

NPDES Permit No. IL0073351  
Notice No. 6546c

Public Notice Beginning Date: **August 22, 2013**

Public Notice Ending Date: **September 23, 2013**

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:

Peabody Arclar Mining, LLC  
7100 Eagle Crest Boulevard  
Suite 100  
Evansville, IN 47715-8152

Name and Address of Facility:

Peabody Arclar Mining, LLC  
Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) and  
Willow Lake Mine  
12250 McClain Road  
Equality, Illinois 62934  
1 mile north of Equality, Illinois  
(Gallatin and Saline Counties)

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 on the dates indicated in the heading of this Public Notice/Fact Sheet. Interested persons are invited to submit written comments on the draft permit to the IEPA as indicated below. Although written comments will be accepted through the Post-Hearing Comment Period Ending Date, the IEPA is requesting that substantive written comments be submitted by the Draft Permit Public Notice Ending Date so the IEPA can better facilitate the public hearing. Commenters 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.

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.

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

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

Total area covered by this permit is increased to 6922.5 acres with the incorporation of 37.5 acres.

Outfalls 004 and 013 have been removed from the NPDES Permit due to the basins and discharge structures being reclaimed in accordance with the approved abandonment plan.

Outfalls 011, 013WL, 015WL and 019 have been removed from the NPDES Permit due to being mined through.

Outfalls 002 and 012 are reclassified as reclamation discharges.

Various mining operations and drainage control plan revisions.

This facility has 25 existing discharges which are located in Saline and Gallatin County, Illinois. The following information identifies the discharge points, receiving streams, and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude (North)</u>	<u>Longitude (West)</u>
001	Unnamed tributary to North Fork Saline River	37°45'14.3"	88°20'47.0"
002	Unnamed tributary to North Fork Saline River	37°45'32.9"	88°20'39.6"
005	North Fork Saline River	37°46'00.2"	88°19'42.2"
006	Unnamed tributary to North Fork Saline River	37°46'16.9"	88°19'46.9"
010	Cockerel Branch	37°46'19.4"	88°24'21.1"
012	Unnamed tributary to Cockerel Branch	37°45'10.7"	88°22'42.4"
014	Unnamed tributary to North Fork Saline River	37°45'37.3"	88°21'02.9"
016	Unnamed tributary to Middle Fork Saline River	37°46'19.0"	88°25'44.0"
018	Cockerel Branch	37°45'53.0"	88°24'21.0"
A13 WL	Pond 028 (Outfall 028)	37°45'42.0"	88°23'33.0"
014 WL	Unnamed tributary to North Fork Saline River	37°45'56.0"	88°23'03"
020	Cockerel Branch	37°45'09"	88°23'32"
021	Unnamed tributary to Rocky Branch	37°44'37"	88°24'14"
022	Unnamed tributary to Rocky Branch	37°44'36"	88°24'21"
023	Unnamed tributary to Rocky Branch	37°44'37"	88°24'27"
024	Unnamed tributary to Rocky Branch	37°44'36"	88°24'38"
025	Unnamed tributary to Rocky Branch	37°44'36"	88°24'44"
026	Unnamed tributary to Rocky Branch	37°44'37"	88°25'06"
027	Unnamed tributary to Saline River	37°44'58"	88°25'36"
028	Unnamed tributary to Cockerel Branch	37°45'27"	88°23'49"
029	Unnamed tributary to Cockerel Branch	37°45'27"	88°23'25"

030	Unnamed tributary to Cockerel Branch	37°45'23"	88°23'07"
031	Unnamed tributary to Cockerel Branch	37°45'02"	88°22'48"
032	Unnamed tributary to Cockerel Branch	37°44'50"	88°22'23"
033	Unnamed tributary to North Fork Saline River	37°45'07"	88°20'48"

The stream segment ATF 06 of North Fork Saline River receiving the flow from the unnamed tributary into which Outfalls 001, 002, 006, 014, 014 WL and 033 discharge and which receives discharge from Outfall 005 is on the draft 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>
001, 002, 005, 006, 014, 014WL, 033	Alteration in stream-side or littoral Vegetative covers, Loss of in-stream cover

The stream segment of Cockerel Branch receiving flow from the unnamed tributary into which Outfalls 012, 028, 029, 030, 031 and 032 discharge is not on the draft 2012 303(d) list of impaired waters.

The stream segment of Cockerel Branch receiving discharges from Outfalls 010, 018 and 020 is not on the draft 2012 303(d) list of impaired waters.

The stream segment ATG 03 of Middle Fork Saline River receiving the flow from the unnamed tributary into which Outfall 016 discharges is on the draft 2012 303(d) list of impaired waters. Outfall 016 is located approximately 8 miles upstream of Middle Fork Saline River. The following parameters have been identified as the pollutants causing impairment:

<u>Outfall</u>	<u>Potential Causes</u>
016	Alteration in stream-side or littoral Vegetative covers, Sedimentation/ Siltation, Total Suspended Solids, Phosphorus (Total), Aquatic Plants (Macrophytes), Changes in Stream Depth and Velocity Patterns

The stream segment ATZB of Rocky Branch receiving the flow from the unnamed tributary into which Outfalls 021, 022, 023, 024, 025 and 026 discharge is not on the draft 2012 303(d) list of impaired waters.

The stream segment AT 05 of Saline River receiving the flow from the unnamed tributary into which Outfall 027 discharges is on the draft 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>
027	Alteration in stream-side or littoral Vegetative covers, Boron, Manganese, Loss of in-stream covers

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

Outfall: 001

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1635	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1835	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1835	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	1835	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. 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 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

- (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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 001, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 006

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	1748	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1748	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1748	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1748	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 5.21 inches.
- III In accordance with 35 Ill. 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 or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

- (1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h).
- (2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 006, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 010

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1521	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. 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 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.
- (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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 010, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 014

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	2500	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. 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 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.
- (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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 014, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 014 WL

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1286	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1286	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1286	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1286	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24 hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. 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 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 014 WL, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.



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

Outfall: 016

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1927	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. 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 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.
- (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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 016, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 018

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1924	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. 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 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.
- (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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 018, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 020

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1790	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2003	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2003	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	2003	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. 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 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.
- (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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 020, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 021, 022, 023, 024, 025, 026

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	2027	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2027	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2027	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	2027	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 5.21 inches.
- III In accordance with 35 Ill. 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 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 021, 022, 023, 024, 025, 026, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 027

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1916	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1916	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1916	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1916	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24 hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. 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 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 027, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 028

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1964	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. 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 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.
- (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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfall 028, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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

Outfall: 029, 030, 031, 032, 033

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	Mn (total) (mg/l)	Hardness (5)	Mercury	Flow (MGD)	Settleable Solids (2) (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	2000	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2000	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2000	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	2000	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24 hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. 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 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 snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
- (4) Discharges from Outfalls 029, 030, 031, 032, 033, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

The reclamation area discharges from this facility shall be monitored and limited at all times as follows:

Outfall<sup>(1)</sup>: 002

Discharge Condition	Parameters				
	pH (S.U.)	Sulfate <sup>(2)</sup> (mg/l)	Chloride (mg/l)	Hardness	Settleable Solids (ml/l)
I	6.5-9.0	1272	500	Monitor only	0.5
II	6.0-9.0	1272	500	Monitor only	0.5
III	6.0-9.0	1272	500	Monitor only	-
IV	6.5-9.0	1272	500	Monitor only	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. The 10-year, 24-hour precipitation event for this area is considered to be (10-YR. PRECIP) 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 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.

(1) Effluent limitations for reclamation area discharges are contained in 35 Ill. Adm. Code 406.109.

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



The reclamation area discharges from this facility shall be monitored and limited at all times as follows:

Outfall<sup>(1)</sup>: 012

Discharge Condition	Parameters				
	pH (S.U.)	Sulfate <sup>(2)</sup> (mg/l)	Chloride (mg/l)	Hardness	Settleable Solids (ml/l)
I	6.5-9.0	1909	500	Monitor only	0.5
II	6.0-9.0	1909	500	Monitor only	0.5
III	6.0-9.0	1909	500	Monitor only	-
IV	6.5-9.0	1909	500	Monitor only	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. The 10-year, 24-hour precipitation event for this area is considered to be (10-YR. PRECIP) 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 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.

(1) Effluent limitations for reclamation area discharges are contained in 35 Ill. Adm. Code 406.109.

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

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

Outfall: A13 WL

Parameters									
Total Suspended Solids				CBOD <sub>5</sub>				pH (3) (S.U.)	Flow (MGD)
Load Limits (1) (lbs/day)		Concentration Limits (2) (mg/l)		Load Limits (1) (lbs/day)		Concentration Limits (2) (mg/l)			
30 day average	daily maximum	30 day average	daily maximum	30 day average	daily maximum	30 day average	daily maximum		
2.06	4.12	30.0	60.0	1.70	3.40	25.0	50.0	6.0-9.0	Measure When Sampling

- (1) Load limits are calculated as follows:  
Average Flow (MGD) x Average or Maximum Concentration Limit (mg/l) X 8.34 = lbs/day
- (2) General effluent standards for deoxygenating wastes are contained in 35 Ill. Adm. Code 304.120.
- (3) pH shall not be less than 6.0 nor greater than 9.0 S.U. pursuant to 35 Ill. Adm. Code 304.125(a).

