

NPDES Permit No. IL0073636
Notice No. 5970c

Public Notice Beginning Date: **December 30, 2011**

Public Notice Ending Date: **January 30, 2012**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Modified NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water, Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

Vigo Coal Operating Co., Inc.
528 Main Street, Suite 202
Evansville, IN 47708

Name and Address of Facility:

Vigo Coal Operating Co., Inc.
Friendsville Mine
1.5 miles west of Mt. Carmel, Illinois
(Wabash County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue an NPDES permit to discharge into waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be accepted will be on the Public Notice period ending date indicated above, unless a comment demonstrating the need for additional time requests an extension to this comment period and the request is granted by the Agency. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. The Agency's responses to written and/or oral comments will be provided in the Responsiveness Summary provided when the final permit is issued. For further information, please call Larry D. Crislip, P.E. at 618/993-2700.

The applicant operates an existing surface coal mine (SIC 1221). Mine operations result in the discharge of alkaline mine drainage, surface runoff from reclamation areas and stormwater discharges.

Public comments are invited on the following proposed modifications:

Incorporation of 20.0 acres previously permitted under Subtitle D Permit No. 2011-MA-7240 which included topsoil stockpiles and a freshwater supply pond for the coal preparation plant and conversion of freshwater supply pond to fine coal refuse disposal area.

Addition of Monitoring Well Nos. GW15, GW17, GW18, GW19 and GW20 for Slurry Pond No. 2.

Addition of Monitoring Well Nos. GW11R and GW14R as replacement wells for GW11 and GW14 which were destroyed.

Addition of Diversion Ditch AA to reroute unaffected area drainage.

This facility has twelve (12) existing discharges which are located in Wabash County, Illinois. The following information identifies the discharge points, receiving streams, and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude (North)</u>	<u>Longitude (West)</u>	<u>Stream Classification</u>
001	Unnamed tributary to Fordice Creek	38° 26' 27.96"	87° 52' 59.16"	General Use
002	Unnamed tributary to Fordice Creek	38° 26' 7.00"	87° 52' 40.00"	General Use
003	Coffee Creek	38° 25' 49.80"	87° 51' 10.08"	General Use
004	Unnamed tributary to Coffee Creek	38° 25' 37.56"	87° 50' 43.44"	General Use
005	Unnamed tributary to Coffee Creek	38° 25' 11.28"	87° 49' 55.56"	General Use
006	Unnamed tributary to Coffee Creek	38° 25' 31.44"	87° 50' 4.20"	General Use
007	Unnamed tributary to Coffee Creek	38° 24' 56.88"	87° 50' 43.44"	General Use
008	Unnamed tributary to Coffee Creek	38° 25' 49.80"	87° 49' 37.20"	General Use
009	Unnamed tributary to Coffee Creek	38° 26' 13.20"	87° 49' 50.88"	General Use
010	Unnamed tributary to Fordice Creek	38° 26' 46"	87° 51' 46"	General Use
011	Unnamed tributary To Fordice Creek	38° 26' 43"	87° 51' 37"	General Use
012	Unnamed tributary to Fordice Creek	38° 26' 44"	87° 51' 30"	General Use

The stream segment BCB of Fordice Creek receiving the flow from the unnamed tributaries into which Outfalls 001, 002, 010, 011 and 012 discharge is not on the draft 2010 303(d) list of impaired waters.

The stream segment BD of Coffee Creek receiving the flow from the unnamed tributary into which Outfalls 003, 004, 005, 006, 007, 008 and 009 discharges is on the draft 2010 303(d) list of impaired waters. The following parameters have been identified as the pollutants causing impairment:

<u>Outfall</u>	<u>Potential Causes</u>	<u>Designated Uses</u>
003, 004, 005 006, 007 008, 009	Loss of instream cover	Channelization

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfall 001:

Discharge Condition	Parameters										
	Total Suspended Solids (3) (mg/l)		Iron (total) (3),(4) (mg/l)		pH (3) (S.U.)	Alkalinity/Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Hardness (5)	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum							
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1182	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1182	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1182	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1182	500	Monitor only	Measure When Sampling	-

I Dry weather discharge (base flow or mine pumpage) from the outfall.

II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.

III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

- (1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h)
- (2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snow melt total. Settleable Solids effluent standards are contained in 35 Ill. Adm. Code 406.109 and 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 001, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfall 002:

Discharge Condition	Parameters										
	Total Suspended Solids (3) (mg/l)		Iron (total) (3),(4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Hardness (5)	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum							
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1168	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1168	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1168	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1168	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.
- (1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h)
- (2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snow melt total. Settleable Solids effluent standards are contained in 35 Ill. Adm. Code 406.109 and 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 002, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfalls 003, 004, 006, 008, 009:

Discharge Condition	Parameters										
	Total Suspended Solids (3) (mg/l)		Iron (total) (3),(4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Hardness (5)	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum							
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1106	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1106	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	Monitor only	Measure When Sampling	-

I Dry weather discharge (base flow or mine pumpage) from the outfall.

II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.

III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

(1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h)

(2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snow melt total. Settleable Solids effluent standards are contained in 35 Ill. Adm. Code 406.109 and 406.110.

(3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.

(4) Discharges from Outfalls 003, 004, 006, 008 and 009, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.

(5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfall 005:

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3),(4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1587	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1587	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1587	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1587	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

I Dry weather discharge (base flow or mine pumpage) from the outfall.

II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.

III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

(1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h)

(2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snow melt total. Settleable Solids effluent standards are contained in 35 Ill. Adm. Code 406.109 and 406.110.

(3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.

(4) Discharges from Outfall 005, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.

(5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfall 007:

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3),(4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1106	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1106	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

I Dry weather discharge (base flow or mine pumpage) from the outfall.

II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.

III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

(1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h)

(2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snow melt total. Settleable Solids effluent standards are contained in 35 Ill. Adm. Code 406.109 and 406.110.

(3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.

(4) Discharges from Outfall 007, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.

(5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfall 010:

Discharge Condition	Parameters										
	Total Suspended Solids (3) (mg/l)		Iron (total) (3),(4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Hardness (5)	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum							
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	947	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	947	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	947	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	947	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.
- (1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h)
- (2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snow melt total. Settleable Solids effluent standards are contained in 35 Ill. Adm. Code 406.109 and 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 010, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

The alkaline mine discharge from this facility shall be monitored and limited at all times as follows:

Outfalls 011, 012:

Discharge Condition	Parameters										
	Total Suspended Solids (3) (mg/l)		Iron (total) (3),(4) (mg/l)		pH (3) (S.U.)	Alkalinity/Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Hardness (5)	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum							
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1369	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1369	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1369	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1369	500	Monitor only	Measure When Sampling	-

I Dry weather discharge (base flow or mine pumpage) from the outfall.

II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.

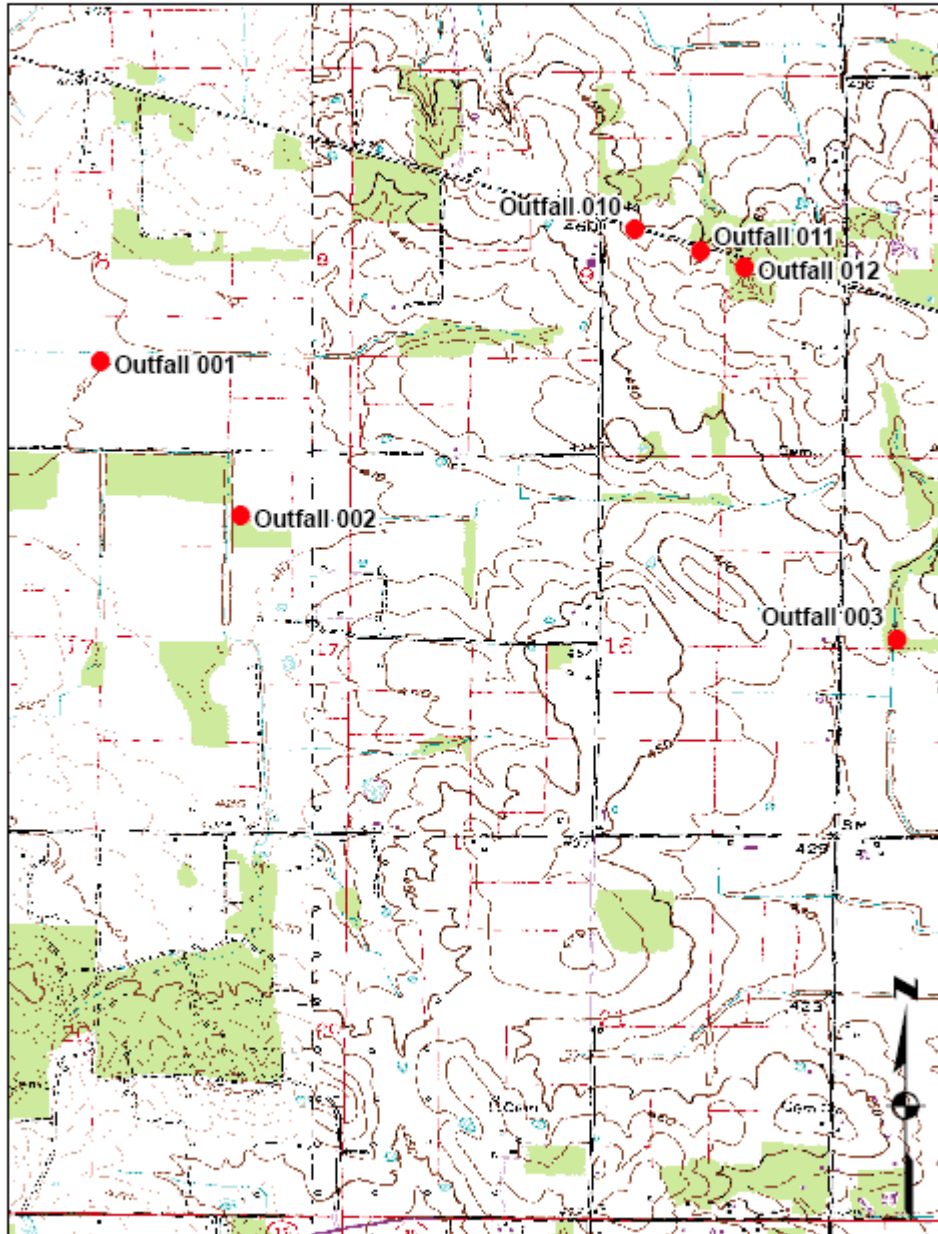
III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).

IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

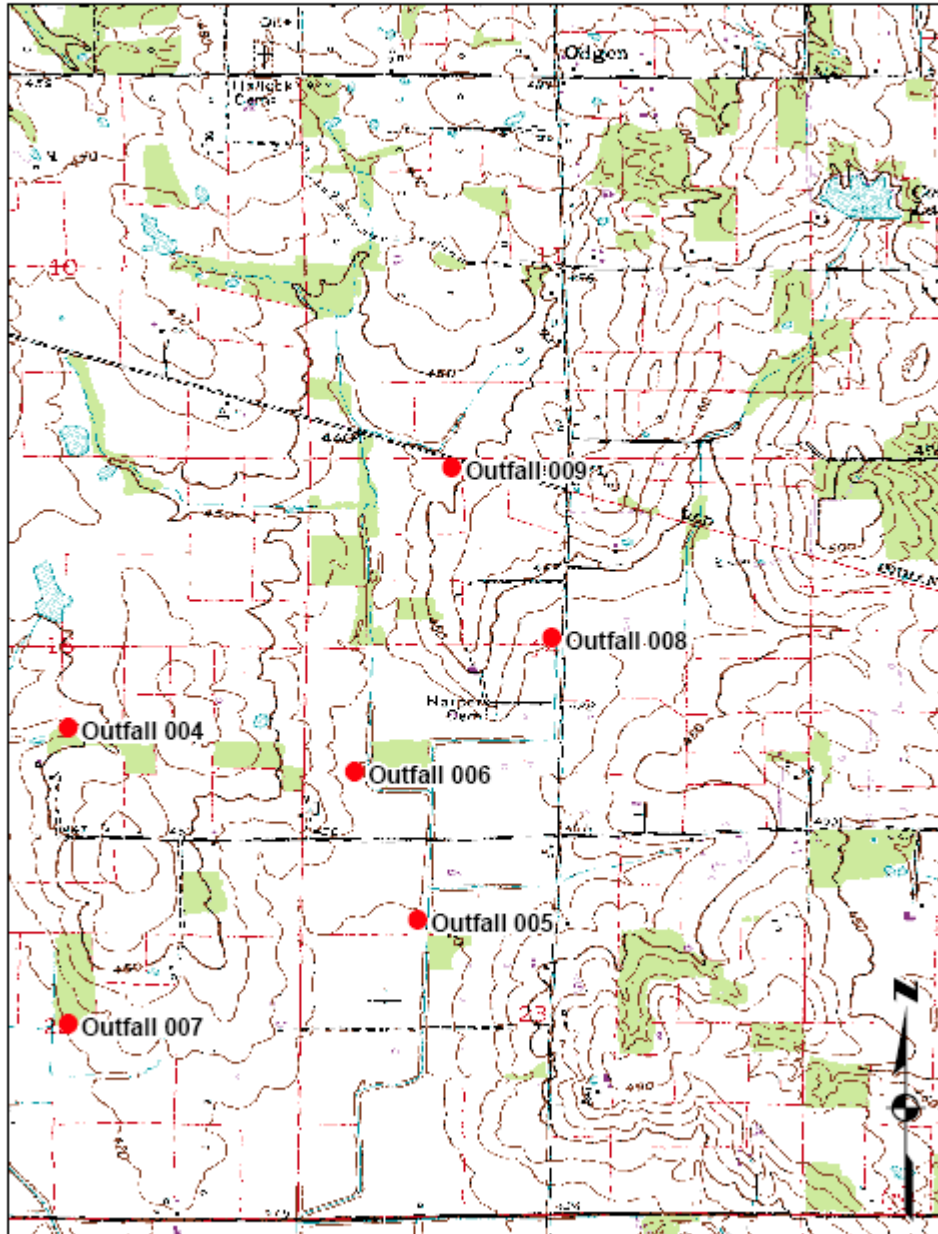
- (1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h)
- (2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snow melt total. Settleable Solids effluent standards are contained in 35 Ill. Adm. Code 406.109 and 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfalls 011, 012, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

To assist you in identifying the location of the discharges, please refer to the attached map. The permit area for this facility is located in Sections 8, 9, 10, 11, 14, 15, 16, 17, 22, 23, and 26, Township 1 South, Range 13 West, 3rd P.M., Wabash County, Illinois.

Vigo Coal Operating Co., Inc. - Friendsville Mine
NPDES No. IL0073636
Wabash County
Township 1 South, Range 13 West



Vigo Coal Operating Co., Inc. - Friendsville Mine
NPDES No. IL0073636
Wabash County
Township 1 South, Range 13 West



NPDES Permit No. IL0073636
Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue, East
P.O. Box 19276
Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified NPDES Permit

Expiration Date: April 30, 2013

Issue Date: May 21, 2008
Effective Date: May 21, 2008
Modification Date: November 9, 2010
Modification Date:

Name and Address of Permittee:

Vigo Coal Operating Co., Inc.
528 Main Street, Suite 202
Evansville, IN 47708

Facility Name and Address:

Vigo Coal Operating Co., Inc.
Friendsville Mine
1.5 miles west of Mt. Carmel, Illinois
(Wabash County)

Discharge Number and Name:

001, 002, 010, 011, 012 Alkaline Mine Drainage
003 Alkaline Mine Drainage
004, 005, 006 Alkaline Mine Drainage
007, 008, 009

Receiving waters

Unnamed tributary to Fordice Creek

Coffee Creek

Unnamed tributary to Coffee Creek

Coffee Creek and Fordice Creek are tributary to
Wabash River

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C and/or Subtitle D Rules and Regulations of the Illinois Pollution Control Board, and the Clean Water Act, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Ronald E. Morse, Manager
Mine Pollution Control Program
Bureau of Water

REM:LDC:IKW;jkb/5970c/12-16-11

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall*: 001 (Alkaline Mine Drainage)

Discharge Condition	Parameters										
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.)	Alkalinity/Acidity	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	3/month	1/month					
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1182	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1182	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1182	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1182	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). The remaining three (3) samples may be taken during any of the Discharge Conditions described above.

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No.12 for the discharges from Outfall 001 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall*: 002 (Alkaline Mine Drainage)

Discharge Condition	Parameters										
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.)	Alkalinity/Acidity	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	3/month	1/month					
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1168	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1168	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1168	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1168	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). The remaining three (3) samples may be taken during any of the Discharge Conditions described above.

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No.12 for the discharges from Outfall 002 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfalls*: 003, 004, 006, 008, 009 (Alkaline Mine Drainage)

Discharge Condition	Parameters										
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.)	Alkalinity/Acidity	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	3/month	1/month					
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1106	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1106	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). The remaining three (3) samples may be taken during any of the Discharge Conditions described above.

