

NPDES Permit No. IL0002232  
Notice No. JAR:15071701

Public Notice Beginning Date: **October 21, 2015**

Public Notice Ending Date: **November 20, 2015**

National Pollutant Discharge Elimination System (NPDES)  
Permit Program

Draft Modified 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:  
Midwest Generation, LLC  
235 Remington Blvd., Suite A  
Bolingbrook, IL 60440

Facility Name and Address:  
Powerton Generating Station  
13082 East Manito Rd.  
Pekin, IL 61554  
(Tazewell 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 Jaime Rabins at 217/782-0610.

The applicant is engaged operation of a steam electric generating station (SIC 4911). The station operates four cyclone coal-fired wet bottom boilers to supply steam to two generating units, designated units #5 and #6 rated at 851 and 846 MW respectively. The station withdraws water from the 1400 acre perched cooling pond for condenser cooling, backwashing the condenser cooling water intake screens, and house service water. Wastewater is generated from once-through condenser cooling, conditioning boiler feed water, backwashing the condenser cooling water intake screens, sanitary, chemical and non-chemical cleaning of plant equipment, ash handling, and precipitation which contacts the site.

Plant operation results in an average discharge of 7.33 MGD of ash treatment system effluent from outfall 001, 0.5 MGD of metal cleaning waste treatment system effluent from outfall A01, an intermittent discharge of cooling pond emergency overflow from outfall 002, an intermittent discharge of coal pile runoff treatment system effluent from outfall A02, 1.14 MGD of west yard treatment system effluent from outfall B02, 0.036 MGD of RBC treatment system effluent from outfall 004, and 1.44 MGD of treated asbestos contaminated stormwater from 006.

The following modifications are proposed:

1600 gpd of Trona Mill Wash water and an intermittent discharge of Trona Mill Building Roof Drains were added as subwastestreams 6(h) and (i) for outfall 001 on page 2 of the permit.

Application is made for the existing discharges which are located in Tazewell 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	Illinois River	40° 32' 52" North	89° 40' 41" West	General Use	Not Rated
002	Unnamed tributary to the Illinois River	40° 32' 21" North	89° 41' 56" West	General Use	Not Rated
004	Illinois River	40° 32' 39" North	89° 40' 51" West	General Use	Not Rated
006	Illinois River	40° 32' 34" North	89° 40' 47" West	General Use	Not Rated

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

The facility discharges to the Illinois River at a point where 2983.0 cfs of flow exists upstream of outfalls 001, 004, and 006 during critical 7Q10 low-flow conditions. The Illinois River, segment D-05 is listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List. The Illinois River 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. The impaired designated uses and pollutants causing impairment are tabulated below:

Impaired Designated Uses	Pollutants Causing Impairment
Fish Consumption	Mercury and Polychlorinated biphenyls

The facility discharges to an unnamed tributary to the Illinois River at a point where 0 cfs of flow exists upstream of outfall 002 during critical 7Q10 low-flow conditions. The unnamed tributary to the Illinois River is not listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List since it has not been assessed.

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

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		REGULATION	CONCENTRATION LIMITS mg/l		REGULATION
	30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	
Outfall: 001 Ash Treatment System Effluent (DAF = 7.33 MGD)						
Flow (MGD)						
pH						40CFR423.12(b)(1)
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(4)
Mercury				Monitor Only		35 IAC 309.146
Outfall: A01 Metal Cleaning Waste Treatment System Effluent ( DAF = 0.5 MGD)						
Flow (MGD)						
Total Suspended Solids				30	100	40CFR423.12(b)(5)
Oil and Grease				15	20	40CFR423.12(b)(5)
Iron				1.0	1.0	40CFR423.12(b)(5)
Copper				0.5	1.0	40CFR423.12(b)(5)
Outfall: 002 Cooling Pond Emergency Overflow ( Intermittent Discharge)						
Flow (MGD)						

