ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

October 31, 2005

Dresden Nuclear Generation Station	)	
	)	
	)	
Petitioner,	)	
	)	
v.	)	IEPA – 06-09
	)	(Provisional Variance-Water)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

Re: Provisional Variance From Special Conditions 4A, 4D, and 4G of NPDES Permit IL0002224

Dear Mr. Wozniak:

The Illinois Environmental Protection Agency (Agency) has completed its technical review of the attached provisional variance request (Attachment A) submitted by Dresden Nuclear Generation Station (Dresden Station) on October 14, 2005. Dresden Station is requesting this provisional variance so that it can install a redundant lift station main breaker and replace all six of the lift pump breakers. These improvements will significantly improve the reliability of the cooling pond lift station. Based on its review, the Agency GRANTS a provisional variance subject to the specific conditions set forth below.

Background

Dresden Station is a nuclear-fueled steam electric generating facility located at the confluence of the Des Plaines and Kankakee Rivers near Morris, Illinois, at River Mile 272.3. The two boiling reactors have a maximum generating capacity of 1824 megawatts electric. Circulating water used to cool and condense the steam from the generating process is discharged to a 1275 acre cooling pond.

Dresden Station normally operates in a closed cycle mode from October 1 through June 14 (about 8 ½ months). In the closed cycle mode, approximately 1,000,000 gallons per minute (gpm) of cooling water is drawn into the station's cribhouse intake structure, passes through the station's heat exchangers, and discharges to a hot canal that routes the water approximately two miles to the lift station. The lift station lifts the 1,000,000 gpm of the cooling water approximately 20 feet from the hot canal to the aboveground cooling pond. The cooling water

routes around the cooling pond and spills over a spillway into the cold canal, which routes the cooling water approximately two miles back to the station. The flow regulating gates direct the majority of the cooling water back to the cribhouse intake structure through a return canal. These gates divert approximately 5 percent or 50,000 gpm of the cooling water flow (limited to 72 million gallons per day (MGD)) to the Illinois River via Outfall 002. The Kankakee River provides makeup flow through a ¼-mile intake canal. The volume of makeup flow is equal to the blowdown flow and water lost to evaporation.

From June 15th to September 30th (about 3 ½ months), Dresden is allowed to operate in an in-direct open cycle mode. In this mode, approximately 1,000,000 gpm of cooling water is drawn into the station's cribhouse intake structure from the Kankakee River via the intake canal. This cooling water passes through Dresden's heat exchangers and discharges to the hot canal that routes the water approximately two miles to the lift station. The lift station lifts the cooling water approximately 20 feet from the hot canal to the aboveground cooling pond. The cooling water routes around the cooling pond and spills over the spillway into the cold canal, which routes the cooling water approximately two miles back to the station. The flow regulating gates divert all the cooling water flow (approximately 1,000,000 gpm) to the Illinois River via Outfall 002. The Illinois Pollution Control Board approved this operational scheme and the related alternate thermal standards on July 9, 1981.

The lift station is equipped with six lift pumps, each with a 167,000-gpm capacity. The pumps provide motive force that allows the cooling water to flow around the cooling pond, over the spillway, through the cold canal to the flow regulating gates.

Relief Requested

Dresden Station seeks a variance from Special Conditions 4A, 4D,and 4G of NPDES Permit IL0002224 (Attachment B). Special Condition 4A requires that the maximum temperature rise above natural temperature must not exceed 5° at the edge of the mixing zone, in accordance with Section 302.211(d) of Subtitle C (35 Ill. Adm. Code Sec. 302.211(d)) when operating in close cycle mode. Special Condition 4D requires that Dresden operate in the closed cycle mode during the period October 1 to June 14. Special Condition 4G allows Dresden to bypass the cooling pond only when both generating units are out of service. A variance from these conditions will allow Dresden Station to operate in direct open cycle mode (i.e., bypass the cooling pond).

Dresden Station requests that the provisional variance begin on Tuesday, November 1, 2005, and potentially extend into Sunday, November 20, 2005, during which time Dresden Station can operate in direct open cycle mode for 180 hours. During this period, Dresden Station will install new 4KV switchgear with a backup Main Feed Breaker (MFB). Once the installation is complete, the lift station will have redundant powerlines, redundant transformers, and redundant MFBs, which will enable the lift station to withstand any single component failure. In addition, Dresden Station will also replace the six lift pump breakers with new breakers.

To minimize the thermal discharge from the plant, the provisional variance period coincides with a scheduled refueling outage in November when the station requires one-half of the normal

cooling requirements. In addition, here will be a period of several days when both units are out of service, further minimizing the thermal output during the this period.

