ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

March 22, 2012

Exelon Generation Company, LLC Braidwood Nuclear Power Station	)	
Petitioner,	)	
v.	)	IEPA – 12-12 (Provisional Variance-Water)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

Re: Provisional Variance From Special Condition 3B of NPDES Permit IL0048321

Dear Mr. Kanavos:

The Illinois Environmental Protection Agency (Illinois EPA) has completed its technical review of the attached provisional variance request, dated March 21, 2012 (Exhibit A), submitted by Exelon Generation Company, LLC for its Braidwood Nuclear Power Station ("Exelon Braidwood" or "Facility"). Exelon Braidwood has requested a provisional variance because the recent unusually hot and dry period of weather has resulted in intake temperatures of approximately 60° Fahrenheit ("F") or above, which presents an undue hardship for Exelon Braidwood to meet the effluent thermal limits of 60° F contained in NPDES Permit IL048321. (Exhibit B)

Based on its review, the Illinois EPA GRANTS Exelon Braidwood a provisional variance from the thermal limits in Special Condition 3B of NPDES Permit IL0048321, subject to the specific conditions set forth below.

Background

Exelon Braidwood is a nuclear-fueled steam electric generating facility located approximately five miles from the Kankakee River at 35100 South Route 53, Braceville, Illinois. The Facility's two pressurized water reactors have a combined maximum generating capacity of 2,461 megawatts.

Exelon Braidwood withdraws its condenser cooling water from a 2,640 acre cooling pond. Condenser cooling water and service water is discharged to the cooling pond for dissipation of waste heat and is then recycled. A portion of the recycled water is discharged as blowdown back to the Kankakee River. Make-up water is pumped from the Kankakee River to the cooling pond to compensate for evaporation and blowdown losses.

The Facility's process wastewaters are discharged to the cooling pond and the cooling pond blowdown line which discharges to the Kankakee River.

Special Condition No. 3B of Braidwood's NPDES Permit requires that water temperature at the edge of the mixing zone shall not exceed 60° F (from December through March) during more than one (1) percent of the hours (excursion hours) in the 12-month period ending with any month (87.6 hours annually) and that, at no time shall the water temperature at such locations exceed the maximum limits by more than 3 degrees F (63° F). The monthly maximum temperature limit contained in the Braidwood Permit increases to 90° F beginning April 1 through November.

As a consequence of the record breaking warm weather and absence of cooling during the evening hours, along with high ambient river temperatures even at current flow rates, the capacity of the Kankakee River to dissipate heat has been drastically reduced beyond its normal capabilities. The river is not cooling off during the evening hours as is typical during this time of year. Without nighttime cooling, the river retains the heat introduced to it during the daytime hours, both upstream and downstream.

When the ambient river temperatures exceed the non-excursion hour limits of 60° F, the Facility has no option other than to use excursion hours, and once its allotment of excursion hours is depleted, the Facility must significantly derate or cease operating altogether to maintain compliance with its NPDES Permit. Adding cooling facilities (such as cooling towers) will not allow the Facility to achieve compliance with a limit that already is exceeded even before any heat is added as a result of Facility operations.

Based on current weather forecasts it is expected that Exelon Braidwood will likely have consumed a large percentage of its permitted excursion hours before Tuesday afternoon, March 20, 2012. Therefore, unless relief is granted by way of a provisional variance, it is likely that the Facility will be forced to shut down for a correspondingly significant duration. Shutting down or significantly derating a base-loaded nuclear power plant such as Exelon Braidwood could jeopardize the stability of the electrical grid (and availability/reliability of electricity in the region), particularly if other plants are required to shut down or derate due to the unusual weather conditions being experienced. With both units offline and not immediately able to return to service, Exelon Braidwood would not be available to support the voltage requirements that could occur under changing grid conditions, including voltage support for the Commonwealth Edison Company and Mid American Transmission systems.

