ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

August 3, 2011

Ameren Energy—E.D. Edwards	)	
	)	
Petitioner,	)	
	)	
v.	)	IEPA – 12-03
	)	(Provisional Variance-Water)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

Re: Provisional Variance Extension from Effluent Limits Contained in NPDES Permit IL0001970

Dear Mr. Menne:

The Illinois Environmental Protection Agency (Agency) has completed its technical review of the attached provisional variance extension request, received August 2, 2011 (Exhibit A) from Ameren Energy—E.D. Edwards Power Plant ("Ameren Edwards"). The original provisional variance was issued by the Illinois EPA on July 22, 2011. An extension to the variance from the thermal limits in the aforementioned NPDES Permit is requested so that Ameren Edwards may continue operating through this unusually hot and dry period of weather which has resulted in high river temperatures.

Based on its review, the Agency GRANTS Ameren Edwards a provisional variance extension subject to the specific conditions set forth below.

Background

Ameren Edwards Power Station is an electric generating station owned and operated by Ameren and located in Bartonville, Peoria County. Ameren Edwards is a coal-fired generation facility on the west side of the Illinois River. Ameren Edwards consists of three steam electric generating units with a net generation rating of 117 MW, 262 MW, and 361 MW. Units 1, 2, and 3 went into commercial operation in 1960, 1968, and 1972, respectively. All three units burn different blends of coal. Various coals are transported to the site by rail and blended onsite for each unit. The three units' start-up power is supplied through a switchyard breaker, start-up transformer, and a circuit breaker located in the Ameren Edwards 138 kV switchyard. Illinois EPA issued NPDES Permit No. IL0001970 to Ameren Edwards, effective February 1, 2006. (Exhibit B) Ameren Edwards timely filed a renewal application that is currently pending before Illinois EPA permits section.

Ameren Edwards discharges an annual average of 352.6 million gallons per day of condenser cooling water to the Illinois River. The high heat and low river flow during July and August 2011 have contributed to elevated water temperatures in the Illinois River Basin, including at Ameren Edwards' cooling water intake. The Illinois River is experiencing temperatures higher than any time during the last two years. The already warmer than normal intake water is increased in temperature during the once-through cooling process and thus results in discharges that are above the plant's average discharge temperatures during the summer months.

The current weather conditions in combination with the low flow of the Illinois River create high intake water temperatures. Ameren Edwards would have to cut back operation significantly to comply with the temperature limits contained in NPDES Permit IL0001970. In support of the extension request, Ameren Edwards submitted the following information about influent and effluent water temperatures at Ameren Edwards, showing that Ameren Edwards is experiencing a hardship meeting thermal permit limits:

> Ambient river temperatures measured at the Plant
>
> Midnight last night (August 2, 2011) ~ 90.3 degrees (Fahrenheit)
> 8:00 am this morning (August 3, 2011) ~ 89.7 degrees (Fahrenheit)
> Noon today (August 3, 2011) ~ 90 degrees (Fahrenheit)
>
> Temperatures as of 2:00 pm at edge of mixing zone ~91.4 degrees—1.4 degrees above NPDES special condition 3 base temperature limit (90 degrees).
>
> . . .
>
> Peoria Lake represents a large heat sink fueled by solar radiation that is throttled through the Corps of Engineers lock and dam north of the [Ameren Edwards] plant. Consequently, despite nominal reductions in extreme ambient temperature conditions, it takes some time for the latent heat built up in the lake to dissipate. (Exhibit C)

Relief Requested

Special Condition 3 of NPDES Permit IL0001970 applies monthly maximum thermal limits to Ameren Edwards' discharges during the summer months (April through November). Special Condition 3 provides that water temperature at the edge of the mixing zone shall not exceed 90 degrees Fahrenheit more than 1% of the hours in a year, and at no time exceed 93 degrees Fahrenheit. (Exhibit B)

Ameren Edwards stated in its July 21, 2011 request that the low river flows compounded with extended elevated temperatures and high energy demand will cause temperatures at the edge of the mixing zone to exceed the temperature limits contained in Special

Condition 3, the first temperature exceedance having occurred during the afternoon of July 21, 2011. Ameren Edwards requested a variance from the thermal limits applicable to Outfall 002 to the Illinois River. In lieu of the monthly maximum temperature limits in Special Condition 3, Ameren Edwards requested that Illinois EPA grant a provisional variance that prohibits water temperatures at the edge of the mixing zone from exceeding 90 degrees Fahrenheit more than 14 days during the term of the variance, and 96 degrees Fahrenheit at any time during that 14-day period. With the August 2, 2011 extension request, Ameren Edwards requests to extend the provisional variance for an additional 10 days (beginning August 4, 2011) under the same conditions.

