

NPDES Permit No. IL0073351
Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue, East
P.O. Box 19276
Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified NPDES Permit

Expiration Date: June 30, 2004

Issue Date: September 1, 1999
Effective Date: September 1, 1999
Modification Date: August 3, 2001
Modification Date: September 18, 2003
Modification Date:

Name and Address of Permittee:

Arclar Company, L.L.C.
420 Long Lane Road
Equality, Illinois 62934

Facility Name and Address:

Arclar Company, L.L.C.
Wildcat Hills Mine - Cottage Grove Pit
1755 Kedron Road
Equality, Illinois 62934
1 mile north of Equality, Illinois
(Gallatin and Saline Counties)

Discharge Number and Name:

001, 002, 003,
006, 007, 013 Alkaline Mine Drainage

010, 011 Alkaline Mine Drainage

012 Alkaline Mine Drainage

004, 005 Alkaline Mine Drainage

Receiving waters

Unnamed tributaries to North Fork Saline River

Cockerel Branch

Unnamed tributary to Cockerel Branch

North Fork Saline River

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

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

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

REM:LDC:BK:jkb/2915c/08-18-03

NPDES Coal Mine Permit
 NPDES Permit No. IL0073351
 Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		

From the effective date of this Permit until June 30, 2004, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfalls*: 001, 002, 003, 004, 005, 006, 007, 010, 011, 012, 013 (Alkaline Mine Drainage)

Flow (MGD)					Measure When Monitoring	
Total Suspended Solids			35.0	70.0	***	Grab
Iron (total)			3.0	6.0	***	Grab
pH	The pH shall not be less than 6.0 nor greater than 9.0				1/month	Grab
Alkalinity/ Acidity	Total acidity shall not exceed total alkalinity				1/month	Grab
Sulfates				1900	***	Grab
Chlorides				500	***	Grab

*Outfalls permitted herein are also subject to the limitations, and monitoring and reporting requirements of Special Condition No. 11.

*** 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 base flow conditions. A "no flow" situation is not considered to be a sample of the discharge. A grab sample of each discharge caused by the following precipitation event(s) shall be taken for the following parameters 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). The remaining three (3) samples may be taken from either base flow or during precipitation event.

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 following limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.

<u>Pollutant or Pollutant Property</u>	<u>Effluent Limitations</u>
Settleable Solids	0.5 ml/l daily maximum
pH	6.0 - 9.0 at all times

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 following limitations instead of those in 35 Ill. Adm. Code 406.106(b).

<u>Pollutant or Pollutant Property</u>	<u>Effluent Limitations</u>
pH	6.0 - 9.0 at all times

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Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	lbs/day		LIMITS mg/l			
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		

Upon completion of Special Condition No. 8 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfalls: 001, 002, 003, 004, 005, 006, 007, 010, 011, 012, 013 (Reclamation Area Drainage)

Flow (MGD)		Measure When Monitoring	
Settleable Solids		0.5 ml/l	1/month Grab
pH	The pH shall not be less than 6.0 nor greater than 9.0		1/month Grab
Sulfates		500	1/month Grab
Chlorides		500	1/month Grab

In addition to the above base flow sampling requirements, a grab sample of each discharge caused by the following precipitation event(s) shall be taken (for the following parameters) 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).

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 following limitations instead of those in 35 Ill. Adm. Code 406.106(b). The 10-year, 24-hour precipitation event for this area is considered to be 5.21 inches.

Pollutant or Pollutant Property
pH

Effluent Limitations
6.0 - 9.0 at all times

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 Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		

Upon completion of Special Condition No. 9 and approval from the Agency, the effluent of the following discharges shall be monitored and limited at all times as follows:

Outfalls: 001, 002, 003, 004, 005, 006, 007, 010, 011, 012, 013 (Stormwater Discharge)

Settleable Solids			0.5 ml/l		1/Year	Grab
pH	The pH shall not be less than 6.0 nor greater than 9.0				1/Year	Grab

Storm water 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 storm water 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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Construction Authorization No. 0325-98

C.A. Date: June 3, 1999

Engineer: Mark R. Yingling, P.E.

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

A surface mine to be constructed and operated as proposed in IEPA Log Nos. 0325-98, 0325-98-B and 0325-98-C. The area permitted herein contains 1500.3 acres located in Sections 4, 5, 6, 7, 8 and 9, T9S, R8E, Saline County, approximately 1 mile north of Equality, Illinois. This area is also identified as IDNR/OMM Permit No. 327 area.

