

NPDES Permit No. IL0049191
Notice No. 14080101bwc.docx

Public Notice Beginning Date: **December 11, 2014**

Public Notice Ending Date: **January 12, 2015**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued 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 Permittee:

Illinois Power Generating Company
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Name and Address of Facility:

Illinois Power Generating Company
Newton Power Station
6725 500th Street
Newton, Illinois 62448
(Jasper County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named Permittee. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. 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. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, 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.

If 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. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Brian W. Cox at 217/782-0610.

The applicant is engaged in the operation of Newton Power Station, an existing 1210 MW coal fired steam-electric generating station consisting of two pulverized coal wet bottom boilers (SIC 4911). Both a once-through cooling water system and a supplemental cooling basin are used to cool the main condenser cooling water for each unit. Condenser cooling water is discharged to Newton Lake for dissipation of waste heat via a discharge flume. Lake water is used for ash sluicing, and station service water is used to supply the water treatment plant and various heat exchangers. Plant operation results in an average discharge of 17.2 MGD of secondary ash pond discharge from outfall 001, 0.00055 MGD of sewage treatment plant #2 effluent from outfall A01, 558.6 MGD of main condenser cooling water from outfall 002, and 0.0256 MGD of sewage treatment plant #1 effluent from outfall 003, 0.5 MGD of construction runoff settling pond effluent from outfall 004, 0.10 MGD of intake screen backwash from outfall 005, and stormwater runoff from outfalls 007, 008, 009, 010, 011, 012, and 013.

The following modifications are proposed:

A change in the permittee's parent companies occurred in December 2013. Therefore the name of the facility and permittee have been changed from Ameren Energy Generating Company to Illinois Power Generating Company.

The requirements associated with the storm water pollution prevention plan have been changed to reflect the Agency's current recommendations and requirements.

The daily maximum limit for oil and grease at Outfall 001 has been changed from 30 mg/L to 20 mg/L to comply with the requirements of 40 CFR 423.12(b).

Fecal coliform monitoring has been added to Outfall A01 and Outfall 003. Newton Power Station was granted a disinfection exemption on December 16, 1997. The fecal coliform monitoring requirement will be used to gather data to rejustify the existing disinfection exemption.

Currently wastewater from Sewage Treatment Plant No. 2 is being hauled to Sewage Treatment Plant No.1 in an effort to remove phosphorus from the sanitary wastewater. Outfall A01 is still being included in the permit, should the facility wish to resume its discharge from STP No. 2 to the ash pond.

A condition has been added to the permit providing cooling water intake structure requirements.

Outfall 013 has been added to the permit for the discharge of storm water runoff from an area of approximately 2 acres which previously was permitted as discharging to Outfall 009.

Internal Outfall B01 has been added to the permit to address the following existing waste streams: air heater wash water and SCR module wash water. The air heater wash water is considered non-chemical metal cleaning waste and should have been subject to the limitations found at 40 CFR 423.12(b)(5). The SCR module wash water is considered chemical metal cleaning waste and was not proposed until August 16, 2005, therefore it is subject to the New Source Performance Standards (NSPS) found at 40 CFR 423.15(d). Limitations from 40 CFR 423.12(b)(5) are the same as limitations from 40 CFR 423.15(d). Therefore, Internal Outfall B01 has been added to include these limitations for these metal cleaning wastes.

Application is made for the existing discharge(s) which are located in Jasper County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

<u>Outfall</u>	<u>Receiving Stream</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Stream Classification</u>	<u>Integrity Rating</u>
001	Newton Lake	38° 55' 16" North	88° 17' 31" West	General Use	Not Rated
A01	Newton Lake via Outfall 001	38° 56' 07" North	88° 16' 47" West	General Use	Not Rated
002	Newton Lake	38° 56' 29" North	88° 18' 25" West	General Use	Not Rated
003	Newton Lake	38° 56' 09" North	88° 16' 10" West	General Use	Not Rated
004	Newton Lake	38° 56' 06" North	88° 16' 15" West	General Use	Not Rated
005	Newton Lake	38° 56' 09" North	88° 16' 14" West	General Use	Not Rated
006	Newton Lake	38° 55' 29" North	88° 17' 47" West	General Use	Not Rated
007	Newton Lake	38° 56' 21" North	88° 16' 13" West	General Use	Not Rated
008	Newton Lake	38° 56' 22" North	88° 16' 12" West	General Use	Not Rated
009	Newton Lake	38° 56' 06" North	88° 16' 15" West	General Use	Not Rated
010	Newton Lake	38° 55' 45" North	88° 16' 09" West	General Use	Not Rated
011	Newton Lake	38° 55' 41" North	88° 18' 18" West	General Use	Not Rated
012	Newton Lake	38° 55' 38" North	88° 18' 07" West	General Use	Not Rated
013	Newton Lake	38° 56' 09" North	88° 16' 11" West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

