NPDES Permit No. IL0080071
Notice No. 6988c

Public Notice Beginning Date: **March 27, 2015**

Public Notice Ending Date: **April 27, 2015**

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:

Sunrise Coal, LLC
1183 Canvasback Drive
Terre Haute, IN 47802

Name and Address of Facility:

Sunrise Coal, LLC
Bulldog Mine
3 miles southeast of Homer, Illinois
(Vermilion 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 proposes a new underground coal mine (SIC 1222). Mine operations result in the discharge of alkaline mine drainage.

Application is made for three (3) new discharges which are located in Vermilion County, Illinois. The following information identifies the discharge points, receiving streams and stream classifications:

Outfall	Receiving Stream	Latitude (North)	Longitude (West)
001	Unnamed tributary to Olive Branch	39° 59' 21"	87° 55' 01"
002	Unnamed tributary to Olive Branch	39° 58' 45"	87° 54' 03"
003	Unnamed tributary to Olive Branch	39° 59' 05"	87° 54' 03"

The stream segment BPJF-01 of Olive Branch receiving the flow from the unnamed tributary into which Outfalls 001, 002 and 003 discharges is not on the 2014 303(d) list of impaired waters.

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

Outfall: 001, 002, 003

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					30 day average	daily maximum				
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1515	500	2.0	4.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1515	500	-	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1515	500	-	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1515	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 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 4.26 inches.

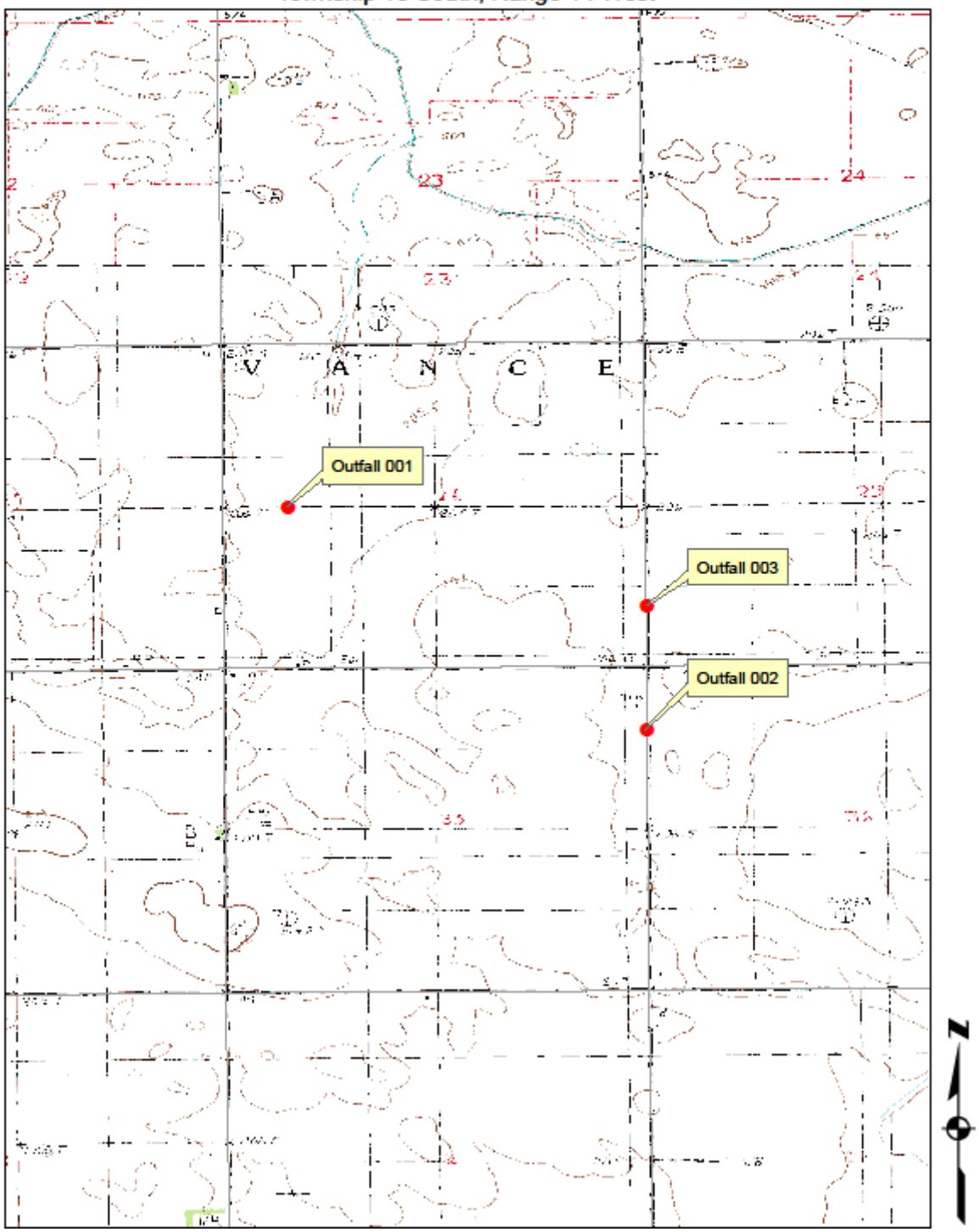
III In accordance with 35 Ill. Adm. Code 406.110(d), any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) shall comply with the indicated limitations instead of those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

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

(1) Sulfate water quality standards and effluent limitations determined in accordance with 35 Ill. Adm. Code 302.208(h).
(2) Settleable solids are monitored only as a result of a discharge due to precipitation events which exceed a predetermined 24-hour duration or snowmelt total. Settleable solids effluent limitations for alkaline mine discharges are contained in 35 Ill. Adm. Code 406.110.
(3) Effluent standards for mine discharges are contained in 35 Ill. Adm. Code 406.106.
(4) Discharges from Outfalls 001, 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.