The facility will contain coal processing areas with coal stockpiles, office and maintenance areas, and fine refuse disposal impoundment. Drainage control consists of six (6) sedimentation ponds, associated diversions and three (3) final cut lakes.

All outfalls will be classified alkaline mine drainage. Outfalls 001, 002, 003, 005 and 006 will report to unnamed tributaries to the North Fork Saline River. Outfall 004 will report directly to the North Fork Saline River. Outfall Nos. 007, 008 and 009 are assigned to Final Cut Lake Nos. 1, 1A and 2, respectively. These discharges when constructed will also be classified alkaline mine drainage and report to unnamed tributaries to the North Fork Saline River. Sedimentation pond designs are approved subject to Condition No. 11.

Coal processing waste will be disposed in an impoundment constructed in accordance with Condition No. 12. Hydrologic calculations for the slurry impoundment are contained in IEPA Log No. 0325-98-C. Coarse refuse may be returned to the floor of the active pits as proposed.

Commercial flocculants, Prestofloc 014 and Praestol CM302, are approved for use on all sedimentation ponds to reduce suspended solids as proposed in IEPA Log No. 9108-99.

The abandonment plan shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109 as detailed in the log numbers referenced in Condition No. 3.

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 by Log Nos. 0325-98, 0325-98-B and 0325-98-C 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.

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C.A. Date: June 3, 1999

Engineer: Mark R. Yingling, P.E.

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, 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 this pond is not allowed unless applicable effluent and water quality standards are met.
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 slime ($\text{Ca}(\text{OH})_2$), 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 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. 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. Annual IDNR/OMM Impoundment inspection reports for each of the six (6) sedimentation basins shall be submitted in duplicate to the Agency.

In the event sediment removal becomes necessary, sludge removed from ponds will be disposed in the active pit unless analyzed for alkalinity/acidity and found to have a net neutralization potential (NNP) of +20 tons/1000 tons CCE or greater. If pit pumpage is directed to any of the ponds the sludge shall be disposed in the active pit, regardless of testing.
12. Construction and operation of the fine refuse disposal area is subject to the following:
 - a. The impoundment will be lined with a compacted clay liner subject to the following:
 - i. If the compacted clay liner is installed at a thickness of less than three (3) feet, the liner shall be compacted to result in a permeability of 10^{-7} cm/sec or less. To ensure adequate compaction is achieved, a minimum of three (3) permeability tests on the compacted clay liner shall be performed within each clay line cell of the fine refuse disposal area with the results submitted to the Agency prior to disposal in the respective areas.
 - ii. If the compacted clay liner is installed at a thickness of three (3) feet or greater, compaction tests for permeability determination will not be required.

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Construction Authorization No. 0325-98

C.A. Date: June 3, 1999

Engineer: Mark R. Yingling, P.E.

- b. Groundwater monitoring is required for monitoring Well Nos. MW-3 and MW-4. Parameters to be monitored are Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Cyanide, Iron, Lead, Manganese, Mercury, Nickel, Phenol, Selenium, Silver, Thallium, Zinc, Chloride, Fluoride, Sulfate, pH, Alkalinity, Acidity, Total Dissolved Solids and Water Elevation.

Six (6) samples will be required during the first year of operation and should be representative of seasonal variations. Six (6) samples will also be required following reclamation of the impoundment. Additional sampling may be required during operation based on a review of the results of initial sampling and conditions encountered during construction. All monitoring reports shall be submitted to the Agency in a timely manner.

- c. All other groundwater monitoring reports required by IDNR/OMM shall also be submitted to the Agency, including those for Monitoring Well Nos. MW-1 and MW-2.

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Supplemental Construction Authorization No. 0325-98-1

S.C.A. Date: June 5, 2001

An additional 658.1 acres, of which 243.8 acres are located in Section 1, Township 9 South, Range 7 East, Saline County, and 414.3 acres are located in Sections 6 and 7, Township 9 South, Range 8 East, Gallatin County. This additional area is identified as OMM Permit No. 348, and is described in IEPA Log Nos. 8459-00 and 8459-00-A. The total area covered by this permit is increased to 2160.4 acres, which also includes the Incidental Boundary Revision discussed below.

