

NPDES Permit No. IL0024767
Notice No. SMT: 14041801.smt

Public Notice Beginning Date: **January 7, 2015**

Public Notice Ending Date: **February 6, 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 Discharger:

City of Springfield
Office of Public Utilities
City Water, Light and Power
Environmental Affairs
7th and Monroe Street
Springfield, Illinois 62757

Name and Address of Facility:

City Water, Light and Power
3100 Stevenson Drive
Springfield, Illinois 62707
(Sangamon 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 discharger. 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 Shu-Mei Tsai at 217/782-0610.

The applicant is engaged in the operation of a steam electric generating station (SIC 4911). Plant operation results in an intermittent discharge of Miscellaneous Water and Ground Seepage Water from outfall 001 which discharges to Lake Springfield, an average discharge of 173 MGD of Dallman 1 and 2 Condenser Cooling Water from outfall 002 which discharges to Lake Springfield, an intermittent discharge of Lakeside Storm Sewer from outfall 003 which discharges to Sugar Creek, an average discharge of 4.883 MGD of Ash Pond Discharge from outfall 004 and discharges to Sugar Creek, an average discharge of 3.578 MGD of Industrial Wastewater Treatment Plant Effluent from outfall 005, an intermittent discharge of Non-Chemical Metal Cleaning Waste from Outfall A05, an average discharge of 4.883 MGD of Ash Pond Discharge from outfall 006, an intermittent discharge flow rate of Dallman Coal Runoff from outfall 007, an intermittent discharge of Stormwater from outfall 008, an average discharge of 187.1 MGD of Dallman 3 Condenser Cooling Water Outfall from outfall 009, an average discharge of 0.144 MGD of Dallman Plant Intake Screen Backwash from outfall 010, an average discharge of 0.025 MGD of Stormwater Runoff - West Drainage Ditch of Unit 4 Roadways from outfall 011, an average discharge of 0.025 MGD of Stormwater Runoff - East Drainage Ditch and Dallman Fuel Oil Unloading Pad from outfall 012, an average discharge of 0.049 MGD of Stormwater Runoff - East Ditch from outfall 013, an average discharge of 0.014 MGD of Stormwater Runoff - Landfill from outfall 016 which discharges to Sugar Creek, and an average discharge of 30 gpm of high service pump station emergency overflow from outfall 017 which discharges to Sugar Creek.

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

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Biological Stream Characterization
001	Lake Springfield	39° 45' 24" North	89° 35' 56" West	General Use	Not Rated
002	Lake Springfield	39° 45' 13" North	89° 36' 13" West	General Use	Not Rated
003	Sugar Creek	39° 45' 36" North	89° 35' 58" West	General Use	Not Rated
004	Sugar Creek	39° 46' 02" North	89° 36' 06" West	General Use	Not Rated
005	Lake Springfield	39° 45' 23" North	89° 35' 56" West	General Use	Not Rated
006	Lake Springfield	39° 45' 22" North	89° 35' 54" West	General Use	Not Rated
007	Lake Springfield	39° 45' 10" North	89° 36' 07" West	General Use	Not Rated
008	Lake Springfield	39° 45' 23" North	89° 35' 56" West	General Use	Not Rated
009	Lake Springfield	39° 45' 13" North	89° 36' 14" West	General Use	Not Rated
010	Lake Springfield	39° 45' 17" North	89° 35' 45" West	General Use	Not Rated
011	Lake Springfield	39° 45' 13" North	89° 36' 13" West	General Use	Not Rated
012	Lake Springfield	39° 45' 13" North	89° 36' 13" West	General Use	Not Rated
013	Lake Springfield	39° 45' 23" North	89° 35' 56" West	General Use	Not Rated
016	Sugar Creek	39° 45' 55" North	89° 35' 47" West	General Use	Not Rated
017	Sugar Creek	39° 45' 23" North	89° 36' 07" West	General Use	Not Rated

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

The waterbody segment receiving the discharge from outfalls 001, 002, 005-010, 012, and 013 discharge to Lake Springfield is on the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List. The receiving water has not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The following parameters have been identified as the pollutants causing impairment:

Pollutants	Potential Contributors
Total Suspended Solids Phosphorus Aquatic Algae (non-pollutant)	Aesthetic Quality

The waterbody segment EOA - 01 receiving the discharge from outfall(s) 003, 004, 016, and 017 is on the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List. The receiving water has not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The impaired designated uses and pollutants causing impairment are tabulated below:

Pollutants	Potential Contributors
Boron	Aquatic Life Use

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

PARAMETER	LOAD LIMITS lbs/day		REGULATION	CONCENTRATION		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Outfall 001: Miscellaneous Water and Ground Seepage Water (Intermittent Discharge)						
Flow (MGD)						
pH						35 IAC 302.204
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(3)
Outfall 002: Dallman 1 and 2 Condenser Cooling Water Outfall (DAF = 173 MGD)						
Flow (MGD)						
Temperature						IPCB 78-52
Total Residual Chlorine					0.05	35 IAC 302.208
Boron					Monitor Only	35 IAC 309.146
Outfall 003: Lakeside Storm Sewer (DAF = Intermittent Discharge)						
Flow (MGD)						
pH						35 IAC 302.204
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(3)
Boron					11	IPCB AS 94-9
Iron (Total)						35 IAC 309.146
Outfall 004: Ash Pond Discharge to Sugar Creek (DAF = 4.883 MGD)						
Flow (MGD)						
pH						35 IAC 302.204
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(4)

Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(4)
Iron (Total)				2	4	35 IAC 304.124
Mercury					12 ng/L	35 IAC 302.208(f)
Outfall: 008 Stormwater (DAF = Intermittent Discharge)						
Flow (MGD)						
pH						35 IAC 302.204
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(3)
Iron (Total)				2	4	35 IAC 304.124
Outfall 009: Dallman 3 Condenser Cooling Water Outfall (DAF = 187.1 MGD)						
Flow (MGD)						
Temperature						IPCB 78-52
Total Residual Chlorine					0.05	35 IAC 302.208
Boron					Monitor Only	35 IAC 309.146
Outfall 010: Dallman Plant Intake Screen Backwash (Intermittent Discharge)						
There shall be no discharge of collected debris.						
Outfalls: 011 Stormwater Runoff from West Drainage Ditch of Unit 4 Roadways (DAF = 0.025 MGD)						
012 Stormwater Runoff from East Drainage Ditch and Dallman Fuel Oil Unloading Pad, Unit 4 Roadways, FGD Wastewater Treatment Facility (DAF = 0.025 MGD)						
013 Stormwater Runoff from East Drainage Ditch (DAF = 0.049 MGD)						
016 Stormwater Runoff from Ash Landfill (DAF = 0.014 MGD)						
Stormwater Pollution Prevention Plan						40 CFR 122.26(b)(14)(vii)
Outfall 017: High Service Pump Station Emergency Overflow (DAF = 30 gpm)						
Clearwells 1, 2, and 3 footing drains						
High Service Pump Station footing drains						
High Service Pump Station emergency overflow						
Flow (MGD)						
pH						35 IAC 302.204
Total Residual Chlorine					0.05	35 IAC 302.208

The Dallman generating station has three units (31, 32 and 33) with a combined generation output of 387 megawatts. The units use once-through cooling on Lake Springfield. Units 31 and 32 have four cooling water pumps rated at 35,000 gpm and Unit 33 has two pumps rated at 65,000gpm. All pumps are located within a single intake structure with their own traveling screen cells the intake

structure is located in a cove. A barrier net is installed approximately 50 feet in front of the Dallman intake structure.

Currently, the permittee is using a net with a 3/8 inch mesh. The net has an updated weight system to anchor it to the Lake bottom. It will facilitate easier removal for cleaning or replacement and increase the reliability of remaining in contact with the Lake bottom.

Dallman 4 includes a coal-fired boiler, with a rated capacity of 2,440 million Btu/hour, and a steam turbine generator, with a nominal capacity of 250 megawatts. There is no intake structure for Dallman 4.

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 19 requires the submittal of additional information, and compliance with new federal regulations.

Outfall 006 discharges ash pond water to the head of the Dallman 31, 32, and 33 cooling water intake structure where it is taken back into the plant and used for condenser cooling and ultimately discharged to Lake Springfield via outfalls 002 and 009. Since all of the outfall 006 wastewater is reused for condenser cooling and mixed with condenser cooling water prior to discharge from outfalls 002 and 009, compliance with the boron water quality standard of 302.208 is determined at outfalls 002 and 009 rather than outfall 006. Boron concentrations at outfalls 002 and 009 have never exceeded 1.0 mg/L since 2008. The Agency has determined that a reasonable potential does not exist to exceed the 1.0 mg/L boron water quality standards at outfalls 002 and 009 but is requiring monthly monitoring to ensure continued compliance.

The following explain the conditions of the proposed permit:

The special conditions clarify: flow, pH, temperature, TRC, monitoring location, DMR's, usage of water treatment additives, re-opener, operator requirement, intake structure submittal, PCB's, metals monitoring, fisheries study submittal and stormwater pollution prevention plan requirements.

