

NPDES Permit No. IL0002208
Notice No. JAR:10111901.daa

Public Notice Beginning Date: **July 4, 2012**

Public Notice Ending Date: **August 3, 2012**

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

Name and Address of Facility:
Will County Generating Station
529 East Romeo Road
Romeoville, Illinois 60441
(Will 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 two pulverized coal-fired wet bottom boilers designated units #3 and #4 rated at 268 and 542 MW respectively. The station withdraws water from the Chicago Sanitary and Ship Canal for condenser cooling, backwashing the condenser cooling water intake screens, and house service water. On-site wells supply water for sanitary uses. Wastewater is generated from once-through condenser cooling, conditioning boiler feed water, backwashing the condenser cooling water intake screens, sanitary (sinks, toilets and shower), chemical and non-chemical cleaning of plant equipment, ash handling and precipitation which contacts the site.

Plant operation results in an average discharge of 741.4 MGD of condenser cooling water and house service water from outfall 001, 0.27 MGD of reverse osmosis reject from outfall A01, 0.023 MGD of boiler blowdown, boiler drain and turbine drain from outfall B01, 0.88 MGD of recycle wastewater treatment system blowdown from outfall 002, an intermittent discharge of metal cleaning wastes from outfall A02, an intermittent discharge of coal pile runoff from outfall B02 and 0.015 MGD of sewage treatment plant effluent from 003.

Once-thru cooling water is conditioned using chlorine to prevent biofouling of the condensers. Bromine biocides may also be used for to prevent condenser biofouling. Discharges from outfall 002 are treated using equalization, sedimentation, chemical oxidation (metal cleaning wastes), coagulation, flocculation and sedimentation. Discharges from outfall 003 are treated using grinding, sedimentation, trickling filtration and sedimentation. Sludge from outfall 003 is treated using anaerobic digestion prior to being disposed of off-site.

The following modifications are proposed:

1. An additional reverse osmosis system will be added to condition well water for use in the boilers. As a result the discharge of reverse osmosis reject from outfall A01 will increase 0.1 to 0.27 MGD.
2. The existing discharge of metal cleaning wastes will be regulated by newly designated internal outfall A02 because it is a regulated wastestream in the Steam Electric Effluent Guideline and BPT/BAT limits must be met prior to dilution with other wastestreams.
3. Chemical metal cleaning wastes have been added to this permit as an authorized discharge. They are included as part of metal cleaning wastes per 40 CFR 423.11(d).
4. Internal monitoring point C01 has been removed from the permit. The discharge of intake screen backwash will continue to be authorized from outfall 001.
5. The existing discharge of coal pile runoff will be regulated by newly designated internal outfall B02 because it is a regulated wastestream in the Steam Electric Effluent Guideline and BPT limits must be met prior to dilution with other wastestreams.
6. The discharger address was changed.

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

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Integrity Rating
001	Chicago Sanitary and Ship Canal	41° 38' 00"	North	88° 03' 45"	West	Secondary Contact	Not Rated
002	Chicago Sanitary and Ship Canal	41° 38' 35"	North	88° 03' 45"	West	Secondary Contact	Not Rated
003	Chicago Sanitary and Ship Canal	41° 38' 35"	North	88° 03' 45"	West	Secondary Contact	Not Rated

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

The stream segment GI-02 receiving the discharge from outfall(s) 001, 002, and 003 is on the draft 2010 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:

Designated Uses	Pollutants Causing Impairment
Fish Consumption	Polychlorinated biphenyls (PCB's)
Aquatic Life	Iron, Oil and Grease, Dissolved Oxygen (non-pollutant), and Phosphorus