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 12 for the discharges from Outfalls 003, 004, 006, 008 and 009, and Coffee Creek and the unnamed tributary to Coffee Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit

NPDES Permit No. IL0073636

Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall*: 005 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.)	Alkalinity/Acidity	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l)	Hardness ***	Mercury see Special Condition No.14	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	3/month	1/month			3/month				
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1587	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1587	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1587	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1587	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). The remaining three (3) samples may be taken during any of the Discharge Conditions described above.

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 12 for the discharges from Outfall 005 and the unnamed tributary to Coffee Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit

NPDES Permit No. IL0073636

Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall*: 007 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.)	Alkalinity/Acidity	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l)	Hardness ***	Mercury see Special Condition No.14	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	3/month	1/month			3/month				
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1106	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1106	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1106	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). The remaining three (3) samples may be taken during any of the Discharge Conditions described above.

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 12 for the discharges from Outfall 007 and the unnamed tributary to Coffee Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall*: 010 (Alkaline Mine Drainage)

Discharge Condition	Parameters										
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.)	Alkalinity/Acidity	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	3/month	1/month					
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	947	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	947	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	947	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	947	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). The remaining three (3) samples may be taken during any of the Discharge Conditions described above.

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 12 for the discharges from Outfall 010 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

From the effective date of this Permit until the expiration date, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfalls*: 011, 012 (Alkaline Mine Drainage)

Discharge Condition	Parameters										
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.)	Alkalinity/Acidity	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	3/month	1/month					
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1369	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	1369	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	1369	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	1369	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method.

*** There shall be a minimum of nine (9) samples collected during the quarter when the pond is discharging. Of these 9 samples, a minimum of one sample each month shall be taken during either Discharge Condition I or IV should such discharge condition occur. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and III) shall be taken and analyzed for the parameters identified in the table above during at least 3 separate events each quarter. For quarters in which there are less than 3 such precipitation events resulting in discharges, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s). The remaining three (3) samples may be taken during any of the Discharge Conditions described above.

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 12 for the discharges from Outfalls 011 and 012 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
 NPDES Permit No. IL0073636
 Effluent Limitations and Monitoring

Upon completion of Special Condition 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfall*: 001 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH**	Sulfate	Chloride	Hardness	Flow	Settleable Solids
	(S.U.) 1/month	(mg/l) 1/month	(mg/l) 1/month	1/month	(MGD)	(ml/l) 1/month
I	6.5 – 9.0	1182	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	1182	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	1182	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	1182	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.109 (b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

One sample per month (1/month) shall be collected under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for the parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 12 for the discharges from Outfall 001 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

Upon completion of Special Condition 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfall*: 002 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH**	Sulfate	Chloride	Hardness	Flow	Settleable Solids
	(S.U.) 1/month	(mg/l) 1/month	(mg/l) 1/month	1/month	(MGD)	(ml/l) 1/month
I	6.5 – 9.0	1168	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	1168	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	1168	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	1168	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.109 (b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

One sample per month (1/month) shall be collected under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for the parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 12 for the discharges from Outfall 002 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
 NPDES Permit No. IL0073636
 Effluent Limitations and Monitoring

Upon completion of Special Condition 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfalls*: 003, 004, 006, 008, 009 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH**	Sulfate	Chloride	Hardness	Flow	Settleable Solids
	(S.U.)	(mg/l)	(mg/l)		(MGD)	(ml/l)
	1/month	1/month	1/month	1/month		1/month
I	6.5 – 9.0	1106	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	1106	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	1106	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	1106	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.109 (b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

One sample per month (1/month) shall be collected under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for the parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No.12 for the discharges from Outfalls 003, 004, 006, 008 and 009, and Coffee Creek and the unnamed tributary to Coffee Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
 NPDES Permit No. IL0073636
 Effluent Limitations and Monitoring

Upon completion of Special Condition 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfall*: 005 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH**	Sulfate	Chloride	Hardness	Flow	Settleable Solids
	(S.U.) 1/month	(mg/l) 1/month	(mg/l) 1/month	1/month	(MGD)	(ml/l) 1/month
I	6.5 – 9.0	1587	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	1587	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	1587	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	1587	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.109 (b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

One sample per month (1/month) shall be collected under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for the parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No.12 for the discharges from Outfall 005 and the unnamed tributary to Coffee Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

Upon completion of Special Condition 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfall*: 007 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH**	Sulfate	Chloride	Hardness	Flow	Settleable Solids
	(S.U.) 1/month	(mg/l) 1/month	(mg/l) 1/month	1/month	(MGD)	(ml/l) 1/month
I	6.5 – 9.0	1106	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	1106	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	1106	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	1106	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.109 (b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

One sample per month (1/month) shall be collected under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for the parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No.12 for the discharges from Outfall 007 and the unnamed tributary to Coffee Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

Upon completion of Special Condition 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfall*: 010 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH**	Sulfate	Chloride	Hardness	Flow	Settleable Solids
	(S.U.)	(mg/l)	(mg/l)		(MGD)	(ml/l)
	1/month	1/month	1/month	1/month		1/month
I	6.5 – 9.0	947	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	947	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	947	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	947	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.109 (b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

One sample per month (1/month) shall be collected under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for the parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No.12 for the discharges from Outfall 010 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
NPDES Permit No. IL0073636
Effluent Limitations and Monitoring

Upon completion of Special Condition 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfalls*: 011, 012 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH**	Sulfate	Chloride	Hardness	Flow	Settleable Solids
	(S.U.)	(mg/l)	(mg/l)		(MGD)	(ml/l)
	1/month	1/month	1/month	1/month		1/month
I	6.5 – 9.0	1369	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	1369	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	1369	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	1369	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.109 (b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.62 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

Sampling during all Discharge Conditions shall be performed utilizing the grab sampling method. A "no flow" situation is not considered to be a sample of the discharge.

One sample per month (1/month) shall be collected under either Discharge Condition I, II or IV and analyzed for the parameters identified in the table above. In addition, at least three (3) grab samples shall be taken each quarter from separate precipitation events under Discharge Condition III and analyzed for the parameters indicated in the above table. For quarters in which there are less than 3 such precipitation events, a grab sample of the discharge shall be required whenever such precipitation event(s) occur(s).

The water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No.12 for the discharges from Outfalls 011 and 012 and the unnamed tributary to Fordice Creek receiving such discharges.

** No discharge is allowed from any above referenced permitted outfall during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit
 NPDES Permit No. IL0073636
 Effluent Limitations and Monitoring

Upon completion of Special Condition 10 and approval from the Agency, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfalls*: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012 (Stormwater Discharge)

Parameters	
pH*	Settleable Solids
(S.U.)	(ml/l)
1/year	1/year
6.0 – 9.0	0.5

Storm water discharge monitoring is subject to the following reporting requirements:

Analysis of samples must be submitted with second quarter Discharge Monitoring Reports.

If discharges can be shown to be similar, a plan may be submitted by November 1 of each year preceding sampling to propose grouping of similar discharges and/or updated previously submitted groupings. If updating of a previously submitted plan is not necessary, a written notification to the Agency, indicating such is required. Upon approval from the Agency, one representative sample for each group may be submitted.

Annual storm water monitoring is required for all discharges until Final SMCRA Bond is released and approval to cease such monitoring is obtained from the Agency.

* No discharge is allowed from any above referenced permitted outfalls during "low flow" or "no flow" conditions in the receiving stream unless such discharge meets the water quality standards of 35 Ill. Adm. Code 302.204 for pH.

NPDES Permit No. IL0073636

Construction Authorization No. 5612-03

C.A. Date: August 24, 2007

Authorization is hereby granted to the above designee to construct and operate the mine and mine refuse area described as follows:

Surface mine containing 2508.1 acres located in Section 8, 9, 10, 11, 14, 15, 16, 17, 22, 23 and 26, Township 1 South, Range 13 West, Wabash County, Illinois, and described as follows:

An area of 20.0 acres located in Section 22, Township 1 South, Range 13 West in Wabash County, Illinois, identified as IBR No. 1 (Log No. 5371-03) to OMM Permit No. 330, is incorporated into conduct surface coal mining activity. Surface runoff from this additional permit area is tributary to Basin S7 with discharge designated as Outfall 007. This additional area is included in the total Permit area cited above.

An area of 20.0 acres located in Section 26, Township 1 South, Range 13 West in Wabash County, Illinois, is incorporated into the Permit to be used for a railroad spur and load out loop. This additional area is identified as IBR No. 2 (Log No. 3489-05) to OMM Permit No. 330. A portion of the surface runoff from this additional permit area consisting of 10.0 acres is tributary to Basin S7 with discharge designated as Outfall 007. Runoff from the remaining 10.0 acres of the railroad spur, to be monitored in accordance with the stormwater monitoring plan requirements for this facility, is controlled by the utilization of straw bale dikes, rip rap check dams, silt fence and/or mulch. This additional area is included in the total Permit area cited above.