Antidegradation Assessment for Springfield City Water Light and Power
NPDES Permit No. IL0024767 Sangamon County

The subject facility has applied for a modified NPDES permit to include a new outfall. Outfall 017 will consist of an emergency overflow from a proposed high service pump station. The high service pump replaces a system elsewhere on the site. In the case of pump or pipe failure, treated drinking water would drain from the pump station through a dedicated discharge pipeline. Groundwater seepage around the pump station and discharge pipeline will also be discharged through this outfall. In the event of a catastrophic failure, drinking water would be discharged at a maximum rate of 1,576 gallons per minute until the system could be shut down. Groundwater discharged through the pipeline on a continuous basis (when groundwater is present) is predicted to be 220 gallons per day. The discharge will be to Sugar Creek.

Identification and Characterization of the Affected Water Body.

Sugar Creek (segment EOA-01) has a 7Q10 flow of zero cfs and is a General Use water. The stream is listed on the draft 2010 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use. The potential cause of impairment given in the report is boron. Sugar Creek is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating. Sugar Creek is not designated as an enhanced water pursuant to the dissolved oxygen water quality standard. The IDNR WIRT system does not list any state threatened or endangered aquatic species as residing in the receiving stream.

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

The treated drinking water that characterizes this proposed effluent is of very good quality. However, this is chlorinated drinking water and may have a chlorine concentration of 1.0 mg/L or more. The groundwater component is also believed to be of good quality as the area of construction is said by a CWLP representative to be unaffected by any previous activities at the site.

The new pump station will replace the one currently in service. The same type of catastrophic event occurring at the existing pump station would result in a sub-basement of that facility filling with water and then overland or pumped flow of the drinking water to either Lake Springfield or Sugar Creek. The new effluent is therefore replacing an existing effluent, the difference being that the new would be discharged in a more contained fashion. Any increase in chlorine loading to the aquatic environment from the new system over the old will be minimal.

The increased loading of the naturally occurring constituents in the drinking water will present no harmful scenario to the receiving stream. The pathway of the discharged water includes a rip-rapped channel that will receive the pipeline discharge. Chlorine in the effluent will encounter chlorine demand at this point, but the effluent may exceed water quality standards as it enters the creek. Dechlorination of the catastrophic flow is not feasible. Aquatic life may be adversely impacted by the influx of chlorine during an emergency discharge.

Fate and Effect of Parameters Proposed for Increased Loading.

Chlorine will naturally dissipate in the receiving stream. The duration of the discharge event will be short given procedures in place at the water treatment plant to shut down systems once a leak is detected. The catastrophic discharge may never occur. The receiving stream may therefore never see an impact.

Purpose and Social & Economic Benefits of the Proposed Activity.

A method to dispose of drinking water catastrophically leaking from the pump station must be in place in order for the drinking water treatment plant to be quickly repaired and put back into service. The new disposal system allows for the orderly draining of the site during and immediately after pump or pipe failure. Without this system in place the leak would take longer to fix, potentially threatening the community water supply.

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

This project replaces an existing system that currently would similarly discharge chlorinated drinking water in the event of a catastrophic leak. De-chlorinating the water after an unexpected leak would be infeasible because containment would be necessary to apply the de-chlorinating chemical. Containing the large quantity of water is infeasible because there is not adequate land available. No feasible alternatives exist to the discharge of the chlorinated drinking water.

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

The Illinois Department of Natural Resources was consulted regarding threatened and endangered species issues via the EcoCAT system on January 9, 2012. It was immediately determined that no threatened or endangered species reside in the receiving stream and consultation was terminated.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the draft permit was written. We tentatively find that the proposed activity is a necessary discharge in the event of a catastrophic leak event at the public water supply treatment plant; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by allowing for the most expeditious repair of the water treatment plant possible. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

NPDES Permit No. IL0024767

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

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Discharger:

City of Springfield
Office of Public Utilities
City Water, Light and Power
Environmental Affairs
7th and Monroe Street
Springfield, Illinois 62757

Name and Address of Facility:

City Water, Light and Power
3100 Stevenson Drive
Springfield, Illinois 62707
(Sangamon County)

Discharge Number and Name:

Receiving Waters

001	Miscellaneous Water and Ground Seepage water	Lake Springfield
002	Dallman 1 and 2 Condenser Cooling Water Outfall	Lake Springfield
003	Lakeside Storm Sewer	Sugar Creek
004	Ash Pond Discharge	Sugar Creek
005	Industrial Wastewater Treatment Plant	Lake Springfield
A05	Non-chemical Metal Cleaning Wastes	Lake Springfield
006	Ash Pond Discharge	Lake Springfield
007	Dallman Coal Pile Runoff	Lake Springfield
008	Stormwater	Lake Springfield
009	Dallman 3 Condenser Cooling Water Outfall	Lake Springfield
010	Dallman Plant Intake Screen Backwash	Lake Springfield
011	Stormwater Runoff from West Drainage Ditch of Unit 4 Roadways	Lake Springfield
012	Stormwater Runoff from East Drainage Ditch and Dallman Fuel Oil Unloading Pad, Unit 4 Roadways, FGDs Wastewater Treatment Facility	Lake Springfield
013	Stormwater Runoff from East Drainage Ditch	Lake Springfield
016	Stormwater Runoff from Landfill	Sugar Creek
017	High Service Pump Station Emergency Overflow	Sugar Creek

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

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NPDES Permit No. IL0024767

Effluent Limitations and Monitoring

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:

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		
Outfall 001: Miscellaneous Water and Groundwater Seepage(DAF = 0.0002 MGD)						
This discharge consists of:			Approximate Flow			
1. Lakeside 2 Turbine Rooms 4, 5 and 6 Floor Drains			Intermittent			
2. Lakeside 2 Turbine Rooms 4, 5 and 6 Roof Drains			Intermittent			
3. Lakeside 2 Boiler Rooms 5, 6 and 7 Floor Drains			Intermittent			
4. Lakeside 2 Boiler Rooms 5, 6 and 7 Roof Drains			Intermittent			
5. Lakeside 1 and 2 Equipment Drains			Intermittent			
Flow (MGD)	See Special Condition 1				2/Month	
pH	See Special Condition 2				2/Month	Grab
Total Suspended Solids			15	30	2/Month	Grab
Oil and Grease			15	20	2/Month	Grab

Effluent Limitations and Monitoring

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:

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		
Outfall 002: Dallman 1 and 2 Condenser Cooling Water (DAF = 173.0 MGD)						
This discharge consists of:			Approximate Flow			
1. Dallman 1 and 2 Condenser Cooling Water			173.0 MGD			
2. Dallman Ash Pond Sluice Water			Intermittent			
Flow (MGD)	See Special Condition 1				Daily	Continuous
Temperature	See Special Condition 4				Daily	Continuous
Total Residual Chlorine	See Special Condition 5			0.05	Each Chlorination Event	Concentration Curve
Boron*				Monitoring	1/Month	Grab

*Monitoring requirement for Boron, apply only during those times when Dallman Ash Pond Sluice Water is being discharged to Outfall 002. If no such discharge occurs during a monthly reporting period, it shall be noted as such on the DMR

Effluent Limitations and Monitoring

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:

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		
Outfall 003: Lakeside Storm Sewer (Intermittent Discharge)						
This discharge consists of:						
<ol style="list-style-type: none"> 1. Lakeside 1 Turbine Rooms 1, 2 and 3 Roof Drains 2. Lakeside 1 Boiler Rooms 2, 3 and 4 Floor Drains 3. Lakeside 2 Turbine Rooms 2, 3, and 4 Roof Drains 4. Lakeside 2 Boilers 7 and 8 Roof Drains 5. Screen Washings from Public Water Supply Intake 6. Public Water Supply Drain 7. Parking Lot Runoff 8. Dam Gate Isolation Drains 9. Dam Gate Vault Drains 10. High Service Pump Station and Low Service Pump Station Parking Area Drains 11. Low Service Pump Station Roof Drains 12. Low Service Pump Station Yard Drains 13. Low Service Pump Station Emergency Overflow (Lake Water) 						
Flow (MGD)	See Special Condition 1				1/Week	
pH	See Special Condition 2				1/Week	Grab
Total Suspended Solids			15	30	1/Week	24-Hour Composite
Oil and Grease			15	20	1/Week	Grab
Boron	See Special Condition 14			11	1/Week	Grab
Iron (Total)			Monitor Only		1/Month	Grab

Effluent Limitations and Monitoring

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:

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			
Outfall 004: Ash Pond Discharge to Sugar Creek (DAF = 4.883 MGD)							
This discharge consists of:				Approximate Flow:			
1. Dallman Plant Fly Ash and Bottom Ash						4.32 MGD	
2. Lime Sludge From the City Water Purification Plant						0.33 MGD	
3. Industrial Wastewater Treatment Plant Sludge						0.19 MGD	
4. Water Treatment Plant Yard Drains						Intermittent	
5. Scrubber Sludge Disposal Site Wastewater						0.043 MGD	
Flow (MGD)	See Special Condition 1					1/Week	
pH	See Special Condition 2					1/Week	Grab
Total Suspended Solids			15	30		1/Week	24-Hour Composite
Oil and Grease			15	20		1/Week	Grab
Boron	See Special Condition 14			11		2/Month	Grab
Mercury *				12 ng/L**		2/Month	Grab
Ammonia			MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MAXIMUM	1/Week	Grab
Mar–May, Sep – Oct			2.4	6.0	10.5		
Jul – Aug			1.6	4.0	12.4		
Nov – Feb			4.0		7.8		

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

**1.0ng/L = 1 part per trillion

NPDES Permit No. IL0024767

Effluent Limitations and Monitoring

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:

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		
Outfall A05: Non-chemical Metal Cleaning Wastes (Intermittent Discharge)						
Flow (MGD)	See Special Condition 1				2/Week	
pH	See Special Condition 2				2/Week	Grab
Total Suspended Solids			15	30	2/Week	24 Hour Composite
Oil and Grease			15	20	2/Week	Grab
Iron (Total)			1.0	1.0	2/Month	Grab
Copper (Total)			1.0	1.0	2/Month	Grab

Effluent Limitations and Monitoring

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:

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		
Outfall 006: Ash Pond Discharge to Lake Springfield (DAF = 4.883 MGD)						
This discharge consists of:			Approximate Flow:			
1. Dallman Plant Fly Ash and Bottom Ash				4.32 MGD		
2. Lime Sludge From the City Water Purification Plant				0.33 MGD		
3. Industrial Wastewater Treatment Plant Sludge				0.19 MGD		
4. Water Treatment Plant Yard Drains				Intermittent		
5. Scrubber Sludge Disposal Site Wastewater				0.043 MGD		
Flow (MGD)	See Special Condition 1				2/Week	
pH	See Special Condition 2				2/Week	Grab
Total Suspended Solids			15	30	2/Week	24 Hour Composite
Oil and Grease			15	20	2/Week	Grab
Phosphorus			1.0	2.0	2/Month	Grab
Boron			Monitoring		2/Month	Grab
Mercury*				12 ng/L**	2/Month	Grab

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

**1.0ng/L = 1 part per trillion

Discharges from outfall 006 shall only occur when the Dallman 31, 32, or 33 cooling water intake structure pumps are in operation.

Effluent Limitations and Monitoring

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:

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		
Outfall: 007 Dallman Coal Pile Runoff (Intermittent Discharge)						
This discharge consists of:				Approximate Flow		
1. Dallman Coal Pile Runoff*				Intermittent		
2. Dallman 1 and 2 Precipitator Area Drain				Intermittent		
3. Dust Suppression System				Intermittent		
4. Storm Water from Transfer Tower Sump, and Reclaim Pit Sump				Intermittent		
5. Cooling Tower Water Building from Unit 4				Intermittent		
6. Ammonia Storage Building				Intermittent		
Flow (MGD)	See Special Condition 1				1/Week	
Total Suspended Solids			15	30	1/Week	8 Hour Composite
Oil and Grease			15	20	1/Week	Grab
Iron (Total)			2	4	1/Week	8 Hour Composite
Mercury**				12 ng/L ***	2/Month	Grab

* This is an alternate routing to the WWTP tributary to Outfall 005

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

***1.0ng/L = 1 part per trillion

Effluent Limitations and Monitoring

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:

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		
Outfall: 008 Stormwater (DAF = Intermittent Discharge)*						
This discharge consists of:			Approximate Flow:			
1. Lakeside Plant Precipitator Runoff			Intermittent			
2. Parking Lot Runoff			Intermittent			
3. Lakeside 2 Turbine Rooms 4, 5, 6 and 7 Roof Drains			Intermittent			
4. Lakeside 2 Boiler Rooms 5, 6 and 7 Roof Drains			Intermittent			
Flow (MGD)	See Special Condition 1				1/Week	
pH	See Special Condition 2				1/Week	Grab
Total Suspended Solids			15	30	1/Week	8 Hour Composite
Oil and Grease			15	20	1/Week	Grab
Iron			2.0	4.0	1/Week	8 Hour Composite

* This is an alternate routing to the WWTP tributary to Outfall 005

Effluent Limitations and Monitoring

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:

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		
Outfall 009: Dallman 3 Condenser Cooling Water Outfall (DAF = 187.1 MGD)						
This discharge consists of:			Approximate Flow			
1. Dallman 3 Condenser Cooling Water			187.1 MGD			
2. Dallman Ash Pond Sluice Water			Intermittent			
Flow (MGD)	See Special Condition 1				Daily	Continuous
Temperature	See Special Condition 4				Daily	Continuous
Total Residual Chlorine	See Special Condition 5			0.05	Each Chlorination Event	Concentration Curve
Boron*				Monitoring	1/Month	Grab
*Monitoring requirement for Boron, apply only during those times when Dallman Ash Pond Sluice Water is being discharged to Outfall 009. If no such discharge occurs during a monthly reporting period, it shall be noted as such on the DMR						

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Effluent Limitations and Monitoring

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

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		
Outfall 010: Dallman Plant Intake Screen Backwash (Intermittent Discharge)						
Flow (MGD)	See Special Condition 1				1/Week	

There shall be no discharge of collected debris.

Effluent Limitations and Monitoring

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:

- Outfalls: 011 Stormwater Runoff from West Drainage Ditch of Unit 4 Roadways (DAF = 0.025 MGD)
- 012 Stormwater Runoff from East Drainage Ditch and Dallman Fuel Oil Unloading Pad, Unit 4 Roadways, FGD Wastewater Treatment Facility (DAF = 0.025 MGD)
- 013 Stormwater Runoff from East Drainage Ditch (DAF = 0.049 MGD)
- 016* Stormwater Runoff from Ash Landfill (DAF = 0.014 MGD)

Discharges shall be managed in accordance with Special Condition 24.

*See Special Condition 18

Effluent Limitations and Monitoring

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:

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				
Outfall 017: High Service Pump Station Emergency Overflow (DAF = 30 gpm) This discharge consists of: <table style="width: 100%; border: none;"> <tr> <td style="width: 60%; vertical-align: top;"> <ol style="list-style-type: none"> 1. Clearwells 1, 2, and 3 Footing Drains 2. High Service Pump Station Footing Drains 3. High Service Pump Station Emergency Overflow </td> <td style="width: 40%; vertical-align: top; text-align: center;"> Approximate Flow Intermittent Intermittent Intermittent </td> </tr> </table>							<ol style="list-style-type: none"> 1. Clearwells 1, 2, and 3 Footing Drains 2. High Service Pump Station Footing Drains 3. High Service Pump Station Emergency Overflow 	Approximate Flow Intermittent Intermittent Intermittent
<ol style="list-style-type: none"> 1. Clearwells 1, 2, and 3 Footing Drains 2. High Service Pump Station Footing Drains 3. High Service Pump Station Emergency Overflow 	Approximate Flow Intermittent Intermittent Intermittent							
Flow (MGD)	See Special Condition 1				1/Week			
pH	See Special Condition 2				1/Week	Grab		
Total Residual Chlorine	See Special Condition 5			0.05	1/Week	Grab		

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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 value on the monthly Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.5 to 9.0 standard units. 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. In accordance with IPCB 78-52, the thermal discharge to Lake Springfield from the Dallman plant (outfalls 002 and 009) shall not exceed 99 °F more than 8 percent of the hours in the 12-month period ending with any month and at no time shall any discharge exceed 109 °F. Also see Special Condition 22.

SPECIAL CONDITION 5. All samples for total residual chlorine (TRC) 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.

The reported mean concentration and maximum concentration of halogen shall be based on a concentration curve. The concentration curves shall be generated using grab samples with an analytical frequency of five minutes or less during the respective halogenation period of each unit allowing for lag time between the initiation of halogenation and the point of sampling before the first sample is taken. Concentration curves shall be submitted with monthly Discharge Monitoring Reports. The frequency and duration of the chlorine and bromine dosing periods plus the amount of chlorine and bromine applied shall be reported on the Discharge Monitoring Reports.

SPECIAL CONDITION 6. For the purpose of this permit discharges are limited to wastewater listed on the effluent pages for each permitted outfall.

SPECIAL CONDITION 7. There shall be no discharge of complexed chemical metal bearing wastestreams and associated rinses from chemical metal cleaning unless this permit has been modified to include the new discharge.

SPECIAL CONDITION 8. There shall be no discharge of polychlorinated biphenyl compounds.

SPECIAL CONDITION 9. To calculate the average daily flow for outfalls 002 and 009 during the reporting period, the total number of pump hours observed is divided by the number of days in the month and then multiplied by the pump rate (gallons/hour). The minimum daily flow rate is determined by multiplying the lowest daily pump hour total by the pump rate. The maximum daily pump rate is calculated by multiplying the highest daily pump hour total by the pump rate.