Additionally, when the ambient river temperatures exceed the excursion hour limits of 63° F, the Facility has no option other than to isolate and secure the blowdown in order to maintain compliance with its NPDES Permit. If Exelon Braidwood were to initiate discharge of the blowdown, the Facility would instantly be in non-compliance with the maximum NPDES Permit temperature limit of 63° F. Therefore, unless relief is granted by way of a provisional variance, the Facility would need to maintain isolation of the blowdown in the cooling lake, which would threaten Exelon's Braidwood's operations as well as the health of the cooling lake. Extended periods of time with isolated blowdown

can cause the cooling lake level to rise, which can pose a risk to the outlying perimeter dikes of the cooling lake. Additionally, the cooling lake could then become chemically concentrated, which would negatively impact its use for cooling critical plant components and would make it difficult to maintain its chemical and environmental health during warm weather periods.

Exelon Braidwood does not currently have temperature probes installed upriver of its intake because the Facility's NPDES Permit does not require upstream monitoring during the winter months, and, due to concerns with icing, the probes are typically removed in winter to avoid breakage. However, the temperature data that does exist demonstrates that the river temperature at the intake has been exceeding the monthly maximum temperature standards due to naturally occurring abnormally high ambient river temperatures for the month of March.

As a result of these record breaking weather conditions, Exelon Braidwood began using excursion hours on Monday, March 19, 2012 at 02:00 A.M when the upstream river temperature was 67.5° F. That temperature exceeds both the 60° F non-excursion hour monthly maximum standard for March and the 63° F excursion hour limit. At that time, the water temperature at the edge of the Facility's mixing zone was 67.9° F, which represents a 0.4° F temperature rise above ambient with both units operating. As of 03:00 A.M. on March 20, 2012, Exelon Braidwood had accumulated 25.0 excursion hours due to the recent record breaking warm weather and was forced to isolate and secure blowdown based on the ambient river temperature's exceedance of the 63° F excursion hour limit.

Relief Requested

Due to the unseasonably warm weather and the inability to maintain long-term non-discharge conditions, Exelon Braidwood requests a provisional variance from NPDES Permit Special Condition 3B, which requires river temperatures at the edge of the mixing zone for the month of March not to exceed 60° F during non-excursion hour episodes and 63° F when excursion hours are being used. The provisional variance request is predicated upon the recent ambient Kankakee River water temperatures that exceed the monthly maximum standards for March.

Specifically, Exelon Braidwood requests that a provisional variance be issued that allows the Facility to cause temperatures at the edge of the mixing zone to increase by no more than 3° F above ambient temperatures for up to 286.7 hours. The term of the provisional variance would be effective from March 21, 2012, through March 31, 2012.

Agency Determinations

The Agency has reviewed the requested provisional variance 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 will preclude the granting of this request; and

5. Exelon Braidwood will face an arbitrary and unreasonable hardship if the request is not granted.

Conditions

The Illinois EPA hereby GRANTS Exelon Braidwood a provisional variance from Special Condition 3B of NPDES Permit IL0048321, subject to the following conditions:

A. The term of this provisional variance shall begin on March 21, 2012, and end no later than March 31, 2012. During this provisional variance term, the water temperature at the edge of the mixing zone provided in NPDES Permit IL0048321 shall not exceed 70° F or 2° F above ambient river temperature, whichever is greater. Further, upon notification to the Agency that the Facility has exhausted its excursion hours, this provisional variance also grants additional excursion hours to Exelon Braidwood through March 31, 2012. This provisional variance is granted based on the facts and circumstances described in the request dated March 21, 2012, and additional written clarifications, especially including several consecutive days of abnormally high ambient water temperatures in the Kankakee River. If the facts and circumstances described in the request abate the term of this provisional variance will end.

B. Exelon Braidwood 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. At no time during the term of this provisional variance shall the water temperature at the edge of the mixing zone exceed a temperature of 70° F or 2° F above ambient river temperature, whichever is greater.

C. During the variance period, Exelon Braidwood must continuously monitor intake, discharge and receiving water temperatures and to visually inspect intake and discharge areas at least three times daily to assess any mortalities to fish and other aquatic life.

D. Exelon Braidwood shall document environmental conditions during the term of the provisional variance and submit the documentation to the Illinois EPA and the Illinois Department of Natural Resources ("Illinois DNR") within thirty (30) days after this provisional variance expires.

E. Exelon Braidwood shall immediately notify the Illinois EPA and Illinois DNR 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 Illinois DNR as changes occur until normal conditions return; notify the Illinois EPA and Illinois DNR when normal conditions return and submit the documentation to the Illinois EPA and Illinois DNR within thirty (30) days after normal conditions return.