Construction Authorization No. 0325-98 incorrectly stated that 1500.3 acres are located in Sections 4, 5, 6, 7, 8 and 9, T9S, R8E, Saline County. The 1500.3 acres are located in Sections 4, 5, 6, 7, 8 and 9, T9S, R8E, Gallatin County.

The mine name is changed to Wildcat Hills Mine, Cottage Grove Pit as requested in Log No. 7054-01. The Permit is being transferred from Black Beauty Coal Company to Sugar Camp Coal, L.L.C., pursuant to information contained in Log Nos. 8206-00, 8324-00 and 8324-00-A.

Surface drainage will be controlled by a three cell pond to be constructed in phases. The initial phase will be designated as Pond 001A which was previously constructed under Construction Authorization No. 0325-98. Ponds 001B and 001C will be tributary to Pond 001A. Previously designated Outfall 009 from Final Cut Lake No. 2 will be relocated as Pond 001C will be re-designated Final Cut No. 2.

The reporting dates for Discharge Monitoring Reports (DMRs) are changed to May 1, August 1, November 1 and February 1 as proposed in Log No. 8323-00.

Incidental Boundary Revision No. 1 to OMM Permit No. 327 containing 2.0 acres in Section 7, Township 9 South, Range 8 East, Gallatin County is approved as proposed. Surface drainage from this area will be subject to storm water monitoring.

The current approved Operations Plan Map may be found in Log No. 7203-01. A temporary crusher and coal yard may be located as proposed on this map. Drainage from this area will be directed to Pond 001A.

Auger mining is approved as proposed in Log No. 7222-01. A 48-inch auger will be located on 6.5 foot centers to remove 50% of the existing coal from within the highwall and pit end walls of Final Cut 2 to a maximum depth of 500 feet. Each entry will be plugged within 30 days unless the auger holes are producing water, in which case they will be sealed within 72 hours. The auger hole plug will consist of non-combustible, impervious backfill material to a depth of 12 feet. This backfill material will be compacted as placed.

Monitoring Well No. 12PMW-3 shall be installed and monitored as described in Condition 1. Monitoring frequency requirements for Well Nos. MW-3 and MW-4 have been modified as described in Condition 2.

The abandonment plan for the additional area incorporated by this supplemental construction authorization shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109 as detailed in IEPA Log Nos. 8459-00, 8459-00-A, and 8479-00.

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

All Conditions in the original Authorization to Construct are incorporated in this Supplemental Authorization unless specifically deleted or revised herein.

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

1. Groundwater monitoring is required for monitoring Well No. 12PMW-3. Parameters to be monitored are Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Cyanide, Iron, Lead, Manganese, Mercury, Nickel, Phenol, Selenium, Silver, Thallium, Zinc, Chloride, Fluoride, Sulfate, pH, Alkalinity, Acidity, Total Dissolved Solids and Water Elevation.

Monitoring for the parameters listed above shall be conducted quarterly during the operation phase.

Six (6) samples will be required during the first year of operation and should be representative of seasonal variations. Six (6) samples will also be required following reclamation of the impoundment. Additional sampling may be required during operation based on a review of the results of initial sampling and conditions encountered during construction. All monitoring reports shall be submitted to the Agency in a timely manner.

2. Monitoring of Well Nos. MW-3 and MW-4 for the parameters listed in Condition 1. above shall be conducted quarterly during the operation phase in addition to the background and post mine monitoring required in SCA 0325-98.

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Supplemental Construction Authorization No. 0325-98-2

S.C.A. Date: March 14, 2003

Engineer: Mark R. Yingling, P.E., Black Beauty Coal Company

Supplemental Authorization is hereby granted to the above designee to construct the mine and mine refuse area, which were previously approved under Authorization No. 0325-98 dated June 3, 1999 and Supplemental Construction Authorization No. 0325-98-1 dated June 5, 2001. These facilities have been revised as follows:

This permit is hereby transferred from Sugar Camp Coal, L.L.C., to Arclar Company, L.L.C., pursuant to information contained in Log Nos. 6252-02, 6442-02 and 6541-02-C.

The total area covered by this Permit before this modification was 2160.4 acres. The modifications discussed below increase the permit area to 2595.1 acres.

The Permit area of 658.1 acres (IDNR/OMM Permit No. 348) initially approved in S.C.A. No. 0325-98-01 was reduced to 617.6 acres, a reduction of 40.5 acres as described in Log No. 8459-00-C.

