ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

May 25, 2012

Exelon Generation Company, L.L.C. Quad Cities Nuclear Power Station Petitioner, v. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	IEPA – 12-17 (Provisional Variance-Water)

Re: Provisional Variance From Discharge Limits Contained in NPDES Permit IL0005037

Dear Mr. Hanley:

The Illinois Environmental Protection Agency (Agency) has completed its technical review of the attached provisional variance request, dated May 24, (Attachment A), for Exelon Generation Company, L.L.C.'s Quad Cities Nuclear Power Station (Quad Cities). Quad Cities is seeking a provisional variance from May 26, 2012 through May 29, 2012, that would allow it to exceed the maximum temperature limit in Special Condition 7B of NPDES Permit IL0005037 by no more than 5° (83° for May), or 2° above ambient river temperature, whichever is greater.

Based on its review, the Agency GRANTS Quad Cities a provisional variance subject to the specific conditions set forth below.

Background

Quad Cities Station is a base load nuclear-fueled steam electric generating facility located near Cordova, Illinois, on the Mississippi River at River Mile 506.8. The station operates two boiling water reactors which have a combined maximum generating capacity of 5,914 megawatts thermal. The station is currently operating at 100% capacity. The station's capacity factor January 1, 2012 through April 31, 2012 was 86%. Quad Cities Station generation output is transmitted to the PJM Interconnection Grid. PJM Interconnection is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

Relief Requested

Condition 7B of the NPDES Permit limits the number of excursion hours to 1% (87.6 hours) of the hours in a 12-month period ending with any month. Specifically, Special Condition 7B provides that the Station shall not cause water temperatures in the Mississippi River (beyond the mixing zone) to exceed by more than 3°F the non-excursion hour temperature limit for May of 78°F.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
F°	45	45	57	68	78	85	86	86	85	75	65	52

Quad Cities is requesting a provisional variance that allows it to exceed the non-excursion hour temperature limit for May of 78°F stated in Special Condition 7B of NPDES Permit No. IL0005037, for the period of May 26, 2012 through May 29, 2012, by no more than 5°F *(83°F for May)* **or** 2°F above ambient river temperature, whichever is greater.

Quad Cities has exhausted its excursion hours.

Necessity for Request

In its request, Exelon states that when the ambient river temperatures approach or exceed the non-excursion hour limits, Quad Cities has no option other than to use excursion hours, and once its allotment of excursion hours is depleted, Quad Cities must cease operating altogether to maintain compliance with the NPDES Permit. According to Exelon, partial deratings or adding cooling facilities (such as cooling towers) will not allow Quad Cities to achieve compliance with a limit that already is exceeded even before any heat is added as a result of Station operations.

Special Condition 7B of NPDES Permit limits the temperature at the edge of the mixing zone to 78°F in May, except when Quad Cities is using excursion hours, during which time the temperatures at the edge of the mixing zone may be 3°F warmer than these limits. As a rule, Quad Cities has been able to operate within its permitted thermal limits due to the fact that the ambient temperatures of the River (measured upstream of the discharge) generally remain below the non-excursion hour limit. It is only during periods when the ambient river temperatures are very close to or exceed the non-excursion hour limits or during periods of extreme low flows that Quad Cities uses its excursion hour allowance.

Illinois is experiencing unusually warm weather for this time of year which is resulting in high ambient river temperatures. In 2012 Quad Cities first began using excursion hours on Sunday, March 18th when upstream Mississippi River temperature matched the station's effluent limitation of 57.0°F. The permitted excursion hours were subsequently exhausted in March as a result of continued record breaking warm weather recorded throughout the mid-western states. Quad Cities submitted a request to the Agency on March 20, 2012, for relief from Special Condition 7B of NPDES Permit No. IL0005037 for the period of March 21, 2012, to April 1, 2012. The Agency subsequently issued Provisional Variance IEPA 12-11 to Quad Cities on March 21, 2012 allowing the station to exceed the non-excursion hour temperature limit for March of 57°F stated in Special Condition 7B of NPDES Permit No. IL0005037 for the period of

neither the option of derating the units nor of obtaining additional temporary cooling capacity will allow Quad Cities to maintain compliance if the ambient river temperatures exceed the applicable temperature limits. The only option is for Quad Cities to shut down once the ambient river temperatures are at or exceed the NPDES permit monthly limit.