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 26 and 35, Township 18 South, Range 14 West, 3rd P.M., Vermilion County, Illinois.

Sunrise Coal, L.L.C. - Bulldog Mine
NPDES No. IL0080071
Vermilion County
Township 18 South, Range 14 West



Antidegradation Assessment
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The Applicant is applying for an NPDES permit for discharges associated with a new underground coal mine. The surface permit area contains 390.3 acres of which 322.0 are planned for disturbance. The 322 acres of disturbance consist of 0.5 acres for mine entries and air shafts, 84.4 acres for coal refuse disposal, 43.3 acres for coal processing and support facilities, 7.1 acres for access, haul roads and transport facilities, 47.5 acres for soil storage, 36.0 acres for ditches and ponds, and 103.2 acres for undeveloped support areas. A portal to the underground mine would be created by excavating a slope from the surface to the coal seam. After the mine slope has been completed, the underground mining operation would begin extracting the Herrin No. 6 coal seam utilizing conventional room and pillar mining methods via the use of a continuous miner, shuttle cars and conveyor belts to mine and transport the coal to the preparation plant for processing. At this location the Herrin #6 coal seam averages approximately 5.9 feet in thickness and has overburden of approximately 280 feet in thickness. The projected life of the mine is 20-25 years with total production estimated at 1.2 million tons of coal per year at full production. Coal processing onsite would be accomplished by a heavy media separation coal processing plant.

To facilitate mining activities, the proposed facility would contain six water containment structures that would exceed 20-acre feet in volume; two treatment ponds (Treatment Ponds #1 and #2), three sediment ponds (Sediment Ponds #1, #2, and #3), and a refuse impoundment. The refuse impoundment would store slurry material generated from the coal washing process. Fine material within the slurry would settle to the bottom of the impoundment. Clean water in the water column would be pumped back to the preparation plant for reuse in coal washing. The impoundment would be constructed above grade to prevent any surface runoff from surrounding areas from flowing into the impoundment. Other than slurry pumpage, the only water entering the impoundment would be from precipitation falling directly into the impoundment. The impoundment would be designed to handle a 100 year storm event. In the rare event of a discharge, impoundment discharges would be sent to Treatment Pond #2 and would flow into Sediment Pond #3. A small holding pond (18.4 acres) would also be constructed onsite to retain water from underground pumpage for use in coal processing. Similar to the refuse impoundment, the holding pond would be constructed to have a very small watershed in order to prevent collection of rainfall. Runoff from the surrounding area (79.2 acres), except for what falls directly into the pond, would report to Sediment Pond #1. Without taking into account evaporation and other water losses associated with coal processing, the holding pond would retain over six months of underground mine pumpage without requiring a discharge. In the infrequent event when more water has accumulated in the holding pond than is needed for coal processing, excess water from the holding pond would be pumped to Sediment Pond #1. A compacted clay liner with a minimum thickness of four feet would be installed in all coal processing areas, including the coal preparation plant, coal stockpile areas, the refuse impoundment, and all drainage control ditches that would convey runoff from the coal processing area to the sedimentation basins. All sediment ponds and treatment ponds, as well as the holding pond, would also have a clay liner installed.

It is anticipated that coal processing and underground mine activities would require approximately 200 GPM and 100 GPM of water usage, respectively. However, given that the local topography consists of mildly sloping land, most of which being tile drained agricultural fields, surface water is a limiting factor at this location. In order to produce an ample supply of water for coal processing and mining activities, the facility intends to collect and store runoff from precipitation events in the treatment ponds and sediment ponds. All of the impoundments, including the refuse impoundment and holding pond, would have the ability to be pumped to the coal processing plant if needed. Even with the storage of surface water runoff and additional water pumped from underground mining, the Applicant foresees the need for an additional water source should water availability be limited due to severe drought conditions or other unforeseen circumstances. The Applicant has therefore entered into an agreement with the City of Georgetown to receive up to 300,000 gallons per day from the City for the first two years after the date on which all infrastructure is completed, and up to 500,000 gallons per day thereafter. Water from the City of Homer may also be obtained to support the bath house. The 100 GPM of water required to support underground mining operations would be supplied by the City of Georgetown. During underground mining operations, excavation of the coal seam would lead to groundwater infiltration from the Herrin No. 6 coal aquifer. Excess water from underground mining operations, which would include stormwater, municipal water, and groundwater near the Herrin #6 coal seam, would be pumped to the surface and stored in the holding pond for use in coal processing. In order to determine the amount of water that would be pumped from underground mining, a well pump test was conducted on a boring that extended through the Herrin No. 6 coal seam. The Applicant's consultant (Hydrogeology, Inc.) concluded that a maximum of 27,922 gallons per day of water would be pumped to the holding pond, which would be comprised of groundwater, stormwater, and municipal water supplied by the City of Georgetown.

