NPDES Permit No. IL0048071 Notice No. 6690c

Public Notice Beginning Date: February 4, 2014

Public Notice Ending Date: March 6, 2014

National Pollutant Discharge Elimination System (NPDES) Permit Program

Draft Renewed NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

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

Name and Address of Discharger:

Eagle River Coal, L.L.C. P.O. Box 444 Harrisburg, Illinois 62946 Name and Address of Facility:

Eagle River Coal, L.L.C. Mine No. 1 1.0 mile north of Mitchellsville, Illinois (Saline County)

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

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

As provided in Section 309.115(a) of the Act, any person may submit a request for a public hearing and if such written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. The Agency shall issue public notice of such hearing no less than thirty (30) days prior to the date of such hearing in the manner described by Sections 309.109 through 309.112 of the Act for public notice. The Agency's responses to written and/or oral comments will be provided in the Responsiveness Summary provided when the final permit is issued.

The applicant operates an existing surface coal mine (SIC 1221). Mine operations result in the discharge of alkaline mine drainage.

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

Outfall 004 has been deleted from this permit as the discharges from this basin and outfall are now tributary to Basin and Outfall 007.

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

<u>Outfall</u>	Receiving <u>Stream</u>	Latitude <u>(North)</u>	Longitude (West)
001	Unnamed tributary to South Fork Saline River	37° 39' 56.3"	88° 32' 9.8"
002	Unnamed tributary to South Fork Saline River	37° 39' 32.2"	88° 31' 54.2"
003	Unnamed tributary to South Fork Saline River	37° 39' 39.2"	88° 31' 33.9"
005	Unnamed tributary to South Fork Saline River	37° 40' 02"	88° 32' 11"
007	Unnamed tributary to South Fork Saline River	37° 39' 46"	88° 31' 20"

The stream segment ATH13 of South Fork Saline River receiving the flow from the unnamed tributary into which Outfalls 001, 002, 003, 004, 005 and 007 discharges is on the 2012 303(d) list of impaired waters. The following parameters have been identified as the pollutants causing impairment:

<u>Outfall</u>	Pollutant
001, 002, 003 005, 007	Manganese, pH Alteration in stream-side or Littoral vegetative cover

Stream segment ATH13 of South Fork Saline River is also listed on the draft 2012 303(d) list of impaired waters for the same parameters as identified above.

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

Outfalls: 001, 005, 007

								Parame	ters					
Discharge Condition	Suspend (n	otal ded Solids ng/l) (3)	(n	(total) ng/l) b)(4)	pH** Alkalinity/ (S.U.) Acidity (3) (3)		Sulfate (mg/l)	Chloride (mg/l)	(n	Manganese (total) (mg/l.) (3) (6)		Mercury	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	(3)	(3)	(1)	(6)	30 day average	daily maximum				(11)(1) (2)
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Monitor Only	Measure When Sampling	-
Ш	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	-	Measure When Sampling	0.5
Ш	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 III. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24 hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.8 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.
- (1) Sulfate water quality standards and effluent limitations determined in accordance with 35 III. Adm. Code 302.208(h).
- (2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 III. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 III. Adm. Code 406.106.
- (4) Discharges from Outfall 001, 005 and 007, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.
- (6) Manganese water quality standards are contained in 35 Ill. Adm. Code 302.208.