The stormwater discharges from this facility shall be monitored and limited at all times as follows:

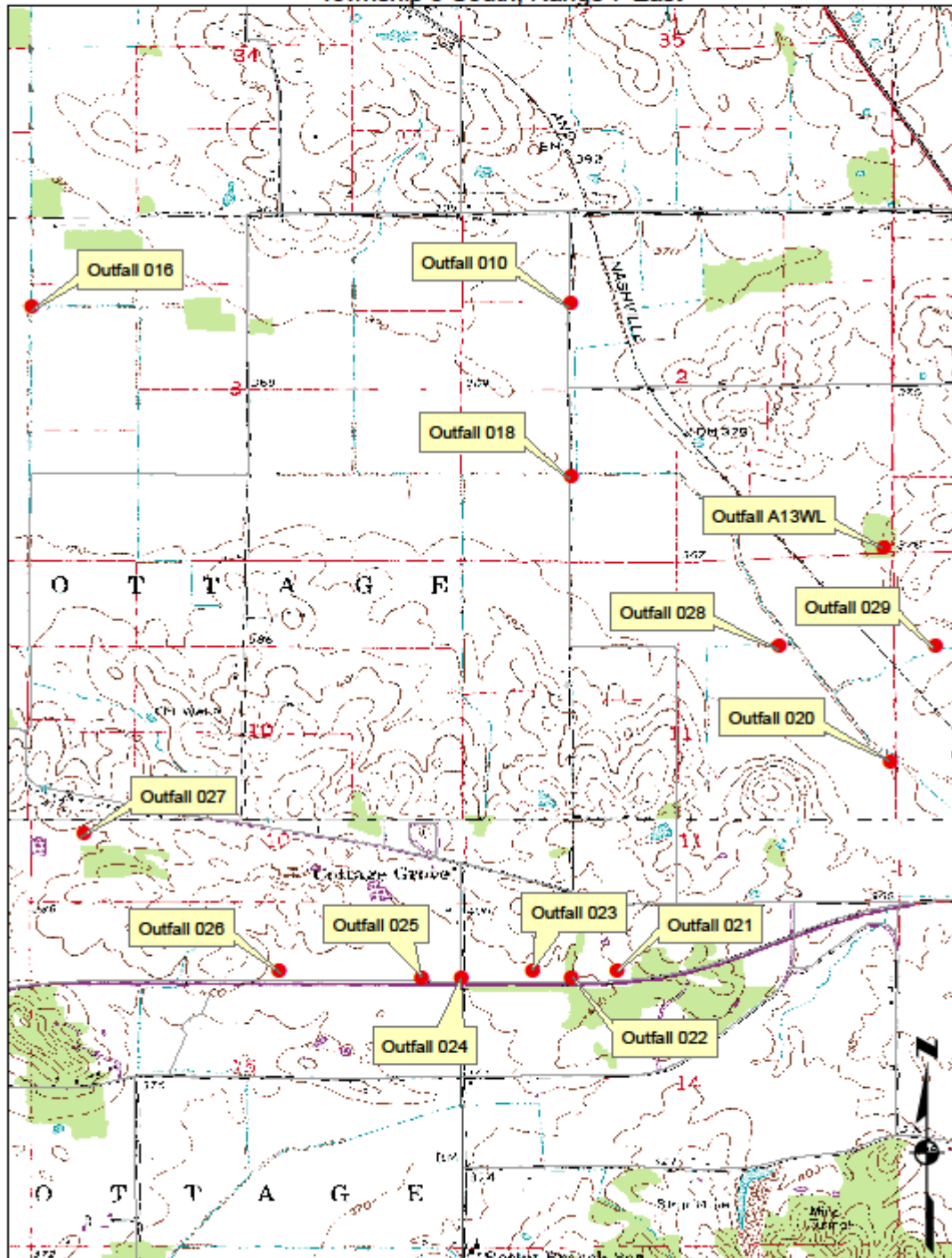
Outfall<sup>(1)</sup>: 005

Parameters	
pH (S.U.)	Settleable Solids (ml/l)
6.0-9.0	0.5

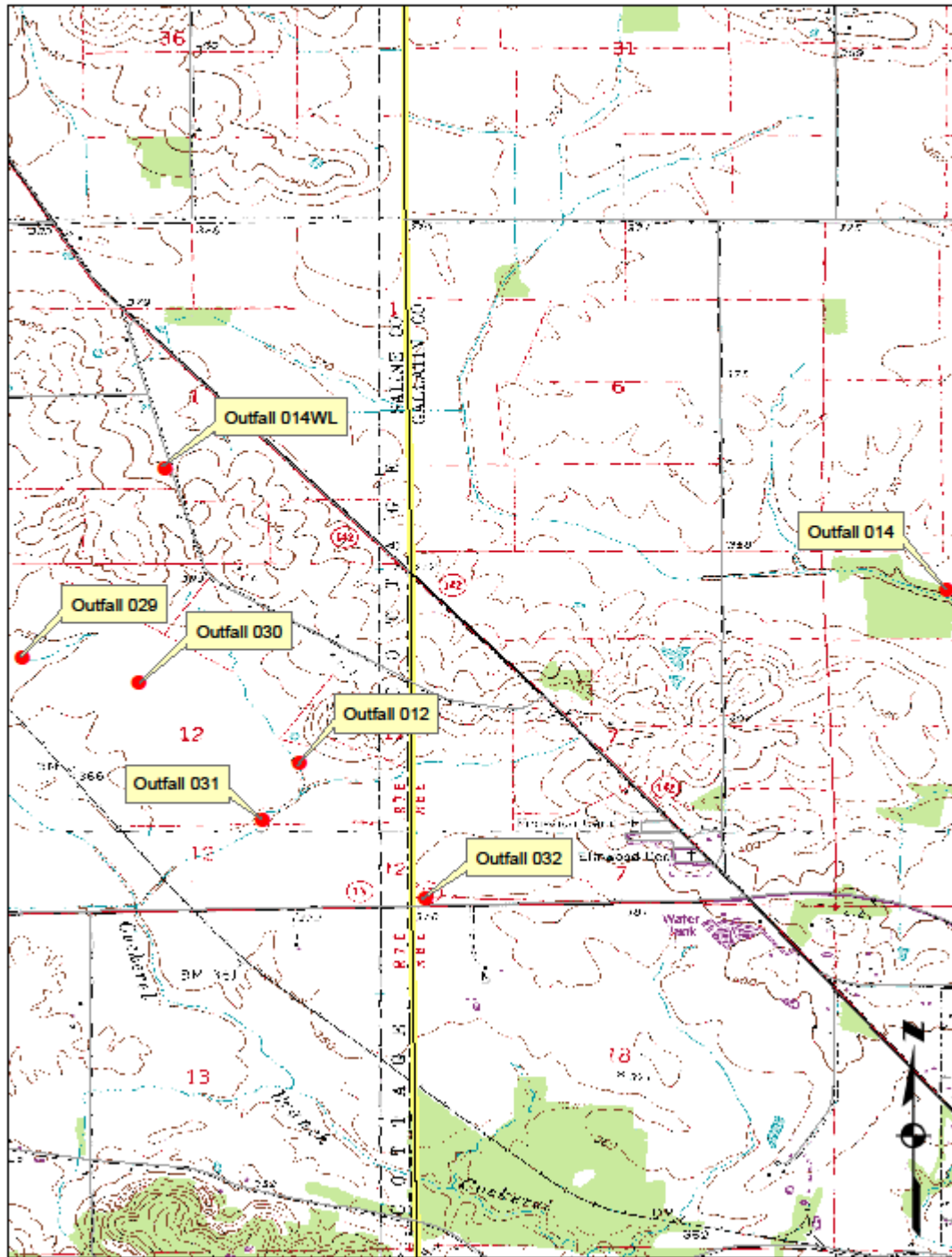
- (1) Stormwater effluent limitations for all Discharge Conditions are established pursuant to 40 CFR 122.26, and IEPA correspondence to the industry dated July 31, 1992, with sample frequency for stormwater discharges being once per year.

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 23, 24 and 26, Township 8 South, Range 7 East, 3rd P.M., Saline County, Sections 1, 2, 3, 10, 11, 12, 14 and 15, Township 9 South, Range 7 East, 3<sup>rd</sup> P.M., Saline County, Section 18, Township 8 South, Range 8 East, 3<sup>rd</sup> P.M., Gallatin County and Sections 4, 5, 6, 7, 8, 9 and 17, Township 9 South, Range 8 East, 3<sup>rd</sup> P.M., Gallatin County, Illinois.

