

NPDES Permit No. IL0073636
Notice No. 7184c

Public Notice Beginning Date: **November 20, 2015**

Public Notice Ending Date: **December 21, 2015**

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. Comments will be accepted until midnight of the Public Notice period ending date indicated above, unless a request for an extension of the original comment period 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, address and the nature of the issues raised and the evidence supporting 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.

As provided in 35 Ill. Adm. Code 309.115(a), any person may submit a request for a public hearing and if such 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. The Agency shall issue public notice of such hearing no less than thirty (30) days prior to the date of such hearing in the manner described by 35 Ill. Adm. Code 309.109 through 309.112 for public notice. The Agency's responses to written and/or oral comments will be provided in the Responsiveness Summary provided when the final permit is issued.

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. Please limit comments to only the following modifications that are further discussed on Page 14 of this Permit:

Outfall Nos. 010, 011, and 012 have been terminated.

Additional 10 acres for surface mining.

Updated Operations Map to include various drainage structures updates.

This facility has nine (9) existing discharges which are located in Wabash County, Illinois. The following information identifies the discharge points, receiving streams, and outfall locations:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude (North)</u>	<u>Longitude (West)</u>
001	Unnamed tributary to Fordice Creek	38° 26' 28"	87° 52' 57"
002	Unnamed tributary to Fordice Creek	38° 26' 07"	87° 52' 39"
003	Coffee Creek	38° 25' 51"	87° 51' 12"
004	Unnamed tributary to Coffee Creek	38° 25' 38"	87° 50' 41"
005	Unnamed tributary to Coffee Creek	38° 25' 10"	87° 49' 54"
006	Unnamed tributary to Coffee Creek	38° 25' 34"	87° 50' 09"
007	Unnamed tributary to Coffee Creek	38° 24' 59"	87° 50' 42"
008	Unnamed tributary to Coffee Creek	38° 25' 51"	87° 49' 37"
009	Unnamed tributary to Coffee Creek	38° 26' 12"	87° 49' 54"

The stream segment BCB of Fordice Creek receiving the flow from the unnamed tributaries into which Outfalls 001 and 002 discharges is not on the draft 2014 303(d) list of impaired waters.

The stream segment BD of Coffee Creek receiving the discharge from Outfall 003 and receiving the flow from the unnamed tributaries into which Outfalls 004, 005, 006, 007, 008 and 009 discharges is on the 2012 303(d) list of impaired waters. The following parameters have been identified as the pollutants causing impairment:

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

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	721	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	721	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	721	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	721	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, 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:

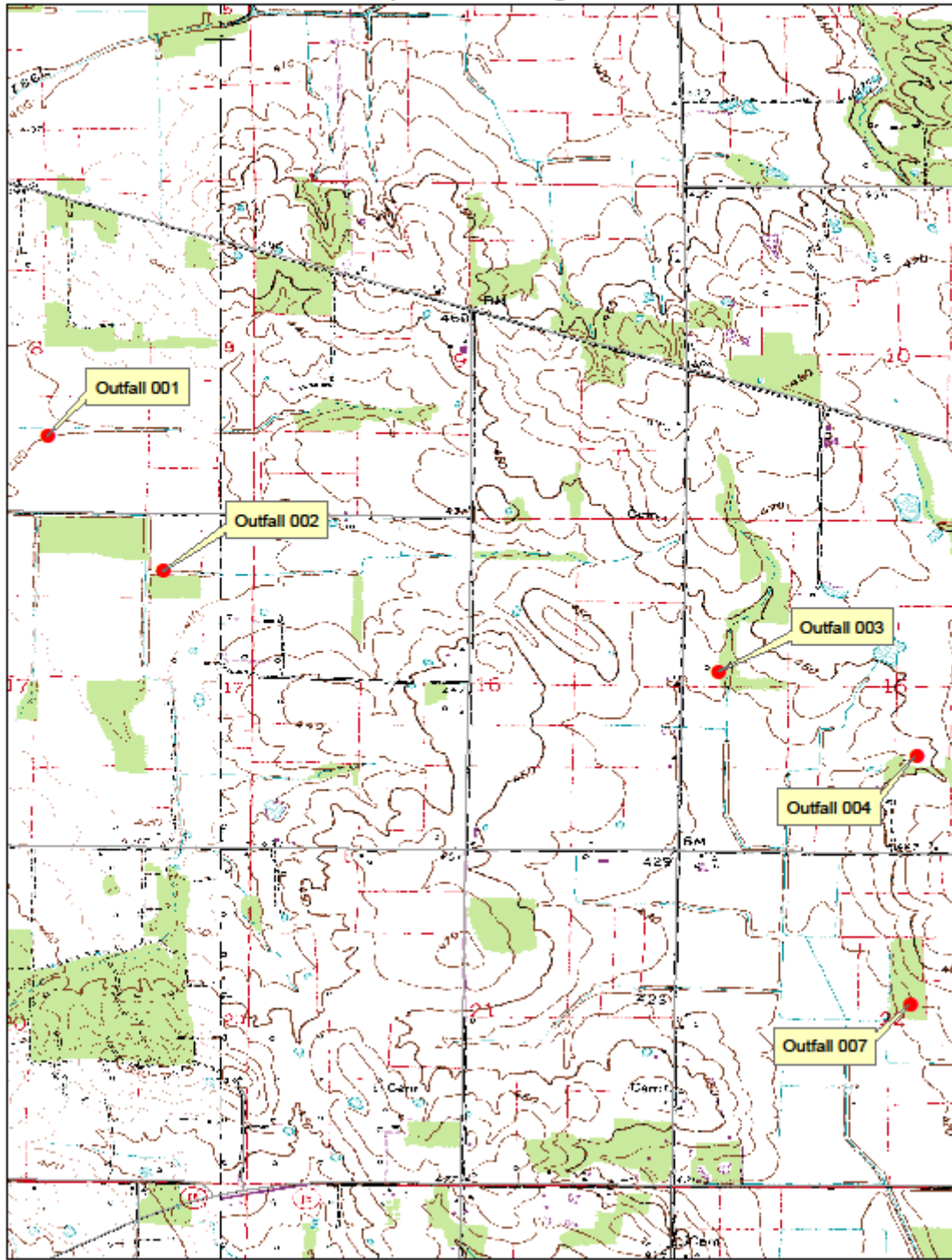
Outfalls: 005, 007

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)	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	721	500	1.0	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	721	500	-	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	721	500	-	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	721	500	1.0	Monitor only	Measure When Sampling	-