Agency Determiniations

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

1. No significant environmental impact will occur as a result of this provisional variance. Dresden Station will closely monitor the environmental impact from the requested relief and will immediately notify the Agency of any significant impact along with actions taken to remedy the problem;

2. No reasonable alternatives appear available;

3. No public water supplies will be affected;

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

5. Dresden Station will face an arbitrary and unreasonable hardship if the request is not granted.

Conditions

The Agency hereby GRANTS the Dresden Station a provisional variance from Special Conditions 4A, 4D, and 4G of NPDES Permit IL0002224, subject to the following conditions:

A. The provisional variance shall begin on Tuesday, November 1, 2005, and potentially extend into Sunday, November 20, 2005, during which time Dresden Station can operate in direct open cycle mode for 180 hours;

B. Dresden Station shall comply with the General Use thermal discharge standards outlined in its NPDES permit's Special Condition 4B during the variance period;

C. Dresden Station shall continuously monitor intake, discharge and Dresden Lock and Dam temperatures to so it can document environmental conditions during the variance period. Dresden Station shall also conduct visual inspections on a daily basis in the vicinity of the intake and the discharge, so it can document the effects of the increased thermal output to the river. Dresden Station shall notify the Agency if it identifies any unusual or unexpected environmental impact;

D. Dresden Station shall conduct additional biological monitoring of the resident fish community, which shall consist of fish sampling during and after the variance period. Dresden Station shall conduct two surveys at eight locations using electrofishing, and two surveys at seven locations using seining. Dresden Station

shall also monitor the physical conditions by compiling temperature and oxygen profiles in all appropriate survey locations;

E. Dresden Station shall conduct additional biological monitoring of the benthos community, which shall consist of macro invertebrate sampling just prior to and just after the variance period. These two surveys shall be performed at six locations using a Ponar grab sampler;

F. Dresden Station shall notify Roger Callaway of the Agency by telephone at 217/782-9720 when the need to operate in direct open mode begins and again when the 180 hours are utilized. Written confirmation of each notice 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, MC #19
Springfield, Illinois 62794-9276

G. Dresden Station shall sign a certificate of acceptance of this provisional variance and forward that certificate to Roger Callaway at the address indicated above within one day of 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 by the Agency in _____dated _____.

_____
Petitioner

_____
Authorized Agent

_____
Title

_____
Date

Dresden Station shall continue to monitor and maintain compliance with all other parameters and conditions specified in its NPDES Permit No. IL0002224.

Conclusion

The Agency grants this provisional variance 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 grant this provisional variance is not intended to address compliance with any other applicable laws or regulations.

Sincerely,

Robert A. Messina
Chief Legal Counsel

cc: Marcia Willhite
Roger Callaway
Vera Herst

Exelon Nuclear

Exelon Generation Company, LLC
Dresden Nuclear Power Station
6500 North Dresden Road
Morris, IL 60450-9765

www.exeloncorp.com

DBWLtr 05-022

VIA AIRBORNE EXPRESS

Mr. Mike Garretson
Manager, Compliance Assurance Section #19
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Avenue East
P. O. Box 19276
Springfield, Illinois 62794-9276

Subject: Dresden Nuclear Generation Station
NPDES Permit No. IL0002224
Provisional Variance - Request for Installing Redundant Lift Station Main Breaker

Dear Mr. Garretson:

The purpose of this request is to allow Dresden Station to operate in the Direct Open Cycle mode for a maximum of 180 hours during a twenty-day period in order to install a redundant Lift Station Main Breaker and replace all six Lift Pump Breakers, significantly improving the reliability of the cooling pond Lift Station. Exelon Generation Company, LLC. ("Exelon") hereby requests that a provisional variance be granted for its Dresden Generating Station ("Dresden" or "station") as provided for by Title IX, Section 35, Subsection (b) of the Illinois Environmental Protection Act ("Act").

BACKGROUND

Dresden is a nuclear-fueled steam electric generating facility located at the confluence of the Des Plaines and Kankakee Rivers near Morris, Illinois, at River Mile 272.3. The two boiling water reactors have a maximum generating capacity of 1824 megawatts electric. Circulating water used to cool and condense the steam from the generating process is discharged to a 1275 acre cooling pond.

The Station normally operates in a Closed Cycle mode from October 1st through June 14th of each year (about 8-1/2 months). In this mode, approximately 1,000,000 gallons per minute (gpm) of cooling water is drawn into the station's Cribhouse intake structure, passes through the station's heat exchangers, and discharges to a hot canal that routes the water approximately two miles to the Lift Station. The Lift Station lifts the 1,000,000 gpm of the cooling water approximately 20 feet from the hot canal to the aboveground cooling pond. The cooling water routes around the cooling pond and spills over a Spillway into the cold canal. The cold canal routes the cooling water approximately two miles back to the station. The Flow Regulating Gates direct the majority of the cooling water back to the Cribhouse intake structure through a return canal. The Flow Regulating Gates divert approximately 5 percent or 50,000 gpm of the cooling water flow (limited to 72 million gallons per day (MGD)), to the Illinois River via Outfall 002. The Kankakee River provides makeup flow through a ¼-mile intake canal. The volume of makeup flow is equal to the blowdown flow and water lost to evaporation.