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

Outfalls: 002, 003

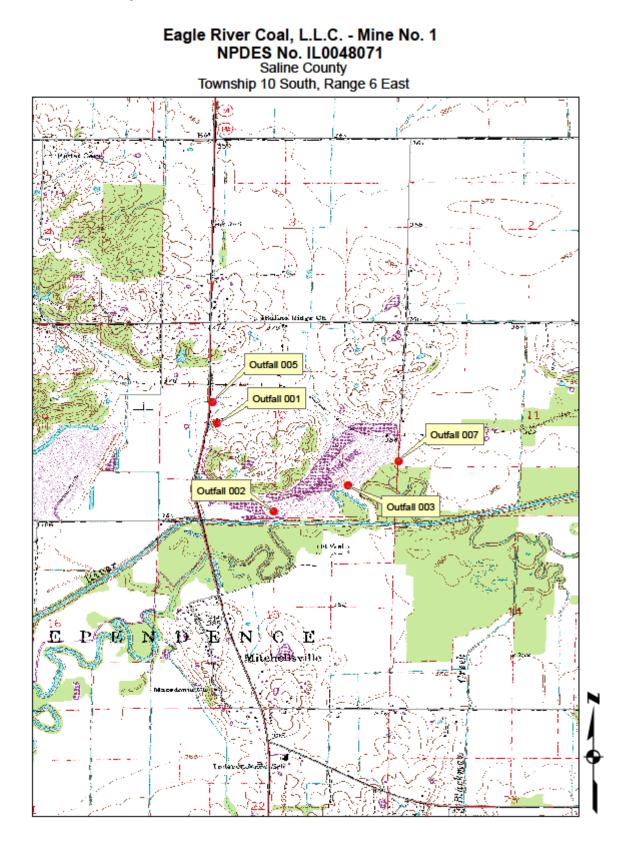
							Paramete	rs					
Discharge Condition	Suspen (r	otal ded Solids ng/l) (3)	(n	(total) ng/l)), (4)	pH** (S.U.)	(S.U.) Acidity		Sulfate Chloride (mg/l) (mg/l)		Manganese (total) (mg/l.) (3) (6)		Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum	(3)	(3)	(1)	(6)	30 day average	daily maximum			(mi/i) (2)
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Measure When Sampling	-
П	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	Measure When Sampling	0.5
Ш	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Measure When Sampling	-

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

- II In accordance with 35 III. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24 hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.8 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.
- (1) Sulfate water quality standards and effluent limitations determined in accordance with 35 III. Adm. Code 302.208(h).
- (2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 III. Adm. Code 406.110.
- (3) Effluent standards for mine discharges are contained in 35 III. Adm. Code 406.106.
- (4) Discharges from Outfall 002 and 003, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
- (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.
- (6) Manganese water quality standards are contained in 35 III. Adm. Code 302.208.

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 10 and 11, Township 10 South, Range 6 East, 3rd P.M., all located in Saline County, Illinois.

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Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue, East

P.O. Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Renewed NPDES Permit

Expiration Date:

Issue Date: Effective Date:

Name and Address of Perm	ittee:	Facility Name and Address:				
Eagle River Coal, L.L.C. P.O. Box 444 Harrisburg, Illinois 62946		Eagle River Coal, L.L.C. Mine No. 1 1.0 mile north of Mitchellsville, Illinois (Saline County)				
Discharge Number and Clas	ssification:	Receiving waters				
001, 002, 003, 005, 007	Alkaline Mine Drainage	Unnamed tributaries to South Fork Saline River				

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

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

Larry D. Crislip, P.E., Permit Manager Mine Pollution Control Program Bureau of Water

LDC:IW:cs/6690c/1-29-14

NPDES Coal Mine Permit

NPDES Permit No. IL0048071

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, 005, 007	(Alkaline Mine Drainage)
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							Pa	arameters								
Discharge Condition	Suspen (r	otal ded Solids ng/l) ***	(n	(total) ng/l)	pH** (S.U.)	U.) Acidity (mg/l)		Acidity (mg/l)		Chloride (mg/l)		Manganese (total) (mg/l.)		Mercury See Special Condition	Flow (MGD)	Settleable Solids
	30 day average	daily maximum	30 day average	daily maximum					30 day average	daily maximum		No. 15		(ml/l)		
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Monitor Only	Measure When Sampling	-		
П	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	-	Measure When Sampling	0.5		
Ш	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	-	Measure When Sampling	-		
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Monitor only	Measure When Sampling	-		

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

- II In accordance with 35 III. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.8 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

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

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

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

^{*} The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfalls 001, 005, 007 and the unnamed tributary to South 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 III. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit

NPDES Permit No. IL0048071

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, 003 (Alkaline Mine Drainage)

							Paramete	rs					
Discharge Condition	Suspend (n	otal ded Solids ng/l) ***	(n	(total) ng/l)	pH** (S.U.)	S.U.) Acidity		Sulfate Chloride (mg/l) (mg/l)		Manganese (total) (mg/l.)		Flow (MGD)	Settleable Solids
	30 day average	daily maximum	30 day average	daily maximum				30 day average	daily maximum			(ml/l)	
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Measure When Sampling	-
Ш	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	Measure When Sampling	0.5
Ш	-	-	-	-	6.0-9.0	-	1654	500	8.19	8.19	Monitor only	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1654	500	2.0	4.0	Monitor only	Measure When Sampling	-

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

- II In accordance with 35 III. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.8 inches.
- III In accordance with 35 III. Adm. Code 406.110(d), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.106(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For outfalls which have no allowed mixing, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

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

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

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

^{*} The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfalls 002, 003 and the unnamed tributary to South 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 III. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit NPDES Permit No. IL0048071

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, 002, 003, 005, 007 (Reclamation Area Drainage)

			Parar	neters		
Discharge Condition	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness	Flow (MGD)	Settleable Solids (ml/l)
I	6.5-9.0	1654	500	Monitor only	Measure When Sampling	0.5
П	6.0-9.0	1654	500	Monitor only	Measure When Sampling	0.5
Ш	6.0-9.0	1654	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1654	500	Monitor only	Measure When Sampling	0.5

- I Dry weather discharge (base flow, if present) from the outfall.
- II In accordance with 35 III. Adm. Code 406.109(b), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations. The 10-year, 24-hour precipitation event for this area is considered to be 4.8 inches.
- III In accordance with 35 III. Adm. Code 406.109(c), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those in 35 III. Adm. Code 406.109(b).
- IV Discharges continuing 24 hours after cessation of precipitation event that resulted in discharge. For reclamation area discharges, monitoring requirements and permit limitations of Discharge Condition IV are identical to Discharge Condition I to which the outfall discharge has reverted.

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

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

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

^{*} The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfalls 001, 002, 003, 005, 007 and the unnamed tributary to South 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 III. Adm. Code 302.204 for pH.

NPDES Coal Mine Permit

NPDES Permit No. IL0048071

Effluent Limitations and Monitoring

Upon completion of Special Condition No. 11 and approval from the Agency, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfalls: 001, 002, 003, 005 and 007 (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.

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

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

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

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

NPDES Permit No. IL0048071

Construction Authorization No. 5437-13

C.A. Date: January 10, 2014

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

A surface coal mine operation consisting of 597.0 acres as described and depicted in IEPA Log Nos. 2031-06 and 2031-06-B (IDNR/OMM Permit No. 381) and Log Nos. 6429-12, 6429-12-B and 6429-12-F (IDNR/OMM Permit No. 425). This area is located in Sections 10 and 11, Township 10 South, Range 6 East, 3rd P.M., Saline County.

Facilities located within the above described area will consist of drainage control structures (ditches), internal culverts, sedimentation ponds, coal stockpiles, soil stockpiles, access roads, parking areas, office and maintenance building, truck scales, revised highway entrance.

Drainage for this site will be controlled by several drainage control structures (ditches) and five (5) sedimentation basins with discharges designated as Outfalls 001, 002, 003, 005 and 007 which are classified as alkaline mine drainage.

Outfall	Latitude			Longitude			Paggiving Waters
Number	Deg.	Min.	Sec.	Deg.	Min.	Sec.	Receiving Waters
001	37 [°]	39'	56.3"	88 [°]	32'	9.8"	Unnamed tributary to South Fork Saline River
002	37 [°]	39'	32.2"	88 [°]	31'	54.2"	Unnamed tributary to South Fork Saline River
003	37 [°]	39'	39.2"	88 [°]	31'	33.9"	Unnamed tributary to South Fork Saline River
005	37	40'	02"	88	32'	11"	Unnamed tributary to South Fork Saline River
007	37	39'	46"	88	31'	20"	Unnamed tributary to South Fork Saline River

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

Surface drainage control for this operation is provided by five (5) single stage ponds identified as Basin and Outfalls 001, 002, 003 and 005, and one (1) dual stage pond identified as Basins 007 and 008, with the discharges from Basin 008 being tributary to Basin 007 with offsite discharges being from Outfall 007.