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 Condenser Cooling and House Service Water (DAF = 741.4 MGD)						
Flow (MGD)						
pH			Shall be in the range of 6.0 to 9.0 standard units			35 IAC 304.125
Total Residual Chlorine					0.05	35 IAC 302.410
Temperature						35 IAC 302.408 and PCB Order AS 96-10
Outfall A01 Reverse Osmosis Reject (DAF = 0.27 MGD)						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423.12(b)(3)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall B01 Boiler Blowdown, Boiler Drain and Turbine Drain (DAF=0.023 MGD)						
Flow (MGD)						
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423.12(b)(3)
Outfall: 002 Recycle Wastewater Treatment System Blowdown (DAF = 0.88 MGD)						
Flow (MGD)						
pH			Shall be in the range of 6.0 to 9.0 standard units			40 CFR 423.12(b)(1)
Total Suspended Solids				15	30	35 IAC 304.124
Oil and Grease				15	20	40 CFR 423.12(b)(3)
Outfall: A02 Metal Cleaning Wastes (Intermittent Discharge)						
Flow (MGD)						
Total Suspended Solids				30	100	40 CFR 423.12(b)(5)
Oil and Grease				15	20	40 CFR 423.12(b)(5)
Iron				1.0	1.0	40 CFR 423.12(b)(5)
Copper				0.5	1.0	35 IAC 304.124
Outfall B02 Coal Pile Runoff (Intermitent Discharge)						
Flow (MGD)						
Total Suspended Solids					50	40 CFR 423.12(b)(5)
Outfall 003 Sewage Treatment Plant Effluent (DAF = 0.015 MGD, DMF = 0.03125 MGD)						
Flow (MGD)						
pH			Shall be in the range of 6.0 to 9.0 standard units			35 IAC 304.125
Total Suspended Solids	3.1	13		25	50	35 IAC 304.124
BOD ₅	2.5	10		20	40	35 IAC 304.124
Total Residual Chlorine					0.05	35 IAC 302.410

Load Limit Calculations:

Load limit calculations for the following pollutant parameters limited at outfall 003 were based on a design average flow of 0.015 and a design maximum flow of 0.03125 and using the formula of design average or design maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅ and total suspended solids.

The following explain the conditions of the proposed permit:

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

The facility is subject to both the temperature standards for Secondary Contact Waters per 35 IAC 302.408 and the temperature standards for Primary Contact Waters at the I-55 Bridge per 35 IAC 302.211 except (d) and (e) which are replaced by Pollution Control Board Order AS 96-10, dated October 3, 1996.

Antidegradation Assessment for Midwest Generation LLC – Will County Station
NPDES Permit No. IL0002208 Will County

The subject facility is proposing to expand their RO reject water from 0.1 MGD to 0.27 MGD (outfall A011, tributary to outfall 001), add a new discharge of dredged spoils supernatant tributary to the South Area Runoff Basin (tributary to outfall 002), add approximately 200 gallons of water-side boiler cleaning wastes (tributary to outfall 002), and 20,000 gallons of heat exchanger cleaning water (tributary to outfall 002).

The facility is proposing to add another reverse osmosis (RO) system to remove dissolved solids from the well water for use in Station operations. The RO reject water will have similar concentrations of total dissolved solids of 3,000 to 4,000 mg/L, primarily composed of magnesium sulfate, calcium sulfate, sodium sulfate, strontium sulfate, and potassium sulfate.

The Station's cooling water intake is located in the Chicago Sanitary and Ship Canal (CSSC). Sediment dredging in that area is necessary for continued cooling water operation and maintenance because increasing sediment levels threaten to inhibit and/or interfere with Station operations which rely upon the intake of cooling water from the CSSC. Sediment will be dredged periodically from the CSSC and will be placed in the settling basin to allow settlement and drying of solids. The volume of supernatant is expected to be on the order of 10 gallons/minute (approximately 0.144 MGD).

The Station cleans boilers once every 3 to 4 years, using an inhibited solution of diammoniated EDTA. Currently, all boiler cleaning water is evaporated and is not discharged. The Station will continue to evaporate the boiler cleaning water; however, it is conceivable that instances may occur where the evaporation process does not successfully capture and evaporate all of the subject wastewater. In such instances, incidental amounts of the water-side boiler cleaning wastewater (estimated 200 gallons) may enter the ash basin which contains a much larger quantity of wastewater. If/when this were to occur, the substantial amount of ash basin wastewater that is normally present could not be evaporated to prevent the discharge of any boiler cleaning water. This is in part because the boiler, which must operate to evaporate the wastewater, discharges wastewater to the ash basin at a rate that is greater than the rate at which the ash basin wastewater could be evaporated.