Dresden is allowed to operate in an In-Direct Open Cycle mode from June 15th to September 30th of each year (about 3-1/2 months). In the Indirect Open Cycle mode, approximately 1,000,000 gpm of cooling water is drawn into the station's Cribhouse intake structure from the Kankakee River via the intake canal. This cooling water passes through the station's heat exchangers and discharges to the hot canal that routes the water approximately 2 miles to the Lift Station. The Lift Station lifts the cooling water approximately 20 feet from the hot canal to the aboveground cooling pond. The cooling water routes around the cooling pond and spills over the Spillway into the cold canal. The cold canal routes the cooling water approximately two miles back to the station. The Flow Regulating Gates divert all the cooling water flow (approximately 1,000,000 gpm) to the Illinois River via Outfall 002. The Illinois Pollution Control Board ("IPCB") approved this operational scheme and the related alternate thermal standards on July 9, 1981, (IPCB #79-134).

The Lift Station is equipped with six lift pumps, each with a 167,000-gpm capacity. The lift pumps provide motive force that allows the cooling water to flow around the cooling pond, over the Spillway, through the cold canal to the Flow Regulating Gates.

I. RELIEF REQUESTED

A provisional variance is being requested from Special Condition Nos. 4A, 4D and 4G in NPDES Permit No. IL0002224.

- **Special Condition 4A requires that the maximum temperature rise above natural temperature must not exceed 5° F at the edge of the mixing zone, in accordance with Section 302.211(d) when operating in closed cycle mode.**

- **Special Condition 4D requires that Dresden operate in the Closed Cycle mode during the period October 1st to June 14th.**

- **Special Condition 4G allows the station to bypass the cooling pond only when both generating units are out of service.**

Based on historical Illinois River flow data we reasonably anticipate that the temperature rise in the Illinois River will remain within the 5 F temperature limit of Special Condition 4A during the Provisional Variance period. In response to your specific request we have determined a worst-case scenario that would occur with extremely low Illinois River flows. Assuming Illinois River flow dropped to 1,000,000 gpm; a Plant discharge temperature rise of 14 F, and, a Discharge Canal flow of 1,000,000 gpm, the maximum temperature rise in the Illinois River may reach as high as 7 F. However, we do not anticipate the Illinois River flows to drop below 2,000,000 gpm during the provisional variance period.

Specifically, Exelon requests that Dresden be allowed take the Lift Station out of service and operate in the Direct Open Cycle mode (i.e. bypass the cooling pond) for 180 hours during a twenty-day period. The period would begin on Tuesday, November 1st, and potentially extend into Sunday November 20, 2005.

During this period, Dresden will install new 4KV switchgear with a backup Main Feed Breaker (MFB). Once this installation is complete the Lift Station will have redundant power lines, redundant transformers and redundant MFBs, enabling the Lift Station power supply system to withstand any single component failure. Dresden will also replace all six aging Lift Station Pump breakers with new breakers. These actions will significantly increase the reliability of the Lift Station.

This work is scheduled to coincide with a refueling outage on one of the Station's two generating units in order to minimize the thermal discharge from the plant during the provisional variance period. There will be a period of several days when both units are out of service further minimizing the thermal output during the provisional variance period.

II. NECESSITY FOR REQUEST

The requested provisional variance will enable Dresden to install new 4KV switchgear with a redundant Lift Station MFB. With the installation of a redundant Lift Station MFB, the Lift Station will continue to operate even with a loss of a power supply, or the loss of a main transformer or the loss of the MFB. Prior to these upgrades a loss of any of these power supply components would force the bypass of the cooling pond in violation of NPDES Permit Special Condition 4G, and, cause the effluent temperature to exceed 93 degrees F in violation of NPDES Permit Special Condition 4B. To reduce the potential for this type of event, Dresden is implementing the final hardware piece needed to make the power supply single failure proof.

This hardware upgrade can only be accomplished while the Lift Station is out of service. With the Lift Station out of service, Dresden's effluent cooling water must bypass the cooling pond and be sent directly to the Illinois River (Direct Open Cycle operation). After careful analysis, the Station determined that all tasks associated with the hardware upgrade could be completed and fully tested within the fifteen day time frame.

This provisional variance is intended to coincide with a scheduled refueling outage in November when the station only requires one-half of the normal cooling requirements. In addition, there will be an over-lapping dual unit outage. Performing the provisional variance during the period requested should have a negligible impact on the aquatic community of the Illinois River.