An area of 20 acres, consisting of two separate parcels, identified as IBR No. 3 (Log No. 2072-06) to OMM Permit No. 330, is incorporated into this Permit. The first parcel consisting of 4.5 acres located in Section 26, Township 1 South, Range 13 West, will be utilized for a railroad spur access road and borrow area. Runoff from this 4.5 acre parcel, to be monitored in accordance with the stormwater monitoring plan requirements for this facility, is controlled by the utilization of straw bale dikes, rip rap check dams, silt fence and/ mulch. The remaining parcel consisting of 15.5 acres located in Section 8, Township 1 South, Range 13 West, will be utilized to facilitate development of Boxcut 3 and 3a. Runoff from this 15.5 acre parcel is tributary to Basin S1 with discharge designated as Outfall 001. This additional area is included in the total Permit area cited above.

An area of 6.0 acres, consisting of two separate parcels, located in Section 22, Township 1 South, Range 13 West, identified as IBR No. 4 (Log No. 2313-06) to OMM Permit No. 330, is incorporated into the Permit. The parcel consisting of 4.4 acres will be utilized to conduct surface coal mining activities with runoff from this area tributary to Basin S7 with discharge designated as Outfall 007. The second parcel consisting of 1.6 acres will be utilized for a graveled parking area. Runoff from this area, to be monitored in accordance with the stormwater monitoring plan requirements for this facility, is controlled by the utilization of straw bale dikes, rip rap check dams, silt fence and/or mulch. This additional area is included in the total permit area cited above.

An area of 20.0 acres located in Section 16, Township 1 South, Range 13 West in Wabash County, Illinois, identified as IBR No. 5 (Log No. 2563-06) to OMM Permit No. 330, is incorporated into this Permit. The additional area will be used for mining (15.6 acres) and diversion (4.4 acres). Surface runoff from this additional permit area is tributary to Basin S1 with discharge designated as Outfall 001. This additional area is included in the total Permit area cited above.

An area of 20.0 acres located in Section 17, Township 1 South, Range 13 West in Wabash County, Illinois, is incorporated into this Permit. These additional acres will be used for additional mining area (17.3 acres) and support area (2.7 acres). This additional area is identified as IBR No. 6 (Log No. 1117-07) to OMM Permit No. 330 and is included in the total Permit area cited above. Surface runoff from this additional permit area is tributary to Basin S1 with discharge designated as Outfall 001.

The facilities at this mine site will include soil and overburden stockpiles, roads and drainage control facilities consisting of diversions and nine (9) sedimentation ponds. Auger mining is approved in various areas as proposed. An air processing system has been added to the preparation plant operation as described in the Log No. 6590-02.

Various minor operational changes to the mine plan, soil stockpiles, diversions, haulroads and parking areas as described in Log Nos. 6580-02, 3470-05 and 2307-06 are incorporated into this Permit.

Surface drainage is controlled by nine (9) sedimentation ponds, identified as Outfalls 001, 002, 003, 004, 005, 006, 007, 008 and 009, all classified as alkaline mine drainage.

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Construction Authorization No. 5612-03

C.A. Date: August 24, 2007

The locations and receiving streams of the Outfalls at this facility are as follows:

Outfall No.	Latitude			Longitude			Receiving Water
	DEG	MIN	SEC	DEG	MIN	SEC	
001	38°	26'	27.96"	87°	52'	59.16"	Unnamed tributary to Fordice Creek
002	38°	26'	7.00"	87°	52'	40.00"	Unnamed tributary to Fordice Creek
003	38°	25'	49.80"	87°	51'	10.08"	Coffee Creek
004	38°	25'	37.56"	87°	50'	43.44"	Unnamed tributary to Coffee Creek
005	38°	25'	11.28"	87°	49'	55.56"	Unnamed tributary to Coffee Creek
006	38°	25'	31.44"	87°	50'	4.20"	Unnamed tributary to Coffee Creek
007	38°	24'	56.88"	87°	50'	43.44"	Unnamed tributary to Coffee Creek
008	38°	25'	49.80"	87°	49'	37.20"	Unnamed tributary to Coffee Creek
009	38°	26'	13.20"	87°	49'	50.88"	Unnamed tributary to Coffee Creek

Revised and approved basin designs for ponds and outfalls 001, 005 and 007 are contained in IEPA Log Nos. 3470-05, 2361-06, 6580-02 and 3396-05 respectively.

Coal Combustion Waste (CCW) is approved for disposal in conjunction with coal refuse disposal in the bottom of the active pit as proposed in Log No. 8508-00 with approved sources identified as follows:

Cinergy – Edwardsport (bottom ash)	SIPC (fly ash)
Cinergy – Edwardsport (fly ash)	SIPC (scrubber sludge)
PSI Energy – Gibson	SIPC (fixated scrubber sludge)
SIPC (bottom ash)	

All CCW disposal is subject to the requirements and limitations of Condition No. 12. CCW and coal refuse disposal in the bottom of the active pit shall be immediately covered with spoil to prevent contact with runoff from precipitation or pit seepage water. The prevention of direct contact of surface runoff and pit seepage with the disposed CCW material has been deemed adequate to prevent any potential impact on water quality in the sedimentation basins that may receive the minimal pit pumpage present at this facility. In the event of extreme weather conditions that make the active mining pit inaccessible for safe disposal of CCW a temporary storage area may be developed subject to Condition No. 12(a).

Groundwater monitoring requirements related to CCW disposal activities are outlined in Condition No. 13.

In accordance with information provided in Log No. 3379-05 the facility name has changed from Vigo Coal Company, Inc., Friendsville Mine to Vigo Coal Operating Co., Inc., Friendsville Mine.

This Construction Authorization supersedes and replaces Construction Authorization No. 0492-98 and Subtitle D Permit No. 2002-MW-8508-3 previously issued for the herein permitted facilities and activities.

The abandonment plan shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109.

All water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.202. For the constituents not covered by Parts 302 and 303, all water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.106.

This Authorization is issued subject to the following Conditions. If such Conditions require additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval to secure issuance of a Supplemental Authorization to Construct.

1. If any statement or representation is found to be incorrect, this permit may be revoked and the permittee thereupon waives all rights thereunder.
2. The issuance of this permit (a) shall not be considered as in any manner affecting the title of the premises upon which the mine or mine refuse area is to be located; (b) does not release the permittee from any liability for damage to person or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (c) does not take into consideration the structural stability of any units or parts of the project; and (d) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or with applicable local laws, regulations or ordinances.

NPDES Permit No. IL0073636

Construction Authorization No. 5612-03

C.A. Date: August 24, 2007

3. Final plans, specifications, application and supporting documents as submitted by the person indicated on Page 1 as approved shall constitute part of this permit and are identified by Log Nos. 0492-98, 0492-98-A, 5371-03, 3489-05, 2072-06, 2313-06, 2563-06 and 1117-07 in the records of the Illinois Environmental Protection Agency.
4. There shall be no deviations from the approved plans and specifications unless revised plans, specifications and application shall first have been submitted to the Illinois Environmental Protection Agency and a supplemental permit issued.
5. The permit holder shall notify the Environmental Protection Agency (217/782-3637) immediately of an emergency at the mine or mine refuse area which causes or threatens to cause a sudden discharge of contaminants into the waters of Illinois and shall immediately undertake necessary corrective measures as required by 35 Ill. Adm. Code 405.111. (217/782-3637 for calls between the hours of 5:00 p.m. to 8:30 a.m. and on weekends.)
6. The termination of an NPDES discharge monitoring point or cessation of monitoring of an NPDES discharge is not authorized by this Agency until the permittee submits adequate justification to show what alternate treatment is provided or that untreated drainage will meet applicable effluent and water quality standards.
7. Initial construction activities in areas to be disturbed shall be for collection and treatment facilities only. Prior to the start of other activities, surface drainage controls shall be constructed and operated to avoid violations of the Act or Subtitle D. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed, with the results sent to this Agency. Should additional treatment be necessary to meet the standards of 35 Ill. Adm. Code 406.106, a Supplemental Permit must be obtained. Discharge from this pond is not allowed unless applicable effluent standards of Subtitle D are met at the basin discharge(s).
8. This Agency must be informed in writing and an application submitted if drainage, which was previously classified as alkaline (pH greater than 6.0), becomes acid (pH less than 6.0) or ferruginous (base flow with an iron concentration greater than 10 mg/l). The type of drainage reporting to the basin should be reclassified in a manner consistent with the applicable rule of 35 Ill. Adm. Code 406 as amended in R84-29 at 11 Ill. Reg. 12899. The application should discuss the treatment method and demonstrate how the discharge will meet the applicable standards.
9. A permittee has the obligation to add a settling aid if necessary to meet the suspended solids or settleable solids effluent standards. The selection of a settling aid and the application practice shall be in accordance with a. or b. below.
 - a. Alum ($\text{Al}_2(\text{SO}_4)_3$), hydrated lime ($\text{Ca}(\text{OH})_2$), soda ash (Na_2CO_3), alkaline pit pumpage, acetylene production by-product (tested for impurities), and ground limestone are acceptable settling aids and are hereby permitted for alkaline mine drainage sedimentation ponds.
 - b. Any other settling aids such as commercial flocculants and coagulants are permitted only on prior approval from the Agency. To obtain approval a permittee must demonstrate in writing to the Agency that such use will not cause a violation of the toxic substances standard of 35 Ill. Adm. Code 302.210 or of the appropriate effluent and water quality standards of 35 Ill. Adm. Code parts 302, 304, and 406.
10. A general plan for the nature and disposition of all liquids used to drill boreholes shall be filed with this Agency prior to any such operation. This plan should be filed at such time that the operator becomes aware of the need to drill unless the plan of operation was contained in a previously approved application. After settling, recirculation water which meets the requirements of 35 Ill. Adm. Code 406.106 and 406.202, may be discharged. The use of additives in the recirculation water which require treatment other than settling to comply with the Act will require a revised permit.
11. Any of the following shall be a violation of the provisions required under 35 Ill. Adm. Code 406.202:
 - a. It is demonstrated that an adverse effect on the environment in and around the receiving stream has occurred or is likely to occur.
 - b. It is demonstrated that the discharge has adversely affected or is likely to adversely affect any public water supply.
 - c. The Agency determines that the permittee is not utilizing Good Mining Practices in accordance with 35 Ill. Adm. Code 406.204 which are fully described in detail in Sections 406.205, 406.206, 406.207 and 406.208 in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese. To the extent practical, such Good Mining Practices shall be implemented to:

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C.A. Date: August 24, 2007

- i. Stop or minimize water from coming into contact with disturbed areas through the use of diversions and/or runoff controls (Section 406.205).
 - ii. Retention and control within the site of waters exposed to disturbed materials utilizing erosion controls, sedimentation controls, water reuse or recirculation, minimization of exposure to disturbed materials, etc. (Section 406.206).
 - iii. Control and treatment of waters discharged from the site by regulation of flow of discharges and/or routing of discharges to more suitable discharge locations (Section 406.207).
 - iv. Utilized unconventional practices to prevent the production or discharge of waters containing elevated contaminant concentrations such as diversion of groundwater prior to entry into a surface or underground mine, dewatering practices to remove clean water prior to contacting disturbed materials and/or any additional practices demonstrated to be effective in reducing contaminant levels in discharges (Section 406.208).
12. Coal Combustion Waste disposal shall be subject to the following:
- a. An initial analysis utilizing both the Toxicity Characteristics Leaching Procedure (TCLP) and the ASTM 3987-85 methods is required of a representative sample of the individual coal combustion waste sources(s) approved above and proposed for disposal for the contaminants listed in 12(e) below. This initial sample shall be obtained and analyzed a minimum of 30 days prior to the re-initiation of disposal activities.
 - b. Any and all temporary coal combustion waste storage areas shall be developed in location(s) where all surface runoff will be tributary to the active mining pit. Under no circumstances shall temporary storage areas be located such that runoff would be directly tributary to an approved sedimentation basin.
 - c. All CCW disposals shall be restricted to a centralized location a minimum of five hundred (500) feet from the boundary of the area to incur mining. In addition, no CCW shall be located within a final cut area. A minimum of twenty-five (25) feet of spoil shall cover and encapsulate the CCW material.
 - d. Prior to re-initiation of CCW disposal activities, a map shall be submitted to the Agency delineating the area proposed for CCW disposal during the forthcoming 6 to 12 month period. Also, the quarterly analyses required in accordance with 12(e) below shall include a map delineating the area within which CCW was disposed during the previous quarter as well as delineating the area proposed for CCW disposal during the forthcoming 6 to 12 month period. This information will be utilized to evaluate the current groundwater monitoring program and requirements, and to determine if the proposed disposal is consistent with the original Permit. Additionally, based on the Agency's review of the CCW analyses and mapping of proposed CCW disposal areas, this Permit may be modified to require additional groundwater monitoring wells and/or requirements.
 - e. Coal Combustion Waste analysis requirements:

A Toxicity Characteristics Leaching Procedure (TCLP) shall be conducted for the following contaminants:

Aluminum	Cobalt	Nickel
Antimony	Copper	Phenol
Arsenic	Iron	Selenium
Barium	Lead	Silver
Beryllium	Manganese	Thallium
Boron	Mercury	Vanadium
Cadmium	Molybdenum	Zinc
Chromium		

An appropriate leaching procedure shall be conducted for the following contaminants:

Chloride	Fluoride	Sulfate
Cyanide		

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C.A. Date: August 24, 2007

An appropriate laboratory analysis on a slurry paste shall include the following:

Acidity (CaCO₃ Equivalent)
 Alkalinity (CaCO₃ Equivalent)
 pH
 Total Dissolved Solids
 Net Neutralization Potential

A quarterly analysis of each individual coal combustion waste approved herein and a weighted composite shall be submitted to this Agency. The quarterly analysis is required only for quarters during which disposal occurs. For quarters during which no disposal occurs, a written notification to the Agency indicating such is required.

Should a new or revised leachate test method be approved by U.S. Environmental Protection Agency, such methodology shall be utilized for coal combustion waste (CCW) analysis in lieu of TCLP analysis required above.

- f. Reporting of coal combustion waste analysis results shall be submitted to the Agency in accordance with Special Condition Nos. 3 and 5 of this Permit.
- g. Fugitive dust from the coal combustion waste material shall not leave the disposal area. Timely covering, incorporation and/or wetting shall be utilized as necessary to protect exposed surfaces from wind erosion. If during disposal operations, such procedures do not sufficiently control fugitive dust, disposal activities shall cease until such time that more favorable conditions exist or modified operation procedures are proposed and approved by this Agency.
- h. Any proposed changes or modifications to the approved conditions, operating procedures waste source or source characteristics require notification and approval by the Agency prior to such changes or modifications being implemented.
- i. Data collected in accordance with this Condition will be used to evaluate the appropriateness of the effluent limits established herein. Should the Agency's evaluation of this data indicate revised effluent limits are warranted, this permit may be re-opened and modified to incorporate more appropriate effluent limitations; otherwise, this data will be considered in the determination of effluent limitations at the time of permit renewal.

13. Groundwater monitoring is required as follows:

- a. Monitoring Well Nos. GW10, GW11 and GW12 shall be monitored six (6) times during the first year of operation (approximately bi-monthly) to show any seasonal variation for the constituents listed in 13(c) below to establish ambient background concentrations.
- b. Following ambient background monitoring as required by 13(a) above, routine quarterly monitoring will be required to include the constituents listed in 13(c) below.
- c. Groundwater monitoring as required above shall include the following constituents:

Aluminum	Fluoride	Sulfate
Antimony	Iron (dissolved)	Thallium
Arsenic	Iron (total)	Vanadium
Barium	Lead	Zinc
Beryllium	Manganese (dissolved)	pH
Boron	Manganese (total)	Acidity
Cadmium	Mercury	Alkalinity
Chloride	Molybdenum	Hardness
Chromium	Nickel	Phenols
Cobalt	Selenium	Total Dissolved Solids
Copper	Silver	Water Elevation
Cyanide		

- d. Reporting of groundwater monitoring results shall be submitted to the Agency in accordance with Special Condition Nos. 3 and 5 of this Permit.

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Supplemental Construction Authorization No. 5612-03-1

S.C.A. Date: March 3, 2008

Supplemental Authorization is hereby granted to the above designee to construct the mine and mine refuse area, which was previously approved under Authorization No. 5612-03 dated August 24, 2007. Those facilities have been revised as follows:

Incorporate an additional 252.7 acres (OMM Permit No. 395) into Permit area for surface mining activities, located in Section 9, 10, 16 and 17, Township 1 South, Range 13 West, Wabash County, Illinois, as depicted in IEPA Log No. 1335-07. This additional 252.7 acre area consists of four (4) parcels described as follows:

Parcels I and II consist of 124.9 acres and 40.0 acres, respectively. Runoff from these parcels will be tributary to previously approved basin and Outfall 002 resulting in an increase in drainage area of only 149.8 acres since a portion of these parcels was previously tributary to this basin and Outfall. The expansion of Outfall 002 was addressed in the antidegradation assessment for this permit modification.

Parcel III consists of 41.8 acres. Runoff from this parcel will be tributary to previously approved basin and Outfall 003 located in OMM Permit No. 330. As this area was previously tributary to the referenced basin and Outfall no expansion of this discharge is proposed; therefore, an antidegradation assessment of this discharge was not warranted.

