NPDES Permit No. IL0077658 Notice No. 6582c

Public Notice Beginning Date: September 25, 2013

Public Notice Ending Date: October 25, 2013

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Renewed 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:

Name and Address of Facility:

Knight Hawk Coal, L.L.C. 500 Cutler-Trico Road Percy, IL 62272 Knight Hawk Coal, L.L.C.
Prairie Eagle Mine
1 ½ miles northwest of Cutler, Illinois
(Perry 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 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 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.

As provided in Section 309.115(a) of the Act, 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 Sections 309.109 through 309.112 of the Act 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 (SIC 1221) and underground mine (SIC 1222). Mine operations result in the discharge of alkaline mine drainage.

Public comments are invited on the following proposed modifications incorporated into this Permit renewal:

Incorporate an additional 20.0 acres into permit area for development of Slurry Sump 012C and install associated Monitoring Well No. MW-13.

Public Notice/Fact Sheet - Page 2 - NPDES Permit No. IL0077658

This facility has five (5) existing discharges which are located in Perry County, Illinois. The following information identifies the discharge points, receiving streams, and stream classifications:

<u>Outfall</u>	Receiving <u>Stream</u>	Latitude (North)	Longitude (West)
001	Unnamed tributary to Rock Fork	38°04'17.3"	89°33'27.7"
002	Unnamed tributary to North Fork Cox Creek	38°02'46.8"	89°35'31.1"
003	Unnamed tributary to North Fork Cox Creek	38°02'07.0"	89°35'36.0"
004	Unnamed tributary to North Fork Cox Creek	38°02'02.0"	89°35'36.0"
005	Unnamed tributary to Rock Fork	38°04'02.8"	89°33'30.7"

The stream segment NCDD of Rock Fork receiving the flow from the unnamed tributary into which Outfalls 001 and 005 discharge is not on the 2012 303(d) list of impaired waters.

The stream segment IIHA of North Fork Cox Creek receiving the flow from the unnamed tributary into which Outfalls 002, 003 and 004 discharges is on the 2012 303(d) list of impaired waters. The following parameters have been identified as the pollutants causing impairment:

Outfall Potential Causes

002, 003, 004 Sulfates

Sedimentation/Siltation Total Dissolved Solids (TDS) Alteration in stream-side or Littoral vegetative cover, Endrin

Outfall: 001

							Parame	ters					
Discharge Condition	Suspend (m	otal ded Solids (3) ng/l)	(3) (m	(total)) (4) ng/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)
	30 day average	daily maximum	30 day average	daily maximum	, ,	` ′	,		,				(ml/l)
1	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1850	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1850	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1850	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1850	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II accordance with 35 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in 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 III. 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 III. 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 III. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 III. 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.

Outfall: 002, 005

							Parame	ters					
Discharge Condition	Suspend (otal ded Solids (3) ng/l) daily maximum	(3)	(total)) (4) ng/l) daily maximum	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)
1	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1700	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1700	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1700	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1700	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II accordance with 35 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in 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 III. 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 III. 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 III. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 III. Adm. Code 406.106.
- (4) Discharges from Outfall 002, 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.

Outfall: 003

						Parame	eters				
Discharge Condition	Susp Sc (otal ended olids 3) ng/l)	(3)	(total) , (4) ng/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	1500	500	Monitor only	Measure When Sampling	1
II	-	1	-	-	6.0-9.0	-	1500	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1500	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1500	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in 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 III. 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 III. 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 III. Adm. Code
- (3) Effluent standards for mine discharges are contained in 35 III. Adm. Code 406.106.
- (4) Discharges from Outfall 003, 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.