III. ASSESSMENT OF ADVERSE ENVIRONMENTAL IMPACTS

The thermal impact of the proposed Open Cycle operation with respect to the near-field aquatic community is expected to be minimal. Over the last four years, the ambient water temperature in the Illinois River (receiving stream) averaged 52 degrees F between November 1st and November 20th. It is anticipated that the ambient temperature of the Illinois River will be about the same during this provisional variance period.

The flow rate in the Illinois River during the fall is typically higher than during the summer months.

During the fall, cooler ambient air temperatures and lower humidity will dissipate heat from the cooling water discharged from the plant to the atmosphere more rapidly than during typical summer conditions. With one of the Dresden Units in a refueling outage, the discharge flow will be about one-half the normal discharge flow rate. The combination of higher Illinois River flow, lower station effluent flow, and cooler ambient conditions will result in the facility maintaining compliance with the thermal limits specified in Special Condition 4B of the NPDES Permit.

The Station normally discharges a blowdown flow of warmer cooling pond water to the Illinois River during the closed cycle operating mode (72-MGD maximum). Thus, fish inhabiting the discharge canal will be acclimated to temperatures above ambient river temperature and should be sufficiently reactive to avoid areas that are out of their desired temperature range.

In all the previous years of fisheries monitoring near Dresden, the resident fish community was dominated by species that are not highly sensitive to moderate temperature changes. In addition, the number of fish species and individuals has steadily improved since the station began operating in the In-Direct Open Cycle mode, despite the increased thermal input. Fish spawning activities generally occur in the spring.

Despite Dresden's significant discharge volume, the thermal plume has been characterized as buoyant in all previous studies submitted to the IEPA. Therefore, benthic organisms are not likely to be adversely affected by the short-term relief requested. The overall impact of the Station's thermal plume on the Illinois River is expected to be minimal.

As mentioned above, this upgrade is scheduled to occur during an outage of one of the two units. In addition, the second unit will be out of service for a few days of the provisional variance period. This scheduling will decrease the thermal output of the plant and, consequently, decrease thermal impacts during this period

Dresden obtained a 21-day provisional variance during the fall of 1999 to perform an upgrade to the Lift Station power supply (Line 1207). This upgrade was also performed when one of the two units was in a refueling outage. Monitoring included river temperatures, flows and visual observations. Dresden also received a 10-day provisional variance on October 8, 2002 to allow completion of Dresden Lift Station preventative maintenance pursuant to IPCB 03-40. During both periods, no adverse environmental impacts were noted.

Station management is committed to remaining in compliance with the applicable General Use temperature standards (as required by permit Special Condition 4B), throughout the course of the Lift Station maintenance work. All of the factors listed above should effectively minimize the impact of this period of Open Cycle operation upon the surrounding aquatic environment.

IV. ALTERNATIVES TO REQUESTED RELIEF

Exelon considered various alternatives to seeking regulatory relief in planning the installation of a backup Main Feed Breaker to Dresden Station's cooling lake lift station and in planning the replacement of all six Lift Pump breakers. The challenge that we faced in planning out this activity was to figure out a way to safely and reliably use as much of the existing cooling system as possible while simultaneously performing the needed system modifications. Since installation of a backup Main Feed Breaker involved power to all six lift station pumps, the planning scenarios quickly focused on three options: (1) Shutdown all plant operations to eliminate the thermal discharge (2) construct auxiliary cooling facilities and (3) install temporary lift station pumps while the lift station is out-of-service. Each of these alternatives are evaluated in more detail below:

(1) Shut Down All Plant Operations to Eliminate the Thermal Discharge

A full fifteen-day shutdown of both units at this time could significantly affect the company's ability to maintain power on the grid. Further, it would be difficult to schedule the resources needed to perform simultaneously, the maintenance required during shutdown of both units and support the needed Lift Station work. To do so would result in significant time and materials, as well as undue stress on existing equipment, while the overall benefit to the environment would be expected to be minimal. In addition, a 15 day shut down of this base-loaded nuclear plant could potentially jeopardize power availability in our service territory, as this is the normal time period when many of the cycling fossil units are brought down for routine maintenance outages.

(2) Construct Auxiliary Cooling System

This option would involve the utilization of existing Cooling Towers. These Cooling Towers would be used to reduce the temperature of the cooling water discharged from the plant instead of the cooling pond. The cooling water discharged from the Cooling Towers would have to be re-routed to the cold canal. This would require the installation and operation of a diesel-generator capable of lifting the cooling water at the rate of 500,000 gpm. Temporary pumps and piping would be required to transport the 500,000 gpm from the Hot Canal to the Cold Canal. The Cold Canal would then route the cooling water back to the plant.