As previously approved, it is noted that Sedimentation Basin 001 was realigned to accommodate the reconstruction of the drainage ditch along State Rt. 34/145 as proposed and depicted in IEPA Log Nos. 8318-10 and 8535-10.

Pursuant to information provided under Log No. 4060-14, approval to cease monitoring of discharges from Outfall 004 is hereby approved and Outfall 004 has been deleted from the Permit as discharges from this basin have been re-directed to Basin and Outfall 007 in accordance with the approved drainage control plan.

In addition to the standard "Good Mining Practices" required to be implemented in accordance with Condition No. 11(c)(i), 11(c)(ii), and 11(c)(iv), enhanced practices consisting of drainage control structure (ditch) sediment traps will be utilized in accordance with Condition No. 11(c)(v).

This operation utilizes a dry coal separator located within the OMM Permit No. 381 area. Reject material from the dry coal separator will be disposed in the active mining pit within either the OMM Permit No. 381 or 425 areas.

Groundwater monitoring for this site will consist of six monitoring wells designated as MW-1, MW-2 and MW-3 as described in IEPA Log Nos. 2031-06 and 2031-06-B and MW-4, MW-5 and MW-6 as described in IEPA Log Nos. 6429-12 and 6429-12-B. Groundwater monitoring requirements are contained in Condition No. 12.

An abandonment plan (Post-mining Reclamation Map) is provided under IEPA Log No. 8083-10-A which depicts a wooded wetland area required in accordance with the Army Corps of Engineers 404 Permit as well as minor revisions and adjustments to the various post-mining land use areas.

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

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

1. If any statement or representation is found to be incorrect, this permit may be revoked and the permittee thereupon waives all rights thereunder.

Construction Authorization No. 5437-13

C.A. Date: January 10, 2014

- 2. The issuance of this permit (a) shall not be considered as in any manner affecting the title of the premises upon which the mine or mine refuse area is to be located; (b) does not release the permittee from any liability for damage to person or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (c) does not take into consideration the structural stability of any units or parts of the project; and (d) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or with applicable local laws, regulations or ordinances.
- 3. Final plans, specifications, application and supporting documents as submitted by the person indicated on Page 1 as approved shall constitute part of this permit in the records of the Illinois Environmental Protection Agency.
- 4. There shall be no deviations from the approved plans and specifications unless revised plans, specifications and application shall first have been submitted to the Illinois Environmental Protection Agency and a supplemental permit issued.
- 5. The permit holder shall notify the Environmental Protection Agency (217/782-3637) immediately of an emergency at the mine or mine refuse area which causes or threatens to cause a sudden discharge of contaminants into the waters of Illinois and shall immediately undertake necessary corrective measures as required by 35 Ill. Adm. Code 405.111. (217/782-3637 for calls between the hours of 5:00 p.m. to 8:30 a.m. and on weekends.)
- 6. The termination of an NPDES discharge monitoring point or cessation of monitoring of an NPDES discharge is not authorized by this Agency until the permittee submits adequate justification to show what alternate treatment is provided or that untreated drainage will meet applicable effluent and water quality standards.
- 7. Initial construction activities in areas to be disturbed shall be for collection and treatment facilities only. Prior to the start of other activities, surface drainage controls shall be constructed and operated to avoid violations of the Act or Subtitle D. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed, for the parameters designated as 1M through 15M under Part 5-C of Form 2C and the effluent parameters designated herein with the results sent to this Agency. Should additional treatment be necessary to meet the standards of 35 III. 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 III. Adm. Code 406 as amended in R84-29 at 11 III. Reg. 12899. The application should discuss the treatment method and demonstrate how the discharge will meet the applicable standards.
- 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
 - Alum (Al₂(SO₄)₃), hydrated lime (Ca(OH)₂), soda ash (Na₂CO₃), alkaline pit pumpage, acetylene production by-product (tested for impurities), and ground limestone are acceptable settling aids and are hereby permitted for alkaline mine drainage sedimentation ponds.
 - b. Any other settling aids such as commercial flocculents and coagulants are permitted <u>only on prior approval from the Agency</u>. To obtain approval a permittee must demonstrate in writing to the Agency that such use will not cause a violation of the toxic substances standard of 35 III. Adm. Code 302.210 or of the appropriate effluent and water quality standards of 35 III. Adm. Code parts 302, 304, and 406.
- 10. A general plan for the nature and disposition of all liquids used to drill boreholes shall be filed with this Agency prior to any such operation. This plan should be filed at such time that the operator becomes aware of the need to drill unless the plan of operation was contained in a previously approved application.
- 11. Any of the following shall be a violation of the provisions required under 35 III. Adm. Code 406.202:
 - a. It is demonstrated that an adverse effect on the environment in and around the receiving stream has occurred or is likely to occur.
 - b. It is demonstrated that the discharge has adversely affected or is likely to adversely affect any public water supply.