pH						35 IAC 302.204
Outfall: A02 Coal Pile Runoff Treatment System Effluent ( Intermittent Discharge)						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(3)
Outfall: B02 West Yard Treatment System Effluent (DAF = 1.14 MGD)						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40CFR423.12(b)(3)
Outfall 004 RBC Sewage Treatment Plant Effluent (DAF = 0.036 MGD)						
Flow (MGD)						
pH						35 IAC 304.125
Total Suspended Solids				30	60	35 IAC 304.120(a)
BOD <sub>5</sub>				30	60	35 IAC 304.120(a)
Total Residual Chlorine					0.05	40 CFR 125.3
Outfall 006 Treated Asbestos Contaminated Stormwater ( DAF = 1.44 MGD)						
Flow (MGD)						
Asbestos					7 million Fibers/L	40 CFR 131.36

The following explain the conditions of the proposed permit:

The special conditions clarify the following: flow, pH, temperature, total residual chlorine, polychlorinated biphenyls, DMRs, intake screen backwash, monitoring location, bypass and upset provisions, operator requirements, dissolved oxygen, semi-annual metals sampling and stormwater.

Antidegradation Assessment for Midwest Generation – Powerton Station  
NPDES Permit No. IL0002232 Tazewell County

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The subject facility has applied for a modification of the NPDES permit to include wastewater generated as part of an air emission control process and the roof and floor drains associated with the Trona mill building. The subject facility is installing a dry sorbent injection flue gas desulfurization system to minimize atmospheric discharges of sulfur dioxide and acid gasses. Trona ( $\text{Na}_2\text{CO}_3 \bullet \text{NaHCO}_3 \bullet 2\text{H}_2\text{O}$ ) will be milled and blown into the flue gas ductwork using injection lances. In order to ensure the efficiency of the milling process, the Trona mills and immediately surrounding areas will have to go through daily wash cycles of approximately 100 gallons of water, per wash. This wastewater will only contain Trona, at an approximate concentration of about 3%. All of the fly ash handling system is dry; therefore any Trona that has been used to control SO<sub>2</sub> emissions will be disposed of offsite.

The amount of Trona used at any given time will vary as a function of its effectiveness in controlling SO<sub>2</sub> emissions. The amount of Trona mill washes is a function of the number of Trona mills used for each boiler. At Powerton Station, once the full Trona injection system is completed, there will be an estimated maximum of 36 washes per day, at 100 gallons of water per wash, for a maximum of 3600 gallons of wash water per day to be introduced into the existing wastewater treatment system. The estimated average Trona mill wash water flow is 1600 gallons/day.

However, total suspended solids are not expected in the effluent, due to the high solubility of this product. The wash water from the milling process will undergo setting within the East Yard basin and would then be sent to the Ash Treatment System prior to discharge into the receiving water. Additional settling and pH adjustment of the wash water would occur in the Ash Treatment System, as the plant currently provides coagulation/flocculation and pH adjustment for waste streams discharge from Outfall 001.

The information in this antidegradation assessment came from the September 2014 antidegradation assessment by Midwest Generation, titled "Powerton Generating Station – NPDES Permit No. IL0002232 Anti-Degradation Assessment".

#### **Identification and Characterization of the Affected Water Body.**

The subject facility discharges to the Illinois River at a point where 2983.0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The Illinois River is classified as a General Use Water. The Illinois River 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 in that document. The Illinois River, Waterbody Segment, D-05, is listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as mercury and polychlorinated biphenyls. Aquatic life, primary contact, and secondary uses are fully supported. This segment of the Illinois River is not subject to enhanced dissolved oxygen standards.

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

Existing Total Suspended Solids and pH permit limits will continue to be regulated. With the treatment provided within the East Yard and Ash Treatment Systems, a measurable increase in pH is not expected to occur at Outfall 001.

#### **Fate and Effect of Parameters Proposed for Increased Loading.**

Given that negligible, if any, additional pollutant loading would occur as a result of this proposed modification; an adverse impact to the existing uses of the receiving water is not anticipated.

