

NPDES Permit No. IL0079545
Notice No. 5783c

Public Notice Beginning Date: **April 21, 2011**

Public Notice Ending Date: **May 23, 2011**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft New 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:

Kaskaskia Regional Port District
154 South Main Street
Red Bud, IL 62278

Name and Address of Facility:

Kaskaskia Regional Port District
Kellogg Dock
3500 S. Levee Road
Modoc, IL 62261
(Randolph 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 coal storage and river dock facility (SIC 4491). Coal storage and transfer operations result in the discharge of alkaline mine drainage.

Application is made for two (2) new discharges which are located in Randolph County, Illinois. The following information identifies the discharge points, receiving streams, and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude (North)</u>	<u>Longitude (West)</u>	<u>Stream Classification</u>
001	Unnamed tributary to Mississippi River	38° 0.0' 47"	90° 3.0' 29.0"	General Use
002	Unnamed tributary to Mississippi River	38° 0.0' 44"	90° 3.0' 16.0"	General Use

The Stream Segment IL J-36 of the Mississippi River receiving the flow from the unnamed tributary into which Outfalls 001 and 002 discharge is on the draft 2010 303(d) list of impaired waters. The following parameters have been identified as the pollutants causing impairment.

<u>Outfall</u>	<u>Potential Causes</u>	<u>Sources</u>
001, 002	Mercury Polychlorinated biphenyls, Manganese, Fecal Coliform	Atmospheric Deposition-Toxics Source Unknown

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

Outfall: 001, 002

Discharge Condition	Parameters												
	Total Suspended Solids (3) (mg/l)		Iron (total) (3) (4) (mg/l)		pH (3) (S.U.)	Alkalinity/ Acidity (3)	Sulfate (1) (mg/l)	Chloride (mg/l)	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	1643	500	1.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1643	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1643	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1643	500	1.0	Monitor only	Monitor only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
 - II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24 hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 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 001, 002, being approved after July 27, 1987, are subject to a 30-day average effluent limitation for Iron of 3.0 mg/l. Daily maximum effluent concentrations are calculated as twice the 30-day average.
 - (5) Hardness monitoring is required to determine the appropriateness of the sulfate permit limit.

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 Section 10, Township 6 South, Range 9 West, 3rd P.M., Randolph County, Illinois.

Kaskaskia Regional Port District - Kellogg Dock
NPDES No. IL0079545
Randolph County
Township 6 South, Range 9 West



**Antidegradation Assessment Summary
Kaskaskia Regional Port District – Kellogg Dock Facility
NPDES Permit No. IL0079545
Massac County**

The subject facility is an existing dry bulk material handling facility that is currently operating under a no discharge permit. Products consisting primarily of coal and other dry bulk non-soluble products arrive at the site via railcar and are transferred directly to barges or are stored in uncovered outdoor stockpiles. The facility is located near the Mississippi River and is surrounded by an elevated railroad berm which connects with the river levee east of the facility. The north and south storage yards are elevated (382 feet at their lowest point) in an effort to limit the potential for products to be inundated with floodwater. Floodwaters entering the site are directed to the east towards a concrete spillway which has a gate that can be opened or closed to regulate the flow of water to and from the site. The facility is now applying for an NPDES permit due to the proposed construction of two sedimentation impoundments which would collect and discharge equipment cleaning water and stormwater runoff from storage stockpiles. The north impoundment (Outfall 001) and south impoundment (Outfall 002) would collect runoff from 12.1 acres and 9.7 acres of land, respectively. The impoundments would provide an additional measure of protection against floodwaters and would also be utilized as a water source for dust suppression at the site. The impoundments would be constructed by placing an internal earthen berm around the entire product storage stockpile area. The top elevation of the berm would be set at 384 feet and an overflow weir for each impoundment would be set at 382 feet to ensure drainage and prevent submersion of the storage yards. Discharge from Outfalls 001 and 002 would be received by an unnamed wetland which is tributary to the Mississippi River. During non-flood conditions the spillway floodgate would be closed and water from each outfall would likely evaporate or percolate into the wetland, whereas during flood conditions the wetland would be submerged by floodwaters and any discharges from the outfalls would be mixed with floodwater and would travel offsite via the flood gate as the water recedes.