The station cleans heat exchangers once every 1 to 2 years, using dilute (typically 10% or less in solution) inhibited acid cleaners such as citric, formic, sulfamic, and hydrochloric acids. Currently, all heat exchanger cleaning water is collected, isolated and neutralized prior to proper off-site disposal. Existing data shows that while iron is removed during the heat exchanger cleaning process, the iron will co-precipitate with the ash. It is expected that other metals which may be present, possibly copper or zinc, also will co-precipitate with the ash just as the data shows iron does. The total volume of wastewater generated is anticipated to be roughly 20,000 gallons or less per occurrence. The incidental amount of neutralized acid (salt), along with any possible metals, would result in insignificant or trace amounts in the wastewater discharge.

The information in this antidegradation assessment came from the "Will County Station, NPDES Permit No. IL0002208 Renewal, Anti-Degradation Assessment".

Identification and Characterization of the Affected Water Body.

The subject facility discharges to the Chicago Sanitary and Ship Canal at a point where 1315.0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The Chicago Sanitary and Ship Canal is classified as a Secondary Contact and Indigenous Aquatic Life Use Water. The Chicago Sanitary and Ship Canal 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 Chicago Sanitary and Ship Canal River, Waterbody Segment, GI-02, is listed on the Illinois Integrated Water Quality Report and Section 303(d) List – 2006 as impaired for indigenous aquatic life use with potential causes given as iron, nitrogen, oil and grease, dissolved oxygen (non-pollutant), and phosphorus and fish consumption use with potential cause given as polychlorinated biphenyls. The partially approved 2008 Illinois Integrated Water Quality Report and Section 303(d) List is identical except that nitrogen has been removed as a potential cause. The Chicago Sanitary and Ship Canal is not subject to enhanced dissolved oxygen standards.

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

The RO wastewater will slightly increase the loading of total dissolved solids and any chemicals used in the RO process. The supernatant from the dredging operation will be returned to the CSSC. This will be an environmental improvement, since contaminated sediments will be removed from the CSSC. The equipment cleaning wastewater will contain total dissolved solids, soluble metal compounds, and trace amounts of chemical cleaning solutions. The equipment cleaning wastewater will be intermittent.

Fate and Effect of Parameters Proposed for Increased Loading.

Any metals will remain in the stream or settle out in the stream. The total dissolved solids discharged will be absorbed by aquatic or riparian terrestrial plants or will remain in the stream. None of the chemical cleaning solutions will be present in toxic amounts.

Purpose and Social & Economic Benefits of the Proposed Activity.

The increase in RO concentrate discharge will increase the use of low dissolved solids water at the Station and will help minimize the generation of equipment cleaning wastewater discharges. The dredging and return of supernatant will be an environmental improvement since contaminated sediments will be removed from the waterway and the station will have an adequate supply of cooling water. The equipment cleaning wastewater is an intermittent discharge that will allow the facility to operate efficiently.

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

The RO process is necessary to provide low dissolved solids water. The Station has investigated the off-site disposal of the additional RO wastewater. MWG believes that the alternatives are not technically or economically reasonable measures given the small amount of addition flow that is proposed.

On-site evaporation of dredging supernatant by either natural or mechanical means would not be technically and economically reasonable given the Chicago-area climate conditions and potentially significant volumes of water needing evaporation. Off-site disposal of the contaminated sediment or disposal of the supernatant is not feasible because of other environmental harm or costs. MWG believes discharge of supernatant water is the only technically and economically reasonable alternative.

The boiler cleaning water is evaporated when possible and given the incidental and very infrequent amount of this potential discharge, if it does in fact occur, the additional economic cost of pumping and off-site disposal is not an economically reasonable alternative.