F. Exelon Braidwood 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, including loss and damage to aquatic life.

G. Exelon Braidwood shall notify Roger Callaway, Illinois EPA, by telephone at 217-782-9720 when the Facility's discharge first causes or contributes to an exceedance of the applicable permitted temperature limit of 70° in March. 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

H. Exelon Braidwood 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 Title

_____ _____
Authorized Agent Date

Exelon Braidwood shall continue to monitor all parameters and comply with all other conditions specified in its NPDES Permit No. IL0048321.

The Illinois EPA 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,

Julie Armitage
Acting Chief Legal Counsel

cc: Marcia Willhite
Roger Callaway
Michael Roubitchek

Exelon Generation Company, LLC
Braidwood Station
35100 South Rt 53, Suite 84
Braceville, IL 60407-9619

www.exeloncorp.com

Exelon Nuclear

March 21, 2012
Bw120027

Mr. Roger Callaway (CAS-19)
Wastewater Compliance Unit Manager
Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section #19
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9274

Subject: Braidwood Nuclear Power Station
NPDES Permit No. IL0048321
Provisional Variance Request – Emergency Application

Dear Mr. Callaway:

Exelon Generation Company, L.L.C. ("Exelon") hereby requests that the Illinois Environmental Protection Agency ("IEPA" or "Agency") grant a provisional variance for Braidwood Nuclear Power Station ("Braidwood" , "Station" or "Facility"), pursuant to Section 35(b) of the Environmental Protection Act ("Act") 415 ILCS 5/35. Exelon submits this application for a provisional variance consistent with IEPA procedures at 35 Ill. Adm. Code 104.300.

Braidwood Station is located approximately five miles from the Kankakee River in Will County, Illinois. The Station discharges wastewater pursuant to NPDES Permit No. IL0048321, which IEPA issued on August 24, 1995.

Background

Braidwood Station is a nuclear-fueled steam electric generating facility located at 35100 South Route 53, Braceville, Illinois. The two pressurized water reactors have a combined maximum generating capacity of 2,461 megawatts. Circulating water used to cool and condense the steam from the generating process is withdrawn from, and discharged to, the Kankakee River.

Braidwood withdraws its condenser cooling water from a 2,640 acre cooling pond. Condenser cooling water and service water is discharged to the cooling pond for dissipation of waste heat and is then recycled. A portion of the recycled water is discharged as blowdown back to the Kankakee River. Make-up water is pumped from the Kankakee River to the cooling pond to compensate for evaporation and blowdown losses. Station process wastewaters are discharged to the cooling pond and the cooling pond blowdown line which discharges to the Kankakee River.

Special Condition No. 3B of Braidwood's NPDES Permit requires that water temperature at the edge of the mixing zone shall not exceed 60 degrees F (in December through March) during more than one (1) percent of the hours (excursion hours) in the 12-month period ending with any month (87.6 hours annually) and that, at no time shall the water temperature at such locations exceed the maximum limits by more than 3 degrees F (63 degrees F). The monthly maximum temperature limit contained in the Braidwood Permit increases to 90 degrees F beginning April 1 (thru November).

As a consequence of the record breaking warm weather and absence of cooling during the evening hours, and high ambient river temperatures even at current flow rates, the capacity of the Kankakee River to dissipate heat has been drastically reduced beyond its normal capabilities. The river is not cooling off during the evening hours as is typical this time of year. Without nighttime cooling, the river retains the heat introduced to it during the daytime hours, both upstream and downstream.

The station does not currently have temperature probes installed upriver of its intake because the Permit does not require upstream monitoring in the winter months, and, due to concerns with icing, the probes are typically removed in winter to avoid breakage. However, the temperature data that do exist show that the river temperature at the intake has been exceeding the monthly maximum temperature standards due to naturally occurring abnormally high ambient river temperatures for the month of March.

As a result of these record breaking conditions, Braidwood Station began using excursion hours on Monday, March 19, 2012 at 02:00 A.M when upstream river temperature was 67.5°F . That temperature exceeds both the 60°F non-excursion hour monthly maximum standard for March and the 63°F excursion hour limit. At that time, the water temperature at the edge of the Braidwood mixing zone was 67.9°F, which represents a 0.4°F temperature rise above ambient with both Units operating. As of 08:00 on March 20, 2012, Braidwood Station accumulated 30.0 excursion hours due to the recent record breaking warm weather.