Identification and Characterization of the Affected Water Body.

The unnamed wetland tributary of the Mississippi River is a General Use water with zero 7Q10 flow. A watershed size cannot be determined using the USGS StreamStats mapping tool. However, given that the elevated railroad berm surrounds 80 acres of the site, the watershed size surrounding the wetland is approximately 0.12 square miles. The WIRT system identifies the majority of the area as a shallow marsh/wet meadow, with a small amount of bottomland forest present in the southeast area of the site. The wetland has not been assessed under the Agency's 305(b)/303(d) program and has 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 wetland is not enhanced in regards to the dissolved oxygen water quality standard.

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

Pollutants associated with the sedimentation pond discharges include substances commonly regulated at sedimentation basins associated with coal. Total suspended solids, chloride, sulfate, and manganese may be present in runoff from product stockpiles. Suspended solids would be treated in the sedimentation ponds during typical weather conditions but could be present at elevated concentrations during high rainfall events. Evaporative losses and water loss from dust suppressant usage are expected to result in infrequent discharges from each outfall, therefore dissolved solids (e.g. chloride, sulfate, and manganese) could be present at concentrations higher than ambient conditions. Water quality standards or effluent limits for each substance are expected to be met upon outfall, therefore no adverse impacts to the uses of the receiving water are anticipated.

Fate and Effect of Parameters Proposed for Increased Loading.

Suspended solids are only expected to be discharged at elevated concentrations during significant rainfall events. Solids would be retained within the wetland or would be transported offsite via the flood gate if occurring during times of flooding. Chloride, sulfate, and manganese would remain dissolved in the receiving water and small amounts would be removed by aquatic life for biological functions. No adverse impacts to the receiving water would occur as all water quality standards would be met.

Purpose and Social & Economic Benefits of the Proposed Activity.

The facility is currently used primarily as a coal handling facility and provides a valuable service by enhancing the delivery of coal for power production. The socio-economic benefits of enhancing the existing site include sustaining jobs at the facility for local workers, providing an alternative location for storage and product shipment which lowers the cost of transporting the resource, and providing additional monies in tax revenue for Randolph County and the State of Illinois.

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

The applicant assessed the following treatment alternatives or the wastewater flows anticipated from the site before selecting sedimentation and best management practices as the preferred method of treating stormwater runoff from the site. The following is a list of alternatives provided by the applicant.

No Discharge: The applicant considered the construction of sedimentation ponds with volume capable of containing a 25-year, 24-hour storm event in an effort to achieve no discharge from the site. However, due to the location of the facility a no discharge scenario would not occur given the potential of floodwaters to encroach the sedimentation basins and intermingle with wastewater, thereby making this scenario impractical.

**Antidegradation Assessment Summary
Kaskaskia Regional Port District – Kellogg Dock Facility
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Massac County**

No Operation: The facility is an existing operation that already provides a valuable service to the local and state economy. The construction of sedimentation impoundments would provide enhanced treatment of stormwater as it exits the site. The economic benefits associated with operation and the environmental benefits associated with the proposed sedimentation impoundment construction justify the continued operation of the facility.

Filtration: This technology was eliminated from consideration for the following reasons: filtration does not remove dissolved solids and filters only a portion of suspended material, filtration processes require a steady stream of water for treatment which would not be present given that stormwater is the predominant effluent, a larger tract of land would be required for such a facility, and filtration would be much more expensive based on initial cost and long-term maintenance due to costs associated with operation/supervision of the system and disposal of solids.

Bioremediation: This technology utilizes a wetland environment managed in an anaerobic condition such that biological activity within the wetland incorporates sulfate and other substances from the water column into biomass. A wetland currently receives runoff the site and would receive treated water from the sedimentation impoundments following construction. Constructing a larger, more controlled wetland would be infeasible for this project given the intermittent flow from the sedimentation basins and the seasonal flooding from the Mississippi River.

Reverse Osmosis: This technology is ineffective and unproven in related applications, as it is primarily utilized for potable water supply needs and is impractical for stormwater treatment given the high energy demands and maintenance requirements. The source water would likely require chemical treatment to prevent biological growth, corrosion, and mineral scaling within the system and the reject water from the system would require treatment with a coagulant to collect the precipitate. The precipitate from the reject water would also require landfill disposal.