Given the consumption of water onsite, under normal operation conditions (absent of excess rainfall) the facility would operate as a closed system and therefore would have infrequent discharges. However, extreme rainfall events or prolonged periods of rainfall would result in discharges from Treatment Ponds and Sediment Ponds, which would result in discharges from assigned NPDES Outfalls. A summary of the Treatment Ponds, Sediment Ponds, and Outfalls is provided below.

Treatment Pond #1 would receive surface runoff from 95 acres which would be pumped to the preparation plant for use in coal processing. During extreme rainfall events, excess water would flow to Sediment Pond #2.

Treatment Pond #2 would receive surface runoff from 135 acres which would be pumped to the preparation plant for use in coal processing. During extreme rainfall events, overflow from the refuse impoundment would be received by Treatment Pond #2. Overflows from Treatment Pond #2 would be received by Sediment Pond #3.

Sediment Pond #1 would receive 79.2 acres of surface runoff from warehouse and office area as well as discharges from the holding pond, if necessary.

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Sediment Pond #2 would receive surface runoff from 502 acres of agricultural land as well any overflow from Treatment Pond #1, which would collect runoff from 95 acres of land used for mine operations.

Sediment Pond #3 would receive surface runoff from 140 acres of agricultural land as well as any overflow from Treatment Pond #2, which would collect surface runoff from 135 acres of soil stockpiles and land surrounding the refuse impoundment. In the rare event of a discharge, overflow from the refuse impoundment discharges would also be tributary to Sediment Pond #3.

Overflows from Sediment Pond #2, Sediment Pond #3, and Sediment Pond #1 would be discharged from Outfalls 001, 002, and 003, respectively. The Outfalls would be located immediately downstream of the sedimentation ponds, but would flow into concrete lined catch basins before being sent to underground tile systems that would convey the effluent to Olive Branch. NPDES sampling for each Outfall would be conducted in the concrete lined catch basins before the effluent is sent underground and combined with runoff from agricultural drain tiles. Therefore, water quality standards and effluent limitations must be met at each outfall location before the effluent mixes with underground tile drainage and eventually reaches Olive Branch. Discharges from Outfalls 001 and 002 are expected to be rare, but discharges from Outfall 003 are expected to be more frequent due to coal processing activities and the steady influx of underground mine pumpage into this treatment works.

Identification and Characterization of the Affected Water Body.

Olive Branch (Segment BPJF-01) is a General Use water with zero 7Q10 flow existing upstream of the proposed outfalls. The watershed area of this portion of Olive Branch is estimated at 10.1 square miles, which would classify the stream as perennial. However, the flat topography and extensive agricultural tiling likely has a significant impact on the amount of water that actually reaches the stream during rainfall events. Given the low stream flow, Olive Branch has not been assessed by the Agency and is therefore not found on the 2014 Illinois Integrated Water Quality Report and Section 303(d) List. It is not listed as a biologically significant stream and has not been given an integrity rating in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The stream is not enhanced in regards to the dissolved oxygen water quality standard.

Downstream waters associated with this project include Salt Fork (Segment BPJ-10), a General Use water with a 7Q10 flow of 22.7 cfs It has been assessed by the Agency and is listed on the 2014 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for Public and Food Processing Water Supply use (causes = nitrogen, nitrate). It is not listed as a biologically significant stream but has been given a "C" integrity rating in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The stream is enhanced in regards to the dissolved oxygen water quality standard.

Given the small size of the receiving water and the lack of information collected by the Agency, the Applicant contracted Midwest Reclamation Resources to perform a physical, chemical, and biological characterization of Olive Branch near the project area. A comprehensive report of the stream characterization was provided in the Applicant's January 13, 2015 document entitled *Assessment of Alternatives for Minimal Environmental Degradation and Economic Benefit Analysis, Bulldog Mine, Sunrise Coal, LLC*. A summary of the findings of the stream survey is provided below.