Relief Requested

Due to the unseasonably warm weather, Braidwood Station is requesting relief from NPDES Permit Special Condition 3B, which requires river temperatures at the edge of the mixing zone for the month of March not to exceed 60 degrees F during non-excursion hour episodes and 63 degrees F when excursion hours are being used. The provisional variance request is predicated upon the recent ambient Kankakee River water temperatures that exceed the monthly maximum standards for March. Specifically, Exelon requests a provisional variance that would allow Braidwood to cause temperatures at the edge of the mixing zone to increase by no more than 3° F above ambient temperatures for up to 286.7 hours. The term of the provisional variance would be effective from March 22 thru March 31, 2012.

Necessity for Request

When the ambient river temperatures exceed the non-excursion hour limits, the Station has no option other than to use excursion hours, and once its allotment of excursion hours is depleted, the Station must significantly derate or cease operating altogether to maintain compliance with the NPDES Permit. Adding cooling facilities (such as cooling towers) will not allow the Station to achieve compliance with a limit that already is exceeded even before any heat is added as a result of Station operations.

Based on current weather forecasts it is expected that the Station will likely consume a large percentage of its permitted excursion hours before Tuesday afternoon, March 20, 2012. Therefore, unless relief is granted by way of this provisional variance request, it is likely that the Station will be forced to shut down for correspondingly significant durations. Shutting down or significantly derating a base-loaded nuclear power plant such as Braidwood could jeopardize the stability of the electrical grid (and availability/reliability of electricity in the region), particularly if other plants are required to shut down or derate due to the unusual weather conditions being experienced. With both units offline and not immediately able to return to service, Braidwood Stations would not be available to support the voltage requirements that could occur under changing grid conditions.

Assessment of Environmental Impacts

Because Braidwood is not proposing to increase cooling water flows, there will be no increase in impingement or entrainment as a result of the issuance of the requested Provisional Variance. Additionally, because the ambient river temperature increase has been gradual, resident fish species have either acclimated to the higher temperature or have found thermal refuge. In addition, the current flows afford a delta T of approximately 1°F between the upstream and downstream Kankakee River temperatures. Therefore, resident fish species will not be subject to any heat shock as a result of granting the requested Provisional Variance.

Alternatives to Requested Relief

Historically, Braidwood Station has not used excursion hours during periods of extreme heat and low-river flows experienced in the summer at which time additional thermal probes and monitoring are incorporated with station procedures to mitigate the effects of extreme heat. These actions in addition to procedure evaluation will be evaluated to define preemptive action initiation to prevent future noncompliance during periods of non-seasonal extreme heat. The problem that Braidwood Station is facing is caused by extreme summer like temperatures during the month of March, which is causing heating of Kankakee River water and thereby increasing ambient river conditions higher than what is allowed by the NPDES Permit. Unless a provisional variance is issued, when the Station runs out of hours, it will have to shut down during all times that the ambient river temperatures are at or above the non-excursion hour limit. Based on river temperatures projections through the end of March, it is likely that there will be a number of extended periods during which ambient river temperatures will be at or above these limits. As previously explained neither the option of derating the units nor of obtaining additional temporary cooling capacity will allow the Station to maintain compliance if the ambient river temperatures are exceeding the applicable temperature limits. The only option is for the Station to shut down once the ambient river temperatures meet or exceed the NPDES permitted monthly limit.

Without the power that Braidwood Station could generate as a result of the requested provisional variance, depending on the operating status of other generating stations in the area, Braidwood Station continued operation may be essential for voltage support for the Commonwealth Edison Company and Mid American Transmission systems, which includes Illinois and portions of Iowa.

Mitigative Actions to be Taken During the Variance Period

During the period when the Station uses any additional excursion hours authorized by the requested provisional variance, Braidwood Station will do the following: (1) continuously monitor the intake and discharge temperatures and assess water temperatures at the edge of the mixing zone using the NPDES Permit temperature monitoring curve or field measurements; (2) on a daily basis, inspect the intake and discharge areas to assess any mortalities to aquatic life, and report the results of these monitoring activities to the Agency within 30 days of the expiration of the provisional variance (or such other time as agreed upon by the Agency); and (3) notify the Agency of any significant adverse environmental conditions observed that might be caused by operations authorized by the provisional variance, including mortalities to fish or other aquatic life, investigate the cause of such conditions, provide the Agency updates regarding the situation, including when normal conditions return, and submit a report to the Agency regarding these matters within 30 days of the expiration of the provisional variance period (or such other time as agreed upon by the Agency).