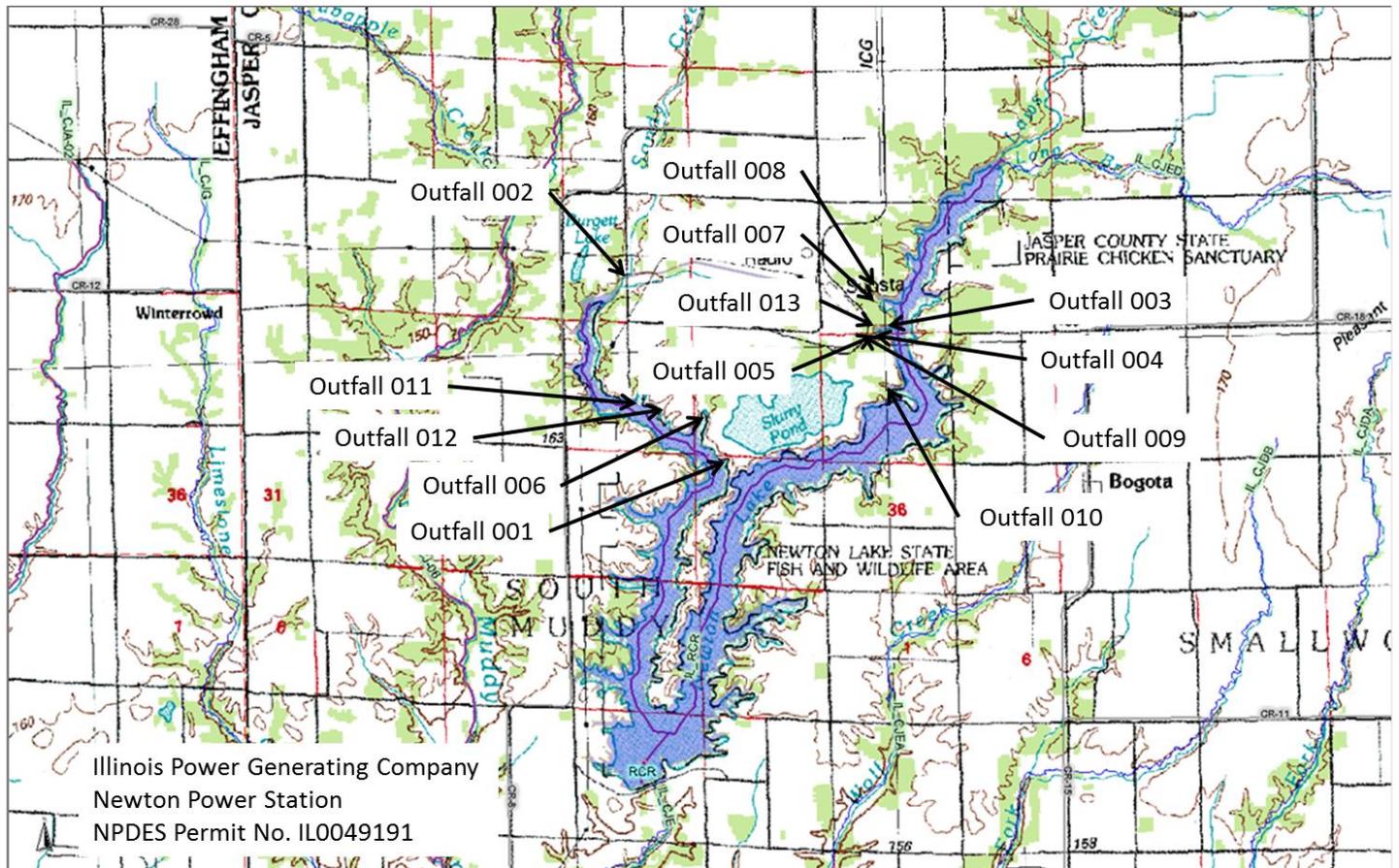
The stream segment, IL_RCR, receiving the discharges from outfall(s) 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, and 013 is on the 2014 303(d) list of impaired waters and was not listed as a biologically significant stream on the 2008 Illinois Department of

Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System.*

The following parameters have been identified as the pollutants causing impairment:

Designated Use	Impairment(s)
Aesthetic Quality	TSS
Fish Consumption	Mercury

Additional impairments include total phosphorus and aquatic algae, which have been addressed in the Little Wabash II Watershed TMDL Report which was approved August 15, 2008. The Little Wabash II Watershed TMDL Report provides a WLA for total Phosphorus for Outfall 001A and for Outfall 003. The outfall identified in the TMDL Report as Outfall 001A is identified within this Permit as Outfall A01.



The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 001

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L			
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	
Flow (MGD)					Measure		
pH				Shall be in the range of 6.0 – 9.0 s.u.		35 IAC 304.125	
Total Suspended Solids				30	50	35 IAC 304.216	
Non-Volatile Total Suspended Solids				15	30	35 IAC 304.216	
Oil and Grease				15	20	40 CFR 423	
Boron					Monitor Only	35 IAC 302.208	
Phosphorus (total)					Monitor Only		
	30 DAY AVG.	DAILY MAX	ANNUAL AVG.	30 DAY AVG.	DAILY MAX	ANNUAL AVG.	
Mercury						0.012 µg/L	35 IAC302.208

Treatment for Outfall 001 consists of settling in a primary and secondary settling pond and pH adjustment if necessary. The overall settling time is approximately 50.5 days.

Outfall: A01

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)					Measure	
pH				Shall be in the range of 6.0 – 9.0 s.u.		35 IAC 304.125
BOD ₅	0.25 (0.63)	0.5 (1.3)	35 IAC 304.120	30	60	35 IAC 304.120
Total Suspended Solids	0.25 (0.63)	0.5 (1.3)	35 IAC 304.120	30	60	35 IAC 304.120
Total Residual Chlorine					0.05	40 CFR 125.3
Phosphorus (total)	0.0083 (0.021)	0.017 (0.042)	35 IAC 304.123	1.0	2.0	35 IAC 304.123
Fecal Coliform					Monitor Only	

*Load limits noted in parentheses are based on the design maximum flow and shall only apply when flow exceeds the design average flow.