On October 17 and 20, 2014, stream characterizations were conducted upstream and downstream of the two locations where existing drainage tiles would convey effluent from the facility into Olive Branch. Water quality measurements were also collected upstream and downstream of the discharge locations from September, 2011 through October, 2014. Olive Branch was found to possess very low sinuosity and moderate entrenchment near the study areas, likely due to extensive channelization to support agricultural drainage. The streambeds of the study areas were heavily vegetated and were predominately comprised of silt (70%), fine organic matter (25%) and small amounts of gravel (5%). Using the United States Environmental Protection Agency Rapid Bioassessment Protocol, the stream produced a total score of 102 at the upstream site and 99 at the downstream site, indicating Marginal/Suboptimal habitat quality. Using the Illinois Environmental Protection Agency's Qualitative Stream Habitat Assessment Procedure the stream produced a total score of 79 at both sites, indicating a Poor to Fair habitat quality. Water quality of Olive Branch at upstream and downstream sampling locations was found to be within standards for all parameters that were assessed, which included the common parameters that are regulated in NPDES permits for coal mines (pH, chloride, iron, manganese, sulfate, etc.). It should be noted that of the nine sampling visits at each site during the summer months from 2011-2014, water was not present during four visits of the upstream site, and two visits of the downstream site. The scarcity of stream flow was reflected in the biological surveys, as a low diversity of fish and macroinvertebrates were observed at both sampling locations. Only 18 taxa of macroinvertebrates were collected, with over 90% of the individuals consisting of the isopod *Asellus sp.* However, the macroinvertebrates collected had a wide range of pollution tolerance values. A Macroinvertebrate Biotic Integrity value of 6.0 was calculated, which indicates Fair stream conditions. Only 3 species of fish were collected, all of which are pioneering species that are indicative of small watersheds. The species consisted of *Ermiyzon oblongus* (creek chubsucker), *Fundulus notatus* (blackstripe topminnow), and *Lythrurus umbratilis* (redfin shiner). One species of crayfish (*Procambarus acutus*, white river crayfish) was collected during fish sampling, and one small, unidentified unionid mussel was collected during macroinvertebrate sampling. Mussel surveys were also conducted, but no mussels were located during these surveys. However, high stream flow and higher water levels at the time of the survey may have impacted the mussel survey results. The Illinois Natural History Survey Mollusk Database indicates that 6 species of mussels have previously been collected in Olive Branch, all of which are common organisms that are widespread throughout Illinois. No threatened or endangered organisms were collected in any of the biological surveys conducted in Olive Branch.

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

Water quality standards for all regulated parameters are expected to be attained at each outfall, but chloride and sulfate could potentially increase in loading to Olive Branch as a result of the mining activities. Given that groundwater near the Herrin #6 coal seam naturally contains elevated concentrations of chloride that may approach or exceed the surface water quality standard of 500 mg/L, pumpage of this water for use in coal processing would be the most significant source of pollutant loading. However, an analysis provided by the Applicant estimated that chloride concentrations in Olive Branch over an annual basis would only increase from 12.9 mg/L to 15.6 mg/L, a 2.7 mg/L increase, due to mining activities. The calculations were performed under worst case conditions that assumed 27,900 GPD of underground pumpage containing 731 mg/L chloride (the highest recorded chloride discharge from other coal mines in the region) would be pumped into the holding pond and discharged into Olive Branch. However, even during drought conditions when underground pumpage retained in the holding pond would be used for processing, the chloride concentration is expected to be below the worst case concentration of 731 mg/L chloride, given that underground pumpage would also include stormwater and municipal water used in underground mining activities. Although the pumpage may contain higher concentrations of chloride, use of this water in coal processing should not have an observable effect on effluent quality, as the facility would essentially operate as a closed system under drought conditions due to evaporative water losses and the export of wetted coal. Furthermore, the holding pond has the capacity to contain 6 months of underground pumpage without overflowing into Sediment Pond #1, therefore discharges from the holding pond during drought conditions are unlikely and would still be afforded additional retention in Sediment Pond #1 prior to being discharged from Outfall 003. Even under drought conditions, water quality standards are expected to be attained at each outfall and no adverse impacts to the uses of Olive Branch due to mining activities are expected.

Fate and Effect of Parameters Proposed for Increased Loading.

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

Purpose and Social & Economic Benefits of the Proposed Activity.

A comprehensive assessment of the social and economic benefits was conducted by the Applicant and provided in the document *Assessment of Alternatives for Minimal Environmental Degradation and Economic Benefit Analysis, Bulldog Mine, Sunrise Coal, LLC*, dated January 13, 2015. In addition to the energy-producing benefits the coal mine would provide, the facility would benefit the community at large by providing jobs, local development, and regional development. Construction of the coal mining facility would generate over $11.9 million in federal taxes and $5.7 million in state and local taxes. Local tax generation would include $400,000 in sales tax revenue and $1.6 million in property tax revenue over the duration of the construction project. The facility would directly create 807 full and part time jobs, and indirectly create 433 full and part time jobs over the duration of the construction project. Once operating, the facility would provide direct employment for 300 employees and indirect employment for 303 employees, with an annual employee compensation in excess of $41.5 million being paid by Vermilion and Champaign Counties. The presence of the coal mining facility would also annually generate $160.4 million in direct and indirect economic activity in these counties. During operation, the coal mine would annually generate $8.3 million in federal taxes and $10.9 million in state and local taxes.

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

The use of sedimentation basins and permitted NPDES outfalls for treatment of stormwater runoff and pit pumpage is the most practical method of minimizing pollutant loading from the proposed project. A comprehensive assessment of alternatives and options to minimize the potential increases in pollutant loading from the project was conducted by the Applicant and provided in the document *Assessment of Alternatives for Minimal Environmental Degradation and Economic Benefit Analysis, Bulldog Mine, Sunrise Coal, LLC*, dated January 13, 2015. This assessment included consideration of the following alternatives, each of which was considered infeasible or impractical: no mining; no discharge of flows from the site; underground injection; discharge of water to publicly-owned treatment works; and alternative onsite treatment technologies including reverse osmosis, filtration, bioremediation, coagulation, ion exchange, cost effective sulfate removal, supervac, and manganese treatment. It is impractical to further evaluate these alternatives given that pollutant load increases are expected to be negligible and all water quality standards for parameters associated with this facility are expected to be met in effluent and within Olive Branch.