The expected concentration of Trona in the effluent would be non-detectable, and therefore, there will be no measurable pollutant loading to the receiving stream as the result of the proposed wash water, and therefore no impact on existing uses and water quality of the receiving stream.

#### **Purpose and Social & Economic Benefits of the Proposed Activity.**

The Trona mill wash water is a byproduct of the advanced air control measures that Powerton Station will employ to reduce emissions of sulfur dioxide and acid gases. This air emissions control technology installation (the basis of the requested Trona mill washwater addition) would benefit the environment by minimizing the loading of these pollutants to the atmosphere, and subsequently minimizing the atmospheric deposition of these pollutant into the Illinois River and other regional watersheds.

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

The facility evaluated applying the Trona washwater around the reclaim area of the coal pile. The reclaim area is where the coal process input point leading directly to the boilers where the coal will be combusted. The facility also evaluated collecting the water and sending it off-site for treatment. Neither of these alternatives was deemed feasible.

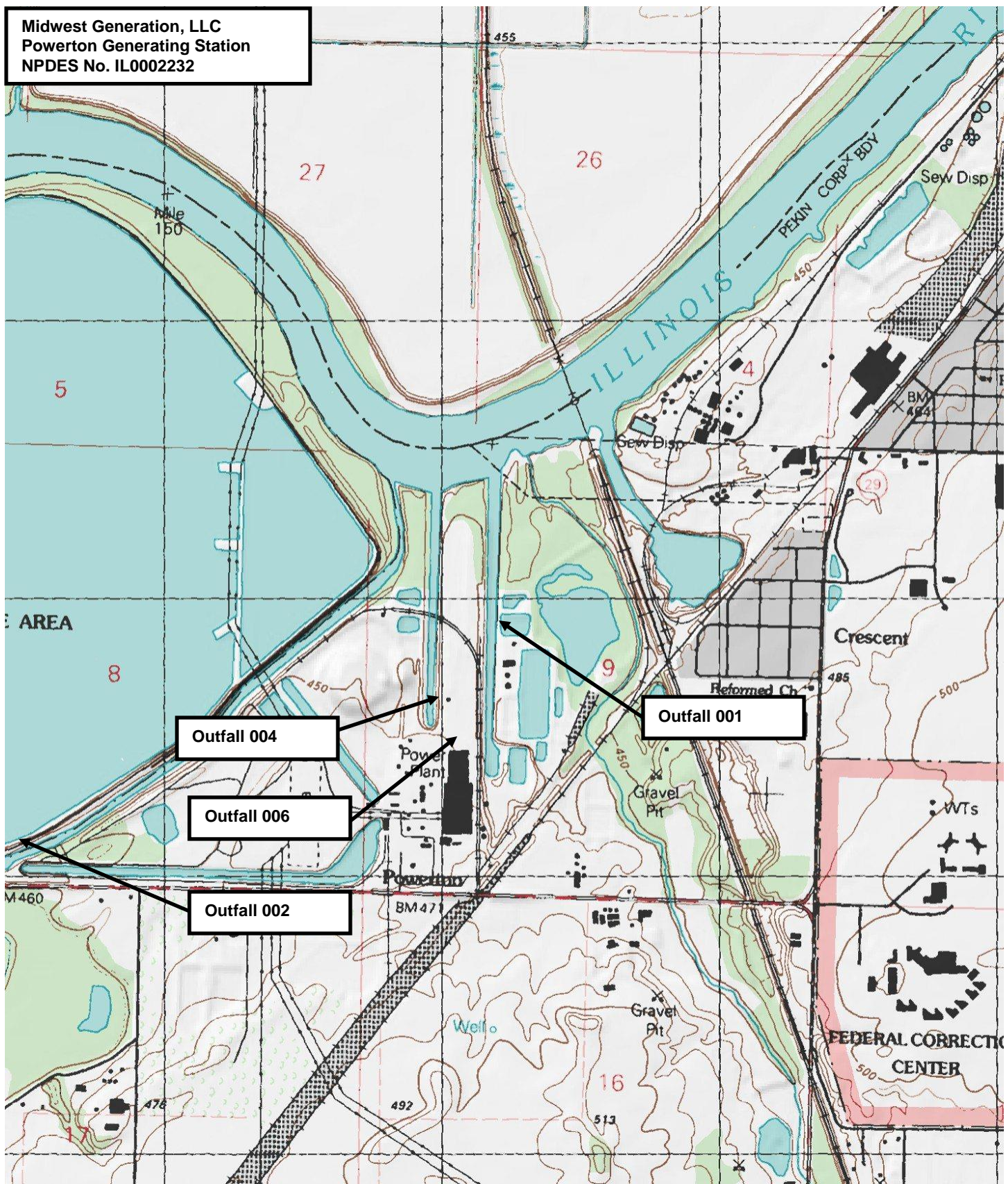
Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