Summary

For the reasons stated above, Exelon requests a provisional variance for relief from Special Condition 3B from March 22 thru March 31, 2012 which would allow Braidwood to cause temperatures at the edge of the mixing zone to increase by no more than 3°F for up to 286.7 hours. It is Exelon's position that not granting this provisional variance would impose an arbitrary and unreasonable hardship.

If you should have any questions regarding these matters, please feel free to contact Jamison Rappeport at (815) 417-3200 or Whitney Kullman at (815) 417-3257 from Braidwood Station or John Petro, Principal Environmental Analyst, Exelon Generation at (630) 657-3209.

Respectfully,

Mark Kanavos
Plant Manager
Braidwood Station

Roubitchek, Mike

From: john.petro@exeloncorp.com
Sent: Thursday, March 22, 2012 7:28 AM
To: Roubitchek, Mike; jamison.rappeport@exeloncorp.com; Whitney.Kullman@exeloncorp.com
Cc: Frederic.Bevington@exeloncorp.com; sharon.neal@exeloncorp.com; Zigmund.Karpa@exeloncorp.com; abielawski@sidley.com
Subject: Draft PV - Exelon Braidwood
Attachments: Exelon Braidwood PV Rev 1.doc

Mike:

Good morning!

The attached draft PV has been track changed with comments from Braidwood Station. As you will see, all of the changes are simply editorial and or clarifications. The one exception is that Braidwood has asked to do the river checks at the make-up and blowdown twice per day rather than three time per day. The rationale for this change request is because Braidwood Staff is working twelve hour shifts.

Also, the answers to your two additional questions follow:

Agency Question #1: Is Braidwood currently out of excursion hours? If so, the draft I sent you can stay as-is. If not, then we need to change the effective date of the Provisional Variance to the time that Braidwood notifies us that its excursion hours have been exhausted. Braidwood's concern is the revised temperature limit increase from 60 degrees F to 70 degrees F. When Braidwood initiates blowdown, we will be in non-compliance space with the maximum permit limit of 63 degrees F (60 degree limit plus 3 degrees F) due to the elevated ambient river temperature (which was 68.6 degrees F on 3/21). If Braidwood is not granted a Provisional Variance effective date at the start time of blowdown (at which time excursion hours will not be exhausted), Braidwood will accrue a second non-compliance for exceeding the 63 degree F limit.

Braidwood Answer #1: Braidwood used 1 excursion hour prior to experiencing permit non-compliance and continued to used excursion hours while in non-compliance. In total Braidwood used 25 excursion hours prior to securing blowdown.

Agency Question #2: We need a more understandable justification as to the hardship that blowdown has on the plant. See the e-mail you sent to Roger Callaway at 1:12pm today. We need this expressed more in "layman's" terms as opposed to engineer terms.

Braidwood Answer #2: Blowdown helps equalize the cooling lake level. Extended periods of time with isolated blowdown can cause the cooling lake level to rise. This rise occurs because the cooling lake is accepting water from the river (an input pathway) while the cooling lake ceases to release water through blowdown (which is isolated to prevent noncompliance with the NPDES permit). Rain and runoff can also impose additional level input to the cooling lake. This rise in cooling lake level can pose a risk to the outlying perimeter (exterior dikes) of the lake in addition to becoming an operational challenge to maintain cooling lake level. Additionally, the cooling lake can become chemically concentrated with

Roubitchek, Mike

From: Tonsor, Connie L.
Sent: Wednesday, March 21, 2012 1:28 PM
To: Roubitchek, Mike
Subject: FW: IEPA Question on Braidwood PV Submittal

I have asked for an explanation in English for a 4th grader, not in "engineer" for a nuclear plant.

From: Callaway, Roger
Sent: Wednesday, March 21, 2012 1:14 PM
To: Willhite, Marcia; Sofat, Sanjay; Tonsor, Connie L.
Subject: FW: IEPA Question on Braidwood PV Submittal

Answer to the Braidwood question.