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

The IDNR EcoCAT system was consulted on December 1, 2014 in regards to the proposed activities. It was determined that no threatened or endangered species or protected natural areas are in the vicinity of the areas where tile drainage would convey facility effluent to Olive Branch. Consultation was immediately terminated on December 1, 2014 by IDNR.

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Agency Conclusion.

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

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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

New NPDES Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

Sunrise Coal, LLC
1183 Canvasback Drive
Terre Haute, IN 47802

Facility Name and Address:

Sunrise Coal, LLC
Bulldog Mine
3 miles southeast of Homer, Illinois
Vermilion County

Discharge Number and Classification:

001, 002, 003 Alkaline Mine Drainage

Receiving waters

Unnamed tributary to Olive Branch

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

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

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

JDS:DM:cs/6988c/2-25-15

NPDES Coal Mine Permit

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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, 003 (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. 15	Flow (MGD)	Settleable Solids (ml/l)
	30 day average	daily maximum	30 day average	daily maximum					30 day average	daily maximum				
I	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1515	500	2.0	4.0	Monitor only	Monitor only	Measure When Sampling	-
II	-	-	-	-	6.0-9.0	-	1515	500	-	-	Monitor only	-	Measure When Sampling	0.5
III	-	-	-	-	6.0-9.0	-	1515	500	-	-	Monitor only	-	Measure When Sampling	-
IV	35	70	3.0	6.0	6.5-9.0	Alk.>Acid	1515	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 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 4.26 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.

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* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfall 001, 002 and 003 and unnamed tributary to Olive Branch receiving such discharges.

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

NPDES Coal Mine Permit

NPDES Permit No. IL0080071

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 (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	1515	500	Monitor only	Measure When Sampling	0.5
II	6.0-9.0	1515	500	Monitor only	Measure When Sampling	0.5
III	6.0-9.0	1515	500	Monitor only	Measure When Sampling	-
IV	6.5-9.0	1515	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 4.26 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.

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* The Permittee is subject to the limitations, and monitoring and reporting requirements of Special Condition No. 13 for the discharges from Outfalls 001, 002 and 003 and unnamed tributary to Olive Branch receiving such discharges.

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

NPDES Coal Mine Permit

NPDES Permit No. IL0080071

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 (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.

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

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

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

Surface facilities in support of an underground mine containing a total of 390.3 acres (OMM Permit No. 429), as described and depicted in IEPA Log Nos. 4280-14 and 4280-14-D, and located in Sections 26 and 35, Township 18 North, Range 14 West, Vermilion County, Illinois.

The surface facilities at this underground mine contains the incline slope to reach the coal seam, two (2) air shafts, access and haul roads, drainage control structures, topsoil and subsoil stockpile areas, coal stockpiles, preparation plant, truck scale, office/bath house, parking areas, warehouse, supply yard, refuse disposal areas, conveyors and power distribution.

Surface drainage control is provided by six (6) sedimentation/treatment/holding ponds with three (3) offsite discharges designated as NPDES Outfall Nos. 001, 002 and 003 all classified as alkaline mine drainage and depicted in IEPA Log No. 4280-14-D.

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

Outfall Number	Latitude			Longitude			Receiving Water
	DEG	MIN	SEC	DEG	MIN	SEC	
001	39°	59’	21”	87°	55’	01”	Unnamed tributary to Olive Branch
002	39°	58’	45”	87°	54’	03”	Unnamed tributary to Olive Branch
003	39°	59’	05”	87°	54’	03”	Unnamed tributary to Olive Branch

Surface drainage at this facility is controlled by six (6) water containment structures designated as Treatment Pond Nos. 1 and 2; Sediment Pond Nos. 1, 2, and 3; and the Holding Pond. Sediment Pond No. 2, Sediment Pond No. 3, and Sediment Pond No. 1 will discharge from NPDES Outfalls 001, 002, and 003, respectively.

Treatment Pond No. 1 receives runoff from the preparation plant and coal processing area which will be pumped to the preparation plant for use in coal processing. Discharges from Treatment Pond No. 1 will flow into Sediment Pond No. 2 with designated NPDES Outfall 001. Sediment Pond No. 2 will also receive runoff from soil stockpiles.

Treatment Pond No. 2 receives runoff from the refuse impoundment which will be pumped to the preparation plant for use in coal processing. Discharges from Treatment Pond No. 2 will flow to Sediment Pond No. 3 with designated NPDES Outfall 002.

The Holding Pond will receive water from underground mine pumpage which will be pumped to the preparation plant for use in coal processing. Discharges from the Holding Pond will flow to Sediment Pond No. 1 with designated NPDES Outfall 003. Sediment Pond No. 1 also receives runoff from the warehouse and office areas.