SPECIAL CONDITION 10. During maintenance outages calcium hypochlorite may be used to passivate the condensers. During discharge of chlorinated wastewater from passivation of the main cooling condensers a minimum of three grab samples shall be taken at five minute intervals or less at the condenser cooling water outfall for each batch discharge allowing for lag time between chlorine discharge and the point of sampling before the first grab sample is taken. The individual values and average value for each set of samples shall be reported with monthly DMR forms including the time samples were collected, the time and duration of chlorine release plus the amount of chlorine applied.

If chlorinated wastewater is to be discharged as a result of these outage conditions for more than 2 hours per day the permittee must request this permit be modified to allow for such a practice.

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 NetDMR 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>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

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

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

SPECIAL CONDITION 14. The permittee shall comply with all provisions of adjusted standard, AS 94-9 dated December 1, 1994, for boron discharges from the facility and the site specific water quality standards for boron specified in IPCB R09-8 dated May 21, 2009.

SPECIAL CONDITION 15. In the event that the permittee shall require a change in the use of water treatment additives, the permittee must request a change in this permit in accordance with the Standard Conditions -- Attachment H.

SPECIAL CONDITION 16. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities (Outfalls 003, 004, 005, 006, 007, and 008) for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 17. In addition to the other requirements of this permit, the permittee shall comply with all procedures of the boron monitoring program submitted to the Agency on March 27, 2000. Agency approval shall be granted prior to changing the procedures identified in the boron monitoring program submitted to the Agency. The Ash Pond Effluent shall not be discharged from Outfall 002 and/or 009 if it becomes apparent that the procedures of the boron monitoring program cannot be adhered to. This permit may be modified as a result of these analysis to include limits and/or additional monitoring for boron.

SPECIAL CONDITION 18. The Permittee shall monitor the effluent from outfalls 004, 005, 006, 007, and 016 for the following parameters on a semi-annual basis. Sampling data for a specific parameter required by other conditions of this permit may be used to satisfy this sampling requirement. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted to the address in special condition 11 in June and December. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET</u> <u>CODE</u>	<u>PARAMETER</u>	<u>Minimum</u> <u>detection limit</u>
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
00940	Chloride	1.0 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 amendable to chlorination)	5.0 ug/L
00720	Cyanide (grab not to exceed 24 hours) (total)	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

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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
00945	Sulfate	1.0 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.

*USEPA Method OIA-1677

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

***1.0ng/L = 1 part per trillion

SPECIAL CONDITION 19. 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.

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:

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- 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 best available technology 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 20: The Permittee shall prepare a biomonitoring plan for the testing of Outfall 004. The plan must be submitted to the Compliance Assurance Section within ninety (90) days of the effective date of this permit.

Biomonitoring

1. Chronic Toxicity - Standard definitive chronic toxicity tests shall be run on an invertebrate species representative of the aquatic community of the receiving stream. Testing must be consistent with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (Fourth Edition) EPA/821-R-02-013. Results shall be reported according to Section 10. The selection of an appropriate control for the toxicity tests shall be submitted to IEPA for review and approval prior to use. Unless substitute tests are pre-approved; the following test is required:
 - b. *Ceriodaphnia* Survival and Reproduction Test.

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2. Test Requirements – Six (6) rounds of the above test shall be conducted during the first six (6) months after Agency approval of the biomonitoring plan. The Permittee shall conduct the tests annually thereafter. Tests shall be performed using 24-hour composite effluent samples unless otherwise authorized by IEPA. When possible, bioassay sample collection should coincide with sample collection for metals analysis or other parameters that may contribute to effluent toxicity. Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA within one week of becoming available to the Permittee. The Permittee shall submit results to the following addresses.

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency
Bureau of Water
Attn: Brian Koch, Water Quality Standards
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

3. Toxicity Assessment - Should effluent result in an Inhibition Concentration of $\geq 25\%$ (IC25) to the test organism, the IEPA may require additional testing and may require the Permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall be developed in accordance with Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, EPA/600/6-91/005F and Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, which shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation and identification within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 21: The permittee shall establish and maintain a groundwater monitoring program plan for the ash impoundment site, subject to Agency review and approval.

SPECIAL CONDITION 22: The permittee shall demonstrate compliance with 35 Ill. Adm. Code 302.211, relief granted in accordance with Section 316(a) of the Clean Water Act, or other thermal relief granted by the Illinois Pollution Control Board and approved by USEPA, three years from the effective date of this permit. After three years, the permittee shall file a modification request with the Agency based on the method of compliance determined according to the schedule below.