Agency Determinations

The Agency has reviewed the requested provisional variance extension and has concluded the following:

1. Any environmental impact from the requested relief shall be closely monitored and the Agency shall be immediately notified of any adverse impacts.

2. No reasonable alternatives appear available;

3. No public water supplies should be affected;

4. No federal regulations preclude the granting of this request; and

5. Ameren Edwards will face an arbitrary and unreasonable hardship if the request is not granted.

Conditions

The Illinois EPA hereby GRANTS Ameren Edwards a provisional variance extension from Special Condition 3 of NPDES Permit IL0001970, subject to the following conditions:

A. The term of this provisional variance extension shall begin on August 4, 2011, and end no later than August 14, 2011. During this term, the water temperature at the edge of the mixing zone provided in NPDES Permit IL0001970 shall not exceed 90 degrees Fahrenheit for more than 10 days and the water temperature shall not exceed 96 degrees Fahrenheit at any time during the provisional variance extension term.

B. This provisional variance extension is granted based on the facts and circumstances described in the requests dated July 21, 2011 and August 2, 2011, including several consecutive days of abnormally high temperatures at Ameren Edwards. If the facts and circumstances described in the requests dated July 21, 2011 and August 2, 2011 abate, the term of this provisional variance will end.

C. Ameren Edwards must continuously monitor discharge and receiving water temperatures and visually inspect all discharge areas at least four times per day to assess any mortalities to fish and other aquatic life. This monitoring shall occur during the period of the provisional variance extension and shall continue for a minimum of two days after the provisional variance extension expires. Ameren Edwards shall provide the best operation of its available equipment to produce the best effluent possible at all times during the term of this provisional variance extension. At no time shall the water temperature at the edge of the mixing zone exceed a temperature of 96 degrees Fahrenheit during the term of this provisional variance extension.

D. Ameren Edwards shall document environmental conditions during the term of the provisional variance extension and submit the documentation to the Illinois EPA and the Department of Natural Resources within seven (7) days after this provisional variance extension expires.

E. Ameren Edwards shall immediately notify the Illinois EPA and the Department of Natural Resources of any unusual conditions, including mortalities of fish or other aquatic life, immediately take action to remedy the problem, investigate and document the cause and seriousness of the unusual conditions while providing updates to the Illinois EPA and the Department of Natural Resources as changes occur until normal conditions return; notify the Illinois EPA and the Department of Natural Resources when normal conditions return and submit the documentation to the Illinois EPA and the Department of Natural Resources within seven (7) days after normal conditions return.

F. Ameren Edwards shall develop and implement a response and recovery plan to address any adverse environmental impact due to thermal conditions that could result from the provisional variance and the extension to the provisional variance, including loss and damage to aquatic life.

G. Ameren Edwards shall notify Roger Callaway, of Illinois EPA, by telephone at 217-782-9720 when the discharge specified in this provisional variance extension ends. Written confirmation shall be sent within five days to the following address:

Illinois Environmental Protection Agency
Bureau of Water - Water Pollution Control
Attention: Roger Callaway
1021 North Grand Avenue East, CAS #19
Springfield, Illinois 62794-9276

H. Ameren Edwards shall sign a certificate of acceptance of this provisional variance extension and forward that certificate to Roger Callaway at the address indicated above within one day after the date of this order.

The certification should take the following form:

> I (We)_____, hereby accept and agree to be bound by all terms and conditions of the provisional variance granted on July 22, 2011 and the extension to that provisional variance granted by the Agency in _____dated _____.
>
> _____ _____
> Petitioner Title
>
> _____ _____
> Authorized Agent Date

Ameren shall continue to monitor all parameters included in and comply with all other conditions specified in its NPDES Permit No. IL0001970.

Conclusion

The Agency grants this provisional variance extension in accordance with its authority contained in Sections 35(b), 36 (c), and 37(b) of the Illinois Environmental Protection Act (415 ILCS 5/35(b), 36(c), and 37(b) (2004). The decision to extend this provisional variance is not intended to address compliance with any other applicable laws or regulations.