If at any time the quantity of water in the ponds becomes insufficient for full operation, municipal water will be purchased from the City of Georgetown. Potable water to support the bath house will be purchased from the City of Homer.

The sanitary wastewater treatment facility will be permitted by the Vermilion County Health Department.

Coarse and fine coal refuse disposal is approved in the southeastern portion of the permit area as depicted in IEPA Log No. 4280-14. Foundation preparation of this disposal area shall consist of the construction of a four (4) foot compacted clay liner subject to and in accordance with the specifications and testing requirements of Condition No. 13.

To ensure protection of any potential groundwater resource in the area, four (4) foot compacted clay liners shall also be constructed for Sedimentation Pond Nos. 1, 2 and 3; Treatment Pond Nos. 1 and 2; the holding pond and all drainage control structures (ditches) connecting such structures which receive underground mine pumpage and/or runoff from coal stockpiles and/or coal refuse disposal activities. The compacted clay liner “Quality Assurance/Quality Control Plan” is contained in Attachment IV(6)(D) of IEPA Log No. 4280-14-D. A subset of the Quality Assurance/Quality Control (QA/QC) requirements for the installation of the compacted clay liner is included in Condition No. 13.

As an alternative to the compacted clay liner required as discussed above, an HDPE Geomembrane liner with a minimum thickness of 60 mils may be utilized. In the event that such a synthetic liner is utilized, a “Quality Assurance/Quality Control Plan” will be submitted to the Agency for approval prior to installation of the liner in accordance with IEPA Log No. 4280-14-D and as per the manufacturer’s guidelines and recommendations.

Groundwater monitoring for this area includes Monitoring Well Nos. MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and MW-16 with monitoring subject to the requirements of Condition No. 12.

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

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

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

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

2. The issuance of this permit (a) shall not be considered as in any manner affecting the title of the premises upon which the mine or mine refuse area is to be located; (b) does not release the permittee from any liability for damage to person or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (c) does not take into consideration the structural stability of any units or parts of the project; and (d) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or with applicable local laws, regulations or ordinances.

3. Final plans, specifications, application and supporting documents as submitted by the person indicated on Page 1 as approved shall constitute part of this permit in the records of the Illinois Environmental Protection Agency.

4. There shall be no deviations from the approved plans and specifications unless revised plans, specifications and application shall first have been submitted to the Illinois Environmental Protection Agency and a supplemental permit issued.

5. The permit holder shall notify the Environmental Protection Agency (217/782-3637) immediately of an emergency at the mine or mine refuse area which causes or threatens to cause a sudden discharge of contaminants into the waters of Illinois and shall immediately undertake necessary corrective measures as required by 35 Ill. Adm. Code 405.111. (217/782-3637 for calls between the hours of 5:00 p.m. to 8:30 a.m. and on weekends.)

6. The termination of an NPDES discharge monitoring point or cessation of monitoring of an NPDES discharge is not authorized by this Agency until the permittee submits adequate justification to show what alternate treatment is provided or that untreated drainage will meet applicable effluent and water quality standards.

7. Initial construction activities in areas to be disturbed shall be for collection and treatment facilities only. Prior to the start of other activities, surface drainage controls shall be constructed and operated to avoid violations of the Act or Subtitle D. At such time as runoff water is collected in the sedimentation pond, a sample shall be collected and analyzed, for the parameters designated as 1M through 15M under Part 5-C of Form 2C and the effluent parameters designated herein with the results sent to this Agency. Should additional treatment be necessary to meet the standards of 35 Ill. Adm. Code 406.106 or applicable water quality standards, 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 ($Al_2(SO_4)_3$), hydrated lime ($Ca(OH)_2$), soda ash (Na_2CO_3), alkaline pit pumpage, acetylene production by-product (tested for impurities), and ground limestone are acceptable settling aids and are hereby permitted for alkaline mine drainage sedimentation ponds.

    b. Any other settling aids such as commercial flocculents and coagulants are permitted only on prior approval from the Agency. To obtain approval a permittee must demonstrate in writing to the Agency that such use will not cause a violation of the toxic substances standard of 35 Ill. Adm. Code 302.210 or of the appropriate effluent and water quality standards of 35 Ill. Adm. Code parts 302, 304, and 406.

10. A general plan for the nature and disposition of all liquids used to drill boreholes shall be filed with this Agency prior to any such operation. This plan should be filed at such time that the operator becomes aware of the need to drill unless the plan of operation was contained in a previously approved application.