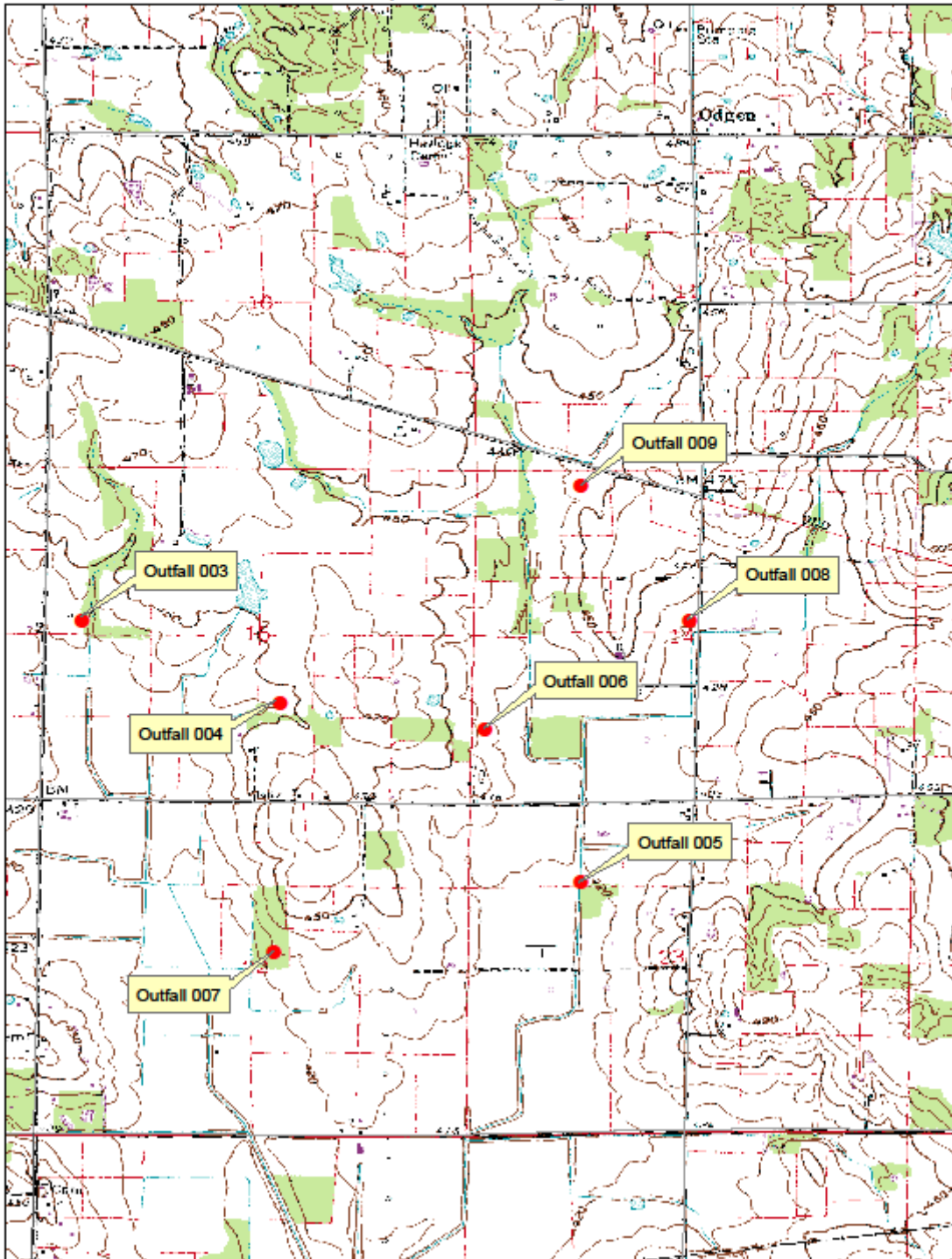
- I Dry weather discharge (base flow or mine pumpage) from the outfall.
 - II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt 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 and 007, 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 3 West, 3rd P.M., Wabash County, Illinois.

Vigo Coal Operating Co., Inc. - Friendsville Mine
NPDES No. IL0073636
Wabash County
Township 1 South, Range 3 West



Vigo Coal Operating Co., Inc. - Friendsville Mine
NPDES No. IL0073636
Wabash County
Township 1 South, Range 3 West



**Antidegradation Assessment
Vigo Coal Operating Co., Inc.
Friendsville Mine
NPDES Permit No. IL0073636
Wabash County**

This facility is a surface coal mine. An Incidental Boundary Revision (IBR) is desired for a 10 acre parcel. The parcel will be mined to extend the life of the mine. The parcel is currently in row crop agriculture with some tree lines. Half of the parcel reports to Pond 006 and the other half to Pond 008.

Identification and Characterization of the Affected Water Body.

Outfalls 006 and 008 discharge to different unnamed tributaries of Coffee Creek at points where zero cfs of flow exists upstream during critical 7Q10 low-flow conditions. The unnamed tributaries of Coffee Creek (no segment code) are General Use waters. The unnamed tributaries of Coffee Creek are not listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List as impaired water bodies as the Illinois EPA has not assessed these waters. The unnamed tributaries of Coffee Creek are not listed as a biologically significant streams in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System* at this locality, nor are they given integrity ratings in that publication. The unnamed tributaries of Coffee Creek are not designated as an enhanced waters at this location pursuant to the dissolved oxygen water quality standard. Coffee Creek (segment BD) is listed as impaired for aquatic life uses on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List. The cause of impairment is given as loss of instream cover (non-pollutant). Antidegradation assessment information was provided in a document entitled Antidegradation Assessment dated July 15, 2015, produced by the applicant.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

Runoff from the parcel during mining will contain total suspended solids, chloride, sulfate and manganese. Total suspended solids loading will remain the same as the current loading from the existing farmland use. Chloride, sulfate and manganese loading will increase slightly. This mine has very low concentrations of these substances in existing outfalls. Water quality standards are met at end-of-pipe. No impact to receiving stream uses is anticipated.