Sincerely,

John J. Kim
Chief Legal Counsel

cc: Marcia Willhite
Roger Callaway
Chad Kruse

August 2, 2011

Mr. Roger Callaway
Division of Water Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. box 19276
Springfield, Illinois 62794-9276

RE: Ameren Energy – E. D. Edwards Power Plant
NPDES Permit No. IL0001970
Thermal Provisional Variance Extension

Dear Mr. Callaway:

AmerenEnergy Resources Company (hereinafter "Ameren" or "the Company") requests that the Illinois Environmental Protection Agency grant an extension to the July 22, 2011, Provisional Variance issued to the Edwards Energy Resource Facility for thermal discharges. Persistent above normal temperatures, creating high ambient temperatures in the Peoria Lake segment of the river, coupled with low river flow conditions continue to exacerbate the Plants' ability to meet the temperature limits contained in Special Condition 3 of the NPDES Permit (Permit No. IL0001970). The station is located immediately south of a US Army Corp of Engineer (USACE) lock and dam structure. The USACE maintains those facilities for both recreational and flood control purposes and periodic releases result in a wide fluctuation of water levels in the river segment impacting the Edwards Station. High temperature conditions combined with the low flow conditions that follow these USACE releases exacerbate the thermal conditions at the Company's intake. Ameren requests an extension of current variance conditions for an additional ten (10) days beyond the August 3rd term of the existing variance in order to avoid an arbitrary and unreasonable hardship to the Company and our customers.

In addition to the considerations identified above, Ameren provides the following supplemental information in support of this request. The Company has relied on the existing variance for seven of the twelve previous days due to weather and river conditions. During this period the Company adhered to the conditions of the variance and noted no adverse aquatic impacts during discharge area inspections. The Company was also able to comply with the 98 degree temperature provision of the variance.

In closing, Ameren respectfully requests your prompt consideration for an extension of variance conditions on the basis of information provided in our July 20, 2011 variance petition due to prolonged temperature and river flow conditions. Any questions may be directed to Mr. John Pozzo at 314 554 2280 (work), or 314 420 8543 (cell).

Very truly yours,

for Michael L. Menne
Vice President, Environmental Services

E.D. Edwards Power Plant
NPDES Permit IL0001970

NPDES Permit No. IL0001970

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: January 31, 2011

Issue Date: January 11, 2006
Effective Date: February 1, 2006

Name and Address of Permittee:

Ameren Energy Resources Generating Company
MC 602
P.O. Box 66149
St. Louis, MO 63166

Facility Name and Address:

Ameren Energy Resources Generating Company
E.D. Edwards Power Plant
7800 South CILCO Road
Bartonville, Illinois 61607
(Peoria County)

Discharge Number and Name:		Receiving Waters:
001	Ash Pond Discharge	Illinois River
002	Condenser Cooling Water	Illinois River
A02	Sewage Treatment Plant Effluent	Illinois River
B02	Boiler Blowdown	Illinois River
003	Intake Screen Backwash	Illinois River
004	Stormwater	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

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

SAK:BMB:05062802.daa

NPDES Permit No. IL0001970

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:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall(s): 001 Ash Pond Discharge*						
This discharge consists of the following:						
1. Fly Ash Sluice Water					3.06 MGD	
2. Bottom Ash, Economizer Ash and Pyrites Sluice Water					1.07 MGD	
3. Air Preheater Wash Water					Intermittent	
4. Lime Softening Water Treatment Waste					0.035 MGD	
5. Water Treatment Filter Backwash					Intermittent	
6. Demineralizer Regenerant Waste					0.035 MGD	
7. Boiler and Turbine Room Sumps					1.03 MGD	
8. Coal Pile Runoff					Intermittent	
9. Yard Substation and Track Drains					Intermittent	
Total:					5.27 MGD	
Flow (MGD)					1/Week	24 Hour Total
pH	See Special Condition 1				1/Week	Grab
Total Suspended Solids			15	30	1/Week	8 Hour Composite
Oil and Grease			15	20	1/Month	Grab
Mercury	See Special Condition 17				1/Month	Grab

*Normal operations employ dry and wet fly ash handling.

NPDES Permit No. IL0001970

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:

PARAMETER	LOAD LIMITS lbs/day DAF (DMF) 30 DAY AVERAGE	LOAD LIMITS lbs/day DAF (DMF) DAILY MAXIMUM	CONCENTRATION LIMITS mg/l 30 DAY AVERAGE	CONCENTRATION LIMITS mg/l DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall(s): 002 Condenser Cooling Water					Approximate Flow	

This discharge consists of the following:

1.	Main Condenser Cooling Water	319 MGD
2.	Turbine Auxiliary Cooling Water	32.4 MGD
3.	Miscellaneous Equipment Cooling Water	1.1 MGD
4.	Sewage Treatment Plant Effluent	0.007 MGD
5.	Boiler Blowdown	0.021 MGD
6.	Roof Drains	Intermittent
Total:		352.6 MGD

Flow (MGD)					Daily	Continuous
Total Residual Chlorine*				0.05	1/Week	Grab
Temperature	See Special Condition 3				1/Day	Calculation