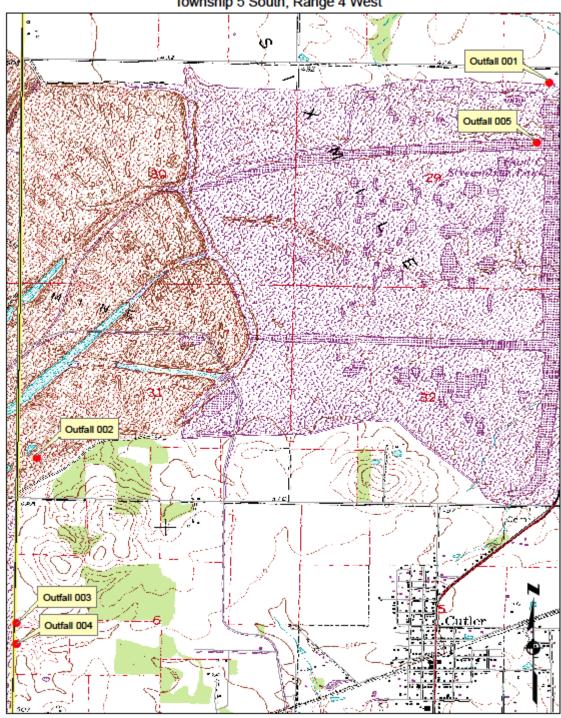
Outfall: 004

						Parame	eters				
Discharge Condition	Susp So (otal ended olids 3) ng/l)	(3)	(total) , (4) ng/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	1000	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1000	500	Monitor only	Measure When Sampling	0.5
III	ı	ı	ı	ı	6.0-9.0	-	1000	500	Monitor only	Measure When Sampling	ı
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1000	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in 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 III. 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 III. 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 III. Adm. Code
- (3) Effluent standards for mine discharges are contained in 35 III. Adm. Code 406.106.
- (4) Discharges from Outfall 004, 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 5, 6 and 7, Township 6 South, Range 4 West and Sections 29, 30, 31 and 32, Township 5 South, Range 4 West, 3rd P.M., all located in Perry County, Illinois.

Knight Hawk Coal, L.L.C. - Prairie Eagle Mine NPDES No. IL0077658 Perry County Township 6 South, Range 4 West Township 5 South, Range 4 West



NPDES Permit No. IL0077658

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

Renewed NPDES Permit

Expiration Date: February 28, 2018 Issue Date: March 8, 2013

Effective Date: March 8, 2013

Modification Date:

Facility Name and Address: Name and Address of Permittee:

Knight Hawk Coal, L.L.C. Knight Hawk Coal, L.L.C.

500 Cutler-Trico Road Prairie Eagle Mine Percy, Illinois 62272

1 1/2 miles northwest of Cutler, Illinois

(Perry County)

Discharge Number and Classification: Receiving waters

002, 003, 004 Alkaline Mine Drainage Permanent post-mining impoundments (from previous

Mining operation) thence to unnamed tributaries to

North Fork Cox Creek

Alkaline Mine Drainage Permanent post-mining impoundments (from previous 001,005

mining operation) thence to unnamed tributaries to

Rock Fork

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.

> Larry D. Crislip, Permit Manager Mine Pollution Control Program

Bureau of Water

LDC:cs/6582c/9-17-13

NPDES Permit No. IL0077658

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)

							Parame	eters					
Discharge Condition	Suspend (n	otal ded Solids ng/l) ****	(n	(total) ng/l) ***	pH** (S.U.) ***	Alkalinity/ Acidity	Sulfate (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness	Mercury see Special Condition	Flow (MGD)	Settleable Solids
	30 day average	daily maximum	30 day average	daily maximum					***		No. 15		(ml/l)
1	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1850	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	,	1	6.0-9.0	•	1850	500	,	Monitor only	•	Measure When Sampling	0.5
III	-	-	•	-	6.0-9.0	-	1850	500	i	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1850	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II accordance with 35 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. 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. In the event that Discharge Conditions II and/or III occur, grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and/or 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). Should a sufficient number of discharge events occur during the quarter, the remaining three (3) quarterly samples may be taken during any of the Discharge Conditions described above.

^{*} The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 001 and the unnamed tributary to Rock Fork 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 III. Adm. Code 302.204 for pH.

NPDES Permit No. IL0077658

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, 005 (Alkaline Mine Drainage)

							Parame	eters					
Discharge Condition	Suspend (n	otal ded Solids ng/l) ***	(m	(total) ng/l)	pH** (S.U.)	Alkalinity/ Acidity	Sulfate (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness	Mercury see Special Condition	Flow (MGD)	Settleable Solids
	30 day average	daily maximum	30 day average	daily maximum					***		No. 15		(ml/l)
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1700	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1700	500	i	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1700	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1700	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 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. 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. In the event that Discharge Conditions II and/or III occur, grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and/or 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). Should a sufficient number of discharge events occur during the quarter, the remaining three (3) quarterly samples may be taken during any of the Discharge Conditions described above.