Fate and Effect of Parameters Proposed for Increased Loading.

Chloride, sulfate and manganese will persist in the receiving stream unless removed by organisms. The 10 acre parcel will contribute imperceptible amounts to the existing load.

Purpose and Anticipated Benefits of the Proposed Activity.

The addition of the 10 acre parcel allows the mine to continue operations. Employment will be preserved and other economic benefits to the community will continue.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The mine provided a list of alternatives in the Antidegradation Assessment document that are typical of the reasons that sedimentation ponds are the only practical technology for treating mine runoff.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

An Eco-CAT endangered species consultation was submitted on July 6, 2015. A letter from the Illinois Department of Natural Resources dated July 8, 2015 indicated that impact to any threatened or endangered species or protected area was unlikely from this project and that consultation was terminated.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community by allowing the mine to remain open longer and preserve jobs. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

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: December 31, 2018

Issue Date: January 28, 2014
Effective Date: January 28, 2014
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	Alkaline Mine Drainage
004, 005, 006 007, 008, 009	Alkaline Mine Drainage
003	Reclamation Area Drainage

Receiving waters

Unnamed tributary to Fordice Creek
Unnamed tributary to Coffee Creek
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.

Joseph D. Stitely, Acting Permit Manager
Mine Pollution Control Program
Bureau of Water

JDS:DM:cs/7184c/11-5-15

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*: 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							
I	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	721	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	721	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	721	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	721	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, monitoring, and reporting requirements of Special Condition No. 13 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, 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 ***	Flow (MGD)	Settleable Solids (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	721	500	1.0	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0 – 9.0	-	721	500	-	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0 – 9.0	-	721	500	-	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5 – 9.0	Alk.>Acid	721	500	1.0	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, monitoring, and reporting requirements of Special Condition No. 13 for the discharges from Outfalls 005 and 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 10 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfall*: 001, 002 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ****
I	6.5 – 9.0	604	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	604	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	604	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	604	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. 13 for the discharges from Outfalls 001 and 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 10 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfalls*: 003, 004, 005, 006, 007, 008, 009 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ****
I	6.5 – 9.0	721	500	Monitor only	Measure When Sampling	0.5
II	6.0 – 9.0	721	500	Monitor only	Measure When Sampling	0.5
III	6.0 – 9.0	721	500	Monitor only	Measure When Sampling	-
IV	6.5 – 9.0	721	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, monitoring, and reporting requirements of Special Condition No.13 for the discharges from Outfalls 003, 004, 005, 006, 007, 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 11 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* (S.U.) 1/year	Settleable Solids (ml/l) 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. 6495-12

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

Surface mine containing 2780.0 acres (OMM Permit Nos. 330 and 395) 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:

The facilities at this mine site includes soil and overburden stockpiles, roads and drainage control facilities consisting of diversions and twelve (12) 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.

Surface drainage is controlled by twelve (12) sedimentation ponds, identified as Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, and 012 all classified as alkaline mine drainage.

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'	28"	87°	52'	57"	Unnamed tributary to Fordice Creek
002	38°	26'	07"	87°	52'	39"	Unnamed tributary to Fordice Creek
003	38°	25'	51"	87°	51'	12"	Coffee Creek
004	38°	25'	38"	87°	50'	41"	Unnamed tributary to Coffee Creek
005	38°	25'	10"	87°	49'	54"	Unnamed tributary to Coffee Creek
006	38°	25'	34"	87°	50'	09"	Unnamed tributary to Coffee Creek
007	38°	24'	59"	87°	50'	42"	Unnamed tributary to Coffee Creek
008	38°	25'	51"	87°	49'	37"	Unnamed tributary to Coffee Creek
009	38°	26'	12"	87°	49'	54"	Unnamed tributary to Coffee Creek
010	38°	26'	45"	87°	52'	44"	Unnamed tributary to Fordice Creek
011	38°	26'	50"	87°	51'	38"	Unnamed tributary to Fordice Creek
012	38°	26'	44"	87°	51'	30"	Unnamed tributary to Fordice Creek

An area of 20 acres, identified as IBR No. 7 to OMM Permit No. 330 located in Section 22, Township 1 South, Range 13 West, previously permitted under Subtitle D Permit No. 2011-MA-7240 is incorporated into this permit. This area is 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.