An additional 40 acres located in Section 6, Township 9 South, Range 8 East, 3rd P.M., Gallatin County is added to the Permit for surface mining. Drainage from this area will report to Basin and Outfall 001 via Basins 013 and 001B. Operation Plans are approved as proposed in Log No. 5154-03. This area is also identified as Incidental Boundary Revision Nos. 2 and 3 to IDNR/OMM Permit No. 348.

Pond No. 013 and associated diversions may be constructed as proposed in Log No. 5065-03. The discharge of Pond No. 013 will be routed to Pond No. 001B. Pond No. 013 will receive drainage originally routed to Pond 001C which will be converted to a slurry impoundment as described below.

A refuse disposal area identified as Final Cut No. 2 is approved as proposed in Log Nos. 5095-03. One new monitoring well No. 1PMW-4 will be installed northwest of the final cut in an undisturbed area.

Plans for the originally approved area, IDNR/OMM Permit No. 327, have been modified as follows.

Due to a reduction in area to be mined and re-location of ponds away from North Fork Saline River, as depicted in Log Nos. 7319-01 and 7319-01-A, revised outfall coordinates are as follows:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude (North)</u>	<u>Longitude (West)</u>
001	Unnamed tributary to North Fork Saline River	37°45'14.3"	88°20'47.0"
002	Unnamed tributary to North Fork Saline River	37°45'32.9"	88°20'39.6"
003	Unnamed tributary to North Fork Saline River	37°45'18.3"	88°20'01.1"
004	North Fork Saline River	37°45'35.7"	88°19'41.5"
005	North Fork Saline River	37°46'00.2"	88°19'42.2"
006	Unnamed tributary to North Fork Saline River	37°46'16.9"	88°19'46.9"
007*	Unnamed tributary to North Fork Saline River	37°46'27.1"	88°19'51.2"

*Outfall 007 will be a discharge from a final cut impoundment. The final cut was relocated north and east of the original proposed position and has a smaller tributary area. Outfall 007 when constructed will replace Outfall No. 006.

Discharges from the above referenced Outfalls are subject to Condition No. 3.

Slurry may be disposed in Pond 001C, a final cut pit, as proposed in Log No. 5072-03. This is considered an emergency disposal area for times when the primary disposal system at the Arclar Company, L.L.C., Big Ridge/Willow Creek Mine (NPDES Permit No. IL0066664) is inoperative. The slurry impoundment will be operated as a closed system and will be managed so as not to discharge to Pond 001B. A slurry line and water return line will be constructed between the Willow Creek Preparation Plant and Pond 001C.

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S.C.A. Date: March 14, 2003

Engineer: Mark R. Yingling, P.E., Black Beauty Coal Company

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

The groundwater monitoring plan is hereby revised as proposed in IEPA Log No. 6412-02. Previously proposed and approved Monitoring Well Nos. MW-3 and MW-4 are hereby removed from the groundwater monitoring plan as these wells will not be installed due to the associated refuse disposal area no longer being proposed for development. Monitoring wells remaining in the groundwater monitoring plan are identified as MW-1, MW-2, 1PMW-4, 2PMW-1 and 12PMW-3. The monitoring and reporting requirements for these wells are outlined in Condition No. 1.

A new surface mining area consisting of 434.8 acres (OMM Permit No. 359) located in Sections 1 and 2, Township 9 South, Range 7 East, 3rd P.M., Saline County is added to the permit. The area will be utilized for surface mining with refuse disposal in the active pit as described in Log Nos. 6541-02 and 6541-02-C.

Drainage control will consist of diversions and two sediment ponds with discharges designated as Outfalls 010 and 011. Both Outfalls are classified as alkaline mine drainage and report to Cockerel Branch. Sediment storage shall be monitored and ponds shall be maintained at all times to maintain design detention volume. Construction of Pond No. 011 is subject to Condition 4.

Outfall Coordinates

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude (North)</u>	<u>Longitude (West)</u>
010	Cockerel Branch	37°46'19.4"	88°24'21.1"
011	Cockerel Branch	37°45'41.8"	88°23'56.2"

Discharges from the referenced Outfalls are subject to Condition No. 3.

The abandonment plan for this area shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109 as detailed in Log No. 6541-02.

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

All Conditions in the original Authorization to Construct are incorporated in this Supplemental Authorization unless specifically deleted or revised herein.