<u>ITEM</u>	<u>COMPLETION DATE</u>
1. Determine if the existing relief is necessary and submit mixing zone study plan	6 months from effective date of the NPDES permit
2. Determine if a mixing zone is applicable and sufficient to allow the water quality standard to be met and submit study plan appropriate to type of relief from 35 Ill. Adm. Code 302.211 to be sought	12 months from effective date of the NPDES permit
3. Perform studies appropriate to requesting additional relief from the IPCB and apply to the IPCB for any relief that is deemed necessary	18 months from effective date of the NPDES permit.
4. If necessary, submit request for relief to Illinois Pollution Control Board or submit report on status of plan to comply with 35 Ill. Adm. Code 302.211	24 months from effective date of the NPDES permit.
5. Achieve compliance with 35 Ill. Adm. Code 302.211 or alternate thermal relief that has been granted by the Illinois Pollution Control Board and approved by USEPA	36 months from effective date of the NPDES permit.

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Reporting

The permittee shall submit a report no later than fourteen (14) days following the completion dates indicated for each numbered item in the compliance schedule, indicating, a) the date the item was completed, or b) that the item was not completed. The plan shall be mailed to IEPA at the following address:

Illinois Environmental Protection Agency
Bureau of Water
Water Quality Standards Unit, Mail Code # 15
Attn: Scott Twait
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Influent and Effluent temperature shall be monitored daily and reported on DMRs. Additionally, a monitoring location on Lake Springfield, outside of the influence of the discharge, may need to be monitored for temperature.

SPECIAL CONDITION 23. 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. 302.

SPECIAL CONDITION 24.

STORM 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,

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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
 - 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.

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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 clean up 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.
 - 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 of quarterly visual observations are applicable to all

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outfalls covered by this condition.

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 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 thereunder, 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 thereunder.
- 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

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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.
- 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 submitted to the following email and office addresses: epa.npdes.inspection@illinois.gov

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.

Public Notice of Draft Reissued Permit

Public Notice Number SMT:14041801.smt is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit has been prepared under 40 CFR 124.6(d) for City of Springfield for discharge into Lake Springfield and Sugar Creek from the City Water, Light and Power. The applicant operates an existing fossil-fuel steam electric generating facility with a total generating capacity of 618 MW (SIC 4911). The Facility consists of two complexes "Lakeside" and "Dallman". The Lakeside complex consisted of two generating units, Lakeside 1 and 2. The applicant stopped operating the Lakeside Units in October, 2009. The Dallman Complex is still operating and consists of four generating units. Dallman 1 and 2 are cyclone fed coal fired boilers with a combined generating capacity of 180.6 MW. Dallman 3 is a pulverized coal fired boiler with a generating capacity of 207.4 MW. Dallman 4 is a pulverized coal fired boiler with a nameplate capacity of 230.1 MW. Dallman 1, 2, and 3 generating facilities are cooled using lake water on an once-through cooling cycle. Dallman 4 utilizes a cooling tower.

Regulated discharges from City Water, Light and Power Generating Station to Lake Springfield are: No. 001- Miscellaneous Water which is an intermittent discharge; No. 002-Dallman 1 and 2 Condenser Cooling Water Outfall with an average flow of 201.6 MGD; No. 005-Industrial Wastewater Treatment Plant Outfall with an average flow of 1.53 MGD; No. A05-Non-Chemical Metal Cleaning Waste which is an intermittent discharge; No. 006-Ash Pond Discharge to Lake Springfield with an average flow of 4.883 MGD; No. 007-Dallman Coal Pile Runoff which is an intermittent discharge; No. 008-Lakeside Coal Pile Runoff which is an intermittent discharge; No. 009-Dallman 3 Condenser Cooling Water Outfall with an average flow of 187.1 MGD; No. 010-Dallman Plant Intake Screen Backwash with an average flow of 0.144 MGD; No. 11- Storm Water Runoff from West Drainage Ditch of Unit 4 Roadways with an average flow of 0.025 MGD; No. 012-Storm Water Runoff from East Drainage of Unit 4 Roadways with an average flow of 0.025 MGD; No.013- Storm Water Runoff from East Drainage Ditch with an average flow of 0.049 MGD; and No. 015-Storm Water Runoff from Coal Crusher House Manholes with an average flow of 0.002 MGD. Regulated discharges from City Water, Light and Power Generating Station into Sugar Creek are: No. 003-Lakeside Storm Sewer which is an intermittent discharge; No. 004-Ash Pond Discharge with an average flow of 4.883 MGD; No. 016 Stormwater Runoff from Landfill with an average flow of 0.014 MGD; and No. 017 High Service Pump Station Emergency Overflow with an average flow of 30 GPM.

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 modified 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 45 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.

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