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- c. The Agency determines that the permittee is not utilizing Good Mining Practices in accordance with 35 III. Adm. Code 406.204 which are fully described in detail in Sections 406.205, 406.206, 406.207 and 406.208 in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese. To the extent practical, such Good Mining Practices shall be implemented to:
 - i. Stop or minimize water from coming into contact with disturbed areas through the use of diversions and/or runoff controls (Section 406.205).
 - ii. Retention and control within the site of waters exposed to disturbed materials utilizing erosion controls, sedimentation controls, water reuse or recirculation, minimization of exposure to disturbed materials, etc. (Section 406.206).
 - iii. Control and treatment of waters discharged from the site by regulation of flow of discharges and/or routing of discharges to more suitable discharge locations (Section 406.207).
 - iv. Utilized unconventional practices to prevent the production or discharge of waters containing elevated contaminant concentrations such as diversion of groundwater prior to entry into a surface or underground mine, dewatering practices to remove clean water prior to contacting disturbed materials and/or any additional practices demonstrated to be effective in reducing contaminant levels in discharges (Section 406.208).
 - v. Sediment basin efficiency will be enhanced by the construction of in-ditch sediment traps (basins) located within the drainage structures (ditches) which convey stormwater runoff from disturbed areas to the sedimentation basins. The sediment traps will be located at intervals of approximately 300 to 500 feet and located considering ease of maintenance with regard to accumulated sediment removal. Periodic sediment removal shall be performed sufficient to maintain adequate volume for sediment accumulation during subsequent precipitation or stormwater runoff events.
- 12. Groundwater monitoring requirements for Well Nos. MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6 are as follows:
 - a. 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 operation or disturbance to determine ambient background concentrations. Background monitoring shall include the following list of constituents:

Aluminum Antimony Arsenic	Fluoride Iron (dissolved) Iron (total)
Barium	Lead
Beryllium	Manganese (dissolved)
Boron	Manganese (total)
Cadmium	Mercury
Chloride	Molybdenum
Chromium	Nickel
Cobalt	Phenols
Copper	Selenium
Cyanide	Silver

Sulfate Thallium Total Dissolved Solids Vanadium Zinc pH Acidity Alkalinity Hardness Static Water Elevation

b. Following the ambient monitoring as required under Condition No. 12(a) above, routine monitoring for the referenced wells shall continue on a quarterly basis as required by IDNR/OMM for the following list of constituents:

Total Dissolved Solids
Hardness
Acidity
Alkalinity
pH
Static Water Elevation

c. Following completion of active mining and reclamation, post-mining monitoring of the above referenced wells shall consist of six (6) samples collected during a 12-month period (approximately bi-monthly) to determine post-mining concentrations. Post-mining monitoring shall include the list of constituents identified in Condition No. 12(a) above.