From: john.petro@exeloncorp.com [mailto:john.petro@exeloncorp.com]
Sent: Wednesday, March 21, 2012 1:12 PM
To: Callaway, Roger
Subject: FW: IEPA Question on Braidwood PV Submittal

See Braidwood answer below.

Subject: RE: IEPA Question on Braidwood PV Submittal

See our answer below

Question: Since Braidwood has used only 30 of their allotted 87.6 excursion hours, can you make it to April 1st with your blowdown secured, and if not, why not? In other words, describe the hardship that securing the blowdown has on the plant.

Cooling lake health is maintained through the river make-up and the blowdown discharge. Cooling lake health is essential for cooling critical plant components and maintaining environmental equilibrium during warm weather cycling of the lake. Cooling lake health would be reduced without adequate blowdown.

Liquid effluent releases would be halted which will affect the water inventory and water processing that is required for the station's April outage preparations.

Continued blowdown isolation will cause the cooling pond level to rise. The station is challenged to maintain the level within operational design criteria. Severe weather events (i.e. significant precipation) can impose additional lake level inputs and additional hydraulic burden on the pond's exterior dikes. (i.e. potential compromise of dike integrity).

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-0610

August 24, 1995

Commonwealth Edison Company
Post Office Box 767, 35 FNW
Chicago, Illinois 60690-0767

Re: Commonwealth Edison Company
Braidwood Power Station
NPDES Permit No. IL0048321
Final Reissued Permit

Gentlemen:

Attached is the final Reissued 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 following revisions were made to the permit after public notice, based on your comments:

1. Sub-wastestream #6 of Outfall 001 was corrected to read Demineralizer Regenerant Waste Drains.

2. Portable Demineralizer Regenerant Wastes was listed as a sub-wastestream of Outfall 001(d).

3. Parts B and C of Special Condition 8 were removed, since they have been completed.

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 30 day period following the issuance date.

SCREENED

Should you have any questions please contact Darin E. 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:fnnpd.doc

Attachment: Final Modified Permit

cc: Records
CAS
USEPA
Maywood Region
NIPC

SPEEDER

NPDES Permit No. IL0048321

Illinois Environmental Protection Agency

Division of Water Pollution Control

2200 Churchill Road

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: September 1, 2000

Issue Date: August 24, 1995
Effective Date: September 1, 1995

Name and Address of Permittee:

Commonwealth Edison Company
Post Office Box 767, 35 FNW
Chicago, Illinois 60690-0767

Facility Name and Address:

Commonwealth Edison Company
Braidwood Nuclear Power Station
Rural Route #1, Box 84
Braceville, Illinois 60407
(Will County)

Discharge Number and Name:
No. 001 Cooling Pond Blowdown Line
No. 001(a) Wastewater Treatment Plant Effluent
No. 001(b) Sewage Treatment Plant Effluent
No. 001(c) Radwaste Treatment System Effluent
No. 001(d) Demineralizer Regenerant Wastes
No. 001(e) Intake Screen Backwash

Receiving Waters:
Kankakee River

No. 002 North Site Stormwater Runoff Basin
No. 003 South Site Stormwater Runoff Basin
No. 004 Switchyard Area Runoff

Mazon River

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C, Rules and Regulations of the Illinois Pollution Control Board, and the FWPCA 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:jab/sp416E

NPDES Permit No. IL0048321

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

1. From the effective date of this permit until September 1, 2000, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 Cooling Pond Blowdown Line*

This discharge consists of:	Approximate Flow
1. Condenser cooling water	11.31 MGD
2. House service water	1.3 MGD
3. Essential service water	1.3 MGD
4. Demineralizer regenerant waste	0.028 MGD
5. Wastewater treatment plant effluent	0.079 MGD
6. Radwaste treatment system effluent	0.032 MGD
7. House service water strainer backwash	0.03 MGD
8. Essential service water strainer backwash	0.017 MGD
9. Sewage treatment plant effluent	0.017 MGD
10. Water treatment system filter backwashes	0.03 MGD
11. River intake screen backwash	0.112 MGD
12. Cooling pond intake screen backwash	0.4 MGD