(3) Install Temporary Lift Pumps While the Lift Station is Out-Of-Service

This would involve the installation and operation of a diesel-generator capable of lifting cooling water 23 from the Hot Canal into the cooling pond at the rate of 500,000 gpm. Temporary pumps and piping would be required to transport the cooling water into the cooling pond where it would route by gravity to the Cold Canal. The cold Canal would route the cooling water back to the plant. This temporary installation would required a considerable amount of space and would interfere with the Lift Station switchgear replacement and reserve feed raceway installation.

Whenever installing large, complex temporary systems there is always a concern with safety and reliability. There can be unexpected power interruptions and/or equipment failures that have the potential of complicating the ongoing work. Renting temporary pumps of this size would require the building of a temporary structure to house them. The discharges from these pumps would have to place across and over the top of the lake dike that could impact the dike integrity in the event of a hose rupture. The failure of a single temporary transfer pipe could be catastrophic.

V. MITIGATIVE ACTIONS TO BE TAKEN DURING THE VARIANCE PERIOD

Station management is committed to complying with the General Use thermal discharge standards outlined in permit Special Condition 4B during the requested provisional variance period.

To document environmental conditions during the open cycle period, intake, discharge and Dresden Lock and Dam temperatures will be continuously monitored. A summary of this data will be submitted to the Agency after the variance period ends. Additionally, visual inspections will be conducted on a daily basis in the vicinity of the intake and the discharge, to document the effects of the increased intake flow, as well as increased thermal output to the river. If any unusual or unexpected environmental impacts are identified, Dresden will notify the IEPA immediately.

VI. ADDITIONAL ENVIRONMENTAL MONITORING

Dresden intends to perform additional environmental monitoring in association with the provisional variance. Dresden will have per-variance environmental data collected in August/September as part of our on-going long-term Upper-Illinois Waterway Study. Additional monitoring will be conducted during and after the provisional variance period.

The additional biological monitoring of the fisheries will consist of fish sampling during and after the variance period. There will be two surveys performed at 8 locations using electrofishing and two surveys performed at 7 locations using seining. Monitoring of the physical conditions will consist of temperature and oxygen profiles in all appropriate survey locations.

The additional biological monitoring of the benthos community will consist of macro invertebrate sampling just prior to and just after the variance period. Unlike the fisheries sample, where we can use the last fish collection of the long-term monitoring study as the pre-variance sample, the benthos samples collected in August would not be adequately representative of the early November benthic community. These two surveys will be performed at 6 locations using a Ponar grab sampler.

VII. SUMMARY

A provisional variance for relief from Special Conditions 4A, 4D and 4G is requested for a 180 hours during a twenty day period from November 1st through November 20th. It is Exelon's position that not granting this provisional variance to Dresden Station would impose an arbitrary and unreasonable hardship. A negative decision could result in the Station being forced into an emergency Open Cycle situation during a period when performing the required repairs may not be feasible.

There is no other provisional variance relief in effect at this time for Dresden Station.

The last provisional variance for Dresden Station was granted on October 8, 2002 for the period of 10 days to allow completion of Dresden Lift Station preventative maintenance pursuant to IPCB 03-40.

Should you require any further information in order to expedite the processing of this request or have any questions, please contact Ed Rowley of my staff at 815-416-3287.

Sincerely,

David B. Wozniak
Dresden Station Plant Manager

CC: J. Roberson
J. Petro
G. Papanic
B. Rybak
J. Schmitz
S. Neal
P. Melberg
File

Attachment B

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/782-0610

October 6, 2000

MAJOR

Commonwealth Edison Company
Environmental Services Department
Post Office Box 767
Chicago, Illinois 60690

Re: Commonwealth Edison Company
Dresden Power Station
NPDES Permit No. IL0002224
Final Permit

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. The failure of you to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit as issued is effective as of the date indicated on the first page of the Permit. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board within a 35 day period following the issuance date.

To assist you in meeting the self-monitoring and reporting requirements of your reissued NPDES permit, a supply of preprinted Discharge Monitoring Report (DMR) forms for your facility is being prepared. These forms will be sent to you prior to the initiation of DMR reporting under the reissued permit. Additional information and instructions will accompany the preprinted DMRs upon their arrival.