The heat exchanger cleaning wastewater, the proposed intermittent discharge cannot be hauled off-site for disposal due to the additional pumping, hauling and disposal costs are not economically reasonable.

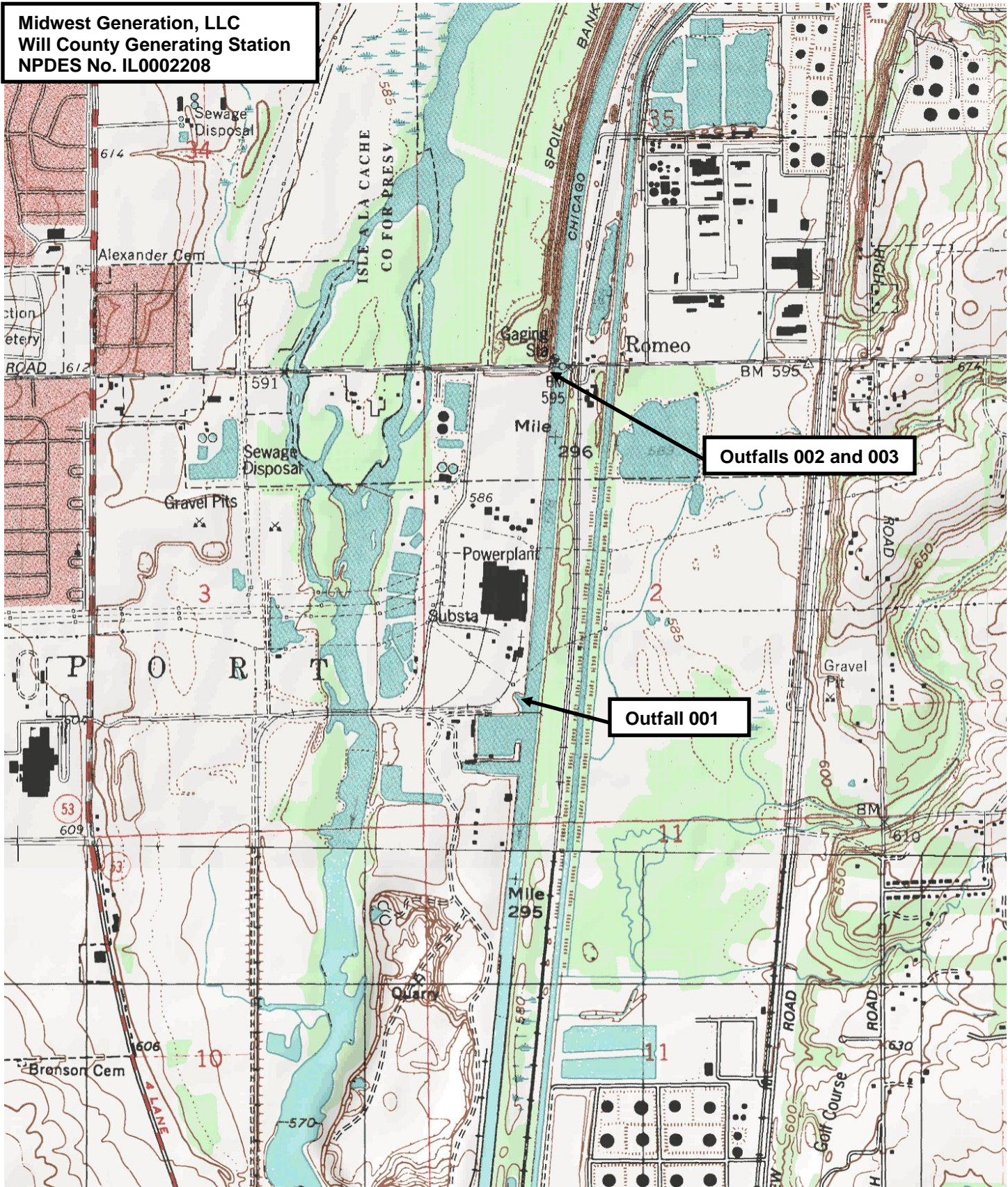
Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

On July 26, 2010, the IDNR EcoCAT web-based tool was used and indicated that Illinois Natural Area Inventory (INAI) sites, nearby presence of nature preserves, Blanding's Turtle (*Emydoidea blandingii*), Hine's Emerald Dragonfly (*Somatochlora hineana*), and Spotted Turtle (*Clemmys guttata*) were nearby. IDNR evaluated the submittal and determined that impacts to the protected resources are unlikely. IDNR terminated the consultation request on July 29, 2010.