On September 8, 2014, the IDNR EcoCAT web-based tool was used and indicated that there were endangered/threatened species (Smooth Softshell (*Apalone mutica*)) present in the vicinity of the discharge. IDNR evaluated the submittal and determined that impacts to the protected resources are unlikely. IDNR terminated the consultation request on 11 September 2014.

**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 will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the community at large by minimizing the loading of sulfur dioxide and acid gases to the atmosphere, and subsequently minimizing the atmospheric deposition of these pollutant into the Illinois River and other regional watersheds. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

**Midwest Generation, LLC  
Powerton Generating Station  
NPDES No. IL0002232**



### Public Notice of Draft Permit

Public Notice Number JAR:15071701 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 IL0002232 has been prepared under 40 CFR 124.6(d) for Midwest Generation, LLC, 235 Remington Blvd., Suite A, Bolingbrook, IL 60440 for discharge into Illinois River from the Powerton Generating Station, 13082 East Manito Rd., Pekin, IL 61554, (Tazewell County).

The station operates four cyclone coal-fired wet bottom boilers to supply steam to two generating units, designated units #5 and #6 rated at 851 and 846 MW respectively. The station withdraws water from the 1400 acre perched cooling pond for condenser cooling, backwashing the condenser cooling water intake screens, and house service water. Wastewater is generated from once-through condenser cooling, conditioning boiler feed water, backwashing the condenser cooling water intake screens, sanitary, chemical and non-chemical cleaning of plant equipment, ash handling, and precipitation which contacts the site.

Plant operation results in an average discharge of 7.33 MGD of ash treatment system effluent from outfall 001, 0.5 MGD of metal cleaning waste treatment system effluent from outfall A01, an intermittent discharge of cooling pond emergency overflow from outfall 002, an intermittent discharge of coal pile runoff treatment system effluent from outfall A02, 1.14 MGD of west yard treatment system effluent from outfall B02, 0.036 MGD of RBC treatment system effluent from outfall 004, and 1.44 MGD of treated asbestos contaminated stormwater from 006.

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

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. IL0002232

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

Modified (NPDES) Permit

Expiration Date: May 31, 2020

Issue Date: May 22, 2015

Effective Date: June 1, 2015

Modification Date:

Name and Address of Permittee:

Midwest Generation, LLC  
235 Remington Blvd., Suite A  
Bolingbrook, IL 60440

Facility Name and Address:

Powerton Generating Station  
13082 East Manito Rd.  
Pekin, IL 61554  
(Tazewell County)

Discharge Number and Name:

001 Ash Treatment System Effluent  
A01 Metal Cleaning Waste Treatment System Effluent  
002 Cooling Pond Emergency Overflow  
A02 Coal Pile Runoff Treatment System Effluent  
B02 West Yard Treatment System Effluent  
004 RBC Sewage Treatment Plant Effluent  
006 Treated Asbestos Contaminated Stormwater

Receiving Waters:

Illinois River  
Unnamed tributary to the Illinois River  
Illinois River  
Illinois River

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

SAK:JAR:15071701.