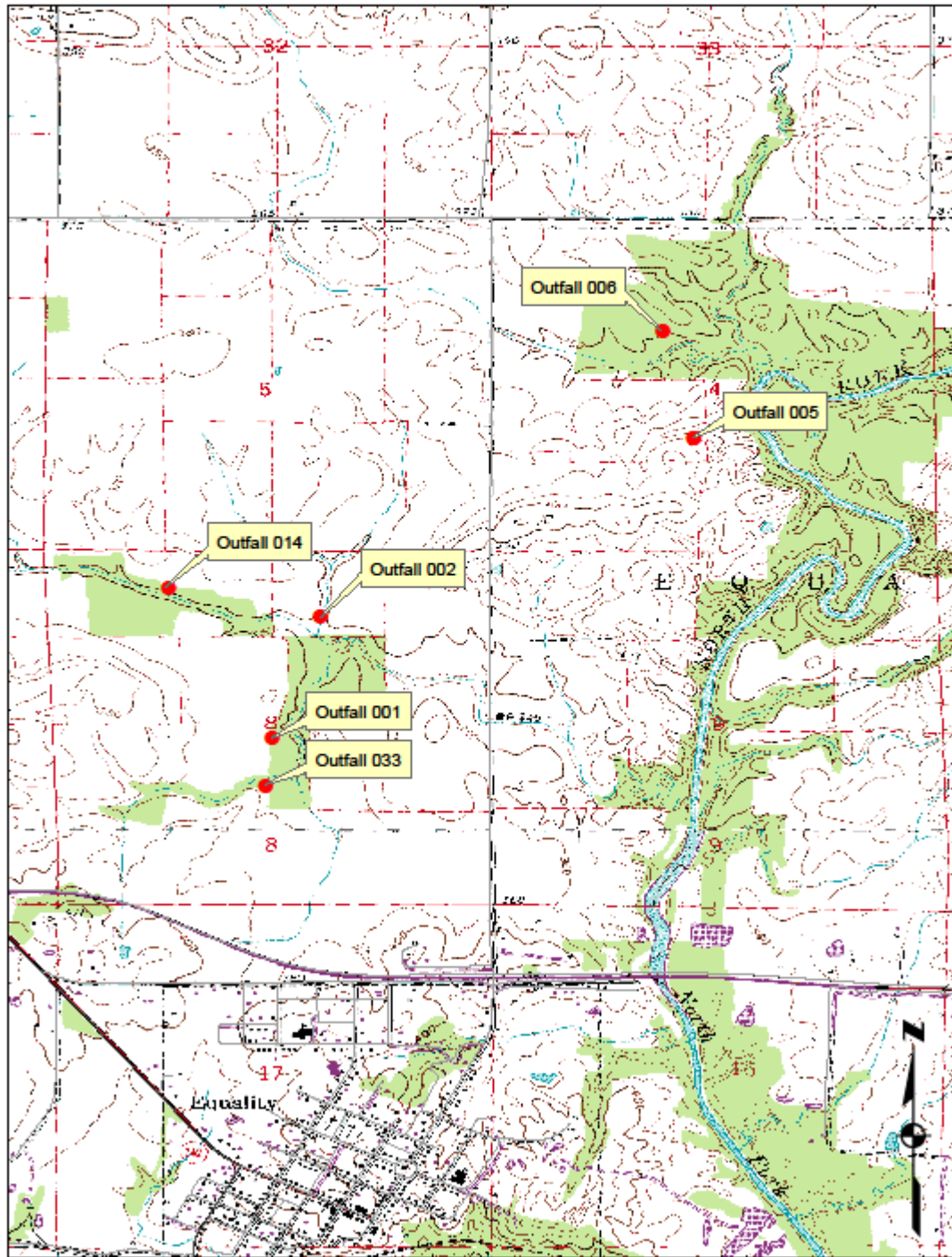
**Peabody Arclar Mining, L.L.C.**  
**Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) & Willow Lake Mine**  
**NPDES No. IL0073351**  
Saline County  
Township 9 South, Range 7 East



**Peabody Arclar Mining, L.L.C.**  
**Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) & Willow Lake Mine**  
**NPDES No. IL0073351**  
Saline County - Township 9 South, Range 7 East  
Gallatin County - Township 9 South, Range 8 East



**Peabody Arclar Mining, L.L.C.**  
**Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) & Willow Lake Mine**  
**NPDES No. IL0073351**  
Gallatin County  
Township 9 South, Range 8 East



**Antidegradation Assessment  
Peabody Arclar Mining, L.L.C.  
Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) and  
Willow Lake Mine  
NPDES Permit No. IL0073351  
Gallatin and Saline Counties**

The NPDES permit for the subject facility is being modified to include Incidental Boundary Revisions (IBRs) to OMM Permits 415, 348, and 327, which would allow for additional surface mining. No new outfalls are proposed, as stormwater runoff from the proposed IBRs would be sent to existing sedimentation basins and NPDES permitted outfalls. IBRs 1 and 2 to OMM Permit 415 would allow for up to 37.2 additional acres of mining and would contribute an additional 43.6 acres of drainage to Outfall 032. IBR 3 to OMM Permit 415 would allow for up to 20.0 additional acres of mining, with stormwater runoff from this area being routed to Outfall 028. However, this 20.0 acre parcel of land was accounted for in the original drainage design for Outfall 028. Additionally, discharges from basins 011, 013WL and 015WL are being directed to basin 028 in accordance with the approved mining plan, and an additional 27.9 acres of mining would be conducted in the catchment area for basin 028 (no IBR needed and acreage already included in original basin design). IBR 6 to OMM Permit 348 would allow permitting of 20.0 additional acres of land for surface mining, 9.6 acres would drain to Outfall 014WL with remaining 10.4 acres draining to Outfall 028. IBR 5 to OMM Permit 327 would allow for up to 0.3 additional acres of mining, with stormwater runoff from this area being routed to Outfall 001. This 0.3 acre tract of land was included in the watershed of Outfall 001 in the previous Antidegradation Assessment and would not affect the catchment area for this outfall. The outfalls associated with these IBRs are received by unnamed tributaries of Cockerel Branch (Outfalls 028 and 032) and unnamed tributaries of the North Fork Saline River (Outfalls 001 and 014WL).

**Identification and Characterization of the Affected Water Body.**

The unnamed tributaries of Cockerel Branch and the North Fork Saline River are classified as General Use streams with zero 7Q10 flow existing upstream of the outfalls associated with this project. Based on the watershed size of the unnamed tributaries, these waters are also recognized as zero 7Q1.1 flow streams. Given their small size, the unnamed tributaries have not been assessed under the Agency's 305(b)/303(d) program and a biological assessment by the Applicant is not required. The unnamed tributaries have not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The unnamed tributaries are not enhanced in regards to the dissolved oxygen water quality standard.

Downstream waters that may be impacted by drainage from the disturbance area include Cockerel Branch and the North Fork Saline River. As part of the 401 Water Quality Certification for new mining activities covered under the existing NPDES permit, the applicant sampled fish and macroinvertebrates communities at several sites in the general area of the mine site, including Cockerel Branch. Aquatic life was found to be limited, which is typical of tributaries of this small size where the primary limiting factor is lack of water during dry periods. The North Fork Saline River (Segment ATF-06) is listed on the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use (causes = alteration in streamside or littoral vegetative cover (non-pollutant), loss of instream cover (non-pollutant), and dissolved oxygen) and aesthetic quality (cause = turbidity). Neither water body is listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor have they been given an integrity rating. The water bodies are not enhanced in regards to the dissolved oxygen water quality standard.

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

Effluent discharged from sedimentation ponds would contain manganese and total suspended solids (TSS) loadings that are similar to those occurring from the land in its present use (cropland). No increases of these pollutants are expected. Each outfall would have TSS limits set at the effluent standard and manganese limits set at or below the water quality standard. Chloride and sulfate would potentially increase in loading to the receiving streams as a result of the mining activities. Based on current effluent concentrations for Outfall 001, and estimated effluent concentrations for Outfalls 014WL, 028 and 032, chloride would meet water quality standards in the discharged effluent. Sulfate water quality standards are expected to be met in the streams receiving discharges from these outfalls. No adverse impacts to the receiving streams are anticipated.

**Fate and Effect of Parameters Proposed for Increased Loading.**

Sulfate and chloride would remain dissolved in the water and would move through the downstream continuum. Small amounts would be removed by organisms as these substances are necessary for life. No adverse impacts to streams would occur as all water quality standards are expected to be met in the receiving waters.

**Purpose and Social & Economic Benefits of the Proposed Activity.**

The surface mine would extract the coal resources of the site. According to information given in the November 6, 2012 document by the Applicant entitled "Peabody Arclar Mining, LLC, Wildcat Hills Mine – Cottage Grove Pits 9 and 10, Modified Analyses of Benefits and Alternatives to Lessen Water Quality Impact", significant social and economic losses will be experienced by the local economy if the mining plan does not proceed as planned. Specifically, 184 jobs with a payroll of \$15 million annually would be lost along with many other spin off jobs resulting from the proposed mining activity. The economical availability of high quality coal that is essential to the local, state and national economy could be compromised. Direct and indirect tax revenues that would have been able to help stimulate the local and state economy would be lost. The company's economic losses would be significant and substantial due to investments in land, coal reserves, equipment, etc., with no foreseeable return on investment.