Outfall(s): A02 Sewage Treatment Plant Effluent (DMF 0.021 MGD)

Approximate Flow is 0.007 MGD

Flow (MGD)					1/Month	Estimate
pH	See Special Condition 1				1/Month	Grab
Total Suspended Solids	5.3	11	30	60	1/Month	8 Hour Composite
BOD_5	5.3	11	30	60	1/Month	8 Hour Composite
Fecal Coliform	See Special Condition 4				1/Month	Grab

*See Special Condition 5

NPDES Permit No. IL0001970

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:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall(s): B02 Boiler Blowdown						
Approximate Flow is 0.021 MGD						
Flow (MGD)					2/Month	Estimate
pH	See Special Condition 1				2/Month	Grab
Total Suspended Solids			15	30	2/Month	8 Hour Composite
Oil and Grease			15	20	2/Month	8 Hour Composite

Outfall(s): 003 Intake Screen Backwash

Approximate Flow is 0.05 MGD

During maintenance of trash rack or intake screen, any debris collected shall not be returned to the river but shall be properly disposed.

Outfall(s): 004 Stormwater

See Special Condition 15.

NPDES Permit No. IL0001970

Special Conditions

SPECIAL CONDITION 1. 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 2. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 3. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:

A. Maximum temperature rise above natural temperature must not exceed 5°F (2.8°C).

B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F (1.7°C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
°F	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

C. The permittee shall determine if the effluent exceeds the above limitations by direct measurement or by using the following equations:

$$\frac{\text{Total Flow of Outfall 002}}{\text{Flow of River}} \times (\text{Outlet Temperature} - \text{Inlet Temperature}) = \text{Temperature rise of the River}$$

to determine the maximum temperature of the river use:

Temperature Rise of the River + Inlet Temperature = Maximum River Temperature.

SPECIAL CONDITION 4. The daily maximum fecal coliform count shall not exceed 400 per 100 mL.

SPECIAL CONDITION 5. The sample date, the total flow from Outfall 002 (MGD), the condenser cooling water flow (MGD), the total residual chlorine concentration and pounds of chlorine applied shall be reported for each sampling date. Sampling shall be conducted during time periods when chlorination is performed. The permittee shall notify this Agency in writing one week prior to the beginning of chlorination and one week prior to the discontinuance of chlorination each year.

The discharge shall comply with the 0.011 mg/L TRC water quality standard at the edge of the mixing zone. Compliance with the water quality standard shall be determined by measuring TRC in the effluent. The effluent limit to determine water quality standards compliance is 0.05 mg/L.

SPECIAL CONDITION 6. Ameren Energy Resources Generating Company Edwards Power Plant has complied with Section 302.211F of Title 35, Chapter 1, Subtitle C: Water Pollution Regulations and Section 316(a) of the CWA by demonstrating that thermal discharge from E. D. Edwards Generating Station has not caused and cannot reasonably be expected to cause significant ecological damage to the Illinois River as stated and approved in PCB order 80-90 dated February 19, 1981. Pursuant to 35 Ill. Adm. Code 302/211(g) no additional monitoring or modification is being required for reissuance of this NPDES Permit.

SPECIAL CONDITION 7. Ameren Energy Resources Generating Company, formerly Central Illinois Light Company, demonstrated for the E.D. Edwards Power Plant, compliance with the previous 316(b) ruling, as indicated in the Agency letter of December 4, 1981.

NPDES Permit No. IL0001970

Special Conditions

SPECIAL CONDITION 8. The Permittee's facility has been deemed to meet the criteria as a Phase II existing facility (under section 316(b) of the Clean Water Act) pursuant to 40 CFR 125.91. Therefore, the permittee must fulfill the applicable requirements of 40 CFR 125 Subpart J, and 40 CFR 122(r)(2), (3) and (5). The regulation at 40 CFR 125.95 requires submittal of a Proposal for Information Collection (PIC) to support the development of a Comprehensive Demonstration Study (CDS) for the herein permitted facility. The PIC will be reviewed by the Agency and a response will be provided. An extension of time to submit the CDS has been granted. Therefore, you must submit your CDS on or before January 7, 2008. Once the CDS has been reviewed by the Agency and a compliance strategy has been approved, this permit will be modified to include implementation, monitoring, and reporting requirements pursuant to 40 CFR 125.98.

SPECIAL CONDITION 9. There shall be no discharge of polychlorinated biphenyl compounds (PCBs).

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 15th 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. The provisions of 40 CFR 122.41(m) and 122.41(n) are applicable to this permit.