Chemical Precipitation: The proposed technology is ineffective for a number of reasons. Utilization of chemical coagulation, followed by settling/filtration steps to remove the precipitate, is energy intensive even in low flow, steady state circumstances which would not occur in this instance. The intermittent and sometimes high volume flows from sedimentation basins make chemical precipitation infeasible and would not result in a significant improvement of water quality. This technology is primarily reserved for potable water supply production or treatment of wastewaters containing high toxic substances. It introduces additional chemical components and creates significant volumes of precipitate which would require special disposal practices. Given that water quality standards are expected to be achieved upon outfall following sedimentation basin treatment, the costs and potential hazards associated with chemical precipitation are not warranted.

Ion Exchange: Ion exchange is simply the exchange of one chemical ion in the water column for another chemical ion. The technology is typically used for potable water production (water softening). It is considered impractical for treating stormwater runoff given that no net chemical reduction occurs and large amounts of energy and water are required to operate this technology while the sedimentation ponds proposed for the site are passive, low energy technology.

Cost-Effective Sulfate Removal (CESR) Process: CESR is a developing proprietary technology that uses hydrated lime and proprietary chemicals to precipitate gypsum, metals, and ettringite. The technology is time consuming, requires large amounts of land, has high infrastructure costs and requires increased supervision and maintenance, has issues with scaling and precipitation of minerals, produces an effluent with high specific conductivity and a high concentration of total dissolved solids, and would produce a sludge that would require landfill disposal. This technology is impractical at the proposed facility due to the aforementioned drawbacks, as well as the consideration that stormwater runoff from the site is expected to meet water quality standards upon outfall from the sedimentation basins.

Supervac: This sludge treatment technology would only be appropriate in conjunction with another water treatment technology. This technology is not considered a viable alternative given that a sedimentation basin is the most practical and feasible treatment for the facility and sludge wastes will not be produced.

The preferred action is to follow the proposed plan, as the alternatives investigated by the applicant do not have practical usefulness and would not result in substantial improvements in water quality.

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

The IDNR EcoCAT system was consulted on March 3, 2011, and it was determined that protected resources may be in the vicinity of the project location. IDNR has evaluated this information and has concluded that adverse effects are unlikely. Consultation was therefore terminated as stated in the March 14, 2011, letter from Tracy Evans.

**Antidegradation Assessment Summary
Kaskaskia Regional Port District – Kellogg Dock Facility
NPDES Permit No. IL0079545
Massac County**

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 assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all existing uses of the wetland 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 continuing to allow a valuable service that provides jobs and economic revenue to the state. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

NPDES Permit No. IL0079545

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

New NPDES Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

Kaskaskia Regional Port District
154 South Main Street
Red Bud, IL 62278

Facility Name and Address:

Kaskaskia Regional Port District
Kellogg Dock
3500 S. Levee Road
Modoc, IL 62261
(Randolph County)

Discharge Number and Classification:

001, 002 Alkaline Mine Drainage

Receiving waters

Unnamed tributary to the Mississippi River

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

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

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

REM:LDC:IKW;jkb/5783c/03-07-11

NPDES Coal Mine Permit
NPDES Permit No. IL0079545
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, 002 (Alkaline Mine Drainage)

Discharge Condition	Parameters												
	Total Suspended Solids (mg/l) ***		Iron (total) (mg/l) ***		pH** (S.U.) ***	Alkalinity/ Acidity ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Mn (total) (mg/l) ***	Hardness ***	Mercury see Special Condition No. 14	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum									
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1643	500	1.0	Monitor only	Monitor Only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1643	500	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1643	500	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1643	500	1.0	Monitor only	Monitor Only	Measure When Sampling	-

- I Dry weather discharge (base flow or mine pumpage) from the outfall.
- II In accordance with 35 Ill. Adm. Code 406.110(a), any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt or equivalent volume) shall comply with the indicated limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 4.76 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 Nos. 8 and 12 for the discharges from Outfalls 001 and 002 and unnamed tributary to the Mississippi 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. IL0079545
 Effluent Limitations and Monitoring

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

Outfall*: 001, 002 (Reclamation Area Drainage)

Discharge Condition	Parameters					
	pH** (S.U.) ***	Sulfate (mg/l) ***	Chloride (mg/l) ***	Hardness ***	Flow (MGD)	Settleable Solids (ml/l) ***
I	6.5-9.0	1643	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1643	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1643	500	Monitor only	Measure When Sampling	-
IV	6.0-9.0	1643	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 4.76 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.