**Antidegradation Assessment  
Peabody Arclar Mining, L.L.C.  
Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) and  
Willow Lake Mine  
NPDES Permit No. IL0073351  
Gallatin and Saline Counties**

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

The use of existing sedimentation basins and permitted NPDES outfalls for treatment of the proposed IBR areas is the most practical method of minimizing pollutant loading from stormwater discharges. Sedimentation basins are the preferred technology for coal mine drainage control. Stormwater control at surface coal mines is a matter of applying established best management practices. Prior steps involve the minimization of exposed earth and coal refuse to the elements. The final step in these practices involves sedimentation ponds to catch all runoff from the mine, settle out solids, provide a venue for pH adjustment if necessary and allow a controlled discharge of the effluent to the receiving stream. An assessment of alternatives or options to the potential increases in pollutant loading from sediment basins was provided in the November 6, 2012 document by the Applicant entitled "Peabody Arclar Mining, LLC, Wildcat Hills Mine – Cottage Grove Pits 9 and 10, Modified Analyses of Benefits and Alternatives to Lessen Water Quality Impact". This assessment includes consideration of the following alternatives: no discharge of stormwater from the site, discharge of stormwater to publicly-owned treatment works (POTW) or other sources, alternate onsite treatment technologies, and no mining. The following is a brief summary of the information provided by the applicant.

No Discharge of Stormwater:

Drainage from the IBR areas would be routed through existing sedimentation basins and NPDES permitted outfalls. The Cottage Grove sedimentation ponds primarily retain runoff from precipitation events and discharge primarily as stormwater. Although the ponds are designed and evaluated to minimize the discharge of water, the volume of runoff from the permitted areas is too large to be retained during significant storm events and water must then be discharged. Illinois design standards for sedimentation ponds allow for discharge during and after storm events provided the design minimizes the release of sediment with the discharged storm water. It is not economically feasible to construct large, no discharge stormwater detention ponds when sedimentation ponds with occasional discharges are allowed and can meet water quality standards. Additionally, retaining all stormwater onsite would be detrimental to the small streams receiving intermittent flows from these sedimentation basins.

Discharge to POTW or Other Sources:

The closest POTW is in Harrisburg, approximately 11 miles from the mine. Routing water to this plant would require more than 85,000 feet of carrier lines, a network of lift and pump stations and obtaining extensive rights of way and easements. The Harrisburg plant was not designed for this type or volume of water in any case. Treatment of stormwater from the Cottage Grove mining area would quickly overload the Harrisburg sewage treatment facility and cause non-compliance of the conditions of the facility permit. Using the town of Harrisburg sewage treatment plant for disposing Cottage Grove area stormwater is, therefore, not a viable option. There are no adjacent or local facilities available, such as golf courses, which could utilize a large volume of water, particularly on a year round basis or during wet weather. Also, there are no known nearby public water supply facilities that are able to treat stormwater runoff quality to drinking water standards.

Alternative Treatment Technologies:

Filtration - Filtration is a water treatment process by which water is passed through a physical barrier, removing particulate matter from the water stream. Filtration of mine drainage typically involves disturbing a large area of land to install an elaborate filtration system. Dissolved solids are not filtered by this technology and only a portion of suspended solids are filtered, leaving an effluent that may not be in compliance with water quality standards. The sludge that is generated will be concentrated from the filtration and must then be disposed of as a solid or a hazardous waste in a landfill, which is time consuming and expensive. Finally, this technology requires a steady flow of water into the system, an environment not anticipated at Cottage Grove, and would require a great deal of maintenance and supervision.

Membrane Processes - In membrane processes such as reverse osmosis, water is pumped through a closed system at extremely high pressures. These membranes allow pure water to pass through while trapping contaminating ions to produce a reject stream on the membrane. This reject stream is then treated by chemical precipitation and then permanently disposed of. This technology requires extremely high-energy output and uses a large amount of water. The source water for the system must be pretreated to prevent microbial growth and mineral precipitation. This is an unnecessary step in mine drainage treatment for the Cottage Grove area. The precipitate generated from the reject stream would contain significantly higher concentrations of waste products that would need to be disposed of in a landfill. This technology also requires an enormous amount of maintenance and supervision of the equipment, both to dispose of the precipitate but also to maintain the membranes and the pumping technology. The water recovered from this process must also be post-treated. This is another unnecessary step that would require more space for equipment, energy, worker supervision and maintenance. Finally, this technology has been developed primarily for the production of potable water from seawater. Reverse osmosis is not practical for the treatment of stormwater, because there is no constant flow of stormwater through the pumping mechanism and a large storm event could overload the system, breaking the system down and halting mining activities.



**Antidegradation Assessment  
Peabody Arclar Mining, L.L.C.  
Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) and  
Willow Lake Mine  
NPDES Permit No. IL0073351  
Gallatin and Saline Counties**

**Biological Treatment** - Biological treatment is the process of using wetlands and other passive systems to create anaerobic and/or aerobic environments to convert sulfates, some metals and other constituents. Stormwater discharge would be pumped into, and slowly travel through, the system. For anaerobic systems, strict anaerobic conditions must be kept in order to remove sulfates. Anaerobic bacteria can utilize the sulfates converting the sulfates to sulfides, which can then be dredged from the system. One system, constructed wetlands, can be one of the least efficient treatment technologies, especially for sulfate removal. Sulfates that are removed can become concentrated in the water and can eventually be released into the atmosphere as hydrogen sulfide and other gases. The removal of sulfates and other constituents from the stormwater would be inconsistent due to lack of a constant flow of water and due to reduced anaerobic bacteria activity in winter when air and water temperatures are low. These systems often fail throughout the life of the wetland, and have not been proven to efficiently treat mine drainage in the long-term. Additionally, space limitations in these small IBR sites would make wetland construction infeasible.

**Chemical Precipitation** - Chemical precipitation is the process of adding alkaline chemicals to acid mine effluent to induce metals to precipitate out of water and to reduce acidity. Lime, limestone, pebble quicklime, soda ash, caustic soda and ammonia can be used treat acid mine drainage. Levels of pH, total suspended solids, iron and manganese concentrations, water flow rate, receiving stream water flow and quality, availability of electricity, the distance from the chemical addition point to the sedimentation basin and the basin's retention volume must all be taken into account before determining the best method for chemical precipitation. Each of these chemical choices possesses obstacles for implementation. The material costs of these chemicals (based on the flow rate of the water outflow areas) can be extremely high. Chemical precipitation requires constant monitoring and maintenance to ensure that the appropriate amounts of chemicals are stockpiled and used. Many of these chemicals (such as anhydrous ammonia) have safety concerns and can harm the environment if introduced. Additionally, the sludge that results from chemical precipitation must be disposed of as either solid or hazardous waste. This disposal can be difficult due to the high water content and the de-watering process of the sludge. These systems can be inundated by high volume storm events, negating the benefits of this technology and releasing precipitate into the environment. Finally, sedimentation basins, such as those that would receive drainage from the proposed IBR areas, would perform the same functions as chemical precipitation by capturing the majority of the constituents in the outflow. Chemical precipitation would be an unnecessary step that allows for greater probability of potentially hazardous waste being introduced to the environment.

**Ion Exchange** - Ion exchange removes unwanted ions by passing the effluent stream through a resin containing cations and later, anions. Unwanted ions are exchanged, ultimately resulting in an outflow of relatively neutral pH containing dissolved solids. This technology is more appropriate for smaller facilities and for treatment of potable water (by replacing calcium and magnesium with sodium known as the process of softening). Problems also arise regarding the degradation of the resin. Additionally, this technology requires a more abundant water supply than that provided by the Cottage Grove area. Large amounts of energy and water are required to operate this technology while the sedimentation ponds anticipated for use at are a passive, low energy technology. Ion exchange does not remove ions from water; it merely exchanges one ion for another, resulting in an outflow stream with no reduction in the amount of chemical components. This technology also produces a large amount of brine, water unsuitable for most purposes. This brine would also have to be disposed of properly.

**Cost Effective Sulfate Removal (CESR) Process** - CESR is a proprietary technology developed to improve previous sulfate removing technology. This process uses hydrated lime to precipitate gypsum, while keeping the pH at levels that do not precipitate. As a second step, the pH is raised to precipitate metals. Finally, the pH is lowered again by a proprietary reagent to precipitate ettringite. Each precipitation step is time consuming and would require the use of large areas of land. Infrastructure costs are high as well, including the installation of tanks and storage handling equipment. This technology is not feasible at Cottage Grove because this technology is still being developed. Other problems with this technology include severe scaling in heat exchange systems, clogging of reverse osmosis equipment and precipitation in pipes. The resultant precipitate would be reduced to a very large amount of sludge. This sludge would need to be disposed of in a landfill. Additionally, the water treated in this system has a high specific conductivity and a high concentration of total dissolved solids. Finally, there is a high supervision and maintenance requirement to use this technology efficiently.