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. For the purpose of this permit, the discharge outfall 002 is limited to main condenser cooling water, turbine auxiliary cooling water, miscellaneous equipment cooling water, sewage treatment plant effluent, boiler blowdown and roof drains, free from other wastewater discharges. In the event that the permittee shall require the use or change in use of water treatment additives, other than those additives outlined in the renewal application, the permittee must request a change in this permit in accordance with the Standard Condition – Attachment H.

SPECIAL CONDITION 15.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. For outfall 004, a storm water pollution prevention plan shall be developed 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.

NPDES Permit No. IL0001970

Special Conditions

B. The plan shall be completed within 180 days of the effective date of this permit. Plans shall provide for compliance with the terms of the plan within 365 days of the effective date of this permit. The owner or operator of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request. [Note: If the plan has already been developed and implemented it shall be maintained in accordance with all requirements of this special condition.]

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 G 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 the shortest reasonable period of time, and shall be provided to the Agency for review upon request.

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

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.

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.

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.

5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.

6. A summary of existing sampling data describing pollutants in storm water discharges.

F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:

1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.

2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.

3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.

4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill 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;

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;

VI. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.

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 and 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.

NPDES Permit No. IL0001970

Special Conditions

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. 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.

H. 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.

I. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.

J. 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.

Construction Authorization

K. 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).

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights thereunder.

2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.

3. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.

4. 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

L. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part G of the Storm Water Pollution Prevention Plan of this permit. 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).

M. 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.

N. Annual inspection reports shall be mailed to the following address:

Special Conditions

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

O. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

SPECIAL CONDITION 16. The Agency has determined that for outfall 001 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 17. Outfall 001 shall be monitored for mercury on a monthly basis until twelve samples have been collected. After collection of all required samples, and upon written notification to the Agency the sampling may cease, unless the Agency modifies the permit to require continued sampling at some frequency. Low-level mercury monitoring shall be performed using USEPA analytical test method 1631 or equivalent.

ATTACHMENT H

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, Ch. 111 1/2 Ill. Rev. Stat. Sec. 1001-1052 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L. 92-500, as amended, 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

(1) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

(2) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.

(3) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

(6) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) Duty to provide information. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit.

(9) Inspection and entry. The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. This period may be extended by request of the Agency at any time.

(c) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

(d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) Signatory requirement. All applications, reports or information submitted to the Agency shall be signed and certified.

(a) Application. All permit applications shall be signed as follows:

(1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) Reports. All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(12) Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.

(b) Anticipated noncompliance. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

(2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.

(e) Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit to be reported within 24 hours;

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

(f) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (12)(c), (d), or (e), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12)(e).

(g) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) Transfer of permits. A permit may be automatically transferred to a new permittee if:

(a) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;

(b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees, and

(c) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.

(14) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:

(a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 ug/l);

(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or

(4) The level established by the Agency in the permit.

(b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.

(15) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:

(a) Any new introduction of pollutants into that POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and

(b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(16) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:

(1) User charges pursuant to Section 204(b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;

(2) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and

(3) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.

(17) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.

(18) Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.

(19) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.

(20) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than $2,500, nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both.

(21) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(22) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit shall, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(23) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.

(24) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.

(25) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board.

(26) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.

Kruse, Chad

From: Pozzo, John C [JPozzo2@ameren.com]
Sent: Wednesday, August 03, 2011 2:21 PM
To: Callaway, Roger; Kruse, Chad
Subject: Edwards Provisional Variance Extension Request

Mr. Callaway & Mr. Kruse

Per our conversation earlier this afternoon I am providing the following information in support of our provisional variance extension request for the Edwards Station.

Ambient river temperatures measured at the Plant
Midnight last night ~ 90.3 degrees
8 am this morning ~ 89.7 degrees
Noon today ~ 90 degrees

Temperatures as of 2 pm at edge of mixing zone ~ 91.4 degrees – 1.4 degrees above NPDES special condition 3 base temperature limit (90.degrees.)

Although we are requesting a 10 day extension, we fully understand conditions of the variance prompt agency notification in the event weather conditions abate. With an abatement of the weather factors contributing to current river conditions, Ameren will provide notification to the agency before the end of the 10 extension, as appropriate.

In addition, as I explained during our conversation, Peoria Lake represents a large heat sink fueled by solar radiation that is throttled through the Corps of Engineers lock and dam north of the plant. Consequently, despite nominal reductions in extreme ambient temperature conditions, it takes some time for the latent heat built up in the lake to dissipate. This condition is somewhat unique to Edwards Plant verses other river plants.

If you have further questions do not hesitate to call.

JOHN POZZO
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