NPDES Permit No. IL0002232

Effluent Limitations and Monitoring

From the modification 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 Ash Treatment System Effluent (DAF = 7.33 MGD)\*

This discharge consists of:

Approximate Flow

- |   |              |
|---|--------------|
| 1. Bottom Ash and Economizer Ash Sluice Wastewater  | 10.9 MGD     |
| 2. Alternate Route for Boiler Room Sump   | Intermittent |
| 3. Intermittent Route for Boiler Room Floor and Roof Drains   | Intermittent |
| 4. Slag Tank Overflow Sump Wastes; Tripper Room Dust Extractor;<br>Tail End and Tripper Room Washdown; Alternate Route for Boiler<br>Room Floor Drains; Alternate Route for RO Reject and Cleaning Wastes | 6.2 MGD      |
| 5. Demineralizer Sand Filter Backwash   | 0.1 MGD      |
| 6. East Yard Runoff Basin Effluent  | Intermittent |
| a. East Yard Area Runoff  | 1.0 MGD      |
| b. Units 1-4 Roof and Yard Drains   | Intermittent |
| c. Boiler Room Sump Wastes  | 0.3 MGD      |
| d. Boiler Room Roof and Building Drains   | Intermittent |
| e. Polymer Building Floor Drains  | 0.01 MGD     |
| f. Scrubber and Limestone Building Area Drains  | 0.01 MGD     |
| g. Condensate Storage Tank  | Intermittent |
| h. Trona Mill Wash Water  | 1600 GPD     |
| i. Trona Mill Building Roof Drains  | Intermittent |
| 7. Demineralizer Regenerant and RO Wastes to South Equalization Basin;<br>Alternate Route direct to Ash Treatment   | 0.3 MGD      |
| 8. Metal Cleaning Wastes Treatment System Effluent  | 0.50 MGD     |

Flow (MGD)	See Special Condition 1			1/Week	24 Hour Total
pH	See Special Condition 2			1/Week	Grab
Total Suspended Solids			15	30	2/Month 24 Hour Composite
Oil and Grease			15	20	2/Month Grab

\*See Special Condition 16.

NPDES Permit No. IL0002232

Effluent Limitations and Monitoring

From the modification 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: A01 Metal Cleaning Waste Treatment System Effluent (DAF = 0.5 MGD)

This discharge consists of:

Approximate Flow

- |  |              |
|--|--------------|
| 1. Boiler and Air Heater, Precipitator, and Economizer Wash Water;<br>(Gas Side Boiler Wash Water) | Intermittent |
| 2. Water Side Boiler Cleaning Water  | Intermittent |
| 3. Alternate Route for Demineralizer Regenerant Waste and RO<br>Reject and Cleaning Wastes         | Intermittent |

Flow (MGD)	See Special Condition 1				Daily	24 Hour Total
Total Suspended Solids			30	100	2/Week	24 Hour Composite
Oil and Grease			15	20	2/Week	Grab
Iron			1.0	1.0	2/Week	24 Hour Composite
Copper			0.5	1.0	2/Week	24 Hour Composite

NPDES Permit No. IL0002232

Effluent Limitations and Monitoring

From the modification 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 Cooling Pond Emergency Overflow (Intermittent Discharge)

This discharge consists of:

Approximate Flow

- |   |              |
|---|--------------|
| 1. Condenser Cooling Water  | 497 MGD/Unit |
| 2. House Service Water  | Intermittent |
| 3. Intermittent Ash Treatment System Effluent (Approximately 15%) | 7.33 MGD     |
| 4. Coal Pile Runoff System Effluent                               | 1.64 MGD     |
| 5. West Yard Runoff System Effluent                               | 1.14 MGD     |
| 6. Pond Intake Screen Backwash                                    | Intermittent |
| 7. Boiler Drains  | Intermittent |
| 8. RO Reject  | 0.14 MGD     |