Should you have questions concerning the Permit, please contact Darin LeCrone at the telephone number indicated above.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:SFN:DEL:99122901.grm

Attachment: Final Permit

cc: Records
Compliance Assurance Section
Maywood Region
Facility

NPDES Permit No. IL0002224

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: October 31, 2005

Issue Date: October 6, 2000
Effective Date: November 1, 2000

Name and Address of Permittee:

Commonwealth Edison Company
Environmental Services Department
Post Office Box 767
Chicago, Illinois 60690

Facility Name and Address:

Commonwealth Edison Company
Dresden Power Station
6500 North Dresden Road
Morris, Illinois 60450

Discharge Number and Name:	Receiving Waters:
001 Unit 1 House Service Water	Illinois River
A01 Unit 1 Intake Screen Backwash	Illinois River
002 Cooling Pond Blowdown	Illinois River
A02 Unit 2/3 Intake Screen Backwash	Illinois River
B02 Wastewater Treatment System Effluent	Illinois River
C02 Rad waste Treatment System Effluent	Illinois River
D02 Demineralizer Regenerate Waste	Illinois River
E02 NW Material Access Runoff	Illinois River
003 Sewage Treatment Plant Effluent	Kankakee River
004 Cooling Pond Discharge	Kankakee River
005 South East Area Runoff	Kankakee River
006 North East Area Runoff	Kankakee 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.

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:DEL:99122901.grm

NPDES Permit No. IL0002224

Effluent Limitations and Monitoring

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
1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): 001 - Unit 1 House Service Water**						
This discharge consists of:				Approximate Flow		
1. Equipment Cooling Water				4.3 MGD		
2. Unit 1 Area Stormwater Runoff				Intermittent		
a. East Area Roof Runoff						
b. Unit 1 Yard Area Runoff						
3. Unit 1 Intake Screen Backwash				Intermittent		
4. North East Area Runoff*						
Flow (MGD)					Daily	Continuous

*See Special Condition 11.
**See Special Condition 18.

Outfall: A01 - Intake Screen Backwash

There shall be no discharge of collected debris

NPDES Permit No. IL0002224

Effluent Limitations and Monitoring

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

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

Outfall(s): 002 - Cooling Pond Blowdown

This discharge consists of:	Approximate Flow
1. Unit 2/3 Condenser Cooling Water	*
2. Demineralizer Regenerant Waste	0.034 MGD
3. Rad waste Treatment System Effluent	Intermittent
4. Wastewater Treatment System Effluent	0.021 MGD
5. Unit 2/3 House Service Water	86.4 MGD
6. Unit 2/3 House Service Water Strainer Backwash	0.001 MGD
7. Unit 2/3 Intake Screen Backwash	Intermittent
8. Unit 2 Auxiliary Boiler Area Oil/Water Separator	Intermittent
9. 138 KV Switchyard Oil/Water Separator***	Intermittent
10. 345 KV Switchyard Oil/Water Separator***	Intermittent

Flow (MGD)	See Special Condition 1		Daily	Continuous
pH	See Special Condition 2		1/Week	Grab
Temperature	See Special Condition 4		Daily	Continuous
Total Residual Chlorine/ Total Residual Oxidant**		0/2/0.05**	2/Month	Grab**

*Cooling pond blowdown flow during closed cycle: 72 MGD; during indirect open cycle operation: 1548 MGD
**See Special Condition 13.
***See Special Condition 18.

NPDES Permit No. IL0002224

Effluent Limitations and Monitoring

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

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

Outfall(s): A01 - Unit 2/3 Intake Screen Backwash

There shall be no discharge of collected debris

Outfall(s): B02 - Wastewater Treatment System Effluent*

This discharge consists of: Approximate Flow: 0.021 MGD

1. Unit 1 Oil/Water Separator Effluent — Intermittent
   a. Unit 1 HPCI Building Floor Drains
   b. Unit 1 Main Power and Auxiliary Power Transformer Area Runoff
   c. Decontamination Area Runoff
2. Unit 2/3 Oil/Water Separator Effluent — Intermittent
   a. West Area Roof Runoff
   b. Station Floor Drains (Turbine building, Turbine Lube Oil Storage Area, Diesel Generator Room, Air Compressor Room)
   c. Unit 2/3 Area Yard Runoff
   d. Unit 2/3 Main Power and Auxiliary Power Transformer Area Runoff
3. Crib House Floor Drains — Intermittent

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
Flow (MGD)					Daily	Continuous
Total Suspended Solids	15	30			1/Week	24-Hour Composite
Oil and Grease	10	20			2/Month	Grab

*See Special Condition 14.

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Effluent Limitations and Monitoring

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

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

Outfall(s): C02 - Rad Waste Treatment System Effluent

This discharge consists of: Approximate Flow

1. Equipment Drains in the Drywell, Reactor Building, Rad waste and Turbine Building — 0.001 MGD
2. Unit 2/3 Decontamination System Drains — Intermittent
3. Floor Drains — 0.001 MGD
4. Laboratory and Sample Drains — Intermittent
5. Unit 1 Heating Boiler Blowdown — Intermittent
6. Unit 2/3 Auxiliary Boiler Blowdown — Intermittent
7. Laundry Wastewater — Intermittent
8. Condenser Polisher Sonic Cleaning Waste — Intermittent

Flow (MGD)			Daily	Continuous
Total Suspended Solids	15	30	1/Week	Discharge Tank Composite
Oil and Grease	15	20	1/Week	Grab

Outfall(s): D02 - Demineralizer Regenerant Waste and Filter Backwash

Approximate Flow: 0.034 MGD

Flow (MGD)			Daily	Continuous
Total Suspended Solids	15	30	1/Month	8-Hour Composite

Outfall(s): E02 - NW Material Access Runoff*

*See Special Condition 18.