In 2006, Quad Cities investigated the feasibility of installing cooling towers. Exelon states that based on analytical evaluation of historical plant, river, and meteorological data, the proposed towers performance and the resulting reduction in downstream river temperature could be quantified. When Exelon evaluated the actual days when excursion hours occurred in the last six year period (2000-2005), it found there was no appreciable reduction in the number of days when excursion hours would have occurred with the cooling towers in operation. According to Exelon, the reason for this is the high upstream river temperatures experienced on most of the days when actual excursion hours were recorded. For ~80% of the days when excursion hours were recorded, the plant intake temperature was at the permit limited temperature or above ($\geq$86°F), and for the remaining 20% of the days, the intake temperature was within half a degree of the permit limits. For most of these occurrences, even if adequate cooling tower capacity was in operation to achieve a zero thermal impact on the river (i.e., the plant discharge temperature equaled the intake temperature), excursion hours nonetheless would have been recorded. Estimated cost in 2006 for installation of cooling towers ranged from $48 to $61 million.

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. Quad Cities will face an arbitrary and unreasonable hardship if the request is not granted.

Conditions

The Agency hereby GRANTS Quad Cities a provisional variance from Special Condition 7B of NPDES Permit No. IL0005037, subject to the following conditions:

A. The provisional variance shall begin on May 26, 2012, and shall run through May 29, 2012.

B. Quad Cities shall provide the best operation of its station to produce the best effluent possible at all times. At no time, during the variance period, shall Quad Cities cause

Petitioner

_____
Authorized Agent

_____
Title

_____
Date

Quad Cities shall continue to monitor and maintain compliance with all other parameters and conditions specified in its NPDES Permit No. IL0005037

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,

Julie Armitage by CHonsa

Julie Armitage
Acting Chief Legal Counsel

cc: Marcia Willhite
Roger Callaway
Vera Herst

Attachment A

Exelon Generation Company, LLC
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, IL 61242-9740
www.exeloncorp.com

Nuclear

SVP-12-053

May 24, 2012

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: Quad Cities Nuclear Power Station
NPDES Permit No. IL0005037
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 Quad Cities Nuclear Power Station ("Quad Cities", "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 Illinois Administrate Code 104.300. The Station discharges wastewater pursuant to NPDES Permit No. IL0005037, which IEPA issued on August 26, 2010 with expiration date of August 31, 2015. Exelon requests that a provisional variance be issued to Quad Cities Station allowing the station to exceed the non-excursion hour temperature limit for May of 78°F stated in Special Condition 7(b) of NPDES Permit No. IL0005037 for the period of May 26, 2012 through May 29, 2012 by no more than 5°F (83°F for May) **or** 2°F above ambient river temperature, whichever is greater.

Background

Quad Cities Station is a base load nuclear-fueled steam electric generating facility located near Cordova, Illinois, on the Mississippi River at River Mile 506.8. The station operates two boiling water reactors which have a combined maximum generating capacity of 5,914 megawatts thermal. The station is currently operating at 100%

capacity. The station's capacity factor January 1, 2012 through April 31, 2012 was 86%. Quad Cities Station generation output is transmitted to the PJM Interconnection Grid. PJM Interconnection is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

Circulating water used to cool and condense the steam from the generating process is withdrawn from, and discharged to, the Mississippi River (Receiving Stream Water ID-IL_M-02). The current Mississippi River flow is 68,000 cfs and the 7Q10 is 13,700 cfs. The incoming water is currently listed as impaired (2012 listing) due to Mercury, Polychlorinated biphenyls, and Manganese. These impaired waters have a designated use of public and food processing water as well as fish consumptions.

Quad Cities operates a condenser cooling water system in open cycle mode. In this mode, cooling water is drawn from the Mississippi River into an intake canal, passes through the plant systems, and is discharged through diffusers into the Mississippi River. The maximum design flow is 2,253 cfs or 1,011,000 gpm. The maximum temperature rise of the station from intake to effluent is 28°F at design flow of 2,253 cfs. Open cycle operation with the diffusers was initially permitted by the IEPA on December 22, 1983. Quad Cities Station effluent temperature rise downstream of the diffusers at the edge of the mixing zone is limited to 5°F per Special Condition 7(a) of NPDES Permit No. IL0005037.

The available temperature data shows that the Mississippi River water temperature at the station's intake is approaching and may exceed the non-excursion hour May temperature standard of 78°F based on latest weather forecasts. The upstream Mississippi River temperature was measured at 71°F on May 24, 2012, as a result of these conditions, Quad Cities Station expects to exceed the non-excursion hour temperature limit for May of 78°F on May 26, 2012. Based on current weather forecast of daily maximum air temperatures near 90°F four of the next five days, ambient Mississippi River water temperature may reach 80°F. Mississippi River flow is currently 65,000 cfs and forecast to decrease to 45,000 cfs by May 26, 2012. The maximum Mississippi River ambient temperature the station will be able to comply with during the provisional variance period without the use of excursion hours is 76°F.

As a consequence of the unusually warm weather, high ambient river temperatures, and the absence of cooling during the evening hours, the capacity of the Mississippi River to dissipate heat has been reduced beyond its normal capabilities. Even at current flow rates of 65,000 cfs, 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 of the station.