As proposed and depicted in IEPA Log No. 5354-13 and 5354-13-B, mine operation plan is modified to incorporate the construction and development of Slurry Pond No. 3. This fine coal refuse (slurry) disposal area will be constructed with a four (4) foot thick compacted clay liner as described and detailed in referenced log nos. The compacted clay liner will be constructed in accordance with the "Construction Quality Assurance Quality Control Plan" included in IEPA Log No. 5354-13. Liner construction oversight and testing shall be performed in a manner similar to that detailed for Slurry Pond No. 2 in the document entitled "Slurry Pond No. 2 Construction Acceptance Report" assigned IEPA Log No. 7415-11. Groundwater monitoring for Slurry Pond No. 3 area will consist of Well Nos. GW21, GW22, GW23 and GW24 with monitoring performed in accordance with Condition No. 13.

All water and/or runoff contained within Slurry Pond Nos. 1, 2 and 3 will be contained within the closed circuit coal preparation process and therefore will have no effect on any NPDES permitted outfall.

NPDES Permit No. IL0073636

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Coal Combustion Waste (CCW) is approved for disposal in conjunction with coal refuse disposal in the bottom of the active pit with approved sources identified as follows:

ALCOA Warrick (Gypsum)
ALCOA Warrick (Fly 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 evaluated and 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.

Groundwater monitoring for this facility includes Monitoring Well Nos. GW10, GW11R, GW12, GW13, GW14R, GW15, GW17, GW18, GW19, GW20, GW21, GW22, GW23 and GW24. Monitoring of the referenced shall be in accordance with Condition No. 13.

This Construction Authorization supersedes and replaces Construction Authorization No. 5612-03 and Supplemental Construction Authorization Nos. 5612-03-1, 5612-03-2 and 5612-03-3 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.
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 in the records of the 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 Agency and a supplemental permit issued.
5. The permit holder shall notify the 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, for the parameters designated as 1M through 15M under Part 5-C of Form 2C and the effluent parameters designated herein 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 ponds is not allowed unless applicable effluent and water quality standards are met in the basin discharge(s).

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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 provisions of 35 Ill. Adm. Code Part 406. 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 flocculents 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.
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:
 - 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. In the event that CCW disposal activities are temporarily ceased, 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(d) below. This initial sample shall be obtained and analyzed a minimum of 30 days prior to the re-initiation of disposal activities.

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- b. All CCW disposal shall be restricted to a centralized location a minimum of five hundred (500) feet from the outer 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.
- c. In the event that CCW disposal activities are temporarily ceased, 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(d) 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.
- d. 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		

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.

- e. 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.
- f. 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.
- g. 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.
- h. 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.

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13. Groundwater monitoring requirements for Well Nos. GW10, GW11R, GW12, GW13, GW14R, GW15, GW17, GW18, GW19, GW20, GW21, GW22, GW23 and GW24 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	

- b. Following the ambient monitoring as required under Condition 13(a) above, routine monitoring shall continue on a quarterly basis as follows:
- i. Monitoring Well Nos. GW10, GW11R, GW12, GW13, GW14R, GW15, GW17, GW18, GW19, GW20, GW21, GW22, GW23 and GW24 shall continue to be monitored quarterly for the contaminants identified in Condition No. 13(a) above.
- 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 No. 13(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. 13(a) and 13(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

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- 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:

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

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

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

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

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 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.

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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.

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Supplemental Construction Authorization No. 6495-12-1

Supplemental Authorization is hereby granted to the above designee to construct and operate the mine and mine refuse area, previously approved under Authorization No. 6495-12. These facilities have been revised as follows:

The total permit area for this facility is increased from 2780.8 acres to the current total of 2790.8 acres as discussed and described below.