^{*} The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 002 and the unnamed tributary to North Fork Cox Creek and Outfall 005 and the unnamed tributary to Rock Fork 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 III. Adm. Code 302.204 for pH.

NPDES Permit No. IL0077658

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*: 003 (Alkaline Mine Drainage)

						Parame	eters				
Discharge Condition	Susp Sc (m	otal ended olids og/l)	(m	(total) ng/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							
1	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1500	500	Monitor only	Measure When Sampling	-
II	-	ı	ı	ı	6.0-9.0	-	1500	500	Monitor only	Measure When Sampling	0.5
III	-	ı	1	ı	6.0-9.0	1	1500	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1500	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II accordance with 35 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. 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.

unless such discharge meets the water quality standards of 35 III. Adm. Code 302.204 for pH.

*** 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. In the event that Discharge Conditions II and/or III occur, grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and/or 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). Should a sufficient number of discharge events occur during the quarter, the remaining three (3) quarterly samples may be taken during any of the Discharge Conditions described above.

^{*} The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges

from Outfall 003 and the unnamed tributary to North Fork Cox 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

NPDES Permit No. IL0077658

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*: 004 (Alkaline Mine Drainage)

						Parame	eters				
Discharge Condition	Susp Sc (m	otal ended olids og/l)	(m	(total) ng/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							
1	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1000	500	Monitor only	Measure When Sampling	-
II	-	ı	ı	ı	6.0-9.0	-	1000	500	Monitor only	Measure When Sampling	0.5
III	-	ı	1	ı	6.0-9.0	1	1000	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1000	500	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II accordance with 35 III. 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 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. 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. In the event that Discharge Conditions II and/or III occur, grab sample of each discharge caused by the above precipitation events (Discharge Conditions II and/or 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). Should a sufficient number of discharge events occur during the quarter, the remaining three (3) quarterly samples may be taken during any of the Discharge Conditions described above.

^{*} The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 004 and the unnamed tributary to North Fork Cox 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 III. Adm. Code 302.204 for pH.

Modification Date:

NPDES Permit No. IL0077658

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:

Outfall*: 001 (Reclamation Area Drainage)

			Paran	neters		
Discharge Condition	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ***
I	6.5-9.0	1850	500	Monitor only	Measure When Sampling	0.5
П	6.0-9.0	1850	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1850	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1850	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 III. 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. The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For reclamation area discharges, 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 if and/or when a discharge occurs 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 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 Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 001 and the unnamed tributary to Rock Fork 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 III. Adm. Code 302,204 for pH.

NPDES Permit No. IL0077658

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:

Outfall*: 002, 005 (Reclamation Area Drainage)

	Parameters									
Discharge Condition	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ***				
I	6.5-9.0	1700	500	Monitor only	Measure When Sampling	0.5				
П	6.0-9.0	1700	500	Monitor only	Measure When Sampling	0.5				
III	6.0-9.0	1700	500	Monitor only	Measure When Sampling	-				
IV	6.5-9.0	1700	500	Monitor only	Measure When Sampling	0.5				

- I Dry weather discharge (base flow, if present) from the outfall.
- II accordance with 35 III. 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. The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For reclamation area discharges, 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 if and/or when a discharge occurs 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 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 Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 002 and the unnamed tributary to North Fork Cox Creek and Outfall 005 and the unnamed tributary to Rock Fork 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 III. Adm. Code 302.204 for pH.

NPDES Permit No. IL0077658

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:

Outfall*: 003 (Reclamation Area Drainage)

			Paran	neters		
Discharge Condition	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ***
I	6.5-9.0	1500	500	Monitor only	Measure When Sampling	0.5
П	6.0-9.0	1500	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1500	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1500	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 III. 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. The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For reclamation area discharges, 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 if and/or when a discharge occurs 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 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 Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 003 and the unnamed tributary to North fork Cox 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 III. Adm. Code 302,204 for pH.