Flow (MGD)	See Special Condition 1				Daily When Discharging	Estimate
pH	See Special Condition 3				Daily When Discharging	Grab
Temperature	See Special Condition 5				Daily When Discharging	Measure

NPDES Permit No. IL0002232

Effluent Limitations and Monitoring

From the modification 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: A02 Coal Pile Runoff Treatment System Effluent (Intermittent Discharge)\*

This discharge consists of:

Approximate Flow

- |   |              |
|---|--------------|
| 1. Crusher Building Area Runoff             | Intermittent |
| 2. East & West Coal Pile Runoff             | 2.0 MGD      |
| 3. Equipment Building Area Runoff           | Intermittent |
| 4. Reclaim Hopper and Car Dumper Sumps      | Intermittent |
| 5. Fuel Oil Tank Area Runoff                | Intermittent |
| 6. Treated Asbestos Contaminated Stormwater | 1.44 MGD     |

Flow (MGD)	See Special Condition 1				Daily	24 Hour Total
Total Suspended Solids			15	30	1/Week	24 Hour Composite
Oil and Grease			15	20	1/Week	Grab

\*See Special Condition 16.

NPDES Permit No. IL0002232

Effluent Limitations and Monitoring

From the modification 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: B02 West Yard Runoff Treatment System Effluent (DAF = 1.14 MGD)

This discharge consists of:

Approximate Flow

- |   |              |
|---|--------------|
| 1. West Yard Area Runoff  | 0.115 MGD    |
| 2. North and South 345kV Switchyard Oil Separator Effluents           | 0.377 MGD    |
| 3. Oil Tank Area Oil Separator Effluent                               | 0.205 MGD    |
| 4. Crib House Roof and Floor Drains                                   | 0.09 MGD     |
| 5. Units 5 and 6 Turbine Room Roof and Floor Drains to Oil Separators | 0.134 MGD    |
| 6. Units 1-4 Area Runoff  | 0.115 MGD    |
| 7. 138kV Switchyard Area Runoff                                       | 0.176 MGD    |
| 8. Condenser Pit Oil Separator Effluents                              | Intermittent |
| 9. Parking Area Runoff  | 0.39 MGD     |
| 10. Administration Building Roof and Area Drains                      | Intermittent |

Flow (MGD)	See Special Condition 1			Daily	24 Hour Total
Total Suspended Solids			15	30	2/Month 24 Hour Composite
Oil and Grease			15	20	2/Month Grab

NPDES Permit No. IL0002232

Effluent Limitations and Monitoring

From the modification 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 RBC Sewage Treatment Plant Effluent (DAF = 0.036 MGD)

Flow (MGD)	See Special Condition 1				Continuous	
pH	See Special Condition 2				1/Week	Grab
Total Suspended Solids	10	20	30	60	2/Month	24 Hour Composite
BOD <sub>5</sub>	10	20	30	60	2/Month	24 Hour Composite
Total Residual Chlorine	See Special Condition 4				Daily When Chlorinating	Grab

NPDES Permit No. IL0002232

Effluent Limitations and Monitoring

From the modification 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 Treated Asbestos Contaminated Stormwater (DAF = 1.44 MGD)

Flow (MGD)	See Special Condition 1				Weekly When Discharging	Single Reading
Asbestos				7 million fibers/L	Weekly When Discharging	Grab

NPDES Permit No. IL0002232

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 6.0 to 9.0 for the discharge from outfalls 001 and 004. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. The pH shall be in the range 6.5 to 9.0 for the discharge from outfall 002. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 4. All samples for TRC shall be grab samples and 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.

SPECIAL CONDITION 5. This facility meets the allowed mixing criteria for thermal discharges from outfall 002 pursuant to 35 IAC 302.102. No reasonable potential exists for the discharge to exceed thermal water quality standards. The permittee shall monitor the flow and temperature of the discharge prior to entry into the receiving water body. Monitoring results shall be reported on the monthly DMR. This permit may be modified to include formal temperature limitations should the results of the monitoring show that there is a reasonable potential to exceed a thermal water quality standard. Modification of this permit shall follow public notice and opportunity for comment.