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

1. Groundwater monitoring requirements are as follows:

- a. Copies of groundwater monitoring reports as required by IDNR/OMM for Well Nos. MW-1 and MW-2 shall be submitted in duplicate to the Agency.
- b. Routine quarterly sampling and analysis is required for Monitoring Well Nos. 2PMW-1 and 12PMW-3. Routine monitoring shall include, at a minimum, the following constituents:

Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Cyanide, Iron, Lead, Manganese, Mercury, Nickel, Phenol, Selenium, Silver, Thallium, Zinc, Chloride, Fluoride, Sulfate, pH, Alkalinity, Acidity, and Total Dissolved Solids.

Analysis results shall be submitted to the Agency in duplicate in accordance with item (1)(d) below.

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S.C.A. Date: March 14, 2003

Engineer: Mark R. Yingling, P.E., Black Beauty Coal Company

- c. During the first year following installation of Monitoring Well No. 1PMW-4, sampling and analysis shall be performed six (6) times (approximately bi-monthly) to account for seasonal variations. Following completion of this ambient background sampling, continued routine sampling will be required on a quarterly basis. All ambient background and routine sampling shall include the constituents identified in item (1)(b) above.
- d. Quarterly routine monitoring will be established following the first year of operation.

- i. Monitoring reports shall be submitted in duplicate to the Agency at the following address.

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

- ii. The reporting schedule for groundwater monitoring data is as follows:

<u>Reporting Period</u>	<u>Due Date</u>
January, February, March	May 1
April, May, June	August 1
July, August, September	November 1
October, November, December	February 1

- 2. Any of the following shall be a violation of the provisions required under 35 Ill. Adm. Code 406.203(c):
 - 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 the permittee is not utilizing good mining practices as defined in 35 Ill. Adm. Code 406.204 which are applicable in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese.

- 3. All alkaline and/or acid mine drainage discharges permitted herein are subject to the following:

- a. No discharge is allowed from any herein 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. Discharges not meeting the water quality standards of 35 Ill. Adm. Code 302 may only be discharged in combination with stormwater discharges from the basin, and only at such times that sufficient flow exists in the receiving stream to ensure that water quality standards in the receiving stream beyond the area of allowed mixing will not be exceeded. Following any such stormwater discharge, but prior to the flow in the receiving stream subsiding, the impounded water in the basin(s) may be pumped or otherwise evacuated sufficiently below the discharge elevation to provide capacity for holding a sufficient volume of mine pumpage and/or surface runoff to preclude the possibility of discharge until such time that a subsequent precipitation event results in discharge from the basin. At times of stormwater discharges, in addition to the alternate effluent monitoring requirements, sulfate and chloride concentrations shall be monitored and reported for all herein permitted outfalls.

- b. In addition to the requirements outlined above, Outfalls 010 and 011 shall be subject to the following:

A minimum of three (3) samples shall be collected of the receiving stream, upstream of the basin discharge confluence, during separate runoff/discharge events with the samples analyzed for sulfate and chloride concentrations. Such samples shall be collected at times when a discharge is occurring from the above referenced basin(s). In addition, the basin discharge flow and receiving stream flow, upstream of the basin discharge confluence, shall be determined recorded and submitted with the basin Discharge Monitoring Reports (DMRs) to demonstrate that adequate mixing is provided to ensure water quality standards in the receiving stream are not exceeded. Upon approval from the Agency, the additional monitoring requirements of Condition 3(b) may be suspended at such time that sufficient information has been collected to demonstrate the validity of the dilution analysis upon which the permit limits were established.

- 4. Construction of Pond No. 011 may not commence until the determination by the Army Corps of Engineers on the requirement for a Section 404 permit is complete. A copy of this determination, and if applicable, Permit shall be submitted to the Agency.

NPDES Permit No. IL0073351

Supplemental Construction Authorization No. 0325-98-3

S.C.A. Date: September 9, 2003

Engineer: Bruce R. Dausman, P.E., Black Beauty Coal Company

Supplemental Authorization is hereby granted to the above designee to construct the mine and mine refuse area, which were previously approved under Authorization No. 0325-98 dated June 3, 1999 and Supplemental Construction Authorization Nos. 0325-98-1 and 0325-98-2 dated June 5, 2001 and March 14, 2003, respectively. These facilities have been revised as follows:

An area of 300.7 acres identified as IDNR/OMM Permit No. 361 will be mined as proposed in Log No. 5155-03 and 5155-03-C. This area is located in Sections 1 and 12, Township 9 South, Range 7 East, 3rd P.M., Saline County and Section 7, Township 9 South, 3rd P.M., Range 8 East, Gallatin County.