Outfall A01 receives discharges from STP No. 2 which is a package activated sludge, extended aeration treatment plant.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: B01

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)					Measure	
Total Suspended Solids				30	100	40 CFR 423.12(b)(5)
Oil & Grease				15	20	40 CFR 423.12(b)(5)
Iron (total)				1.0	1.0	40 CFR 423.12(b)(5)
Copper (total)				1.0	1.0	40 CFR 423.12(b)(5)

Outfall: 002

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)					Measure	
Total Residual Chlorine					0.05	40 CFR 125.3
Temperature						IPCB 78-271

Non-contact cooling water is discharged to a 7,500 ft open flume to facilitate cooling prior to discharging to Outfall 002. Additionally, the condenser cooling waters are discharged to a supplemental perched cooling pond with an approximate surface area of 123 acres. Also, if necessary, the special conditions within this permit provide for the installation of temporary cooling towers. The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 003

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)					Measure	
pH				Shall be in the range of 6.0 – 9.0 s.u.		35 IAC 304.125
BOD ₅	4.7 (11)	9.4 (22)	35 IAC 304.120	30	60	35 IAC 304.120
Total Suspended Solids	4.7 (11)	9.4 (22)	35 IAC 304.120	30	60	35 IAC 304.120
Total Residual Chlorine					0.05	40 CFR 125.3
Phosphorus (total)	0.16 (0.37)	0.31 (0.73)		1.0	2.0	35 IAC 304.123
Fecal Coliform					Monitor Only	

*Load limits noted in parentheses are based on the design maximum flow and shall only apply when flow exceeds the design average flow.

Outfall 003 receives discharges from STP No. 1 which is an extended aeration activated sludge package treatment plant with slow sand filtration and chlorine disinfection.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 004

The permittee is required to maintain a storm water pollution prevention plan (SWPPP) which incorporates best management practices (BMPs) in order to minimize stormwater runoff and to minimize contamination of stormwater runoff. Additionally, this discharge is required to be monitored for various metals as a condition of the permit.

Treatment prior to discharging to Outfall 004 consists of settling in a storm water detention pond.

Outfall: 005

Adequate maintenance of the trash basket is required to prevent the discharge of debris collected on intake screens back to Newton Lake.

Outfall: 006

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Sulfate					Monitor Only	
Boron					Monitor Only	

Treatment prior to discharging to Outfall 006 consists of settling in a storm water detention pond.

Outfalls: 007, 008, 009, and 010

The permittee is required to maintain a storm water pollution prevention plan (SWPPP) which incorporates best management practices (BMPs) in order to minimize stormwater runoff and to minimize contamination of stormwater runoff. Additionally, these discharges are required to be monitored for various metals as a condition of the permit.

Outfalls: 011 and 012

The permittee is required to maintain a storm water pollution prevention plan (SWPPP) which incorporates best management practices (BMPs) in order to minimize stormwater runoff and to minimize contamination of stormwater runoff. Additionally, the discharge from Outfall 011 is required to be monitored for various metals and other parameters as a condition of the permit.

Treatment prior to discharging to Outfall 011 consists of settling in a storm water detention pond

Load Limit Calculations:

- A. Load limit calculations for the following pollutant parameters were based on average flows of 0.001 MGD and 0.015 MGD and maximum flows of 0.0025 MGD and 0.044 MGD for Outfalls A01 and 003 respectively and using the formula of average or maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅, Total Suspended Solids, and Phosphorus.

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

Illinois Power Generating Company has complied with Section 302.211(f) of Title 35, Chapter 1, Subtitle C: Water Pollution Regulations by demonstrating that its thermal discharges from its Newton Power Station have not caused and cannot be reasonably expected to cause significant ecological damage to Newton Lake as approved by PCB order 83-84 dated January 26, 1984 for Unit 1 and PCB order 88-207 dated January 25, 1990 for Unit 2. (Note: Newton Power Station was owned and operated by Central Illinois Public Service Company at the time of establishing IPCB Orders 1978-271, 1988-084, and 1988-207.)

With the application for renewal of this permit, the permittee shall demonstrate to the Agency that the facility has obtained alternate thermal standards from the Illinois Pollution Control Board pursuant to Section 316(a) of the Clean Water Act, and 35 Ill. Adm. Code 304.141(c), in accordance with the procedures as found in 35 Ill. Adm. Code Part 106, Subpart K. This demonstration is only necessary if the permittee intends to maintain relief from the applicable water quality standards as granted in IPCB 78-271 and outlined in Special Condition 7.

Alternately, the Permittee may demonstrate to the Agency that relief granted in IPCB 78-271, or other site specific water quality standards for temperature approved by the Illinois Pollution Control Board, and USEPA, meets the requirements of 40 CFR 131 and the Illinois Environmental Protection Act.

All of the facility's cooling water originates from Newton Lake. The cooling water intake structure contains eight circulating water pumps rated at 70,000 gpm each for a total maximum intake flow of 806.4 MGD. The intake is protected by a traveling screen which is backwashed using lake water. The intake velocity is approximately 2.0 ft/s. Illinois Power Generating Company's (formerly Central Illinois Public Service Company) original demonstration for the Newton Power Station in accordance with Section 316(b) of the Clean Water Act, was approved by this Agency by letter dated August 26, 1981. There have been no significant changes to the intake structure or Newton Lake that would alter this determination. Therefore, the Agency has determined that the operation of the cooling water intake structure meets the equivalent of Best Technology Available (BTA) in accordance with the Best Professional Judgment provisions of 40 CFR 125.3 based on the information currently available. Special Condition 14 of the permit requires the submittal of additional information, and compliance with new cooling water intake structure rules for existing facilities as found in 40 CFR 122 and 125.