Parcel IV consists of 46.0 acres. Runoff from this parcel will be tributary to proposed basins and Outfalls 010 and 011 which are classified as alkaline mine drainage with discharges reporting to an unnamed tributary to Fordice Creek. Proposed Outfalls 010 and 011 were addressed in the antidegradation assessment for this permit modification.

Up to three (3) water wells will be installed near the preparation plant and office complex area as depicted in IEPA Log No. 1484-07. These wells, proposed to be pumped only intermittently, will be used as a supplemental water supply for coal preparation during extreme dry weather periods.

Coal Combustion Waste (CCW) is approved for disposal in conjunction with coal refuse disposal in the bottom of the active pit within the additional area permitted herein subject to all limitations and monitoring requirements outlined in the original Authorization to Construct.

Groundwater monitoring requirements for the additional area permitted herein are outlined in Condition No. 1.

The abandonment plan for the additional area approved herein shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109 as detailed in the log Nos. 1335-07 and 1335-07-C.

All water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.202. For the constituents not covered by Parts 302 or 303, all water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.106.

All Conditions in the original Authorization to Construct are incorporated in this Supplemental Authorization unless specifically deleted or revised herein.

This Supplemental Authorization is issued subject to the following Condition(s). If such Condition(s) require(s) additional or revised facilities, appropriate engineering plan documents must be submitted to this Agency for review and approval to secure issuance of a Supplemental Authorization to Construct.

1. Groundwater monitoring is required as follows:
 - a. Monitoring Well Nos. GW13 and GW14 shall be monitored six (6) times during the first year of operation (approximately bi-monthly) to show any seasonal variation for the constituents listed in 1(c) below to establish ambient background concentrations.
 - b. Following ambient background monitoring as required by 1(a) above, routine quarterly monitoring will be required to include the constituents listed in 1(c) below.

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S.C.A. Date: March 3, 2008

- c. Groundwater monitoring as required above shall include the following constituents:

Aluminum	Fluoride	Sulfate
Antimony	Iron (dissolved)	Thallium
Arsenic	Iron (total)	Vanadium
Barium	Lead	Zinc
Beryllium	Manganese (dissolved)	pH
Boron	Manganese (total)	Acidity
Cadmium	Mercury	Alkalinity
Chloride	Molybdenum	Hardness
Chromium	Nickel	Phenols
Cobalt	Selenium	Total Dissolved Solids
Copper	Silver	Water Elevation
Cyanide		

- d. Reporting of groundwater monitoring results shall be submitted to the Agency in accordance with Special Condition Nos. 3 and 5.
- e. A statistically valid representation of background water quality required under Condition 1(a) above shall be submitted utilizing the following method. This method shall be used to determine the upper 95 percent confidence limit for each parameter listed above.

Should the Permittee determine that an alternate statistical method would be more appropriate based on the data being evaluated, the Permittee may request utilization of such alternate methodology. Upon approval from the Agency, the alternate methodology may be utilized to determine a statistically valid representation of background water quality.

This method should be used to predict the confidence limit when single groundwater samples are taken from each monitoring (test) well.

- i. Determine the arithmetic mean \bar{X}_b of each indicator parameter for the background sampling period. If more than one background (upgradient) well is used, an equal number of samples must be taken from each well.

$$\bar{X}_b = \frac{X_1 + X_2 + \dots + X_n}{n}$$

Where:

\bar{X}_b = Average background value for a given chemical parameter

X_n = Background values for each upgradient sample

n = the number of background samples taken

- ii. Calculate the background variance (S_b^2) and standard deviation (S_b) for each parameter using the values (X_n) from each background sample of the upgradient well(s) as follows:

$$S_b^2 = \frac{(X_1 - \bar{X}_b)^2 + (X_2 - \bar{X}_b)^2 + \dots + (X_n - \bar{X}_b)^2}{n - 1}$$

$$S_b = \sqrt{S_b^2}$$

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S.C.A. Date: March 3, 2008

- iii. Calculate the upper confidence limit using the following formula:

$$CL = \bar{X}_b \pm t \sqrt{1 + 1/n} \quad \bar{X}_b$$

Where:

CL = upper confidence limit prediction
 (upper and lower limits should be calculated for pH)
 t = one-tailed t value at the required significance level and at n-1 degrees of freedom from Table 1
 (a two-tailed t value should be used for pH)

- iv. If the values of any routine parameter for any monitoring well exceed the upper confidence limit for that parameter, the permittee shall conclude that a statistically significant change has occurred at that well.
- v. When some of the background (upgradient) values are less than the Method Detection Limit (MDL), a value of one-half (1/2) the MDL shall be substituted for each background value that is reported as less than the MDL. All other computations shall be calculated as given above.

If all the background (upgradient) values are less than the MDL for a given parameter, the Practical Quantitation Limit (PQL), as given in 35 Ill. Adm. Code Part 724 Appendix I shall be used to evaluate data from monitoring wells. If the analytical results from any monitoring well exceed two (2) times the PQL for any single parameter, or if they exceed the PQLs for two or more parameters, the permittee shall conclude that a statistically significant change has occurred.

Table 1
Standard t-Tables Level of Significance

Degrees of freedom	t-values (one-tail)		t-values (two-tail)*	
	99%	95%	99%	95%
4	3.747	2.132	4.604	2.776
5	3.365	2.015	4.032	2.571
6	3.143	1.943	3.707	2.447
7	2.998	1.895	3.499	2.365
8	2.896	1.860	3.355	2.306
9	2.821	1.833	3.250	2.262
10	2.764	1.812	3.169	2.228
11	2.718	1.796	3.106	2.201
12	2.681	1.782	3.055	2.179
13	2.650	1.771	3.012	2.160
14	2.624	1.761	2.977	2.145
15	2.602	1.753	2.947	2.131
16	2.583	1.746	2.921	2.120
17	2.567	1.740	2.898	2.110
18	2.552	1.734	2.878	2.101
19	2.539	1.729	2.861	2.093
20	2.528	1.725	2.845	2.086
21	2.518	1.721	2.831	2.080
22	2.508	1.717	2.819	2.074
23	2.500	1.714	2.807	2.069
24	2.492	1.711	2.797	2.064
25	2.485	1.708	2.787	2.060
30	2.457	1.697	2.750	2.042
40	2.423	1.684	2.704	2.021

Adopted from Table III of "Statistical Tables for Biological Agricultural and Medical Research" (1947, R.A. Fisher and F. Yates).

* For pH only when required.

NPDES Permit No. IL0073636

Supplemental Construction Authorization No. 5612-03-2

S.C.A. Date: February 3, 2010

Supplemental Authorization is hereby granted to the above designee to construct the mine and mine refuse area, which was previously approved under Authorization No. 5612-03 dated August 24, 2007, and Supplemental Construction Authorization No. 5612-3-1 dated March 3, 2008. Those facilities have been revised as follows:

The drainage control plan for this facility is being modified pursuant to IEPA Log Nos. 9285-09-A and 9390-09. Previously approved Outfall 011 is being re-designated as Outfall 012. A new basin with discharge designated as Outfall 011 will be located approximately 600' west of basin and Outfall 012.

Updated Outfall location information is provided below as follows:

1. Location information is provided below for Outfall 010 previously approved in Supplemental Construction Authorization No. 5612-03-1
2. Location information for new Outfall 011 provided in IEPA Log No. 8033-10.
3. Outfall 012 which is re-designated Outfall 011 and which was previously approved in Supplemental Construction Authorization No. 5612-03-1.

The locations and receiving streams of the Outfalls at this facility are as follows:

Outfall No.	Latitude			Longitude			Receiving Water
	DEG	MIN	SEC	DEG	MIN	SEC	
010	38°	26'	46"	87°	52'	40"	Unnamed tributary to Fordice Creek
011	38°	26'	43"	87°	51'	37"	Unnamed tributary to Fordice Creek
012	38°	26'	44"	87°	51'	30"	Unnamed tributary to Fordice Creek

Temporary off-site Diversion Ditch DDGoodsen will be constructed as depicted in IEPA Log No. 8032-10 to divert runoff from unaffected area around the active mining area.

As proposed in IEPA Log No. 8034-10, coal combustion waste (CCW) from the following additional sources is approved for disposal:

Vectren Culley (Gypsum)
 Vectren Culley (Fly Ash)
 ALCOA Warrick (Gypsum)
 ALCOA Warrick (Fly Ash)

CCW from these additional sources will be disposed in conjunction with coal refuse in the bottom of the active pit as proposed in IEPA Log No. 8508-00 and previously approved in Construction Authorization No. 5612-03. All CCW disposal shall be subject to all limitations and monitoring requirements outlined in the original Construction Authorization.