NPDES Permit No. IL0077658

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:

Outfall*: 004 (Reclamation Area Drainage)

	Parameters							
Discharge Condition	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ***		
I	6.5-9.0	1000	500	Monitor only	Measure When Sampling	0.5		
П	6.0-9.0	1000	500	Monitor only	Measure When Sampling	0.5		
III	6.0-9.0	1000	500	Monitor only	Measure When Sampling	-		
IV	6.5-9.0	1000	500	Monitor only	Measure When Sampling	0.5		

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 III. 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. The 10-year, 24-hour precipitation event for this area is considered to be 4.76 inches.
- III In accordance with 35 III. 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 III. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For reclamation area discharges, 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 if and/or when a discharge occurs 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 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 Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 004 and the unnamed tributary to North Fork Cox 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 Permit No. IL0077658

Effluent Limitations and Monitoring

Upon completion of Special Condition No. 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 (Stormwater Discharge)

Paran	neters
pH* (S.U.) **	Settleable Solids (ml/l) **
6.0-9.0	0.5

Stormwater 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 stormwater 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 III. Adm. Code 302.204 for pH.

^{**} One (1) sample per year shall be collected and analyzed for the indicated parameter; however, such sampling and analysis is required only if and/or when a discharge occurs from the individual Outfall(s) identified above.

Page 11 Modification Date:

NPDES Permit No. IL0077658

Construction Authorization No. 7001-11

C.A. Date: September 5, 2012

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

A coal mine with both surface and underground operations containing a total of 1980.8 acres, also identified as IDNR/OMM Permit 372 and 377, located in Sections 5, 6 and 7, Township 6 South, Range 4 West and Sections 29, 30, 31 and 32, Township 5 South, Range 4 West, 3rd P.M., Perry County, Illinois, and described as follows:

The mine facilities include a preparation plant, coal stockpiles, office, bathhouse, warehouse, roads, diversions and a number of surface impoundments. The following additional areas are being added to the original facilities and area approved for this operation.

An additional area of 5.7 acres, identified as IBR No. 6 to OMM Permit No. 372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log Nos. 1505-07 and 1507-07-A, soil stockpiles and electric distribution cable will be located within the area with runoff tributary to the active pit identified as Boxcut No. 8. Pit pumpage will be routed to non-discharging Sump 011. This additional area is included in the total permit area cited above.

An additional area of 20.0 acres, identified as IBR No. 7 to OMM Permit No. 372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log Nos. 0482-08 and 0482-08-A, this acreage will be used for additional mining area. Surface runoff will be tributary to the active pit identified as Boxcut No. 8. Pit pumpage will be routed to non-discharging Sump 011. This additional area is included in the total permit area cited above.

An additional area of 20.0 acres, identified as IBR No.11 to OMM Permit No.372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log Nos. 7105-11 and 7105-11-B, this acreage will be used for placement of overburden stockpiles. Surface Runoff will be tributary to non-discharging Sumps A and B. This additional area is included in the total permit area cited above.

An additional area of 20.0 acres, identified as IBR No. 12 to OMM Permit No. 372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log Nos. 7200-11 and 7200-11-B, this acreage will be used to develop Sumps A and B and construct Ditch No. 22. Surface runoff from this area will be tributary to non-discharging Sumps A and B. This additional area is included in the total permit area cited above.

An additional area of 20.0 acres, identified as IBR No. 13 to OMM Permit No. 372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log Nos. 7397-11 and 7397-11-A, this acreage will be used to develop an overburden stockpile. Surface runoff will be tributary to non-discharging Sumps A and B. This additional area is included in the total permit area cited above.

An additional area of 6.0 acres, identified as an IBR to OMM Permit No. 372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log Nos. 7549-11 and 7549-11-A, this acreage will be used to recover highwall mining equipment as well as for surface mining activities. Surface runoff will be tributary to the active pit with pit pumpage routed to non-discharging Sumps. This additional area is included in the total permit area cited above.