An area of 10 acres, identified as Incidental Boundary Revision (IBR) No. 8 to OMM Permit No. 330 located in Section 14, Township 1 South, Range 13 West is incorporated into this permit. The additional area will be utilized for surface mining including activities such as construction of safety berms, overburden excavation, coal removal backfilling and reclamation as described and depicted in IEPA Log No. 3150-15. Drainage from this IBR area will report to Pond Nos. 006 and 008. This acreage has been added to the total acreage cited above.

As described and depicted in IEPA Log No. 3331-15, Outfall Nos. 011 and 012 have been granted cessation of monitoring requirements. The reclaimed watershed and basin areas will be incorporated into the annual stormwater monitoring plan in accordance with Special Condition No. 12 of this permit.

As described and depicted in IEPA Log No. 4282-14 and previously approved, Outfall No. 010 has been granted cessation of monitoring as the basin and outfall have been reclaimed in accordance with the approved abandonment (reclamation) plan. The watershed and basin have been incorporated into the annual stormwater monitoring in accordance with Special Condition No. 12 of this permit.

The updated 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.

As described and depicted in IEPA Log Nos. 3176-15 and 3309-15, identified as Insignificant Permit Revision (IPR) Nos. 46 and 49 respectively, the construction of Diversion Ditch DD-BD DD-BD1, DD-EE, DD-FF, and DD-FF1 will route affected and unaffected stormwater runoff to the west of restored Coffee Creek to Pond No. 006.

As described and depicted in IEPA Log No. 3341-15, the mining operation map has been updated to include the diversion ditches described above and the reorientation of Sediment Pond Nos. 006 and 008.

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

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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 No. 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, IL 62794-9276

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

Attn: Compliance Assurance Section

The Permittee may choose to submit electronic DMRs (NetDMR) instead of submitting paper DMRs. Information, including registration information for the NetDMR program can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>.

Should electronic filing (NetDMR) be elected for DMR monitoring and reporting requirements, a written notification shall be submitted to the Mine Pollution Control Program at the Marion, Illinois address indicated above that such electronic monitoring has been elected providing an indication of the date and/or quarter in which this electronic filing will be initiated.

Special Condition No. 4: Completed Discharge Monitoring Report (DMR) forms and as well as upstream and downstream 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

The Permittee shall record discharge monitoring results on Discharge Monitoring Report (DMR) forms using one such form for each Outfall and Discharge Condition each month. In the event that an Outfall does not discharge during a monthly reporting period or under a given Discharge Condition, the DMR form shall be submitted with "No Discharge" indicated.

In the event that electronic filing is being utilized, any and all monitoring results, other than NPDES outfall discharge results reported through NetDMR, shall be submitted to the Agency at the addresses indicated in Special Condition No. 3 above.

Special Condition No. 5: Completed periodic monitoring and reporting, other than DMR's and stream monitoring (i.e., groundwater monitoring, coal combustion waste analysis 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

Special Condition No. 6: The Agency may revise or modify the permit consistent with applicable laws, regulations or judicial orders.

Special Condition No. 7: 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.

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Special Conditions

Special Condition No. 8: 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. 9: 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 Form 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. 10: 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 to request the discharge be classified as a reclamation area discharge. The Agency will notify the permittee upon approval of the change.

Special Condition No. 11: The special stormwater effluent standards apply only on approval from the Agency. To obtain approval, a request with supporting documentation shall be submitted to request 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. 12: 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. 13: Sediment Pond Operation and Maintenance (001, 002, 003, 004, 005, 006, 007, 008 and 009):

- 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 and 009 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 and 009.
 - i. All sampling and monitoring required in accordance with 13(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 and 002. This downstream monitoring shall be performed a sufficient distance downstream of each Outfall to ensure 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 ensure 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 13(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.

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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 13(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.
- c. All results of sampling and monitoring performed in accordance with Special Condition No. 13(a) and (b) shall be submitted to the Agency in accordance with Special Condition Nos. 3 and 4 above.

Special Condition No. 14: Data collected in accordance with Special Condition No. 13 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.