The abandonment plan shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109.

All water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.202. For the constituents not covered by Parts 302 or 303, all water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.106.

All Conditions in original Authorization No. 5612-03 and Supplemental Authorization No. 5612-03-1 are incorporated into this Supplemental Authorization unless specifically deleted or revised herein.

NPDES Permit No. IL0073636

Supplemental Construction Authorization No. 5612-03-3

S.C.A. Date: December 22, 2011

Supplemental Authorization is hereby granted to the above designee to construct the mine and mine refuse area, which was previously approved under Authorization No. 5612-03 dated August 24, 2007, and Supplemental Construction Authorization Nos. 5612-03-1 dated March 3, 2008, and 5612-03 dated February 3, 2010. Those facilities have been revised as follows:

The addition of 20.0 acres, identified as IBR No. 7 to OMM Permit No. 330, located in Section 22, Township 1 South, Range 13 West, 2nd P.M., Wabash County. This additional area results in a total permitted area under this NPDES Permit of 2780.8 acres. This additional permit area is described as follows:

This area was previously permitted under Subtitle D Permit No. 2011-MA-7240 to be utilized for construction and operation of the Freshwater Supply Pond for the coal preparation plant as described and depicted in IEPA Log No. 7240-11. The freshwater supply pond is located within the existing railroad loop and will consist of approximately 14.8 acres. An adjacent area of approximately 5.2 acres located immediately south of the railroad loop will be utilized for topsoil storage. Runoff from the topsoil storage area will be controlled by a constructed berm and either pumped or routed through a culvert under the railroad loop to the freshwater pond. Upon completion, water collecting in the freshwater supply pond was pumped to Slurry Pond No. 1 located within the approved NPDES Permit area for use in the closed circuit coal preparation process.

As the freshwater supply pond discussed above was planned to be converted to a fine coal refuse (slurry) disposal area, this impoundment was constructed with a 4 foot thick compacted clay liner as described and detailed in IEPA Log No. 7229-11. This fine coal refuse disposal area is identified as Slurry Pond No. 2. The compacted clay liner was constructed in accordance with the "Construction Quality Assurance/Quality Control Plan" included in the referenced IEPA Log No. 7229-11. Liner construction oversight and testing details are included in the "Slurry Pond No. 2 Construction Acceptance Report" which is assigned IEPA Log No. 7415-11.

All water and/or runoff contained within Slurry Pond Nos. 1 and 2 will be contained within the closed circuit coal preparation process and therefore will have no affect on any NPDES permitted outfall.

Groundwater monitoring for Slurry Pond No. 2 consists of Monitoring Well Nos. GW15, GW17, GW18, GW19 and GW20 as depicted in Log Nos. 7229-11 and 7240-11. Groundwater monitoring requirements for these additional wells are outlined in Condition No. 1.

As discussed in IEPA Log No. 7152-11, Monitoring Well Nos. GW11 and GW14 were destroyed by the sloughing of unconsolidated materials. These wells are to be replaced by Monitoring Well Nos. GW11R and GW14R, respectively. Groundwater monitoring requirements for Well Nos. GW11R and GW14R are outlined in Condition No. 1.

As proposed and described in IEPA Log No. 7096-11, Diversion Ditch AA will be constructed east of Maud Road to route unaffected area runoff around the active mining operation.

The abandonment plan for the additional area approved herein shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109.

All water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.202. For the constituents not covered by Parts 302 or 303, all water remaining upon abandonment must meet the requirements of 35 Ill. Adm. Code 406.106.

All Conditions in the original Authorization to Construct are incorporated in this Supplemental Authorization unless specifically deleted or revised herein.

This Supplemental Authorization is issued subject to the following Conditions. If such Conditions require additional or revised facilities, appropriate engineering plan documents must be submitted to this Agency for review and approval to secure issuance of a Supplemental Authorization to Construct.

1. Groundwater monitoring requirements for Well Nos. GW11R, GW14R, GW15, GW17, GW18, GW19 and GW20 are as follows:

a. Ambient background monitoring shall be performed for all above referenced wells. Such ambient monitoring shall consist of six (6) samples collected during the first year (approximately bi-monthly) following well installation but no later than during the first year of operation or disturbance to determine ambient background concentrations. Background monitoring shall include the following list of constituents:

Aluminum	Fluoride	Sulfate
Antimony	Iron (dissolved)	Thallium
Arsenic	Iron (total)	Total Dissolved Solids
Barium	Lead	Vanadium
Beryllium	Manganese (dissolved)	Zinc
Boron	Manganese (total)	pH
Cadmium	Mercury	Acidity
Chloride	Molybdenum	Alkalinity
Chromium	Nickel	Hardness
Cobalt	Phenols	Water Elevation
Copper	Selenium	
Cyanide	Silver	

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S.C.A. Date: December 22, 2011

- b. Following the ambient monitoring as required under Condition 1(a) above, routine monitoring shall continue on a quarterly basis as follows:
 - i. Monitoring Well Nos. GW15, GW17, GW18, GW19 and GW20 shall continue to be monitored quarterly for the contaminants identified in Condition 1(a) above.
 - ii. Monitoring Well Nos. GW11R and GW14R shall be monitored quarterly as required by IDNR/OMM for the following list of constituents:

Iron (dissolved)	Hardness
Iron (total)	Acidity
Manganese (dissolved)	Alkalinity
Manganese (total)	pH
Sulfate	Water Elevation
Total Dissolved Solids	

- c. Following completion of active mining and reclamation, post-mining monitoring of the above referenced wells shall consist of six (6) samples collected during a 12-month period (approximately bi-monthly) to determine post-mining concentrations. Post-mining monitoring shall include the list of constituents identified in Condition 1(a) above.
- d. Groundwater monitoring reports shall be submitted to the Agency in accordance with Special Condition Nos. 3 and 5 of this NPDES permit.
- e. A statistically valid representation of background and/or post mining water quality required under Condition Nos. 1(a) and 1(c) above shall be submitted utilizing the following method. This method shall be used to determine the upper 95 percent confidence limit for each parameter listed above.

Should the Permittee determine that an alternate statistical method would be more appropriate based on the data being evaluated, the Permittee may request utilization of such alternate methodology. Upon approval from the Agency, the alternate methodology may be utilized to determine a statistically valid representation of background and/or post mining water quality.

This method should be used to predict the confidence limit when single groundwater samples are taken from each monitoring (test) well.

- i. Determine the arithmetic mean \bar{X}_b of each indicator parameter for the sampling period. If more than one well is used, an equal number of samples must be taken from each well.

$$\bar{X}_b = \frac{X_1 + X_2 + \dots + X_n}{n}$$

Where:

\bar{X}_b = Average value for a given chemical parameter

X_n = Values for each sample

n = the number of samples taken

- ii. Calculate the background and/or post mining variance (S_b^2) and standard deviation (S_b) for each parameter using the values (X_n) from each sample of the well(s) as follows:

$$S_b^2 = \frac{(X_1 - \bar{X}_b)^2 + (X_2 - \bar{X}_b)^2 + \dots + (X_n - \bar{X}_b)^2}{n - 1}$$

$$S_b = \sqrt{S_b^2}$$

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Supplemental Construction Authorization No. 5612-03-3

S.C.A. Date: December 22, 2011

- iii. Calculate the upper confidence limit using the following formula:

$$CL = \bar{X}_b \pm t \sqrt{1 + 1/n}$$

Where:

CL = upper confidence limit prediction
(upper and lower limits should be calculated for pH)
t = one-tailed t value at the required significance level and at n-1 degrees of freedom from Table 1
(a two-tailed t value should be used for pH)

- iv. If the values of any routine parameter for any monitoring well exceed the upper confidence limit for that parameter, the permittee shall conclude that a statistically significant change has occurred at that well.
- v. When some of the background and/or post mining values are less than the Method Detection Limit (MDL), a value of one-half (1/2) the MDL shall be substituted for each value that is reported as less than the MDL. All other computations shall be calculated as given above.

If all the background and/or post mining values are less than the MDL for a given parameter, the Practical Quantitation Limit (PQL), as given in 35 Ill. Adm. Code Part 724 Appendix I shall be used to evaluate data from monitoring wells. If the analytical results from any monitoring well exceed two (2) times the PQL for any single parameter, or if they exceed the PQLs for two or more parameters, the permittee shall conclude that a statistically significant change has occurred.