An additional area of 20.0 acres, identified as an IBR to OMM Permit No. 372 area, located in Sections 31 and 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log Nos. 6035-12 and 6035-12-B, this acreage will be used to develop fine coal (slurry) refuse disposal area identified as Sump 012A. Surface runoff from this additional area will be tributary to Slurry Sump 012A. This additional area is included in the total permit area cited above. Please refer to discussion below for additional details regarding Sump 012A.

An additional area of 3.5 acres, identified as an IBR to OMM Permit No. 372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log No. 6561-12, 2.0 acres of this will be used to obtain borrow material to construct embankments in Sump 012A and 1.5 acres will be used to extend mining southward. Surface drainage will be tributary to Sump 012A and the active pit, respectively. This additional area is included in the total permit acreage cited above.

An additional area of 20.0 acres, identified as an IBR to OMM Permit No. 372 area, located in Section 32, Township 5 South, Range 4 West, in Perry County, Illinois. As proposed and depicted in IEPA Log No. 6426-12, this acreage will be used to develop fine coal (slurry) refuse disposal area identified as Sump 012B. Surface runoff from this additional area will be tributary to Slurry Sump 012B. This additional area is included in the total permit area cited above. Please refer to discussion below for additional details regarding Sump 012B.

The mining plan includes the development of boxcuts where highwall miners will be utilized to excavate coal laterally. For most of the operation, the only disturbed areas from mining will be the areas immediately adjacent to the boxcuts. Traditional surface mining will be conducted in limited areas.

Page 12 Modification Date:

NPDES Permit No. IL0077658

Construction Authorization No. 7001-11

C.A. Date: September 5, 2012

The mining operation plan for this facility is revised to include the following:

As proposed and depicted in IEPA Log No. 7132-11 the mining operation plan is revised to include Access Road A, Retail Haul Roads A and B and a small parking area.

The surface drainage control plan is revised to include Collector Ditches on the north side of the OMM Permit No. 377 Pit (IEPA Log Nos. 0110-08, 0140-08 and 0223-08) and Diversion Ditch 21A to route drainage south of the OMM Permit No. 377 Pit into the final cut (IEPA Log Nos. 0435-08 and 0435-08-A).

As proposed and depicted in IEPA Log No. 0144-08 a Conveyer Belt structure will be constructed from the underground portal to the raw coal stockpile. In addition Diversion Ditch 13D will be constructed south of the east end of Boxcut No. 5.

As proposed and depicted in IEPA Log No. 1393-07 a temporary coal stockpile may be developed within the mined spoil near the preparation plant. Surface runoff from this coal stockpile area will be routed to the coal processing circuit.

As proposed and depicted in IEPA Log No. 9545-09 a temporary coal stockpile may be developed within the mined spoil. Surface runoff from this coal stockpile area will be routed to approved sediment control areas.

As proposed and depicted in IEPA Log No. 7385-11 an overflow coal stockpile may be developed between Retail Haul Road A and B. Surface runoff from this coal stockpile area will be controlled by Collector Ditches 1F and 1B and will be conveyed to non-discharging Sump 001.

As proposed and depicted in IEPA Log No. 6334-12 various modifications to the preparation plant will be implemented which includes additional conveyor belts, concrete stacker, concrete reclaim tunnel, truck loadout and a clean coal stockpile.

Five (5) discharges identified as Outfalls 001, 002, 003, 004 and 005, all classified as alkaline mine drainage, are located at this facility. Outfall Nos. 002, 003 and 004 report to existing post-mining permanent impoundments from a previous mining operation then to an unnamed tributary to North Fork Cox Creek, while Outfall Nos. 001 and 005 report to existing post-mining permanent impoundments from a previous mining operation then to an unnamed tributary to Rock Fork. These impoundments are identified as sumps on the Operations Plans Drawings.