The following explain the conditions of the proposed permit:

The special conditions of this permit provide additional monitoring and/or reporting requirements for the following: flow, pH, Temperature, DMR Submission, total residual chlorine, mercury, and a list of other parameters including Arsenic, Barium, Cadmium, Chromium (hexavalent), Chromium (total), Copper, Cyanide (available or amenable to chlorination), Cyanide (total), Fluoride, Iron (total), Iron (Dissolved), Lead, Manganese, Mercury, Nickel, Oil (hexane soluble or equivalent), Phenols, Selenium, Silver (total), and Zinc. In addition, the conditions of this permit provide requirements, restrictions, clarifications or certifications for the following: discharge monitoring report submission requirements, monitoring location requirements, Class K operator requirements, condenser chlorination restrictions, disposal of chemical metal cleaning waste restrictions, prohibition of discharging PCBs, certification of thermal demonstration compliance with 35 IAC 302.211(f), cooling water intake requirements, restrictions/requirements for the usage of molluscicides, groundwater monitoring requirements, and clarification regarding compliance with Title 35 Ill. Adm. Code 302 and not causing offensive conditions.

Public Notice of Draft Permit

Public Notice Number 14080101bwc.docx is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0049191 has been prepared under 40 CFR 124.6(d) for Illinois Power Generating Company, 1500 Eastport Plaza Drive, Collinsville, Illinois 62234 for discharge into Newton Lake from the Illinois Power Generating Company, Newton Power Station located at 6725 500th Street, Newton, Illinois 62448 (Jasper County). The applicant is engaged in the operation of Newton Power Station, an existing 1210 MW coal fired steam-electric generating station consisting of two pulverized coal wet bottom boilers (SIC 4911). Both a once-through cooling water system and a supplemental cooling basin are used to cool the main condenser cooling water for each unit. Condenser cooling water is discharged to Newton Lake for dissipation of waste heat via a discharge flume. Lake water is used for ash sluicing, and station service water is used to supply the water treatment plant and various heat exchangers. Plant operation results in an average discharge of 17.2 MGD of secondary ash pond discharge from outfall 001, 0.00055 MGD of sewage treatment plant #2 effluent from outfall A01, 558.6 MGD of main condenser cooling water from outfall 002, and 0.0256 MGD of sewage treatment plant #1 effluent from outfall 003, 0.5 MGD of construction runoff settling pond effluent from outfall 004, 0.10 MGD of intake screen backwash from outfall 005, and stormwater runoff from outfalls 007, 008, 009, 010, 011, 012, and 013.

The application, draft permit and other documents are available for inspection and may be copied at the Agency between 9:30 A.M. and 3:30 P.M. Monday through Friday. A Fact Sheet containing more detailed information is available at no charge. For further information, call the Public Notice Clerk at 217/782-0610.

Interested persons are invited to submit written comments on the draft permit to the Agency at the above address. The NPDES Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 30 days from the date of this publication shall be considered in making the final decision regarding permit issuance.

Any interested person may submit written request for a public hearing on the draft permit, stating their name and address, the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to these issues in the hearing. Such requests must be received by the Agency not later than 30 days from the date of this publication.

If written comments and/or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing.

NPDES Permit No. IL0049191

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Illinois Power Generating Company
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Facility Name and Address:

Illinois Power Generating Company
Newton Power Station
6725 500th Street
Newton, Illinois 62448
(Jasper County)

Discharge Number and Name:

001 Secondary Ash Pond Discharge
A01 Sewage Treatment Plant #2 Discharge
002 Main Condenser Cooling Water Discharge
003 Sewage Treatment Plant #1 Discharge
004 Construction Runoff Settling Pond Discharge
005 Intake Screen Backwash
006 Flue Gas Desulfurization Disposal Area Settling Pond #1
007,008, 009, 010, and 013 Storm Water Runoff from Coal
Delivery Rail Lines
011 Flue Gas Desulfurization Sludge Disposal Area Settling
Pond #3
012 Flue Gas Desulfurization Sludge Disposal Area Settling
Pond #2

Receiving Waters:

Newton Lake
Newton Lake via Outfall 001
Newton Lake
Newton Lake
Newton Lake
Newton Lake
Newton Lake
Newton Lake
Newton Lake
Newton Lake

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), 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.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

NPDES Permit No. IL0049191

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 Secondary Ash Pond Discharge*

This discharge consists of:

Approximate Flow:

1. Bottom ash sluice water	2.5 MGD
2. Fly ash sluice water	10.2 MGD
3. Water treatment filter backwash	0.15 MGD
4. Reverse Osmosis reject waste	0.125 MGD
5. Mixed bed waste	0.025 MGD
6. Air heater wash water	0.36 MGD (discharged 3x/year)
7. Boiler Blowdown	0.19 MGD
8. Wastewater sumps**	4.0 MGD
9. Sewage Treatment Plant #2 discharge	0.001 MGD
10. Storm water runoff***	Intermittent
11. Coal pile runoff	Intermittent
12. SCR Module Washwater	Intermittent
13. Oil/Water Separators*****	Intermittent

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L			SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	ANNUAL AVERAGE	30 DAY AVERAGE	DAILY MAXIMUM	ANNUAL AVERAGE		
Flow (MGD)							Daily	Continuous Recording
pH	See Special Condition No. 2						1/Week	Grab
Total Suspended Solids				30	50		1/Week	8-Hour Composite
Non-Volatile Total Suspended Solids				15	30		1/Week	8-Hour Composite
Oil and Grease				15	20		1/Month	Grab
Boron						Monitor Only	1/Month	Grab
Phosphorus (total)						Monitor Only	1/Quarter*****	Grab
	30 DAY AVERAGE	DAILY MAXIMUM	ANNUAL AVERAGE	30 DAY AVERAGE	DAILY MAXIMUM	ANNUAL AVERAGE		
Mercury****						0.012 µg/L	1/Month	Grab

*See Special Conditions 18 and 22 for monitoring requirements for various metals and other parameters.