**No Mining:**

No mining as a means to reduce pollutant loading is not a reasonable alternative due to associated economic losses. Mining within these IBR areas would allow for continued employment at Cottage Grove, which consists of approximately 184 direct jobs with an annual payroll of approximately \$15 million. Many of these employees would be long term miners and are not currently trained for other employment. The mining industry is vitally important to the local economy of Gallatin and Saline Counties and the surrounding counties as well as to the region and state. Over half of the electricity produced in the United States and nearly 50 percent of the electricity produced in Illinois comes from coal-fired power plants. It is, therefore, vital to the local, state, and national economy that available high quality coal be mined to maintain a continuous supply of fuel to the coal-fired power plants. Economic losses would occur if sufficient electricity is not provided to energy consumers. The loss in tax revenue to Illinois and Gallatin and Saline Counties, both direct and indirect would be significant, particularly when a replacement industry is unknown. In addition, the economic loss to the company, should no mining at the site occur, would be substantial because of the significant investment in land, coal reserves, permitting expenses, and mining equipment made by the company using a business plan dependent on maximizing recovery of the coal reserve.



**Antidegradation Assessment  
Peabody Arclar Mining, L.L.C.  
Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG) and  
Willow Lake Mine  
NPDES Permit No. IL0073351  
Gallatin and Saline Counties**

Conclusion:

All the alternatives assessed above carry a significant economic cost. Beyond that, all treatment alternatives have a common problem in that they are not compatible with the nature of effluent generation (stormwater) at Illinois coal mines. Mine runoff comes intermittently and at highly variable volumes. Storing the effluent for later treatment would take much larger ponds than are now proposed and would result in extended down time of treatment equipment due to the lack of water to treat. Once significant rainfall necessitates the use of treatment equipment, start-up of the treatment alternatives investigated would be difficult. All of the treatment alternatives result in byproducts that are generally more harmful to the environment than the low concentrated sulfate solution generated by the proposed sedimentation ponds. The sludges and high strength wastewaters produced would have to be disposed of somewhere and at a financial and energy cost. Many of the alternatives add additional pollution to the environment in the form of sulfur gas, barium sludge, aluminum or cleaning surfactants. None of the alternatives investigated by the mine company, including no mining, have practical usefulness and are therefore rejected as viable alternatives.

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

The IDNR EcoCAT system was consulted on November 6, 2012 in regards to the IBR 1 and 2 project areas. It was determined that no threatened or endangered species or protected natural areas are in the vicinity of the areas and consultation was immediately terminated.

Additional consultations for IBRs 3, 5 and 6 were conducted on June 21, 2013. It was determined that no threatened or endangered species or protected natural areas are in the vicinity of the IBR 3 and 6 project areas and consultation was immediately terminated. Consultation for IBR 5 determined that protected resources (Fat pocketbook (*Potamilus capax*)) may be in the vicinity of the project location. IDNR has evaluated this information and has concluded that adverse effects are unlikely. Consultation was terminated as stated in the July 11, 2013 letter from Pat Malone.

**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 would result in the attainment of water quality standards; that all existing uses of the receiving streams would 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 would benefit the community at large by preserving existing mining jobs and the ancillary economic benefits of these jobs to the local economy. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

NPDES Permit No. IL0073351

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: October 31, 2016

Issue Date: November 29, 2011

Effective Date: November 29, 2011

Modification Date:

Name and Address of Permittee:

Peabody Arclar Mining, LLC  
7100 Eagle Crest Boulevard  
Suite 100  
Evansville, IN 47715-8152

Facility Name and Address:

Peabody Arclar Mining, LLC  
Wildcat Hills Mine (Cottage Grove Pit/Wildcat UG)  
and Willow Lake Mine  
12250 McClain Road  
1 mile north of Equality, Illinois  
(Gallatin and Saline Counties)

Discharge Number and Classification:

001, 006, 014, 014 WL, 033

Alkaline Mine Drainage

010, 018, 020

Alkaline Mine Drainage

028, 029, 030, 031, 032

Alkaline Mine Drainage

016

Alkaline Mine Drainage

021, 022, 023, 024, 025, 026

Alkaline Mine Drainage

027

Alkaline Mine Drainage

002

Reclamation Discharge

012

Reclamation Discharge

005

Stormwater Discharge

A13 WL

Sanitary Wastewater

Receiving waters

Unnamed tributaries to North Fork Saline River

Cockerel Branch

Unnamed tributary to Cockerel Branch

Unnamed tributary to Middle Fork Saline River

Unnamed tributary to Rocky Branch

Unnamed tributaries to Saline River

Unnamed tributary to North Fork Saline River

Unnamed tributary to Rocky Branch

North Fork Saline River

Pond 028 (Outfall 028)

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

## NPDES Coal Mine Permit

NPDES Permit No. IL0073351

## Effluent Limitations and Monitoring

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

Outfall\*: 001 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1635	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1835	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1835	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	1835	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 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. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

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.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride 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 Outfall 001 and unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 006 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1748	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1748	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1748	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1748	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 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. 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 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. 15 for the discharges from Outfall 006 and the unnamed tributary to North Fork Saline River 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. IL0073351

## Effluent Limitations and Monitoring

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

Outfall\*: 010 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1521	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

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.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride 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 Outfall 010 and Cockerel Branch 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. IL0073351

## 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\*: 014 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2500	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	2500	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 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. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

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.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride 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 Outfall 014 and the unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 014 WL (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1286	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1286	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1286	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1286	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 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. 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 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. 15 for the discharges from Outfall 014 WL and the unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 016 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1927	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

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.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride 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 Outfall 016 and the unnamed tributary to Middle Fork Saline River 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. IL0073351

## 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\*: 018 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1924	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

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.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride 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 Outfall 018 and Cockerel Branch 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. IL0073351

## 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\*: 020 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1790	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2003	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2003	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	2003	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

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.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride 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 Outfall 020 and Cockerel Branch 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. IL0073351

## 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\*: 021, 022, 023, 024, 025, 026 (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	2027	500	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2027	500	Monitor only	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2027	500	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	2027	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 5.21 inches.

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

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

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 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. 15 for the discharges from Outfalls 021, 022, 023, 024, 025, 026 and the unnamed tributary to Rocky Branch 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. IL0073351

## 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\*: 027 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1916	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1916	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1916	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1916	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 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. 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 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. 15 for the discharges from Outfall 027 and the unnamed tributary to Cockerel Branch and unnamed tributary to Saline River 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. IL0073351

## 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\*: 028 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	1964	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	3250	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.0-9.0	Alk.>Acid	3250	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall at times of "low flow" or "no flow" conditions in the receiving stream as defined in Special Condition No. 13.
- 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 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. At such time that receiving stream flow subsides to the degree that the mixing ratio specified in Special Condition No. 13 is not available, monitoring requirements and permit limitations shall revert to Discharge Condition I.

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.

Discharges from the above referenced outfall that are subject to the requirements of Discharge Conditions II, III and/or IV must meet the water quality standards for sulfate and chloride 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 Outfall 028 and the unnamed tributary to Cockerel Branch 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. IL0073351

## 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\*: 029, 030, 031, 032, 033 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 17	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	2000	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	2000	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	2000	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	2000	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 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. 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 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. 15 for the discharges from Outfalls 029, 030, 031, 032 and 033 and the unnamed tributary to Cockerel Branch and unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: A13WL (Sanitary Wastewater)

Parameters									
Total Suspended Solids **				CBOD <sub>5</sub> **				pH (S.U.) **	Flow (MGD)
Load Limits (lbs/day)		Concentration Limits (mg/l)		Load Limits (lbs/day)		Concentration Limits (mg/l)			
30 day average	daily maximum	30 day average	daily maximum	30 day average	daily maximum	30 day average	daily maximum		
2.06	4.12	30.0	60.0	1.70	3.40	25.0	50.0	6.0-9.0	Measure When Sampling

\* Sample only when Outfall 028 is discharging.

\*\* A minimum of three (3) samples per month 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 Outfall 028. No more than one (1) sample shall be collected during any individual monitoring event.