Location and receiving stream of the Outfalls at this facility is as follows:

Outfall	Latitude			Longitude			Description Water
Number	DEG	MIN	SEC	DEG	MIN	SEC	Receiving Water
001	38°	04'	17.3"	89°	33'	27.7"	Unnamed tributary to Rock Fork
002	38°	02'	46.8"	89°	35'	31.1"	Unnamed tributary to North Fork Cox Creek
003	38°	02'	07.0"	89°	35'	36.0"	Unnamed tributary to North Fork Cox Creek
004	38°	02'	02.0"	89°	35'	36.0"	Unnamed tributary to North Fork Cox Creek
005	38°	04'	02.8"	89°	33'	30.7"	Unnamed tributary to Rock Fork

A pre-law inclines is currently being used as a slurry disposal impoundment with water being returned to the preparation plant. Slurry disposal area expansion into Cell B will be developed as proposed and described in IEPA Log No. 2188-06 (OMM Permit No. 372, IPR No. 17). In addition, the original Slurry Cell will be modified to develop additional Cells C and D as described and depicted in IEPA Log No. 2221-06 (OMM Permit No. 372, IPR No. 13). Groundwater monitoring for the original slurry cell, as well as the cells B, C and D will consist of monitoring Well No. MW-3.

As discussed above and described in IEPA Log Nos. 6035-12 and 6035-12-B, a portion of a pre-law incline will be developed into a slurry disposal impoundment identified as Sump 012A. This slurry disposal area will be operated to allow discharges into adjacent Slurry Sump 012B (discussed below) or as a non-discharging impoundment with water collecting in Sump 012A will either be returned to the coal processing circuit or pumped to other onsite non-discharging Sumps. Groundwater monitoring for Sump 012A will consist of Monitoring Well No. MW-11 as depicted in IEPA Log No. 6035-12-B and subject to Condition No. 14.

As discussed above and described in IEPA Log No. 6426-12, a portion of a pre-law incline immediately east of Slurry Sump 012A will be developed into a slurry disposal impoundment identified as Sump 012B. This slurry disposal area will be operated as a non-discharging impoundment with water collecting in Sump 012B either being returned to the coal processing circuit or pumped to other onsite non-

Page 13 Modification Date:

NPDES Permit No. IL0077658

Construction Authorization No. 7001-11

C.A. Date: September 5, 2012

discharging sumps. Development of Slurry Sump 012B shall be subject to the requirements of Condition No. 13 as well as groundwater monitoring requirements of Condition No. 14.

Refuse from the preparation plant will be disposed in the bottom of the active pit as proposed in Log Nos. 4412-04, 4412-04-A and 3368-05.

Refuse Disposal Areas A and B will be developed and constructed as proposed in IEPA Log Nos. 8185-10, 8185-10-A, 8185-10-C and 7251-11. A compacted clay liner of two (2) foot thickness will be constructed beneath refuse disposal area A and B. Foundation preparation and liner construction for these areas shall be in accordance with the specifications and testing requirements of Condition No. 12. Groundwater monitoring for refuse disposal areas A and B shall consist of Monitoring Well Nos. MW-5, MW-6 and MW-7. Refer to discussion below and Condition No. 14 for groundwater monitoring requirements.

As proposed in IEPA Log No. 6377-12, Groundwater Monitoring Well No. MW-1 will be abandoned and properly sealed due to damage to the well casing. The Agency has determined that replacement of this well will not be required.

Groundwater monitoring for this area includes Monitoring Well Nos. MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-11, MW-12, UG-MW-01 and UG-MW-02. Groundwater monitoring requirements are outlined in Condition No. 14.

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

All water remaining upon abandonment must meet the requirements of 35 III. 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 III. 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.

- 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 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, 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).

Page 14 Modification Date:

NPDES Permit No. IL0077658

Construction Authorization No. 7001-11

C.A. Date: September 5, 2012

- 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 III. Adm. Code 406 as amended in R84-29 at 11 III. Reg. 12899. The application should discuss the treatment method and demonstrate how the discharge will meet the applicable standards.
- 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 (Al₂(SO₄)₃), hydrated lime (Ca(OH)₂), soda ash (Na₂CO₃), 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 permitted must demonstrate in writing to the Agency that such use will not cause a violation of the toxic substances standard of 35 III. Adm. Code 302.210 or of the appropriate effluent and water quality standards of 35 III. 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 III. 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 III. 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:
 - 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. The two (2) foot compacted clay liners to be constructed beneath refuse disposal areas A and B shall be subject to the following specifications and procedures as detailed in IEPA Log No. 8185-10-C.
 - All trees and/or roots that may compromise liner integrity will be thoroughly removed and the area properly backfilled and compacted.
 - b. To obtain the two (2) foot thick liner, the upper one (1) foot of spoil material will be removed and the underlying twelve (12) inches of material conditioned and compacted to a minimum 95% standard proctor. The removed upper material will be replaced and compacted. Compacted effort on both liner lifts shall be sufficient to achieve a permeability of 1x10⁻⁷ cm/s, or less.