**Wastewater sumps includes soot blower thermal drains, ash hopper overflow, ash pit sumps, boiler house floor drains, strainer backwash, and other miscellaneous contributory flows.

***Includes runoff from coal delivery rail lines and from ash byproduct storage areas; See Special Condition No. 12 for SWPPP requirements.

**** See Special Condition No. 15

*****Oil/Water Separators receive wastewater from floor drains in part of the boiler house, plus underground drains and storm drains around the main power transformers and unit auxiliary transformers.

*****See Special Condition No. 22.

NPDES Permit No. IL0049191

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): A01 Sewage Treatment Plant #2 Discharge
(DAF = 0.001 MGD, DMF = 0.0025 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)**		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)					1/Month	Measurement
pH	See Special Condition No. 2				1/Month	Grab
BOD ₅	0.25 (0.63)	0.50 (1.3)	30	60	1/Month	8-Hour Composite
Total Suspended Solids	0.25 (0.63)	0.50 (1.3)	30	60	1/Week	8-Hour Composite
Total Residual Chlorine*				0.05*	Daily	Grab
Phosphorus (total)	0.0083 (0.021)	0.017 (0.042)	1.0	2.0	1/Month	Grab
Fecal Coliform				Monitor Only	1/Quarter***	Grab

*See Special Condition No. 6

** Load limits noted in parentheses are based on the design maximum flow and shall only apply when flow exceeds the design average flow.

*** See Special Condition No. 22.

Outfall(s): B01 Metal Cleaning Waste

This discharge consists of:

1. Air heater wash water
2. SCR Module Washwater

Approximate Flow:

0.36 MGD (discharged 3x/year)
Intermittent

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)**		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)					1/Month	Measurement
Total Suspended Solids			30	100	1/Month	Grab
Oil & Grease			15	20	1/Month	Grab
Iron (total)			1.0	1.0	1/Month	Grab
Copper (total)			1.0	1.0	1/Month	Grab

NPDES Permit No. IL0049191

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 002 Main Condenser Cooling Water Discharge***

This discharge consists of:

1. Main condenser cooling water
2. Various heat exchange cooling water discharges
3. Storm water runoff*

Approximate Flow:

508.3 MGD
50.3 MGD
Intermittent

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)					Daily	Continuous Recording
Total Residual Chlorine**				0.05**	2/Month**	Grab
Temperature	See Special Condition 7				Daily	Continuous Recording

*Includes runoff from coal delivery rail lines and ash byproduct storage areas; See Special Condition No. 10

**See Special Conditions No. 5 and 6

***See Special Conditions 18 and 22 for monitoring requirements for various metals and other parameters.

Outfall(s): 003 Sewage Treatment Plant #1 Discharge
(DMF = 0.044 MGD) Average Flow: 0.0188 MGD

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)***		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)					1/Week	Estimate*
pH	See Special Condition No. 2				1/Week	Grab
BOD ₅	4.7 (11)	9.4 (22)	30	60	1/Week	8-Hour Composite
Total Suspended Solids	4.7 (11)	9.4 (22)	30	60	1/Week	8-Hour Composite
Total Residual Chlorine**				0.05**	Daily	Grab
Phosphorus (total)	0.16 (0.37)	0.31 (0.73)	1.0	2.0	1/Month	Grab
Fecal Coliform				Monitor Only	1/Quarter	Grab

*Based on elapsed running time meter on lift station pump, or by direct reading from a flow meter.

**See Special Condition No. 6.

*** Load limits noted in parentheses are based on the design maximum flow and shall only apply when flow exceeds the design average flow.

NPDES Permit No. IL0049191

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 004 Construction Runoff Settling Pond Discharge*

This discharge consists of:

1. Induced fan heat exchangers
2. Storm water runoff**

Approximate flow:

0.5 MGD
Intermittent

*See Special Conditions 18 and 22 for monitoring requirements for various metals and other parameters.

**Includes runoff from coal delivery rail lines; See Special Condition No. 12 for SWPPP requirements.

Outfall(s): 005 - Intake Screen Backwash*
(Approximate flow: 0.10 MGD)

*Adequate maintenance of the trash basket is required to prevent the discharge of debris collected on intake screens back to Newton Lake.

Outfall(s): 006 - Flue Gas Desulfurization Sludge Disposal Area Settling Pond #1*

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Sulfate				Monitor Only	1/Quarter	8-Hour Composite
Boron				Monitor Only	1/Quarter	8-Hour Composite

The permittee shall continue to implement Best Management Practices operation methods for control of storm water runoff from the Flue Gas Desulfurization Sludge Disposal Area. See Special Condition No. 12 for SWPPP requirements.

* See Special Conditions 18 and 22 for monitoring requirements for various metals and other parameters.

Outfall(s): 007, 008, 009, 010, and 013 – Storm Water Runoff from Coal Delivery Rail Lines

See Special Conditions 18 and 22 for monitoring requirements for various metals and other parameters.
See Special Condition No. 12 for SWPPP requirements.

Outfall(s): 011 - Flue Gas Desulfurization Sludge Disposal Area Settling Pond #3

See Special Conditions 18 and 22 for monitoring requirements for various metals and other parameters.
See Special Condition No. 12 for SWPPP requirements.

Outfall(s): 012 - Flue Gas Desulfurization Sludge Disposal Area Settling Pond #2

See Special Condition No. 12 for SWPPP requirements.

Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. 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 4.