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

$$\overline{X}_{b} = \frac{X_{1} + X_{2} + \dots X_{n}}{n}$$

Where:

 \overline{X}_{b} = Average value for a given chemical parameter X_{n} = Values for each sample

n = the number of samples taken

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

$$S_{b}^{2} = \frac{(X_{1} - \overline{X}_{b})^{2} + (X_{2} - \overline{X}_{b})^{2} + \dots + (X_{n} - \overline{X}_{b})^{2}}{n - 1}$$
$$S_{b} = \sqrt{S_{b}^{2}}$$

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

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

Where:

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

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- 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 onehalf (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 III. Adm. Code Part 724 Appendix I shall be used to evaluate data from monitoring wells. If the analytical results from any monitoring well exceed two (2) times the PQL for any single parameter, or if they exceed the PQLs for two or more parameters, the permittee shall conclude that a statistically significant change has occurred.

Degrees of freedom	t-valu		t-value	
	(one-ta		(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

Table 1 Standard t-Tables Level of Significance

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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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.

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

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

Attn: Compliance Assurance Section

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

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	April 15
April, May, June	July 15
July, August, September	October 15
October, November, December	January 15

The Permittee shall record discharge monitoring results on Discharge Monitoring Report 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.

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Special Conditions

Special Condition No. 9: Plans must be submitted to and approved by this Agency prior to construction of a sedimentation pond. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed for the parameters designated as 1M-15M under Part 5-C of Form 2C and the effluent parameters designated herein with the results sent to this Agency. Should additional treatment be necessary to meet these standards, a Supplemental Permit must also be obtained. Discharge from a pond is not allowed unless applicable effluent and water quality standards are met.

Special Condition No. 10: The special reclamation area effluent standards of 35 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.

<u>Special Condition No. 12</u>: Annual stormwater monitoring is required for all discharges not reporting to a sediment basin until Final SMCRA Bond is released and approval to cease such monitoring is obtained from the Agency.

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

Special Condition No. 13: Sediment Pond Operation and Maintenance (Outfalls 001, 002, 003, 005 and 007):

- a. For discharges resulting from precipitation events, in addition to the alternate effluent (Discharge Condition Nos. II and III) monitoring requirements, as indicated on the applicable effluent pages of this Permit, discharges from Outfalls 001, 002, 003, 005 and 007 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 South Fork Saline River which receive discharges from Outfalls 001, 002, 003, 005 and 007.
 - 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. The unnamed tributaries to South Fork 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. The unnamed tributaries to South Fork Saline River shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.

Special Condition No. 14: Data collected in accordance with Special Condition No. 13 above will be utilized to evaluate the appropriateness of the effluent limits established in this Permit. Should the Agency's evaluation of this data indicate revised effluent limits are warranted; this permit may be reopened and modified to incorporate more appropriate effluent limitations. This data will also be used for determination of effluent limitations at the time of permit renewal.

Special Conditions

Special Condition No. 15: Mercury shall be monitored quarterly until a minimum of ten (10) samples have been collected. This Mercury monitoring is required only under Discharge Condition Nos. I and/or IV and only during quarters in which there are discharges from the outfall which occur under Discharge Condition Nos. I and/or IV. Samples shall be collected and tested in accordance with USEPA 1631E using the option at Section 11.1.1.2 requiring the heating of samples at 50°C for 6 hours in a BrCl solution in closed vessels. This test method has a Method Detection Limit (MDL) of 0.5 ng/l (nanograms/liter). The results of such testing must be reported in "ng/l" (nanograms/liter) and submitted with the quarterly Discharge Monitoring Reports (DMRs). The Permittee may submit a written request to the Agency to discontinue quarterly Mercury monitoring if the sampling results show no reasonable potential to exceed the Mercury water quality standard.