11. Any of the following shall be a violation of the provisions required under 35 Ill. Adm. Code 406.202:

    a. It is demonstrated that an adverse effect on the environment in and around the receiving stream has occurred or is likely to occur.

    b. It is demonstrated that the discharge has adversely affected or is likely to adversely affect any public water supply.

    c. The Agency determines that the permittee is not utilizing Good Mining Practices in accordance with 35 Ill. Adm. Code 406.204 which are fully described in detail in Sections 406.205, 406.206, 406.207 and 406.208 in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese. To the extent practical, such Good Mining Practices shall be implemented to:

        i. Stop or minimize water from coming into contact with disturbed areas through the use of diversions and/or runoff controls (Section 406.205).

        ii. Retention and control within the site of waters exposed to disturbed materials utilizing erosion controls, sedimentation controls, water reuse or recirculation, minimization of exposure to disturbed materials, etc. (Section 406.206).

        iii. Control and treatment of waters discharged from the site by regulation of flow of discharges and/or routing of discharges to more suitable discharge locations (Section 406.207).

        iv. Utilized unconventional practices to prevent the production or discharge of waters containing elevated contaminant concentrations such as diversion of groundwater prior to entry into a surface or underground mine, dewatering practices to remove clean water prior to contacting disturbed materials and/or any additional practices demonstrated to be effective in reducing contaminant levels in discharges (Section 406.208).

12. Groundwater monitoring requirements for Well Nos. MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and MW-16 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	Fluoride	Sulfate
Antimony	Iron (dissolved)	Thallium
Arsenic	Iron (total)	Total Dissolved Solids
Barium	Lead	Vanadium
Beryllium	Manganese (dissolved)	Zinc
Boron	Manganese (total)	pH
Cadmium	Mercury	Acidity
Chloride	Molybdenum	Alkalinity
Chromium	Nickel	Hardness
Cobalt	Phenols	Static Water Elevation
Copper	Selenium	
Cyanide	Silver	

    b. Following the ambient monitoring as required under Condition No. 12 above, routine monitoring shall continue on a quarterly basis as follows:

        i. Monitoring Well Nos. MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and MW-16 shall continue to be monitored quarterly for the contaminants identified in Condition No. 12(a) above.

c. Following completion of active mining and reclamation, post-mining monitoring of all 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.

d. Groundwater monitoring reports shall be submitted to the Agency in accordance with Special Condition Nos. 3 and 5 of this NPDES permit.

e. A statistically valid representation of background and/or post mining water quality required under Condition Nos. 12(b) and 12(c) above shall be submitted utilizing the following method. This method shall be used to determine the upper 95 percent confidence limit for each parameter listed above.

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

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

i. Determine the arithmetic mean $\left(\overline{X}_b\right)$ 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.

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

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:

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

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

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

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

Where:

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

iv. If the values of any routine parameter for any monitoring well exceed the upper confidence limit for that parameter, the permittee shall conclude that a statistically significant change has occurred at that well.

v. When some of the background and/or post mining values are less than the Method Detection Limit (MDL), a value of one-half (1/2) the MDL shall be substituted for each value that is reported as less than the MDL. All other computations shall be calculated as given above.

If all the background and/or post mining values are less than the MDL for a given parameter, the Practical Quantitation Limit (PQL), as given in 35 Ill. Adm. Code Part 724 Appendix I shall be used to evaluate data from monitoring wells. If the analytical results from any monitoring well exceed two (2) times the PQL for any single parameter, or if they exceed the PQLs for two or more parameters, the permittee shall conclude that a statistically significant change has occurred.

Table 1
Standard t-Tables Level of Significance

Degrees of freedom	t-values (one-tail)		t-values (two-tail)*	
	99%	95%	99%	95%
4	3.747	2.132	4.604	2.776
5	3.365	2.015	4.032	2.571
6	3.143	1.943	3.707	2.447
7	2.998	1.895	3.499	2.365
8	2.896	1.860	3.355	2.306
9	2.821	1.833	3.250	2.262
10	2.764	1.812	3.169	2.228
11	2.718	1.796	3.106	2.201
12	2.681	1.782	3.055	2.179
13	2.650	1.771	3.012	2.160
14	2.624	1.761	2.977	2.145
15	2.602	1.753	2.947	2.131
16	2.583	1.746	2.921	2.120
17	2.567	1.740	2.898	2.110
18	2.552	1.734	2.878	2.101
19	2.539	1.729	2.861	2.093
20	2.528	1.725	2.845	2.086
21	2.518	1.721	2.831	2.080
22	2.508	1.717	2.819	2.074
23	2.500	1.714	2.807	2.069
24	2.492	1.711	2.797	2.064
25	2.485	1.708	2.787	2.060
30	2.457	1.697	2.750	2.042
40	2.423	1.684	2.704	2.021

Adopted from Table III of "Statistical Tables for Biological Agricultural and Medical Research" (1947, R.A. Fisher and F. Yates).

* For pH only when required.

13. The four (4) foot compacted clay liner to be constructed within refuse disposal area (slurry disposal area and surrounding coarse refuse embankment), ditches conveying coal and refuse affected drainage, Sedimentation Basin Nos. 1, 2 and 3, Treatment Pond Nos. 1 and 2 and the Holding Pond shall be subject to the specifications and procedures presented in IEPA Log No. 4280-14-D, as well as the following:

    a. All soils to be used for the compacted clay liner shall be free of grass, vines, vegetation and rock or stones greater than four (4) inches in diameter.
    b. Inter-lift surfaces shall be adequately scarified to ensure inter-lift bonding.
    c. The placement of frozen material or the placement material on frozen ground is prohibited.
    d. Contemporaneous placement or protective covering shall be provided to prevent drying, desiccation and/or freezing where necessary.
    e. Soil lifts shall be placed in loose thicknesses of six (6) to eight (8) inches. Compactive effort shall be applied to each lift to obtain a liner permeability of 1×10^{-7} cm/sec, or less.

f. Each soil lift shall be compacted to ninety-five (95) percent standard proctor within two (2) percent below or three (3) percent above optimum moisture content. Compaction shall be determined utilizing ASTM Test Method D698.
g. Moisture and density testing shall be conducted at a rate of at least one (1) test per 7,500 cubic yards of material place.
h. After liner placement samples shall be used to determine permeability utilizing ASTM Test Method D5084. Permeability testing shall be conducted at a rate of at least one (1) test per 7,500 cubic yards of material place.