Page 15 Modification Date:

NPDES Permit No. IL0077658

Construction Authorization No. 7001-11

C.A. Date: September 5, 2012

c. A sufficient number of density tests shall be performed to adequately evaluate overall compaction of each compacted lift. The results of all compaction testing as well as a map locating test sides shall be submitted to the Agency.

- 13. A map shall be submitted within 60 days of the issuance date of this permit to propose and depict a groundwater monitoring well to be identified as Well No. MW-12 at the approximate mid-point of Slurry Sump 012B and located within 25-30 feet of the top of slope on the south side of the incline. This monitoring well should be proposed to be completed in the uppermost saturated (water bearing) zone. Following well installation monitoring shall be in accordance with Condition No. 14 below.
- 14. Groundwater monitoring requirements for Well Nos. MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-11, MW-12, UG-MW-01 and UG-MW-02 are as follows:
 - a. Ambient background monitoring shall be performed for Monitoring Well Nos. MW-3, MW-5, MW-6, MW-7, MW-11 and MW-12. 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

Lead Barium Vanadium Beryllium Manganese (dissolved) Zinc Manganese (total) Boron рΗ Cadmium Mercury Acidity Molybdenum Alkalinity Chloride Chromium Nickel Hardness Phenols Water Elevation Cobalt

Copper Selenium Cyanide Silver

NOTE: Ambient background monitoring for Well Nos. MW-3, MW-5, MW-6 and MW-7 has been completed with the results of such monitoring contained in IEPA Log Nos. 2496-06 and 6048.12.

- b. Following the ambient monitoring as required under 14(a) above, routine monitoring shall continue on a quarterly basis as follows:
 - Monitoring Well Nos. MW-3, MW-5, MW-6, MW-7, MW-11 and MW-12 shall continue to be monitored quarterly for the contaminants identified in 14(a) above.
 - Monitoring Well Nos. MW-2, MW-4, UG-MW-1 and UG-MW-02 shall be monitored quarterly as required by IDNR/OMM for the following list of constituents:

Iron (dissolved)HardnessIron (total)AcidityManganese (dissolved)AklalinityManganese (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 No. 14(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. 14(a) and 14(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.

NPDES Permit No. IL0077658

Construction Authorization No. 7001-11

C.A. Date: September 5, 2012

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 (\overline{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.

$$\overline{X}_b = \frac{X_1 + X_2 + ... X_n}{n}$$

Where:

 \overline{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:

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

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

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

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

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.

Page 17 Modification Date:

NPDES Permit No. IL0077658

Construction Authorization No. 7001-11

C.A. Date: September 5, 2012

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 III. 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

Dograpa of francism	t-valu		t-value	S
Degrees of freedom	(one-ta 99%	95%	(two-tail)* 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.

Page 18 Modification Date:

NPDES Permit No. IL0077658

Supplemental Construction Authorization No. 7001-11-1

S.C.A. Date: September 17, 2013

Supplemental Authorization is hereby granted to the above designee to construct and operate the mine and mine refuse area previously approved under Authorization No. 7001-11 dated September 5, 2012. These facilities have been revised as follows:

An additional area of 20.0 acres, identified as IBR No. 18 to OMM Permit No. 372, located in Section 32, Township 5 South, Range 4 West, Perry County, Illinois. As proposed and depicted in IEPA Log No. 5030-13, this acreage will be used to develop fine coal refuse (slurry) disposal area identified as Slurry Sump 012C. Surface runoff from this additional area will be tributary to the Slurry Sump 012C. This additional area results in a total area covered by this Permit of 2000.8 acres.