SPECIAL CONDITION 6. Debris collected on river make-up intake screens is prohibited from being discharged back to the pond. Debris does not include living fish or other living aquatic organisms.

SPECIAL CONDITION 7. 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 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 8. There shall be no discharge of polychlorinated biphenyl compounds

SPECIAL CONDITION 9. The bypass provisions of 40 CFR 122.41(m) and upset provisions of 40 CFR 122.41(n) are hereby incorporated by reference.

SPECIAL CONDITION 10. Samples taken in compliance with the effluent monitoring requirements of outfalls 001, 002, 004 and 006 shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

Samples taken in compliance with the effluent monitoring requirements of outfalls A01, A02 and B02 shall be taken at a point representative of the discharge, but prior to comingling with other wastestreams.

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 (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.html>.

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



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Permittees not using NetDMR 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. 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 13. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 14. 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 15. In accordance 40 CFR 125.3 it is the Agency's Best Professional Judgment that the intake structure is considered the Best Technology Available for minimizing adverse environmental impact because utilization of a closed-cycle recirculating system was considered the best technology available for minimizing adverse environmental impact under the now remanded rule of 40 CFR 125.94(a)(1)(i). Furthermore, the Illinois River intake structure design intake velocity is less than 0.5 feet per second which is considered the best technology available for minimizing adverse environmental impact. This permit may also be revised or modified in accordance with any laws, regulations, or judicial orders issued pursuant to Section 316(b) of the Clean Water Act.

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.

Nothing in this permit authorizes take for the purpose of a facility's compliance with the Endangered Species Act.

SPECIAL CONDITION 16. The Permittee shall monitor the effluent from outfalls 001 and A02 for the following parameters on a semi-annual basis. 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 CODE</u>	<u>PARAMETER</u>	<u>Minimum reporting limit</u>
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01022	Boron	0.1 mg/L
01027	Cadmium	0.001 mg/L
00940	Chloride	0.1 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
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
00945	Sulfate	0.1 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

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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. Mercury shall be monitored monthly for the first two years and quarterly thereafter. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The quarterly monitoring results shall be submitted on the March, June, September and December DMRs.

\*\*\*USEPA Method OIA-1677

SPECIAL CONDITION 17. A zone of initial dilution (ZID) is recognized for ammonia, with dimensions of 1.0 feet outward across the river from the point where the canal/ditch receiving the effluent from outfall 004 flows into the Illinois River, and 1.0 feet downstream from this point. Within the ZID 11:1 dilution is afforded. A mixing zone is recognized with dimensions of 1.2 feet outward across the river from the outfall and 1.2 feet downstream from this point. Within the mixing zone 88:1 dilution is afforded.

SPECIAL CONDITION 18. A plan of study must be submitted to IEPA no later than 30 days from the effective date of the permit for a bacteria die-off demonstration. Fecal coliform bacteria must be measured at the end of the treatment process for Outfall 004 (the usual sampling location) and at points in the canal receiving the effluent leading to the Illinois River. The sampling for this demonstration must occur on at least three occasions, at least one week apart, during the months of July, August and/or September, 2015. A final report on the results of the study is due to the IEPA no later than October 15, 2015. IEPA will use the results of this demonstration to determine if the year-round disinfection exemption remains valid for this Outfall. If the IEPA finds that the Illinois River receives water at fecal coliform concentrations above the water quality standard (geometric mean of 200 cells per 100 mL) a modified permit will be issued that revokes the year-round exemption and requires seasonal disinfection.

SPECIAL CONDITION 19. An alternate discharge location for the reverse osmosis reject, which is currently discharged to the cooling pond tributary to outfall 002, shall be evaluated for discharge into the Illinois River. If this alternative proves reasonable, an antidegradation assessment with modification request to relocate the reverse osmosis reject discharge from the cooling pond to the Illinois River, shall be submitted to the Agency within 90 days of the effective date of the permit.