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. 12 for the discharges from Outfalls 001 and 002 and unnamed tributary to the Mississippi 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. IL0079545
 Effluent Limitations and Monitoring

Upon completion of Special Condition No. 10 and approval from the Agency, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfalls: 001, 002 (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 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. IL0079545

Construction Authorization No. 7099-11

C.A. Date: March 24, 2011

Authorization is hereby granted to the above designee to construct and operate the coal storage and transfer facility described as follows:

The coal storage and transfer facility contains 110.0 acres as described and depicted in IEPA Log No. 7099-11 and located in Section 10, Township 6 South, Range 9 West, 3rd P.M., Randolph County, Illinois.

Included on this site is office and maintenance buildings, a rail to barge loadout facility, hoppers, stacker, coal storage area, conveyors, railcar dump shed and sedimentation ponds.

All surface drainage from the coal stockpile areas will be controlled by two (2) sedimentation basins with discharges identified as Outfall 001 and 002. Both Outfalls 001 and 002 are classified as alkaline mine drainage.

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

Outfall Numbers	Latitude			Longitude			Receiving Water
	DEG	MIN	SEC	DEG	MIN	SEC	
001	38°	0.0'	47.00"	90°	3.00'	29.0"	Unnamed tributary to the Mississippi River
002	38°	0.0'	44.00"	90°	3.00'	16.0"	Unnamed tributary to the Mississippi River

This Construction Authorization supersedes and replaces Subtitle D Permit No. 2010-MT-8537 previously issued for the herein permitted facilities and activities.

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 and are identified 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.

NPDES Permit No. IL0079545

Construction Authorization No. 7099-11

C.A. Date: March 24, 2011

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 (Na_2CO_3), alkaline pit pumpage, acetylene production by-product (tested for impurities), and ground limestone are acceptable settling aids and are hereby permitted for alkaline mine drainage sedimentation ponds.
 - b. Any other settling aids such as commercial flocculents and coagulants are permitted only on prior approval from the Agency. To obtain approval a 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. After settling, recirculation water which meets the requirements of 35 Ill. Adm. Code 406.106 and 406.202, may be discharged. The use of additives in the recirculation water which require treatment other than settling to comply with the Act will require a revised permit.
11. Any of the following shall be a violation of the provisions required under 35 Ill. Adm. Code 406.202:
 - a. It is demonstrated that an adverse effect on the environment in and around the receiving stream has occurred or is likely to occur.
 - b. It is demonstrated that the discharge has adversely affected or is likely to adversely affect any public water supply.
 - c. The Agency determines that the permittee is not utilizing Good Mining Practices in accordance with 35 Ill. Adm. Code 406.204 which are fully described in detail in Sections 406.205, 406.206, 406.207 and 406.208 in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese. To the extent practical, such Good Mining Practices shall be implemented to:
 - 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).

NPDES Permit No. IL0079545

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, the Agency shall be notified via correspondence or e-mail at such time that the electronic filing has been completed.

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: If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

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

Special Condition No. 8: Plans must be submitted to and approved by this Agency prior to construction of a sedimentation pond. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed for the parameters designated as 1M-15M under Part 5-C of 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 Conditions

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

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

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

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

Special Condition No. 12: Sediment Pond Operation and Maintenance (Outfalls 001 and 002):

- 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 and 002 shall be monitored and reported for Discharge Rate, Sulfate, Chloride and Hardness.
- b. The following sampling and monitoring requirements are applicable to flow in the unnamed tributary to Mississippi River which receive discharges from Outfalls 001 and 002.
 - i. All sampling and monitoring required under 12(b)(ii) and (iii) below shall be performed during a discharge and monitoring event from the associated outfall.
 - ii. Unnamed tributary to Mississippi 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 tributary to Mississippi River shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.

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

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