Drainage control will consist of one (1) sedimentation pond and associated diversions. Outfall No. 012 from the sedimentation pond will report to an unnamed tributary to Cockerel Branch and is classified as alkaline mine drainage.

Groundwater monitoring requirements for monitoring well 12 PMW-5 are contained in Condition 3.

An area of 380.9 acres identified as IDNR/OMM Permit No. 365 will be mined as proposed in Log No. 5246-03. This area is located in Section 1, Township 9 South, Range 7 East, 3rd P.M., Saline County and Sections 5 and 6, Township 9 South, Range 8 East, 3rd P.M., Gallatin County.

Drainage control will consist of Sedimentation Pond No. 13 and associated diversions. Pond No. 013 was previously approved, however, the discharge was directed through Outfall No. 001. Pond No. 013 will be enlarged and the discharge will be routed to an Unnamed Tributary to North Fork Saline River. This Outfall is classified as alkaline mine drainage.

Internal drainage control modifications will be implemented as proposed in Log No. 5292-03. Runoff from initially disturbed areas within OMM Permit No. 359 area, which was previously approved under this permit, will report to Pond 015 included in NPDES Permit No. IL0066664 issued in the name of Arclar Company, L.L.C. – Big Ridge/Willow Lake Mine. The discharge from Pond 015 at the Big Ridge/Willow Lake facility will report to Pond 011 previously approved under this permit. This modification does not change the discharge quantity or quality of Outfall 011 as previously approved.

The final cut pit in the northwest corner of the IDNR/OMM Permit No. 359 area is to be utilized as a fine refuse disposal area.

A final cut lake will be constructed in the northeast portion of the IDNR/OMM Permit Area No. 359. Discharges from this lake will be to Pond 010. The area affected by the final cut lake was previously tributary to Outfall 010 and there will be no changes in tributary area to Outfall No. 010.

A fine refuse disposal area is to be constructed as proposed in Log No. 5223-03. This area is located immediately west of Pond 013.

Additional auger mining may be conducted as proposed in Log No. 5153-03.

The location for the outfalls approved in this Authorization are:

<u>Outfall No.</u>	<u>Latitude (North)</u>	<u>Longitude (West)</u>
012	37°45'10.7"	88°22'42.4"
013	37°45'47.6"	88°21'40.3"

Discharges from the referenced outfalls are subject to Condition 2.

Total area covered by this permit is 3301.4 acres with the addition of IDNR/OMM Permit Area Nos. 361 and 365. This acreage corresponds to the summation of IDNR/OMM Permit areas minus the overlap of OMM Permit No. 359 over OMM Permit Area No. 348.

<u>IDNR/OMM Permit Area No.</u>	<u>Area (acres)</u>
327	1502.3
348	617.6
359	499.9
361	300.7
365	380.9
Total	3301.4

NPDES Permit No. IL0073351

Supplemental Construction Authorization No. 0325-98-3

S.C.A. Date: September 9, 2003

Engineer: Bruce R. Dausman, P.E., Black Beauty Coal Company

The referenced IDNR/OMM permit areas are located on Map No. 1, General Reference Map submitted with Log No. 5246-03. Two additional IDNR/OMM Permit Areas are depicted on this drawing, Nos. 347 and 360. These areas are permitted under NPDES Permit No. IL0066664 issued to Arclar Company, L.L.C. for the Willow Lake complex. While there will be some double permitting, overlapping permit areas, the operations at Willow Lake are entrances for underground mining and a processing plant. These facilities will remain after surface mining approved herein has ceased and as such are permitted separately.

The abandonment plan for this area shall be executed and completed in accordance with 35 Ill. Adm. Code 405.109 as detailed in the Log Nos. 5155-03 and 5246-03.

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

All Conditions in the original Authorization to Construct are incorporated in this Supplemental Authorization unless specifically deleted or revised herein.