A portion of the pre-law incline immediately east of Slurry Sump 012B will be developed into the slurry disposal impoundment identified as Slurry Sump 012C. This slurry disposal area will be operated as a non-discharging impoundment with water collecting in Sump 012C either being returned to the coal processing circuit or pumped to other onsite non-discharging sumps. The development of Slurry Sump 012C shall be subject to the requirements of Condition No. 1 of this Supplemental Construction Authorization as well as the groundwater monitoring requirements of Condition No. 14 of Construction Authorization No. 7001-11.

In support of the development and utilization of Slurry Sump 012C, spillways will be installed in the Slurry Sump 012A-2 and 012B dams. These spillways will consist of 12-inch culverts and emergency spillways to allow slurry to flow through the series of sumps as slurry may be directed to any of Sumps 012A-1, 012A-2, 012B or 012C. To prevent overflow of Sump 012C, as indicated above, water will be returned to the coal processing circuit or pumped to an onsite non-discharging sump.

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

All water remaining upon abandonment must meet the requirements of 35 III. 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 III. 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. If such Condition requires 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. A map shall be submitted within 60 days of the issuance date of this modified permit to propose and depict a groundwater monitoring well to be identified as Well No. MW-13 east of the mid-point near the Slurry Sump 012C dam and located within 25-30 feet of the top of slope on the south side of the incline. This monitoring well should be proposed to be completed in the uppermost saturated (water bearing) zone. Following well installation monitoring shall be in accordance with Condition No. 14 of Construction Authorization No. 7001-11.

Page 19 Modification Date:

NPDES Permit No. IL0077658

Special Conditions

<u>Special Condition No. 1</u>: 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.

<u>Special Condition No. 2</u>: 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.

<u>Special Condition No. 3</u>: 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

Should electronic filing be available and elected for any periodic monitoring and reporting requirements, written notification shall be provided to the Agency that such electronic filing has been elected and the date on which this filing will be initiated.

<u>Special Condition No. 4</u>: 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, MarchApril 15April, May, JuneJuly 15July, August, SeptemberOctober 15October, November, DecemberJanuary 15

The Permittee shall record discharge monitoring results on Discharge Monitoring Report forms (DMR's) using one such form for each applicable Discharge Condition each month.

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, MarchMay 1April, May, JuneAugust 1July, August, SeptemberNovember 1October, November, DecemberFebruary 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.

<u>Special Condition No. 8</u>: 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.

Page 20 Modification Date:

NPDES Permit No. IL0077658

Special Conditions

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 III. 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.

<u>Special Condition No. 12</u>: 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 (Outfalls 001, 002, 003, 004 and 005):

- a. For discharges resulting from precipitation events, in addition to the alternate effluent (Discharge Condition Nos. II and III) monitoring requirements, as indicated on the applicable effluent pages of this Permit, discharges from Outfalls 001, 002, 003, 004 and 005 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 unnamed tributary to Rock Fork which receive discharges from Outfalls 001 and 005 and unnamed tributary to North Fork Cox Creek which receives discharge from Outfalls 002, 003 and 004.
 - i. All sampling and monitoring required under 13(b)(ii) and (iii) below shall be performed during a discharge and monitoring event from the associated outfall.
 - ii. Unnamed tributary to Rock Fork and unnamed tributary to North Fork Cox Creek shall be monitored and reported quarterly for Discharge Rate, Chloride, Sulfate and Hardness downstream of the associated outfall. This downstream monitoring shall be performed a sufficient distance downstream of the associated outfall to ensure that complete mixing has occurred. 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 herein 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 this permit based on an evaluation of the quarterly data, a minimum of three (3) additional samples analyzed for the parameters identified above must be submitted with the permit renewal application a minimum of 180 days prior to expiration of this permit.
 - iii. Unnamed tributary to Rock Fork and unnamed tributary to North Fork Cox Creek shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.

Page 21 Modification Date:

NPDES Permit No. IL0077658

Special Conditions

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.

Special Condition No. 15: Mercury shall be monitored quarterly until a minimum of ten (10) samples have been collected. This Mercury monitoring is required only under Discharge Condition Nos. I and/or IV and only during quarters in which there are discharges from the outfall which occur under Discharge Condition Nos. I and/or IV. 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 0.5 ng/l (nanograms/liter). The results of such testing must be reported in "ng/l" (nanograms/liter)and 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.