Flow				Daily	Continuous
pH	See Special Condition No. 1			1/Week	Grab
Temperature	See Special Condition No. 3			Daily	Continuous
Total Residual Chlorine			0.2	1/Month	Grab**

*See Special Condition No. 13
**See Special Condition No. 5

NPDES Permit No. IL0048321

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

1. From the effective date of this permit until September 1, 2000, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001(a) Wastewater Treatment Plant Effluent

This discharge consists of:	Approximate Flow
1. Turbine building fire and oil sump*	0.079 MGD
a. Turbine building floor drain tank*	
i. Turbine building floor drain sumps ii. Essential service water drain sumps iii. Condensate pit sumps	
b. Turbine building equipment drain tank*	
c. Units 1 and 2 tendon tunnel sumps	
d. Auxiliary boiler blowdown	
e. Units 1 and 2 diesel fuel storage tank sumps	
f. Oil-water separator No. 1 effluent	
g. Secondary-Side Drain Water	
2. Water treatment area floor and equipment drain sumps	Intermittent
3. Water treatment lime-softening clarator blowdown	Intermittent
4. Wastewater treatment system sand filter backwash	0.002 MGD
5. Condensate polisher regenerant wastes (Alternate Route)	Intermittent
6. Demineralizer Regenerant Waste Drains (Alternate Route)	Intermittent

Flow			Daily	24 Hour Total
Total Suspended Solids	15.0	30.0	1/Week	24 Hour Composite
Oil and Grease	15.0	20.0	1/Week	Grab

*These wastestreams may be directed to the Radwaste Treatment System depending on the results of the process radiation monitors.

NPDES Permit No. IL0048321

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

1. From the effective date of this permit until September 1, 2000, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001(b) Sewage Treatment Plant Effluent**

				Approximate Flow 0.017 MGD (DMF 0.078 MGD)		
Flow					Daily	Continuous
pH	See Special Condition No. 1				1/Week	Grab
Total Suspended Solids	19.5	39.0	30.0	60.0	1/Week	24 Hour Composite
BOD_5	19.5	39.0	30.0	60.0	1/Week	24 Hour Composite
Fecal Coliform	See Special Condition No. 4				1/Week	Grab

Outfall(s): 001(c) Radwaste Treatment System Effluent

This discharge consists of: Approximate Flow: 0.032 MGD

1. Steam generator condensate blowdown				Intermittent		
2. Cooling jacket blowdown				Intermittent		
3. Auxiliary building and turbine building floor drains				Intermittent		
4. Laundry waste treatment system drains				0.001 MGD		
5. Chemical and volume control system drains				Intermittent		
6. Boron recycle system blowdown				Intermittent		
7. Radwaste demineralizer regenerant wastes and filter backwash				0.002 MGD		
8. Reactor building floor and equipment drains				Intermittent		
9. Turbine building floor drain tank (Alternate Route)				Intermittent		
10. Turbine building fire and oil sump (Alternate Route)				Intermittent		
11. Turbine building equipment drain tank (Alternate Route)				Intermittent		
12. Evaporator wastewater				Intermittent		
Flow					Daily	Continuous
Total Suspended Solids			15.0	30.0	1/Week	Discharge Tank Composite
Oil and Grease			15.0	20.0	1/Week	Grab

**Outfall No. 001(b) Sewage Treatment Plant Effluent will normally be discharged to the Kankakee River via the cooling pond blowdown line. The existing outfall to the Mazon River will be maintained as an emergency backup. The permittee shall give notice to the Agency of any emergency discharge to the Mazon River. Applicable effluent limitations shall apply.

SPECIMEN

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Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

1. From the effective date of this permit until September 1, 2000, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001(d) Demineralizer Regenerant Wastes

This discharge consists of

Approximate Flow
0.028 MGD

1. Make-up demineralizer regenerant waste***
2. Condensate polisher regenerate waste***
3. Regenerant chemical area drains
4. Portable Demineralizer Regenerant Wastes

Flow			Daily	Continuous
Total Suspended Solids	15.0	30.0	1/Week	8 Hour Composite

***This wastestream may be alternately routed to the wastewater treatment system.

Outfall(s): 001(e) River Intake Screen Backwash

There shall be no discharge of collected debris.