## NPDES Coal Mine Permit

NPDES Permit No. IL0073351

## 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 (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	1272	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1272	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1272	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1272	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 002 and unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 012 (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	1909	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1909	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1909	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1909	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 15 for the discharges from Outfall 012 and the unnamed tributary to Cockerel Branch 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. IL0073351

## 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)

Discharge Condition	Parameters					
	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ***
I	6.5-9.0	1635	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1635	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1635	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1635	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 001 and unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 006 (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	1748	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1748	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1748	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1748	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 15 for the discharges from Outfall 006 and unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 010 (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	1521	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1521	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1521	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1521	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 010 and Cockerel Branch 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. IL0073351

## 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\*: 014 (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	1250	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1250	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1250	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1250	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 014 and unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 014WL (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	1286	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1286	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1286	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1286	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 15 for the discharges from Outfall 014WL and unnamed tributary to North Fork Saline River 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. IL0073351

## 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\*: 016 (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	1927	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1927	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1927	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1927	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 016 and unnamed tributary to Middle Fork Saline River 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. IL0073351

## 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\*: 018 (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	1924	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1924	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1924	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1924	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. The 10-year, 24-hour precipitation event for this area is considered to be 5/21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 018 and Cockerel Branch 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. IL0073351

## 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\*: 020 (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	1790	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1790	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1790	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1790	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 020 and Cockerel Branch 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. IL0073351

## Effluent Limitations and Monitoring

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

Outfalls\*: 021, 022, 023, 024, 025, 026 (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	2027	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	2027	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	2027	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	2027	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 15 for the discharges from Outfalls 021, 022, 023, 024, 025 and 026 and unnamed tributary to Rocky Branch 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. IL0073351

## Effluent Limitations and Monitoring

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

Outfalls\*: 027 (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	1916	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1916	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1916	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1916	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 15 for the discharges from Outfall 027 and unnamed tributary to Cockerel Branch and unnamed tributary to Saline River 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. IL0073351

## 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\*: 028 (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	1964	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1964	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1964	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1964	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 14 for the discharges from Outfall 028 and unnamed tributary to Cockerel Branch 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. IL0073351

## Effluent Limitations and Monitoring

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

Outfalls\*: 029, 030, 031, 032, 033 (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	2000	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	2000	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	2000	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	2000	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. The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.
- III In accordance with 35 Ill. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For 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 water quality standards for sulfate and chloride must be met in discharges from the above referenced outfall as well as in the receiving stream.

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\* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 15 for the discharges from Outfalls 029, 030, 031, 032 and 033 and unnamed tributary Cockerel Branch and unnamed tributary to North Fork Saline River 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. IL0073351

## 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: 005 (Stormwater Discharge)

Parameters	
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.

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.

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\* 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.

\*\* 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.

## NPDES Coal Mine Permit

NPDES Permit No. IL0073351

## 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, 006, 010, 012, 014, 016, (Stormwater Discharge)  
018, 020, 021, 022, 023, 024, 025, 026,  
027, 028, 029, 030, 031, 032, 033, 014WL

Parameters	
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.

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\* 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.

\*\* 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.

NPDES Permit No. IL0073351

Construction Authorization No. 9356-09

C.A. Date: July 15, 2011

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

The mining complex containing a total of 6885.0 acres covered by IDNR/OMM Permit Nos. 327, 347, 348, 359, 360, 361, 365, 370, 376, 392, 397, 403 and 415 and located in Sections 23, 24, 26 and 36, Township 8 South, Range 7 East, Saline County, Sections 1, 2, 3, 10, 11, 12, 14 and 15, Township 9 South, Range 7 East, 3<sup>rd</sup> P.M., Saline County, Section 18, Township 8 South, Range 8 East, Gallatin County and Sections 4, 5, 6, 7, 8, 9 and 17, Township 9 South, Range 8 East, 3<sup>rd</sup> P.M., Gallatin County.

The addition of an area as described in IEPA Log No. 7256-11 consisting of 1.0 acre located in Section 36, Township 8 South, Range 7 East, Saline County, for installation of a pumpage borehole, a buried water line and an access road. The pump borehole will be installed to remove water that accumulates in the underground workings. Alternate drainage control will be provided for this additional area by silt fence, straw bale dikes, graveled areas and vegetation. Runoff from this area will be monitored in accordance with stormwater monitoring requirements. This additional acreage is included in the total permit area cited above.

This permit includes three (3) separate mining areas identified as Cottage Grove, Wildcat Underground and Willow Lake Mine. These areas include various mining pits, surface facilities for underground mining areas, haulage roads, ditches, sedimentation ponds, office buildings and various structures, fuel storage areas, coal storage areas, refuse disposal, subsoil and topsoil stockpiles, coal preparation facilities, conveyers, etc. These existing facilities and modifications are discussed in more detail as follows:

A floating pump may be used to extract water from the North Fork Saline River during high flows only as proposed in Log No. 6046-02. A pipeline may be constructed across the permit area to the Willow Lake Mine as depicted. The pump will be moved to the location depicted in Log No. 6046-02 when not in use.

Pursuant to Log No. 5448-03, a wetland area will be constructed northwest of Pond 005. These wetlands are being constructed under the Army Corps of Engineers jurisdiction. No coal related materials will be affected by this operation. The discharges from these wetlands will be subject to stormwater monitoring and incorporated into the stormwater monitoring plan.

An aeration cascade, aeration treatment ditch and sedimentation pond that affects Permit Area Nos. 347 and 359, as proposed in Log Nos. 4369-04 and 4545-04. The settling pond will be kept pumped down to allow room for continuous treatment and to store a 100-year, 6-hour storm. Treated water is pumped to Basin 015.

Collection Ditch CDD 015A will be modified to incorporate silt traps to enhance runoff treatment and Sediment Basin 015 designs are revised to reflect existing conditions as proposed in Log Nos. 9399-09 and 8051-10.

As proposed and depicted in IEPA Log No. 9541-09 the mining operation plan has been revised to reflect the relocation of Hole Road HR-5, the permanent relocation of Thaxton Road and the relocation of Collection Ditch CDD 019A.

Collection Ditch CDD 016B-6 will be constructed to divert an additional 62 acres of runoff to Basin 016B to provide additional water to be utilized in the coal processing circuit as proposed in IEPA Log No. 8286-10.

As proposed and depicted in IEPA Log No. 8366-10, Sediment Basin 001A has been redesigned to enhance treatment by incorporating as shallow water filtration area. In addition the parking area west of Thaxton Road is proposed to be expanded in this submittal.

As proposed and depicted in IEPA Log No. 8483-10, collection ditches CDD 001F, CDD 013A and CDD 013B will be removed as part of the reclamation process. Also temporary basin and Outfall 004 is proposed to be removed as reclamation of this area continues

As proposed and depicted in IEPA Log No. 7063-11 a temporary raw coal storage area may be developed and utilized during periods when issues exist with the overland conveyor or stacker conveyor. Following utilization of the temporary coal storage area, all coal shall be removed and transported to the preparation plant for processing.

The temporary coal crusher and coal storage area located in the area identified as a Pit 1 will be expanded by approximately 2.4 acres as proposed and described in IEPA Log No. 7199-11. Runoff from this expansion area will continue to be tributary to Sediment Basin 001A.

An area consisting of 878.5 acres as described and depicted in IEPA Log Nos. 7203-11 and 7203-11-B and identify as OMM Permit No. 415 is incorporated into this Permit and is reflected in the above cited total permit area. This additional area is located in Sections 2, 11 and 12, Township 9 South, Range 7 East, Saline County and Sections 7, 8 and 17, Township 9 South, Range 8 East, Gallatin County, Illinois. This additional area, including mining areas identified as Pit 9 and Pit 10 contains haulage and access roads, soil stockpiles areas and six (6) new sedimentation ponds with discharges designated as Outfalls 028, 029, 030, 031, 032 and 033. See table below for Outfall locations and receiving streams.



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C.A. Date: July 15, 2011

An additional monitoring well identified as Well No. 8MW-22 is proposed as described in IEPA Log No. 7203-11-B while Well No. 12MW-21 is proposed for this mining area to replace existing Monitoring Well Nos. 2PMW-1 and 12PMW-5 which will be mined through.

Additional mining area identified as Pit 10 includes the temporary diversion of approximately 1500 feet of the upper reach of Cockerel Branch. Following active mining in this area, Cockerel Branch will be restored through the reclaimed mining area in the appropriate original location.

Surface drainage will be controlled with 30 impoundments. All outfalls are classified alkaline mine drainage with the exception Outfalls 004 and 005 which are classified as stormwater discharges and Outfall A013 WL which is a Sanitary wastewater discharge. Commercial flocculants, Prestofloc 014 and Praestol CM302, are approved for use on all sedimentation ponds to reduce suspended solids as proposed in IEPA Log No. 9108-99.

The most current and comprehensive surface drainage control information is contained in IEPA Log Nos. 0070-08, 0478-08, 0478-08-A, 9017-09 and 7203-11.

The sanitary wastewater treatment plant located at the Willow Lake Mine Facility will be a diffused aerobic system consisting of six (6) Nayadic Model M-2000A treatment units operating in parallel. Daily average flow is anticipated to be 8250 gallon per day when the facility reaches full production. Population equivalent based on Total Suspended Solids (TSS) is 412. Discharge from this system, designated as Outfall A13WL, will report to Pond 013WL. A year-round disinfection exemption (IEPA Log No. 8346-00-E) was previously issued for discharges from Outfall A13WL on October 24, 2000.