NPDES Permit No. IL0080071

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

Attn: Compliance Assurance Section

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

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

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

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

Period	Received by IEPA
January, February, March	April 15
April, May, June	July 15
July, August, September	October 15
October, November, December	January 15

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

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

Special Condition No. 5: Completed periodic monitoring and reporting, other than DMR's and stream monitoring (i.e., groundwater monitoring, coal combustion waste analysis reports, etc.), shall be retained by the Permittee for a period of three (3) months and shall be mailed and received by the IEPA at the addresses indicated in Special Condition No. 3 above in accordance with the following schedule, unless otherwise specified by the permitting authority.

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

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

Special Condition No. 7: If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

Special Conditions

Special Condition No. 8: The permittee shall notify the Agency in writing by certified mail within thirty days of abandonment, cessation, or suspension of active mining for thirty days or more unless caused by a labor dispute. During cessation or suspension of active mining, whether caused by a labor dispute or not, the permittee shall provide whatever interim impoundment, drainage diversion, and wastewater treatment is necessary to avoid violations of the Act or Subtitle D.

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

Special Condition No. 10: The special reclamation area effluent standards of 35 Ill. Adm. Code 406.109 apply only on approval from the Agency. To obtain approval, a request form and supporting documentation shall be submitted to request the discharge be classified as a reclamation area discharge. The Agency will notify the permittee upon approval of the change.

Special Condition No. 11: The special stormwater effluent standards apply only on approval from the Agency. To obtain approval, a request with supporting documentation shall be submitted to request the discharge to be classified as a stormwater discharge. The documentation supporting the request shall include analysis results indicating the discharge will consistently comply with reclamation area discharge effluent standards. The Agency will notify the permittee upon approval of the change.

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

A. Each discharge must be monitored for pH and settleable solids annually.

B. Analysis of samples must be submitted with second quarter Discharge Monitoring Reports. A map with discharge locations must be included in this submittal.

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

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

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 and 003 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 Olive Branch which receives discharges from Outfalls 001, 002 and 003.

   i. All sampling and monitoring required under 13(b)(ii) and (iii) below shall be performed during a discharge and monitoring event from the associated outfall.

   ii. Unnamed tributary to Olive Branch shall be monitored and reported quarterly for Discharge Rate, Chloride, Sulfate and Hardness downstream of the associated outfall. This downstream monitoring shall be performed a sufficient distance downstream of the associated outfall to ensure that complete mixing has occurred. At such time that sufficient information has been collected regarding receiving stream flow characteristics and in-stream contaminant concentrations the permittee may request a re-evaluation of the monitoring frequency required herein for possible reduction or elimination. For the purpose of re-evaluating the downstream monitoring frequency of the receiving stream, "sufficient information" is defined as a minimum of ten (10) quarterly sampling events.

   In the event that downstream monitoring of the receiving waters is eliminated during the term of this permit based on an evaluation of the quarterly data, a minimum of three (3) additional samples analyzed for the parameters identified above must be submitted with the permit renewal application a minimum of 180 days prior to expiration of this permit.

   iii. Unnamed tributary to Olive Branch shall be monitored and reported annually for Discharge Rate, Chloride, Sulfate and Hardness upstream of the associated outfall.

NPDES Permit No. IL0080071

Special Conditions

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

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

Special Condition No. 16: Discharges from Outfall Nos. 001, 002 and 003 shall be monitored twice annually with such monitoring spaced at approximately 6-month intervals during the entire 5-year term of this NPDES Permit. Sampling of the discharges shall be performed utilizing the grab sampling method and analyzed for total (unfiltered) concentrations. The results of the sampling required under this Special Condition shall be submitted twice annually to the Agency in January and July of each calendar year to the addresses indicated in the Special Condition No. 2 above. The parameters to be sampled and the detection limits (minimum reported limits) are as follows:

Parameter	Detection Limit
Arsenic	0.05 mg/l
Barium	0.50 mg/l
Cadmium	0.001 mg/l
Chromium (hexavalent)	0.01 mg/l
Chromium	0.05 mg/l
Copper	0.005 mg/l
Lead	0.05 mg/l
Manganese	0.50 mg/l
Mercury*	1.00 ng/l**
Nickel	0.005 mg/l
Phenols	0.005 mg/l
Selenium	2.000 µg/l***
Silver	0.003 mg/l
Zinc	0.025 mg/l

* Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.
** 1.00 ng/l (nanogram/liter) = 1 part per trillion.
*** µg/l = micrograms/liter