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Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

1. From the effective date of this permit until September 1, 2000, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 002 North Site Stormwater Runoff Basin

This discharge consists of: Approximate Flow:

1. Parking lot runoff — Intermittent
2. Transformer area runoff — Intermittent
3. North station area runoff — Intermittent
4. Turbine building, auxiliary building and waste treatment building roof drains — Intermittent

See Special Condition No. 9

Outfall(s): 003 South Site Stormwater Runoff Basin

Approximate Flow

Intermittent

See Special Condition No. 9

Outfall(s): 004 Switchyard Area Runoff

Approximate Flow

Intermittent

See Special Condition No. 9

SOLEMN

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Special Conditions

SPECIAL CONDITION 1. The pH shall be in the range 6.0 to 9.0.

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 $5^{o}F$ ($2.8^{o}C$).

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 $3^{o}F$ ($1.7^{o}C$). (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.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
^{o}F	60	60	60	90	90	90	90	90	90	90	90	60
^{o}C	16	16	16	32	32	32	32	32	32	32	32	16

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

SPECIAL CONDITION 5. Total residual chlorine may not be discharged from each units main cooling condensers for more than two hours in any one day.

A. The reported mean concentration and maximum concentration of Total Residual Chlorine shall be based on a minimum of three grab samples taken at approximately five minute intervals at Outfall 001. The detection limit shall be $\leq$ 0.05 mg/l TRC. The time samples were collected, the time and duration of the chlorine dosing period plus the amount of chlorine applied shall be reported. The reported average concentration of Total Residual Chlorine is the average of all values measured for the sampling event and the reported maximum concentration is the highest value measured for a single grab sample.

SPECIAL CONDITION 6. There shall be no discharge of polychlorinated biphenyl compounds.

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

SPECIAL CONDITION 8.

A. Intake impacts will be reduced by limiting pumping from the river during the peak entrainment period. For a four-week period (last three weeks in May and first week in June), pumping will be allowed only during the day (between one hour after sunrise and one hour before sunset). In addition, during the four-week period, pumping will be minimized during the day. Pumping will occur when needed to fill the freshwater holding pond and to maintain efficient operation of the cooling pond. In an extreme emergency, and upon immediate notification of the Agency, pumping could occur at night. Such pumping would cease as soon as the emergency was over. Records of all pumping during the four-week period will be maintained. Such records will include dates, number of pumps operating and start and end times.

SPECIAL CONDITION 9

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.

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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.

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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.

REPORTING

K. 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).

L. 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.

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

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
Annual Inspection Report
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

N. 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 10. Discharge of station cooling pond water to adjacent impoundments owned by the permittee, to replace water which is withdrawn from these impoundments for station operations during periods of low flows in the Kankakee River when the station must decouple its operations from the river, is hereby permitted for these emergency periods. No monitoring is required for this permitted activity. The IEPA shall be promptly notified during such operations.

SPECIAL CONDITION 11. 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 forms shall be submitted to IEPA no later than the 28th of the following month, unless otherwise specified by the the permitting authority.

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Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Attention: Compliance Assurance Section

SPECIAL CONDITION 12. The "upset" defense provisions of Title 40, Section 122.41(n) of the Federal Regulations are hereby incorporated into this permit by reference.

SPECIAL CONDITION 13. An emergency cooling pond overflow exists tributary to an unnamed drainage ditch which is tributary to the Mazon River. Discharges from this overflow shall be subject to the bypass provisions of 40 CFR 122.41(m).

SPECIAL CONDITION 14. This permit does not authorize the use of bromine-based biocides. If the permittee notifies the Agency, pursuant to Standard Condition 12 or 14, of its intent to use bromine-based biocides, this permit may be modified to incorporate different TRC/TRH limitations or restrictions on the use of bromine-based biocides based on the results of biomonitoring or other bromine toxicity data which becomes available to the Agency. Such modification shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 15. The permittee shall submit a completed Form 2F as soon as conditions allow, for Outfall 002 and Outfall 003. Based on the new information the Agency may choose to modify the permit after public notice and opportunity for hearing.

ATTACHMENT H

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, Ch. 111 1/2 Ill. Rev. Stat., Sec. 1001-1051 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 purpose 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 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:

(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 screenings, 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.

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(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 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:

(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 screenings, 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.