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

1. Any of the following shall be a violation of the provisions required under 35 Ill. Adm. Code 406.203(c):
 - 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 the permittee is not utilizing good mining practices as defined in 35 Ill. Adm. Code 406.204 which are applicable in order to minimize the discharge of total dissolved solids, chloride, sulfate, iron and manganese.
2. All alkaline and/or acid mine drainage discharges permitted herein are subject to the following:
 - a. No discharge is allowed from any herein 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. Discharges not meeting the water quality standards of 35 Ill. Adm. Code 302 may only be discharged in combination with stormwater discharges from the basin, and only at such times that sufficient flow exists in the receiving stream to ensure that water quality standards in the receiving stream beyond the area of allowed mixing will not be exceeded. Following any such stormwater discharge, but prior to the flow in the receiving stream subsiding, the impounded water in the basin(s) may be pumped or otherwise evacuated sufficiently below the discharge elevation to provide capacity for holding a sufficient volume of mine pumpage and/or surface runoff to preclude the possibility of discharge until such time that a subsequent precipitation event results in discharge from the basin. At times of stormwater discharges, in addition to the alternate effluent monitoring requirements, sulfate and chloride concentrations shall be monitored and reported for all herein permitted outfalls.
 - b. In addition to the requirements outlined above, Outfalls 012 and 013 shall be subject to the following:

A minimum of three (3) samples shall be collected of the receiving stream, upstream of the basin discharge confluence, during separate runoff/discharge events with the samples analyzed for sulfate and chloride concentrations. Such samples shall be collected at times when a discharge is occurring from the above referenced basin(s). In addition, the basin discharge flow and receiving stream flow, upstream of the basin discharge confluence, shall be determined recorded and submitted with the basin Discharge Monitoring Reports (DMRs) to demonstrate that adequate mixing is provided to ensure water quality standards in the receiving stream are not exceeded. Upon approval from the Agency, the additional monitoring requirements of Condition 2(b) may be suspended at such time that sufficient information has been collected to demonstrate the validity of the dilution analysis upon which the permit limits were established.
3. Groundwater monitoring reports for Monitoring Well 12 PMW-5 required by IDNR/OMM shall be submitted simultaneously to the Agency.

NPDES Permit No. IL0073351

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: The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month. The Discharge Monitoring Report forms shall be submitted to the Agency in accordance with the schedule outlined in Special Condition No. 4 below.

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Ave., East
P.O. Box 19276
Springfield, Illinois 62794-9276

Attn: Compliance Assurance Section

Special Condition No. 4: The completed Discharge Monitoring Report form shall be retained by the permittee for a period of three months and shall be mailed and received by the IEPA 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. 5: 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. 6: 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. 7: 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. 8: 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. 9: 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.

NPDES Permit No. IL0073351

Special Conditions

Special Condition No. 10: 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. 11: All alkaline and/or acid mine drainage discharges permitted under this Permit are subject to the following:

- a. No discharge is allowed from any herein 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. Discharges not meeting the water quality standards of 35 Ill. Adm. Code 302 may only be discharged in combination with stormwater discharges from the basin, and only at such times that sufficient flow exists in the receiving stream to ensure that water quality standards in the receiving stream beyond the area of allowed mixing will not be exceeded. Following any such stormwater discharge, but prior to the flow in the receiving stream subsiding, the impounded water in the basin(s) may be pumped or otherwise evacuated sufficiently below the discharge elevation to provide capacity for holding a sufficient volume of mine pumpage and/or surface runoff to preclude the possibility of discharge until such time that a subsequent precipitation event results in discharge from the basin. At times of stormwater discharges, in addition to the alternate effluent monitoring requirements, sulfate and chloride concentrations shall be monitored and reported for all herein permitted outfalls.
- b. In addition to the requirements outlined above, Outfalls 010, 011, 012 and 013, shall be subject to the following:

A minimum of three (3) samples shall be collected of the receiving stream, upstream of the basin discharge confluence, during separate runoff/discharge events with the samples analyzed for sulfate and chloride concentrations. Such samples shall be collected at times when a discharge is occurring from the above referenced basin(s). In addition, the basin discharge flow and receiving stream flow, upstream of the basin discharge confluence, shall be determined recorded and submitted with the basin Discharge Monitoring Reports (DMRs) to demonstrate that adequate mixing is provided to ensure water quality standards in the receiving stream are not exceeded. Upon approval from the Agency, the additional monitoring requirements of Special Condition No. 11(b) may be suspended at such time that sufficient information has been collected to demonstrate the validity of the dilution analysis upon which the permit limits were established.