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Effluent Limitations and Monitoring

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
1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): 003 - Sewage Treatment Plant						
				Approximate Flow: 0.03 MGD		
Flow (MGD)	See Special Condition 1				Daily	Continuous
pH	See Special Condition 2				1/Week	Grab
BOD_5	7.76 (18.77)*	15.51 (37.53)*	30	60	1/Week	24-Hour Composite
Total Suspended Solids	7.76 (18.77)*	15.51 (37.53)*	30	60	1/Week	24-Hour Composite
Fecal Coliform**				400/100 mL	1/Week	Grab
Total Residual Chlorine**				0.75	1/Week	Grab

*Load Limits were computed based on a Design Average Flow of 0.031 MGD (Design Maximum Flow of 0.075 MGD). Load limits based on Design Maximum Flow (in parenthesis) shall apply only when flow exceeds Design Average Flow.

**See Special Condition 17

Outfall(s): 004 - Cooling Pond Discharge*

Flow (MGD)		Daily When Discharging	Estimate
Temperature		*	*
Total Residual Chlorine/ Total Residual Oxidant**	0.2/0.05**	Once Per Discharge Event	Grab

*See Special Condition 10.
**See Special Condition 13.

Outfall(s): 005 South East Area Runoff*
006 North East Area Runoff**

*See Special Condition 18.
**See Special Conditions 11 and 18.

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SPECIAL CONDITION 1. Flow shall be reported as a monthly average and a daily maximum on the DMR form.

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

SPECIAL CONDITION 3. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 4. 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 may discharge cooling pond blowdown using an indirect open cycle cooling mode from June 15 through September 30 in accordance with the following limitation in lieu of 35 Ill. Adm. Code 302.211(d) and 302.211(e) as written above in Special Condition 4A and 4B respectively: During the period June 15 through September 30, the temperature of the plant discharges shall not exceed 32.2°C (90°F) more than 10% of the time in the period and never will exceed 33.9°C (93°F).

D. The Dresden Station shall be operated closed cycle during the period October 1 to June 15. The station may be operated in accordance with the Unit 2/3 Variable Blowdown Plan (governed by the original July 6, 1977 Thermal Compliance Plan calculations) from June 1 to June 15, as deemed necessary by station management.

E. Compliance with the thermal limitations shall be determined by maintaining a continuous temperature and flow record for cooling pond blowdown to the Illinois River. If the variable blowdown plan will be used from June 1 to June 15, data acquisition and records for the parameters necessary to implement the plan shall be maintained.

F. Additional water temperature monitoring shall be continued as follows:

1. A continuous water temperature record of water temperature at the Dresden Island Lock and Dam, and the Dresden Station intake shall be maintained during the period of June 15 through September 30.

2. Water temperature recorded at these locations shall be tabulated and submitted to this Agency, Industrial Unit, Division of Water Pollution Control by December 31, each year.

3. Permittee's failure to submit the temperature monitoring data from these locations due to equipment malfunction shall not be deemed a permit violation provided the permittee employs reasonable efforts to repair the malfunction. If the malfunction lasts more than 24 hours; a manual measurement shall be made at least once per day.

G. The station may bypass the cooling pond, that is operate open cycle, only during periods when both generating units have been taken out of service.

SPECIAL CONDITION 5. There shall be no discharge of polychlorinated biphenyl compounds.

SPECIAL CONDITION 6. The "Upset" defense provisions listed under 40 CFR 122.41(N) are hereby incorporated by reference.

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SPECIAL CONDITION 7. Commonwealth Edison Company has complied with 35 Ill. Adm. Code 302.211(f) and Section 316(a) of the Clean Water Act in demonstrating that the thermal discharge from its Dresden Nuclear Power Station has not caused and cannot be reasonably expected to cause significant ecological damage to receiving waters as approved by the Illinois Pollution Control Board in PCB Order 73-359 dated January 17, 1974 and PCB Order 79-134 dated July 9, 1981. Pursuant to 35 Ill. Adm. Code 302.211(g), no additional monitoring or modification is now being required for reissuance of this NPDES Permit.