*****CONSTRUCTION AUTHORIZATION*****

Authorization is hereby granted to construct temporary supplemental cooling towers and related equipment on an as needed basis to ensure compliance with temperature limitations at Outfall 002. These supplemental cooling towers would draw a portion of the flow from the discharge flume, pass it through the supplemental towers, and return it to the flume.

This Authorization is issued subject to the following conditions.

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee thereupon waives all rights thereunder.
2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
3. The permittee shall notify the Agency in writing prior to placing the temporary supplemental cooling towers in service. Notification shall also be given upon taking the towers out of service.
4. The discharge of stormwater runoff associated with construction activities related to cooling tower installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of total land acre, are not covered by this permit or authorization. Prior to commencing construction, the permittee shall apply for and obtain coverage under the General NPDES Stormwater Permit for Construction Site Activities.

SPECIAL CONDITION 5. Chlorine when exclusively used may not be discharged from each unit's main cooling condenser for more than two hours in any one day. A minimum of three grab samples shall be taken at approximately five minute intervals above the second drop structure in the discharge flume during the respective biofoulant addition period of each unit allowing for lag time between the initiation of chlorine and/or bromine addition and the point of sampling before the first grab sample is taken. The individual values for each set of samples shall be reported including the unit sampled, the time samples were collected, the time and duration of the biofoulant dosing period plus the amount of chlorine and/or bromine applied. Continuous analyzers may be substituted for the above grab sampling method. When continuous analyzers are used, calculations submitted with the Discharge Monitoring Reports (DMRs) will be based on data collected on the first and third Wednesday of the calendar month. In the event of an analyzer malfunction on the above days, data will be collected on the following Wednesday by either an analyzer or by use of the grab sampling method. The unit sampled, the duration of biofoulant injection plus the amount of chlorine and/or bromine injected must be submitted with the Discharge Monitoring Reports when continuous analyzers are used.

SPECIAL CONDITION 6. All samples for Total Residual Chlorine shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained. For the purpose of this permit Total Residual Chlorine means those substances which include combined and uncombined forms of both chlorine and bromine and which are expressed, by convention, as an equivalent concentration of molecular chlorine.

The water quality standard for TRC (0.011 mg/l 30-day average and 0.019 mg/l daily max) is below the method detection level (0.05 mg/l) as described in 40 CFR 136. Therefore, for the purpose of this permit, the method detection level will be utilized to determine compliance with the permit limit for TRC. A measurement of <0.05 mg/l reported on the DMR shall not be considered a violation of the water quality based effluent limit. This reporting threshold is being established to determine compliance and does not authorize the discharge of TRC in excess of the water quality based effluent limit.

SPECIAL CONDITION 7. The following specific thermal limitations adopted through IPCB Order 78-271 pursuant to 35 Ill. Adm. Code 302.211(j)(5) shall apply at the edge of the mixing zone for the main condenser cooling water discharge. The edge of the mixing zone shall be a maximum area of 26 acres and compliance with the following thermal limitations determined by a fixed temperature recorder set at the edge of the mixing zone below the surface of the water.

Special Conditions

1. The thermal discharge to Newton Lake from Illinois Power Generating Company's (formerly Central Illinois Power Company) Newton Power Station shall not result in a temperature, measured at the outside edge of the mixing zone in Newton Lake, which exceeds 102°F as a monthly average and 111 °F as a maximum.

The 111 °F maximum limit shall not be exceeded at any time. Monthly average and daily maximum temperature shall be reported on the DMR form.

SPECIAL CONDITION 8. Chemical metal cleaning wastewater rinses may be stored in the on-site clay lined pond until placement on an active area of the coal pile provided the wastewater does not exhibit hazardous characteristics as defined at 35 Ill. Adm. Code 729.301. Chemical metal cleaning wastewater rinses may be placed on an active area of the coal pile for incineration provided a demonstration showing BAT equivalency is submitted to the IEPA within 90 days following completion of treatment. This demonstration will consist of a sampling program approved by the IEPA which will provide for the monitoring of iron and copper levels in coal pile runoff prior to, during, and after placement of rinses onto the coal pile. This monitoring must show that the naturally occurring iron and copper levels in coal pile runoff are not altered through this disposal practice (attachment A). Chemical metal cleaning wastewater rinses may also be evaporated in the boiler if this method has been approved and permitted by the Agency's Division of Air Pollution Control. Chemical metal cleaning wastewater rinses may not be discharged other than as outlined in this condition unless this Permit No. IL0049191 has been modified to include the new discharge.

SPECIAL CONDITION 9. There shall be no discharge of polychlorinated biphenyl compounds (PCB's) such as those commonly used for transformer fluid.

SPECIAL CONDITION 10. Illinois Power Generating Company has complied with Section 302.211(f) of Title 35, Chapter 1, Subtitle C: Water Pollution Regulations by demonstrating that its thermal discharges from its Newton Power Station have not caused and cannot be reasonably expected to cause significant ecological damage to Newton Lake as approved by PCB order 83-84 dated January 26, 1984 for Unit 1 and PCB order 88-207 dated January 25, 1990 for Unit 2. (Note: Newton Power Station was owned and operated by Central Illinois Public Service Company at the time of establishing IPCB Orders 1978-271, 1988-084, and 1988-207.)

With the application for renewal of this permit, the permittee shall demonstrate to the Agency that the facility has obtained alternate thermal standards from the Illinois Pollution Control Board pursuant to Section 316(a) of the Clean Water Act, and 35 Ill. Adm. Code 304.141(c), in accordance with the procedures as found in 35 Ill. Adm. Code Part 106, Subpart K. This demonstration is only necessary if the permittee intends to maintain relief from the applicable water quality standards as granted in IPCB 78-271 and outlined in Special Condition 7.