Table 1
Standard t-Tables Level of Significance

Degrees of freedom	t-values (one-tail)		t-values (two-tail)*	
	99%	95%	99%	95%
4	3.747	2.132	4.604	2.776
5	3.365	2.015	4.032	2.571
6	3.143	1.943	3.707	2.447
7	2.998	1.895	3.499	2.365
8	2.896	1.860	3.355	2.306
9	2.821	1.833	3.250	2.262
10	2.764	1.812	3.169	2.228
11	2.718	1.796	3.106	2.201
12	2.681	1.782	3.055	2.179
13	2.650	1.771	3.012	2.160
14	2.624	1.761	2.977	2.145
15	2.602	1.753	2.947	2.131
16	2.583	1.746	2.921	2.120
17	2.567	1.740	2.898	2.110
18	2.552	1.734	2.878	2.101
19	2.539	1.729	2.861	2.093
20	2.528	1.725	2.845	2.086
21	2.518	1.721	2.831	2.080
22	2.508	1.717	2.819	2.074
23	2.500	1.714	2.807	2.069
24	2.492	1.711	2.797	2.064
25	2.485	1.708	2.787	2.060
30	2.457	1.697	2.750	2.042
40	2.423	1.684	2.704	2.021

Adopted from Table III of "Statistical Tables for Biological Agricultural and Medical Research" (1947, R.A. Fisher and F. Yates).

* For pH only when required.

NPDES Permit No. IL0073636

Special Conditions

Special Condition No. 1: No effluent from any mine related facility area under this permit shall, alone or in combination with other sources, cause a violation of any applicable water quality standard as set out in the Illinois Pollution Control Board Rules and Regulations, Subtitle C: Water Pollution.

Special Condition No. 2: Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

Special Condition No. 3: All periodic monitoring and reporting forms, including Discharge Monitoring Report (DMR) forms, shall be submitted to the Agency according to the schedule outlined in Special Condition Nos. 4 or 5 below with one (1) copy forwarded to each of the following addresses:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Ave., East
P.O. Box 19276
Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency
Mine Pollution Control Program
2309 West Main Street, Suite 116
Marion, Illinois 62959

Attn: Compliance Assurance Section

Special Condition No. 4: Completed Discharge Monitoring Report (DMR) forms and stream monitoring results, shall be retained by the Permittee for a period of three (3) months and shall be mailed and received by the IEPA at the addresses indicated in Special Condition No. 3 above in accordance with the following schedule, unless otherwise specified by the permitting authority.

Period	Received by IEPA
January, February, March	April 15
April, May, June	July 15
July, August, September	October 15
October, November, December	January 15

Special Condition No. 5: Completed periodic monitoring and reporting forms, other than DMR's and stream monitoring (i.e., groundwater monitoring, coal combustion waste reports, etc.) shall be retained by the Permittee for a period of three (3) months and shall be mailed and received by the IEPA at the addresses indicated in Special Condition No. 3 above in accordance with the following schedule, unless otherwise specified by the permitting authority.

Period	Received by IEPA
January, February, March	May 1
April, May, June	August 1
July, August, September	November 1
October, November, December	February 1

Should electronic filing be available and elected for any periodic monitoring and reporting requirements, the Agency shall be notified via correspondence or e-mail at such time that the electronic filing has been completed.

Special Condition No. 6: If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

Special Condition No. 7: The permittee shall notify the Agency in writing by certified mail within thirty days of abandonment, cessation, or suspension of active mining for thirty days or more unless caused by a labor dispute. During cessation or suspension of active mining, whether caused by a labor dispute or not, the permittee shall provide whatever interim impoundment, drainage diversion, and wastewater treatment is necessary to avoid violations of the Act or Subtitle D.

Special Condition No. 8: Plans must be submitted to and approved by this Agency prior to construction of a sedimentation pond. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed for the parameters designated as 1M-15M under Part 5-C of From 2C and the effluent parameters designated herein with the results sent to this Agency. Should additional treatment be necessary to meet these standards, a Supplemental Permit must also be obtained. Discharge from a pond is not allowed unless applicable effluent and water quality standards are met.

Special Condition No. 9: The special reclamation area effluent standards of 35 Ill. Adm. Code 406.109 apply only on approval from the Agency. To obtain approval, a request form and supporting documentation shall be submitted 45 days prior to the month that the permittee wishes the discharge be classified as a reclamation area discharge. The Agency will notify the permittee upon approval of the change.

NPDES Permit No. IL0073636

Special Conditions

Special Condition No. 10: The special stormwater effluent standards apply only on approval from the Agency. To obtain approval, a request with supporting documentation shall be submitted 45 days prior to the month that the permittee proposes the discharge to be classified as a stormwater discharge. The documentation supporting the request shall include analysis results indicating the discharge will consistently comply with reclamation area discharge effluent standards. The Agency will notify the permittee upon approval of the change.

Special Condition No. 11: Annual stormwater monitoring is required for all discharges not reporting to a sediment basin until Final SMCRA Bond is released and approval to cease such monitoring is obtained from the Agency.

- a. Each discharge must be monitored for pH and settleable solids annually.
- b. Analysis of samples must be submitted with second quarter Discharge Monitoring Reports. A map with discharge locations must be included in this submittal.
- c. If discharges can be shown to be similar, a plan may be submitted by November 1 of each year preceding sampling to propose grouping of similar discharges and/or update previously submitted groupings. If updating of a previously submitted plan is not necessary, a written notification to the Agency indicating such is required. Upon approval from the Agency, one representative sample for each group may be submitted.

Special Condition No. 12: Sediment Pond Operation and Maintenance (001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011 and 012):

- a. For discharges resulting from precipitation events, in addition to the alternate effluent monitoring requirements, discharges from Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011 and 012 shall be monitored and reported for Discharge Rate, Sulfate, Chloride and Hardness.
- b. The following sampling and monitoring requirements are applicable to flow in the receiving streams which receive discharges from Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011 and 012.
 - i. All sampling and monitoring required in accordance with 12(b)(ii), (iii), (iv) and (vi) below shall be performed during a discharge and monitoring event from the associated outfall.
 - ii. The unnamed tributaries to Fordice Creek shall be monitored and reported quarterly for Discharge Rate, Sulfate, Chloride, and Hardness downstream of Outfalls 001, 002, 010, 011 and 012. This downstream monitoring shall be performed a sufficient distance downstream of each Outfall to insure that complete mixing has occurred.
 - iii. Coffee Creek shall be monitored and reported quarterly for Discharge Rate, Sulfate, Chloride and Hardness downstream of Outfall 003. This downstream monitoring shall be performed a sufficient distance downstream of Outfall 003 to ensure that complete mixing has occurred.
 - iv. The unnamed tributaries to Coffee Creek shall be monitored and reported quarterly for Discharge Rate, Sulfate, Chloride and Hardness downstream of Outfalls 004, 005, 006, 007, 008 and 009. This downstream monitoring shall be performed a sufficient distance downstream of each Outfall to insure that complete mixing has occurred.
 - v. At such time that sufficient information has been collected regarding receiving stream flow characteristics and in-stream contaminant concentrations, the Permittee may request a re-evaluation of the monitoring frequency required in accordance with 12(b)(ii), (iii) and (iv) above for possible reduction or elimination. For the purpose of re-evaluating the downstream monitoring frequency of the receiving stream, "sufficient information" is defined as a minimum of ten (10) quarterly sampling events.

In the event that downstream monitoring of the receiving waters is eliminated during the term of the permit based on an evaluation of the quarterly data, a minimum of three (3) additional samples analyzed for the parameters identified in 12(b)(ii), (iii) and (iv) above must be submitted with the permit renewal application a minimum of 180 days prior to expiration of this permit.
 - vi. The unnamed tributaries to Fordice Creek, Coffee Creek and the unnamed tributaries to Coffee Creek shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.
- g. All results of sampling and monitoring performed in accordance with Special Condition No. 12(a) and (b) shall be submitted to the Agency in accordance with Special Condition Nos. 3 and 4 above.

Special Condition No. 13: Data collected in accordance with Special Condition No. 12 above will be utilized to evaluate the appropriateness of the effluent limits established in this Permit. Should the Agency's evaluation of this data indicate revised effluent limits are warranted; this permit may be reopened and modified to incorporate more appropriate effluent limitations. This data will also be used for determination of effluent limitations at the time of permit renewal.

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Special Conditions

Special Condition No. 14: Mercury shall be monitored quarterly until a minimum of ten (10) samples have been collected. Samples shall be collected and tested in accordance with USEPA 1631E using the option at Section 11.1.1.2 requiring the heating of samples at 50°C for 6 hours in a BrCl solution in closed vessels. This test method has a Method Detection Limit (MDL) of 0.001 ug/l. The results of such testing must be submitted with the quarterly Discharge Monitoring Reports (DMRs). The Permittee may submit a written request to the Agency to discontinue quarterly Mercury monitoring if the sampling results show no reasonable potential to exceed the Mercury water quality standard.