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 operating efficiently and providing jobs and electricity. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

**Midwest Generation, LLC
Will County Generating Station
NPDES No. IL0002208**



Public Notice of Draft Permit

Public Notice Number JAR:10111901.daa 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 IL0002208 has been prepared under 40 CFR 124.6(d) for Midwest Generation, LLC, for discharge into Chicago Sanitary & Ship Canal from the Will County Generating Station, 529 East Romeo Road, Romeoville, Illinois 60441, (Will County).

The station operates two pulverized coal-fired wet bottom boilers designated units #3 and #4 rated at 268 and 542 MW respectively. The station withdraws water from the Chicago Sanitary and Ship Canal for condenser cooling, backwashing the condenser cooling water intake screens, and house service water. On-site wells supply water for sanitary uses. Wastewater is generated from once-through condenser cooling, conditioning boiler feed water, backwashing the condenser cooling water intake screens, sanitary (sinks, toilets and shower), chemical and non-chemical cleaning of plant equipment, ash handling and precipitation which contacts the site.

Plant operation results in an average discharge of 741.4 MGD of condenser cooling water and house service water from outfall 001, 0.27 MGD of reverse osmosis reject from outfall A01, 0.023 MGD of boiler blowdown, boiler drain and turbine drain from outfall B01, 0.88 MGD of recycle wastewater treatment system blowdown from outfall 002, an intermittent discharge of metal cleaning wastes from outfall A02, an intermittent discharge of coal pile runoff from outfall B02 and 0.015 MGD of sewage treatment plant effluent from 003.

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. IL0002208

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

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

Facility Name and Address:

Will County Generating Station
529 East Romeo Road
Romeoville, Illinois 60441
(Will County)

Discharge Number and Name:

001 Condenser Cooling Water and House Service Water
A01 Reverse Osmosis Wastes
B01 Boiler Blowdown, Boiler Drain and Turbine Drain
002 Recycle Wastewater Treatment System Blowdown
A02 Metal Cleaning Wastes
B02 Coal Pile runoff
003 Sewage Treatment Plant Effluent

Receiving Waters:

Chicago Sanitary and Ship Canal

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:10111901.daa

NPDES Permit No. IL0002208

Effluent Limitations and Monitoring

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

Outfall: 001 Condenser Cooling and House Service Water (DAF = 741.4 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
This discharge consists of:			Approximate Flow			
1. Condenser Cooling Water				587 MGD		
2. House Service Water				78.9 MGD		
3. Reverse Osmosis Wastes				0.1 MGD		
4. Boiler Blowdown				0.023 MGD		
5. Boiler Drain				Intermittent		
6. Turbine Drain				Intermittent		
7. Intake Screen Backwash				0.433 MGD		
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				1/Week	Grab
Total Residual Chlorine	See Special Condition 3			0.05	*	Grab
Temperature	See Special Condition 4				Daily	Continuous

*Total Residual Chlorine shall be sampled whenever chlorination or biocide addition is being performed or residuals are likely to be present in the discharge. If chlorination and biocide addition are not used during the month it shall be so indicated on the DMR.