Alternately, the Permittee may demonstrate to the Agency that relief granted in IPCB 78-271, or other site specific water quality standards for temperature approved by the Illinois Pollution Control Board, and USEPA, meets the requirements of 40 CFR 131 and the Illinois Environmental Protection Act.

SPECIAL CONDITION 11. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More 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>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 28th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using eDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 12.

Special ConditionsSTORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.

1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.

Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act

For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.

D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.

E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.
2. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
 - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations

Special Conditions

- vii. Areas of existing and potential soil erosion;
 - viii. Vehicle service areas;
 - ix. Material loading, unloading, and access areas.
 - x. Areas under items iv and ix above may be withheld from the site for security reasons.
3. A narrative description of the following:
 - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities;
 - v. Methods of onsite storage and disposal of significant materials.
 4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
 5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
 6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
 2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
 3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
 4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill cleanup equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
 5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
 - i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.

Special Conditions

- ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.
 - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.
 - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
 - v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment of activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.
 - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
 - vii. Storm Water Reduction - Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspire runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.
6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.
 7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
 8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. Non-Storm Water Discharge - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.
- H. Quarterly Visual Observation of Discharges - The requirements and procedures for quarterly visual observations are applicable to all outfalls covered by this condition. In order to provide time to construct safe access points to monitor all outfalls covered by this condition, the requirements for quarterly visual observations specified within this condition will not take effect until one year after the effective date of this permit.
1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.
 2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4.
 3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious

Special Conditions

indicators of storm water pollution), and probable sources of any observed storm water contamination.

4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
 5. Representative Outfalls - If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).
 6. The visual observation documentation shall be made available to the Agency and general public upon written request.
- I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
 - J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated there under, and Best Management Programs under 40 CFR 125.100.
 - K. The plan is considered a report that shall be available to the public at any reasonable time upon request.
 - L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
 - M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

- N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights there under.
- O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
- P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
- Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

- R. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.

Special Conditions

- S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.
- U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Annual Inspection Report
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

- V. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.

SPECIAL CONDITION 13. 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 14. Cooling Water Intake Structure.

Based on available information, the Agency has determined that the operation of the cooling water intake structure meets the equivalent of Best Technology Available (BTA) in accordance with the Best Professional Judgment provisions of 40 CFR 125.3 and 40 CFR 125.90(b), based on information available at the time of permit reissuance.

However, the Permittee shall comply with the requirements of the Cooling Water Intake Structure Existing Facilities Rule as found at 40 CFR 122 and 125. Any application materials and submissions required for compliance with the Existing Facilities Rule, shall be submitted to the Agency no later than 4 years from the effective date of this permit.

If for any reason, the Cooling Water Intake Structure Existing Facilities Rule is stayed or remanded by the courts, the Permittee shall comply with the requirements below. The information required below is necessary to further evaluate cooling water intake structure operations based on the most up to date information, in accordance with the Best Professional Judgment provisions of 40 CFR 125.3 and 40 CFR 125.90(b), in existence prior to the effective date of the new Existing Facilities Rule:

- A. The permittee shall submit the following information/studies within 4 years of the effective date of the permit:
 - 1. Source Water Physical Data to include:
 - a. A narrative description and scaled drawings showing the physical configuration of all source water bodies used by the facility including aerial dimensions, depths, salinity and temperature regimes;
 - b. Identification and characterization of the source waterbody's hydrological and geomorphological features, as well as the methods used to conduct any physical studies to determine the intake's area of influence and the results of such studies; and
 - c. Location maps.
 - 2. Source Waterbody Flow Information

The permittee shall provide the annual mean flow of the waterbody, any supporting documentation and engineering calculations to support the analysis of whether the design intake flow is greater than five percent of the mean annual flow of the river or stream for purposes of determining applicable performance standards. Representative historical data (from a period of time up to 10 years) shall be used, if available.

Special Conditions

3. Impingement Mortality and Entrainment Characterization Study

The permittee shall submit an Impingement Mortality and Entrainment Characterization Study whose purpose is to provide information to support the development of a calculation baseline for evaluating impingement mortality and entrainment and to characterize current impingement mortality and entrainment. The Study shall include the following in sufficient detail to support establishment of baseline conditions:

- a. Taxonomic identification of all life stages of fish and shellfish and any species protected under Federal, State, or Tribal law (including threatened or endangered species) that are in the vicinity of the cooling water intake structure(s) and are susceptible to impingement and entrainment;
- b. A characterization of all life stages of fish and shellfish, and any species protected under Federal, or State law, including a description of the abundance and temporal and spatial characteristics in the vicinity of the cooling water intake structure(s). These may include historical data that are representative of the current operation of the facility and of biological conditions at the site; and
- c. Documentation of the current impingement mortality and entrainment of all life stages of fish, shellfish, and any species protected under Federal, State, or Tribal Law (including threatened or endangered species) and an estimate of impingement mortality and entrainment to be used as the calculation baseline. The documentation may include historical data that are representative of the current operation of the facility and of biological conditions at the site. Impingement mortality and entrainment samples to support the calculations required must be collected during periods of representative operational flows for the cooling water intake structure and the flows associated with the samples must be documented.