The location of outfalls permitted herein are as follows:

Outfall Numbers	Latitude			Longitude			Receiving Water
	DEG	MIN	SEC	DEG	MIN	SEC	
001	37°	45'	14.3"	88°	20'	47.0"	Unnamed tributary to North Fork Saline River
002	37°	45'	32.9"	88°	20'	39.6"	Unnamed tributary to North Fork Saline River
004	37°	45'	35.7"	88°	19'	41.5"	North Fork Saline River
005	37°	46'	0.2"	88°	19'	42.2"	North Fork Saline River
006	37°	46'	16.9"	88°	19'	46.9"	Unnamed tributary to North Fork Saline River
010	37°	46'	19.4"	88°	24'	21.1"	Cockerel Branch
011	37°	45'	41.8"	88°	23'	56.2"	Cockerel Branch
012	37°	45'	10.7"	88°	22'	42.4"	Unnamed tributary to Cockerel Branch
013	37°	45'	47.6"	88°	21'	40.3"	Unnamed tributary to North Fork Saline River
014	37°	45'	37.3"	88°	21'	02.9"	Unnamed tributary to North Fork Saline River
016	37°	46'	19.0"	88°	25'	44.0"	Unnamed tributary to Middle Fork Saline River
018	37°	45'	53.0"	88°	24'	21.0"	Cockerel Branch
019	37°	45'	27.0"	88°	23'	47.0"	Cockerel Branch
A13WL	37°	45'	42.0"	88°	23'	33.0"	Pond 013 (Outfall 013)
013WL	37°	45'	41.0"	88°	23'	33.0"	Unnamed tributary Cockerel Branch
014WL	37°	45'	56.0"	88°	23'	3.0"	Unnamed tributary to North Fork Saline River
015WL	37°	45'	47.0"	88°	23'	51.0"	Unnamed tributary to Cockerel Branch
020	37°	45'	09"	88°	23'	32"	Cockerel Branch
021	37°	44'	37"	88°	24'	14"	Unnamed tributary to Rocky Branch
022	37°	44'	36"	88°	24'	21"	Unnamed tributary to Rocky Branch
023	37°	44'	37"	88°	24'	27"	Unnamed tributary to Rocky Branch
024	37°	44'	36"	88°	24'	38"	Unnamed tributary to Rocky Branch
025	37°	44'	36"	88°	24'	44"	Unnamed tributary to Rocky Branch
026	37°	44'	37"	88°	25'	06"	Unnamed tributary to Rocky Branch
027	37°	44'	58"	88°	25'	36"	Unnamed tributary to Saline River
028	37°	45'	27"	88°	23'	49"	Unnamed tributary to Cockerel Branch
029	37°	45'	27"	88°	23'	25"	Unnamed tributary to Cockerel Branch
030	37°	45'	23"	88°	23'	07"	Unnamed tributary to Cockerel Branch
031	37°	45'	02"	88°	22'	48"	Unnamed tributary to Cockerel Branch
032	37°	44'	50"	88°	22'	23"	Unnamed tributary to Cockerel Branch
033	37°	45'	07"	88°	20'	48"	Unnamed tributary to North Fork Saline River

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Construction Authorization No. 9356-09

C.A. Date: July 15, 2011

The coal preparation plant and refuse disposal area for this mining complex is located at the Willow Lake Mine Facility as described and depicted in IEPA Log Nos. 8346-00, 8346-00-A and 8346-00-B.

Coal refuse disposal at this facility is described as follows:

Slurry from the preparation plant can go to either Refuse Disposal Area No. 2 of RB001 (Pit 4 final cut). Refuse Disposal Area No. 2 decant is pumped to Sedimentation Basin 016B which is pumped to Sedimentation Basin 015 (outfall WL015) and then pumped to the plant for reuse. If Sedimentation Basin 016B does discharge it reports to Sedimentation Basin 016A Phase 3 (Outfall 016). RB001 discharges to RB001 decent basin that is pumped back to the plant for reuse. If decant basin RB001 does discharge it reports to Sedimentation Basin 010 (Outfall 010).

Currently, coarse refuse is taken to the refuse impoundment for use in constructing the coarse refuse dam. The outslope runoff reports to Sedimentation Basin 016B which reports to Sedimentation Basin 016A Phase 3 (Outfall 016) or Sedimentation Basin 018B which reports to Sedimentation Basin 018A (Outfall 018).

The permit allows coarse refuse to be placed in the pits as long as it is not a monofill and the elevation of the coarse refuse is below the top of the rock/unconsolidated interface.

IEPA Log Nos. 4291-04, 4291-04-D, 4291-04-E and 4291-04-F contains information relative to OMM Permit No. 369 for development of a coarse refuse disposal area.

IEPA Log Nos. 4506-04 and 4506-04-D contains information relative to OMM Permit No. 374 for development of a coarse refuse disposal area. This OMM Permit area is included in the total NPDES permit area cited above. It is noted that OMM Permit No. 376 and 403 have overlapped and replaced the majority of the OMM Permit No. 374 area.

In addition to the coarse refuse disposal areas discussed above, coarse refuse may also be disposed in the active surface mining pits.

Groundwater monitoring requirements are outlined in Condition No. 12.

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.

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.
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.)

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C.A. Date: July 15, 2011

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).
8. This Agency must be informed in writing and an application submitted if drainage, which was previously classified as alkaline (pH greater than 6.0), becomes acid (pH less than 6.0) or ferruginous (base flow with an iron concentration greater than 10 mg/l). The type of drainage reporting to the basin should be reclassified in a manner consistent with the applicable rule of 35 Ill. Adm. Code 406 as amended in R84-29 at 11 Ill. Reg. 12899. The application should discuss the treatment method and demonstrate how the discharge will meet the applicable standards.
9. A permittee has the obligation to add a settling aid if necessary to meet the suspended solids or settleable solids effluent standards. The selection of a settling aid and the application practice shall be in accordance with a. or b. below
  - a. Alum ( $\text{Al}_2(\text{SO}_4)_3$ ), hydrated lime ( $\text{Ca}(\text{OH})_2$ ), soda ash ( $\text{Na}_2\text{CO}_3$ ), 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 permitted 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).

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C.A. Date: July 15, 2011

- 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).
- d. The Agency determines that the permittee is not utilizing Best Management Practices associated with coal refuse disposal activities in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese. As stated in IEPA Log No. 9253-09, the Best Management Practices to be implemented are:
  - i. Reducing periods of weathering and oxidation of soil and coal processing with consideration given to geochemistry and temperature.
  - ii. Contemporaneous reclamation (soil cover), as practical, to minimize spoil exposed to oxidation.
  - iii. Compaction of coarse coal processing waste, as appropriate.
  - iv. Reduction of exposed pyrite rich materials in fine coal processing refuse circuits.
  - v. Water management to reduce concentrating dissolved solids constituents.
  - vi. Geochemical characterization of coal refuse and potentially acid producing overburden which are applicable in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese.
- 12. Groundwater monitoring requirements for Well Nos. MW-1, MW-2, 1PMW-4, 2 PMW-1, 2PMW-6, 2PMW-7, 3MW-1R, 3MW-20, 8MW-22, 11MW-19, 12MW-21, 12PMW-5 and 14MW-21 are as follows:
  - a. Unless previously completed, ambient background monitoring shall be performed for all 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 facility operation 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	Selenium	Water Elevation
Copper	Silver	
Cyanide		
  - \* Although background monitoring may have been completed for Well Nos. 3MW-20 and 11MW-19, such previous monitoring may not have included the most recently added contaminants identified as Aluminum, Molybdenum and Vanadium. Background monitoring for these contaminants shall be performed no later than the first year following issuance of this permit.
  - b. Following the ambient background monitoring as required under Condition No. 12(a) above, routine monitoring shall continue on a quarterly basis as follows:
    - i. Routine quarterly monitoring for Well Nos. 1PMW-4, 2PMW-1, 2PMW-6, 2PMW-7, 8MW-22, 11MW-19, 12PMW-5, 12MW-21 and 14MW-21 shall include the list of contaminants identified in Condition No. 12(a) above.

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- ii. Routine quarterly monitoring for Well Nos. MW-1, MW-2, 3MW-1R and 3MW-20 shall include the following list of contaminants.

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

\*\* In the event that refuse disposal occurs within the Pit No. 9 mining area, routine monitoring for Well No. 8MW-22 shall be revised to include the list of contaminants identified in Condition No. 12(a) above.

- c. Following completion of active mining and reclamation of this facility, 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 12(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 No. 12(a) and 12(c) above shall be submitted utilizing the following method. This method shall be used to determine the upper 95 percent confidence limit for each parameter listed above.

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

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

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

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

Where:

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

$X_n$  = Values for each sample

n = the number of samples taken

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

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

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

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- 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.

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. 9356-09-1

S.C.A. Date: August 1, 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. 9356-09 dated July 15, 2011. These facilities have been revised as follows:

The addition of 37.5 acres, identified as IBR Nos. 1 and 2 to OMM Permit No. 415 and IBR No. 5 to OMM Permit No. 327 results in a total permitted area under this NPDES Permit of 6922.5 acres. This additional permit area is described as follows:

An additional 37.2 acres is incorporated into this permit as proposed and described in IEPA Log Nos. 6572-12, 5020-13 and 5088-13. This additional area includes IBR Nos. 1 and 2 to OMM Permit No. 415, consisting of 20.0 acres and 17.2 acres, respectively. This additional 37.2 acres is located in Section 12 Township 9 South, Range 7 East, Saline County. This additional area will be used for surface mining, soil stockpiles and the relocation of sedimentation basin 032. Collection ditches CDD 032A and CDD 032B will be constructed within this additional area to convey all runoff to basin and Outfall 032.