NPDES Permit No. IL0002208

Effluent Limitations and Monitoring

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

Outfall: A01 Reverse Osmosis Wastes (DAF = 0.27 MGD)

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

Flow(MGD)	See Special Condition 1				2/Month	24-Hour Total
Total Suspended Solids			15	30	2/Month	8-Hour Composite
Oil and Grease			15	20	2/Month	Grab

NPDES Permit No. IL0002208

Effluent Limitations and Monitoring

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

Outfall: B01 Boiler Blowdown, Boiler Drain and Turbine Drain (DAF = 0.023 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				2/Month	24-Hour Total
Total Suspended Solids			15	30	2/Month	8-Hour Composite
Oil and Grease			15	20	2/Month	Grab

NPDES Permit No. IL0002208

Effluent Limitations and Monitoring

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

Outfall: 002 Recycle Wastewater Treatment System Blowdown (DAF = 0.88 MGD)

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

This discharge consists of:

Approximate Flow

- | | |
|--|--------------|
| 1. Ash Sluice System Blowdown | 0.88 MGD |
| a. Bottom ash sluice water | Intermittent |
| b. Unit Nos. 1, 2,3 and 4 slag tank overflow sumps | Intermittent |
| c. Metal cleaning wastes (chemical and non-chemical) | Intermittent |
| d. South area runoff collection basin effluent | Intermittent |
| 2. North area runoff collection basin effluent | Intermittent |
| 3. Chemical and control building floor drainage | Intermittent |

Flow(MGD)	See Special Condition 1			Daily	Continuous
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

NPDES Permit No. IL0002208

Effluent Limitations and Monitoring

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

Outfall: A02 Metal Cleaning Wastes (Intermittent Discharge)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Daily	Continuous
Total Suspended Solids			30	100	Daily	Grab
Oil and Grease			15	20	Daily	Grab
Iron			1.0	1.0	Daily	24-Hour Composite
Copper			0.5	1.0	Daily	24-Hour Composite

Sampling is only required when discharging.

NPDES Permit No. IL0002208

Effluent Limitations and Monitoring

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

Outfall: B02 Coal Pile Runoff (Intermittent Discharge)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Daily	Continuous
Total Suspended Solids				50	Daily	Grab

Sampling is only required when discharging.

Any untreated overflow from facilities designed, constructed, and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event is not subject to the above total suspended solids limitation.

NPDES Permit No. IL0002208

Effluent Limitations, Monitoring

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

Outfall: 003 Sewage Treatment Plant Effluent (DAF = 0.015 MGD, DMF = 0.03125 MGD)

PARAMETER	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				1/Week	Grab
Total Suspended Solids	3.1	13	25	50	1/Week	24-Hour Composite
BOD ₅	2.5	10	20	40	1/Week	24-Hour Composite
Total Residual Chlorine	See Special Condition 3			0.05	Daily when Chlorinating	Grab

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. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. 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 4. Pursuant to Illinois Pollution Control Board Order AS 96-10, dated October 3, 1996 and amended March 16, 2000 the facility shall comply with the following temperature limitations:

- A. At the point of discharge the receiving waters are designated as Secondary Contact and Indigenous Aquatic Life Waters by Section 302.408, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended. In the Chicago Sanitary and Ship Canal at the edge of the 26-acre mixing zone, temperatures shall not exceed 93°F (34°C) more than 5% of the time, or 100°F (37.8°C) at any time.
- B. In the main channel of the Lower Des Plaines River, at the I-55 Bridge, the effluent shall not alone or in combination with other sources cause temperatures to exceed the temperatures set forth in the following table, except in accordance with the allowable monthly excursions detailed below:

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u> <u>1-15</u>	<u>Apr</u> <u>16-30</u>	<u>May</u> <u>1-15</u>	<u>May</u> <u>16-31</u>	<u>June</u> <u>1-15</u>	<u>June</u> <u>16-30</u>	<u>July</u>	<u>Aug</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
°F	60	60	65	73	80	85	90	90	91	91	91	90	85	75	65

These standards are in lieu of the requirements of 35 Ill. Adm. Code 302.211(d) and (e) and may be exceeded by no more than 3°F during 2% of the hours in the 12-month period ending December 31, except that at no time shall Midwest Generation's plants cause the water temperature at the I-55 Bridge to exceed 93°F.