SPECIAL CONDITION 8. Pursuant to Section 316(b) of the Clean Water Act, a determination for the Dresden Nuclear Power Station has not been made. Data submitted by Commonwealth Edison Company pursuant to Section 316(b) of the CWA for the Dresden Nuclear Power Station has been reviewed by the Illinois Environmental Protection Agency and the review determination is: That where as additional intake monitoring is not being required at this time, further monitoring is not precluded if determined necessary at the time of any modification or reissuance of NPDES Permit No. IL0002224.

SPECIAL CONDITION 9. The permittee shall record monitoring results on Discharge Monitoring Report forms using one such form for each discharge each month. The completed Discharge Monitoring Report form shall be submitted monthly to IEPA, no later than the 15th of the following month, unless otherwise specified by the Agency, to the following address:

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

SPECIAL CONDITION 10. The permittee shall minimize make-up water requirements to the cooling pond system during cooling pond water diversion to the Kankakee River in order to minimize fish impingement losses. This should be accomplished by eliminating to the extent feasible normal closed cycle blowdown flows of 50,000 gpm to the Illinois River except during a discharge from the rad waste treatment system and/or other water conservation measures. Such measures and operations taken by the station to minimize make-up water requirements during diversion shall be documented and reported with monthly discharge monitoring reports.

a. Operating requirements

1. The siphon will be operated for only two runs during the winter, each run lasting no more than 14 days.

2. Thermal monitoring at established transects and narrative observations will be recorded during operations in accordance with the siphon Operations Plan dated November, 1993 and a report of findings made available to this Agency in late spring.

3. The maximum amount of heat that will be placed in the Kankakee River shall be <0.5 billion BTUs per hour.

4. A fish barrier net must be in place around the siphon inlet before the siphon is operated, and must remain intact throughout the run.

SPECIAL CONDITION 11. The North East Area Runoff discharges to the Unit 1 intake canal. When the Unit 1 service water system is in use, the discharge will be drawn into the intake and eventually discharged at outfall 001. During those times when the Unit 1 service water system is out of service, this discharge will remain in the intake canal and eventually flow into the Kankakee River.

SPECIAL CONDITION 12. This permit may be modified to include appropriate final limitations, requirements, or conditions, which are consistent with applicable laws, regulations, or judicial orders. The Agency will public notice the permit modification.

SPECIAL CONDITION 13. The cooling pond blowdown shall be monitored twice per month for Total Residual Chlorine or Total Residual Oxidant concentration by grab sample, recording the date and time of sampling, the times and duration of the daily chlorine or bromine dosing periods plus the amount of each chemical applied per day. For purposes of reporting and determining compliance, the highest single instantaneous TRC/TRO concentration measured on any day will be regarded as the daily maximum concentration, and the monthly average shall be the average of all daily discharges.

Total Residual Chlorine may not be discharged from each unit's main cooling condensers for more than two hours in any one day, and is subject to a limit of 0.2 mg/L.

The use of bromine based biocides for micro invertebrate control, and regardless of duration, is subject to the discharge limit of 0.05 mg/L TRO (Total Residual Oxidant) measured as an instantaneous maximum.

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SPECIAL CONDITION 14. 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 15. The responsibility for outfall 004 - Cooling Pond Discharge will be transferred to the Will County Emergency Management Agency upon issuance of a separate NPDES permit for operation of the Dresden Station siphon Ice Melt system. Upon issuance of a permit to Will County EMA, Commonwealth Edison shall submit a request to terminate the monitoring and reporting requirements associated with outfall 004, in writing to the Agency.

SPECIAL CONDITION 16. There shall be no discharge of complexed metal bearing wastestreams and associated rinses from chemical metal cleaning unless this permit has been modified to include the new discharge.

SPECIAL CONDITION 17. (Outfall 003) The daily maximum fecal coliform count shall not exceed 400 per 100 mL. Fecal Coliform limits for Outfall 003 are effective May through October. Sampling of Fecal Coliform concentrations are only required during this time period.

The Total Residual Chlorine limit of 0.75 mg/L is applicable at all times. If the permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on page 6 of this permit.

SPECIAL CONDITION 18.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. 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.

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.

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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.

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 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.

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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 cleaning, grading and excavation activities which result in the disturbance of five acres 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:

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.

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 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 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 ter for cause by the Agency pursuant to 40 CFR 122.62. The filing of a request permittee for a permit modification, revocation and reissuance, or terminatio notification of planned changes or anticipated noncompliance, does not st permit condition.

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

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

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

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

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

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

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

(10) Monitoring and records.

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

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

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

(11) Signatory requirement. All applications, reports or information submitted t 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 le vice president or a person or position having overall responsibili environmental matters for the corporation;

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

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

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

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

(2) The authorization specifies either an individual or a position responsib the overall operation of the facility, from which the discharge originates, as a plant manager, superintendent or person of equivalent responsi 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 time; 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 this 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:

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

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

(c) 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 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, 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, slumes, 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 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.

(Rev. 3-13-98)