As proposed and described in IEPA Log No. 5139-13 an additional area of 0.3 acres identified as IBR No. 5 to OMM Permit No. 327 is incorporated into this permit. This additional area is located in Section 7, Township 9 South, Range 8 East, Gallatin County, and will be used to expand a topsoil stockpile area. Runoff from this additional area will be tributary to existing sediment basin 001A with discharge designated as Outfall 001.

As proposed in IEPA Log No. 6576-12 and previously approved under correspondence from the Agency dated January 9, 2013, monitoring requirements for Outfalls 011, 013WL and 015WL have been deleted from this permit. These basins and Outfalls have been mined through with all runoff being re-directed to report to basin and Outfall 028.

As proposed in IEPA Log No. 6452-12 and previously approved under correspondence from the agency dated October 15, 2012, monitoring requirements for Outfall 019 has been deleted from this permit. This basin and Outfall has been mined through with runoff currently reporting to basin and Outfall 020. In addition basin and Outfalls 002 and 012 have been reclassified from alkaline mine drainage to reclamation area discharges.

In accordance with notification provided in IEPA Log No. 5087-13 monitoring Well No. 2PMW-1 has been mined through as per the approved mining operations plan. Monitoring Well No. 12MW-21 will be monitored in place of Well No. 2PMW-1 which will be removed from the groundwater monitoring plan.

For informational purposes only, it is noted that the current operations map is contained in IEPA Log No. 5169-13.

The following mining operations and drainage control plan revisions are being incorporated into this Permit under this Supplemental Construction Authorization:

IEPA Log Nos. 6038-12 and 6038-12-A includes relocated Haulage Road HR 001B, revised permanent impoundment PI 002 designs and new Access Road AR 009.

IEPA Log No. 6053-12 proposed removal of soil stockpile and development of graveled supply yard.

IEPA Log Nos. 6241-12, 6244-12 and 6536-12 revised overland flow diversions OFD 028 and onsite drainage ditch CDD 028A.

IEPA Log Nos. 6324-12 and 6324-12-A updated operations plan with revised collection ditch CDD 001C.

IEPA Log No. 6439-12 updated operations plan to remove existing and proposed new soil stockpiles, relocated haulage road and drainage control structures and remove drainage structures from operations map that have been mined through.

IEPA Log No. 5107-13 updated the operations plan for the installation of an overland conveyor to transport raw coal from the Wildcat Hills Underground Mine area to the Willow Lake coal stockpile area.

IEPA Log Nos. 6452-12 and 5108-13 proposed to backfill and reclaim basin and Outfalls 004 and 013 as well as collection ditches CDD 013C and CDD 013E and portions of CDD 001A in accordance with the approved mine plan. The Agency granted approval to backfill and reclaim basins 004 and 013 in correspondence dated October 15, 2012. As required, the Applicant has provided notification in IEPA Log No. 5108-13-A that Basins and Outfalls 004 and 013 have been reclaimed in accordance with the approved abandonment plan. Based on the information provided, Outfalls 004 and 013 will be removed from the Permit.

IEPA Log No. 5109-13 updated the mining operations plan for the construction of new collection ditch CDD 028C, and additional haulage road, new topsoil stockpile and to depict the mining through of ditches CDD 011A and CDD 015A by removing these structures from the operations plan map.

IEPA Log No. 5160-13 described and depicts revisions to the drainage control plan to add collection ditch CDD 014 which will convey an additional 24.9 acres to sedimentation basin 014WL resulting in an expanded discharge.

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S.C.A. Date: August 1, 2013

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

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.

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

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

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, 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.

**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.

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**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 discharge 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, 010, 014, 016, 018, 020 and 028):

- a. No discharge is allowed from Outfall Nos. 001, 010, 013, 014, 016, 018, 020 and 028 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. For purposes of this Special Condition "low flow" shall be defined as any condition wherein the upstream flow required for mixing is less than the ratio times the flow rate being discharged from the respective outfall. These minimum required ratios are as follows:

Outfall No.	Flow Ratio of Receiving Stream to Outfall Discharge ( minimum required)
001	0.34
010	1.19
014	1.77
016	0.72
018	1.18
020	4.80
028	2.80

Pursuant to 35 Ill. Adm. Code 302.102, discharges from the referenced outfalls that otherwise would not meet the water quality standards of 35 Ill. Adm. Code 302 may be permitted if sufficient flow exists in the receiving stream to ensure that applicable water quality standards are met. That is, discharges not meeting the water quality standards of 35 Ill. Adm. Code 302 may only be discharged in combination with stormwater discharges from the basin, and only at such times that sufficient flow exists in the receiving stream to ensure that water quality standards in the receiving stream beyond the area of allowed mixing will not be exceeded. Following any such stormwater discharge, but prior to the flow in the receiving stream subsiding, the impounded water in the basin may be pumped or otherwise evacuated sufficiently below the discharge elevation to provide capacity for holding a sufficient volume of mine pumpage and/or surface runoff to preclude the possibility of discharge until such time that a subsequent precipitation event results in discharge from the basin. Should the Permittee elect to pump impounded water from the basin in accordance with this Special Condition, the pump intake shall be "floated" near the impounded water surface or otherwise managed to prevent re-suspension and subsequent discharge of previously accumulated sediments. At times of stormwater discharge, 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 Outfall Nos. 001, 010, 014, 016, 018, 020 and 028 shall be monitored and reported for Discharge Rate, Sulfate, Chloride and Hardness.

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- b. The following sampling and monitoring requirements are applicable to flow in Cockerel Branch which receives the discharges from Outfalls 010, 018, and 020, the unnamed tributary to Cockerel Branch which receives discharges from Outfall 028, the unnamed tributary to Middle Fork Saline River which receives discharges from Outfall 016, and the unnamed tributary to North Fork Saline River which receives discharges from Outfalls 001, and 014.

- 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. Cockerel Branch, the unnamed tributary to Cockerel Branch, the unnamed tributary to Middle Fork Saline River and the unnamed tributary to North Fork Saline River shall be monitored and reported quarterly for Discharge Rate, Sulfate, Chloride 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 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. Cockerel Branch, the unnamed tributary to Cockerel Branch, the unnamed tributary to Middle Fork Saline River and the unnamed tributary to North Fork Saline River shall be monitored and reported annually for Discharge Rate, Sulfate, Chloride and Hardness upstream of the associated outfall.

**Special Condition No. 14:** Sediment Pond Operation and Maintenance (Outfalls 001, 002, 010, 014, 016, 018, 020 and 028 – Reclamation Area Discharges):

- 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, 010, 014, 016, 018, 020 and 028 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 tributaries to North Fork Saline River which receive discharges from Outfalls 001, 002, 014; the unnamed tributary to Middle Fork Saline River which receives discharges from Outfalls 016, the Cockerel Branch which receive discharges from outfalls 010, 018, and 020 and the unnamed tributary to Cockerel Branch which receives discharges from Outfall 028.

- i. All sampling and monitoring required under 14(b)(ii) and (iii) below shall be performed during a discharge and monitoring event from the associated outfall.
- ii. Unnamed tributaries to North Fork Saline River, the unnamed tributary to Middle Fork Saline River, Cockerel Branch and the unnamed tributary to Cockerel Branch 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 tributaries to North Fork Saline River, the unnamed tributary to Middle Fork Saline River, Cockerel Branch and the unnamed tributary to Cockerel Branch shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.

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**Special Condition No. 15:** Sediment Pond Operation and Maintenance (Outfalls 006, 012, 014WL, 021, 022, 023, 024, 025, 026, 027, 029, 030, 031, 032 and 033)

- a. For discharges resulting from precipitation events, in addition to the alternate effluent monitoring requirements, discharges from Outfalls 006, 012, 014WL, 021, 022, 023, 024, 025, 026, 027, 029, 030, 031, 032 and 033 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 tributaries to North Fork Saline River which receive discharges from Outfalls 006, 014WL and 033 and the unnamed tributaries to Cockerel Branch which receives discharges from Outfalls 012, 029, 030, 031 and 032; the unnamed tributary to Rocky Branch which receives discharges from Outfalls 021, 022, 023, 024, 025 and 026, and the unnamed tributary to Saline River which receives discharges from Outfall 027.
  - i. All sampling and monitoring required under 15(b)(ii) and (iii) below shall be performed during a discharge and monitoring event from the associated outfall.
  - ii. Unnamed tributaries to North Fork Saline River, the unnamed tributaries to Cockerel Branch, the unnamed tributary to Rocky Branch and the unnamed tributary to Saline River 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 tributaries to North Fork Saline River, the unnamed tributaries to Cockerel Branch, the unnamed tributary to Rocky Branch and the unnamed tributary to Saline River shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.

**Special Condition No. 16:** Data collected in accordance with Special Condition Nos. 13, 14 and 15 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. 17:** 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.