- C. When it appears that discharges from Outfall 001 have the reasonable potential to cause either the water temperatures at the downstream monitoring point to exceed the values set forth in Part (A) and/or the main channel of the Lower Des Plaines River at the I-55 Bridge to exceed the values set forth in Part (B), the permittee shall determine whether, and the extent to which, station operations must be restricted to avoid violating the above-stated limits.
- D. The permittee shall maintain and operate a water temperature monitor and a suitable back-up monitor at the I-55 Bridge downstream monitoring location. The Permittee shall develop and submit to the Agency within six months of the issuance date, a thermal model taking into account upstream flow characteristics and temperature in the receiving stream, effluent flow, temperature and any other factors required, for the purposes of predicting downstream river temperatures at points up to and including the edge of the 26-acre mixing zone and for monitoring the use of excursion hours under all conditions of temperature and flow reasonably likely to occur.
- E. Upon the approval by the Agency of a thermal model for determining the temperature at the edge of the allowed mixing zone in the Chicago Sanitary and Ship Canal in accordance with Part (D), the Permittee is required to report on the DMR the monthly maximum temperature and the cumulative number of hours used in a 12 month calendar period in which temperatures exceed the thermal standards (the "excursion hours") set forth in Part (A). For the I-55 Bridge adjusted thermal standards, the cumulative number of excursion hours used in a 12 month calendar period shall be reported separately on the monthly DMR in accordance with Part (B).

SPECIAL CONDITION 5. 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.

SPECIAL CONDITION 6. 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 7. There shall be not discharge of polychlorinated biphenyl compounds.

Special Conditions

SPECIAL CONDITION 8. 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 9. Samples taken in compliance with the effluent monitoring requirements of outfalls 001, 002 and 003 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 outfall A01, B01, A02 and B02 shall be taken at a point representative of the discharge, but prior to comingling with other wastestreams.

SPECIAL CONDITION 10. 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 (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/edmr/index.html>.

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

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

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

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 11. In order for the Agency to evaluate the potential impacts of cooling water intake structure operation pursuant to 40 CFR 125.90(b), the permittee shall prepare and submit information to the Agency outlining current intake structure conditions at this facility, including a detailed description of the current intake structure operation and design, description of any operational or structural modifications from original design parameters, source waterbody flow information, or other information as necessary. The information submitted should be in accordance with the previously submitted information collection proposal received by the Agency on July 25, 2005.

The information shall also include a summary of historical 316(b) related intake impingement and / or entrainment studies, if any, as well as current impingement mortality and / or entrainment characterization data; and shall be submitted to the Agency within six (6) months of the permit's effective date.

Upon the receipt and review of this information, the permit may be modified to require the submittal of additional information based on a Best Professional Judgment review by the Agency. 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.

SPECIAL CONDITION 12. The Permittee shall monitor the effluent from outfalls 001 and 002 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 10 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
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab) (weak acid dissociable)	5.0 ug/L
00720	Cyanide (grab not to exceed 24 hours) (total)	5.0 ug/L

Special Conditions

00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

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

*1.0 ng/L = 1 part per trillion.

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

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. The permittee shall notify the Agency within 30 days of decommissioning or permanently removing from service any generating units. The notice shall identify which units were removed from service and any changes to the discharge quality, including temperature or quantity.

SPECIAL CONDITION 16. The cooling water prior to entering the intake structure and at outfall 001 shall be grab sampled once per week at the same time of day within ½ hour of each other between 9:00 a.m. and 3:00 p.m. in a randomized fashion for dissolved oxygen. The results in mg/l and the time of day the influent and effluent sample was taken shall be reported to the Agency as an attachment to the DMR.

SPECIAL CONDITION 17. Coal pile runoff and the discharges identified on page 5 of this permit as bottom ash sluice water and north area runoff collection basin effluent shall be individually grab sampled on a semi-annual basis. The wastes shall be analyzed for mercury utilizing USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E. The minimum reporting limit shall be one part per trillion. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The results shall be submitted to the address in special condition 10 in June and December.