B. The permittee shall comply with the following requirements:

1. At all times properly operate and maintain the intake equipment as demonstrated in the application material supporting the BTA determination.
2. Inform IEPA of any proposed changes to the cooling water intake structure or proposed changes to operations at the facility that affect impingement mortality and/or entrainment.
3. Debris collected on intake screens is prohibited from being discharged back to the canal. Debris does not include living fish or other living aquatic organisms.
4. Compliance Alternatives. The permittee must evaluate each of the following alternatives for establishing BTA for minimizing adverse environmental impacts at the facility due to operation of the intake structure:
 - a. Evaluate operational procedures and/or propose facility modifications to reduce the intake through-screen velocity to less than 0.5 ft/sec. The operational evaluation may consider modified circulating water pump operation; reduced flow associated with capacity utilization, recalculation or determination of actual total water withdrawal capacity. The evaluation report and any implementation plan for the operational changes and/ or facility modification shall be submitted to the Agency with the renewal application for this permit.
 - b. Complete a fish impingement and entrainment mortality minimization alternatives evaluation. The evaluation may include an assessment of modification of the traveling screens, consideration of a separate fish and debris return system and include time frames and cost analysis to implement these measures. The evaluation report and implementation plan for any operational changes and/ or facility modifications shall be submitted to the Agency with the renewal application for this permit.

C. All required reports shall be submitted to the Industrial Unit, Permit Section and Compliance Assurance Section at the address in Special Condition 11.

This special condition does not relieve the permittee of the responsibility of complying with any other laws, regulations, or judicial orders issued pursuant to Section 316(b) of the Clean Water Act.

SPECIAL CONDITION 15. All mercury testing shall be conducted in accordance with USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E. The permittee shall report the results of the monthly mercury sampling and shall also report the average concentration for the previous 12 months for mercury to determine compliance with the annual average limit. All mercury monitoring results shall be reported in µg/L. Note: Compliance with the annual average limit is based on a rolling 12 month average. It is not based on a calendar year.

SPECIAL CONDITION 16. The discharge of a reportable quantity is not subject to the reporting requirements of Section 311 of the Clean

Special Conditions

Water Act, if such discharge is in compliance with this permit and such activity was reviewed and made part of the public record in accordance with the issuance of this permit. The permittee is exempt from Section 311 reporting for discharges meeting the terms and conditions as found at 40 CFR 117.12.

SPECIAL CONDITION 17. The usage of Spectrus CT 1300, or a product with an equivalent active ingredient shall be conducted in accordance with US EPA recommendations. The methyl orange analytical method for surfactant shall be used to document that no detectable residual n-alkyl dimethyl benzyl ammonia chloride (ADBAC) exists after detoxification. Measurement shall be required at 8-hour intervals and analysis conducted immediately after collection of a grab sample.

SPECIAL CONDITION 18. The Permittee shall conduct semi-annual monitoring of the effluent from Outfalls 001, 002, 004, 006, 007, 008, 009, 010, and 011 and report concentrations (in mg/l) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. The sample for Outfalls 001, 002, and 004 shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms unless otherwise specified by the IEPA. The sample for Outfalls 006, 007, 008, 009, 010, and 011 shall be a grab sample. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Minimum reporting limit</u>
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab (available *** or amenable to chlorination))	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900****	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556****	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

***USEPA Method OIA-1677.

****Mercury and Oil and Grease monitoring of the effluent from Outfall 001 shall be conducted in accordance with the monitoring requirements shown on page 2 of this permit. Mercury and Oil and Grease monitoring shall be conducted in accordance with this condition for Outfalls 002, 004, 006, 007, 008, 009, 010, and 011.

SPECIAL CONDITION 19. Groundwater quality at wells G116, APW-2, APW-3, and APW-4 shall be monitored quarterly for manganese, sulfate, total dissolved solids (TDS) and pH plus any other parameter determined to be of concern during the site assessment and review process. This monitoring data must be evaluated to determine if the additional ash load is causing impacts to groundwater quality above existing concentrations in these wells. If it is determined that additional impacts to groundwater are occurring, the permittee must then at a minimum address the following:

- a) The permittee shall initiate an assessment of operational alternatives for ash handling within 30 days of a confirmed statistically significant increase in constituent concentrations attributable to the ash in the surface impoundment.
- b) The assessment of operational alternatives for ash handling shall include an analysis of hydrogeologic conditions, groundwater monitoring data and operational requirements and alternatives including reduction or elimination of wet sluicing and/or removal from service of the impoundment, as necessary for the elimination of further impacts to groundwater quality.

Special Conditions

- c) The permittee shall complete and submit the assessment and include a schedule for implementation of operational alternatives to the Agency within 90 days of initiation.
- d) Ash pond operational changes must be initiated within 30 days of Agency approval.

SPECIAL CONDITION 20. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

SPECIAL CONDITION 21. No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.

SPECIAL CONDITION 22. Semi-annual sampling shall be conducted once between the months of January – June and once between the months of July – December, with the results being submitted with the June and December DMRs respectively.

Quarterly sampling shall be conducted once per quarter with the results being submitted in March, June, September, and December.

SPECIAL CONDITION 23. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

Special Conditions

Attachment A

The permittee shall monitor coal pile runoff for concentrations of copper (total) and iron (total) a minimum of four times prior to placing chemical metal cleaning wastewater rinses on the coal pile. The permittee shall monitor the coal pile runoff following the placement of chemical metal cleaning wastewater rinses on the coal pile. Upon placement of the rinses on the coal pile, for each placement which causes an effluent from the coal pile and each rainfall event which produces coal pile runoff during 30 days following placement on the coal pile, a representative grab sample shall be taken daily and analyzed for iron (total) and copper (total). The analysis report shall include the frequency, duration and amounts of the month's precipitation events.

If the permittee after monitoring twice the above practice for incineration of chemical metal cleaning rinses can demonstrate to the satisfaction of the permitting authority that there is no significant discharge of the designated parameters caused by this practice, upon written request by the permittee, the permitting authority shall review the monitoring requirements and may, at their discretion revise or waive these monitoring requirements by letter without public notice or opportunity for hearing. ■