At *no time* has the difference between ambient river temperature and the temperature at the edge of the mixing zone exceeded 5 degree F. In fact, based on modeling, the difference between ambient river temperature and the temperature at the edge of the mixing zone has not exceeded 2 degrees F.

Relief Requested

A provisional variance is being requested from the restriction in Special Condition 7B of the NPDES Permit that limits the number of excursion hours to 1% (87.6 hours) of the hours in a 12-month period ending with any month. Specifically, Special Condition 7B provides that the Station shall not cause water temperatures in the Mississippi River (beyond the mixing zone) to exceed by more than 3°F the non-excursion hour temperature limit for May of 78°F.

Exelon requests that a provisional variance be issued to Quad Cities Station allowing the station to exceed the non-excursion hour temperature limit for May of 78°F stated in Special Condition 7(b) of NPDES Permit No. IL0005037 for the period of May 26, 2012 through May 29, 2012 by no more than 5°F (83°F for May) **or** 2°F above ambient river temperature, whichever is greater.

Necessity for Request

When the ambient river temperatures approach or 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 cease operating altogether to maintain compliance with the NPDES Permit. Partial deratings or 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.

Special Condition 7B of NPDES Permit limits the temperature at the edge of the mixing zone to 78°F in May, except when the Station is using excursion hours, during which time the temperatures at the edge of the mixing zone may be 3°F warmer than these limits. As a rule, Quad Cities has been able to operate well within its permitted thermal limits due to the fact that the ambient temperatures of the River (measured upstream of the discharge) generally remain below the non-excursion hour limit. It is only during periods when the ambient river temperatures are very close to or exceed the non-excursion hour limits or during periods of extreme low flows that the Station is forced to use a significant number of its excursion hour allowance.

As you are aware, Illinois is experiencing unusually warm weather for this time of year which is resulting in high ambient river temperatures. In 2012 Quad Cities Station first began using excursion hours on Sunday, March 18th when upstream Mississippi River temperature matched the station's effluent limitation of 57.0°F. The permitted excursion hours were subsequently exhausted in March as a result of continued record breaking warm weather recorded throughout the mid-western states. Quad Cities Station submitted a request to IEPA on March 20, 2012 for relief from Special Condition 7(b) of

NPDES Permit No. IL0005037 for the period of March 21, 2012 to April 1, 2012. IEPA subsequently issued Provisional Variance IEPA 12-11 to Quad Cities Station on March 21, 2012 allowing the station to exceed the non-excursion hour temperature limit for March of 57°F stated in Special Condition 7(b) of NPDES Permit No. IL0005037 for the period of March 21, 2012 to April 1, 2012 by no more than 5°F (62°F for March) or 2°F above ambient river temperature, whichever is greater. A total of 223.5 excursion hours were accumulated by Quad Cities Station during March of 2012. The stations rolling 12 month excursion hour total stands at 256.5 including the 33 hours accumulated in July of 2011. IEPA also issued Provisional Variances to Exelon's Braidwood Station (IEPA-12-12), Dresden Station (IEPA-12-14), and LaSalle Station (IEPA-12-15) for thermal effluent relief during the March 2012 heat wave.

With the current forecast, it is expected that Quad Cities Station will exceed the non-excursion hour temperature limit for May of 78°F starting May 26, 2012 through May 29, 2012 in order to continue to provide safe reliable power to the grid.

Based on current weather forecasts it is expected that the Mississippi River will approach or exceed Quad Cities Station's permitted effluent limitation. 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.

Since derating the units will not ensure compliance with the effluent limitations shutting the units down may be the only alternative. Removing both units from operation will not only reduce the available power supply to the grid but will also result in the need for power from the grid to operate key nuclear safety systems. The time required to return nuclear generating units to full power can require 18-24 hours meaning the electricity generated from these systems will not be readily available in the event of an emergency. Furthermore, under normal conditions only one of the two reactors would be removed from service at any given time allowing the operating unit to be the primary backup power source for the non-operating unit. Removing both units from service will also eliminate this redundancy and will increase the stations' reliance on off-site power to support safety related systems. With both unit's offline, and unable to immediately return to service, the power that Quad Cities Station could generate as a result of the requested provisional variance would not be available to support the voltage requirements that could occur under changing grid conditions. PJM grid status does not currently have or project any alerts, warnings, or actions through the holiday weekend. However, a number of generating stations are performing load drops over the holiday weekend. If these units were to go offline, grid stability could be affected. PJM predicts an anticipated Peak Load >14, 000 MW on Tuesday 5/29/2012.

In cooperation with IEPA's request that Exelon explore long-term thermal relief options for Quad Cities, Exelon commissioned extensive studies of the Station's thermal output and impacts. Exelon has shared those studies and its draft long-term regulatory relief proposal with both Federal and State regulators. Additionally, Quad Cities Station submitted a draft of its 316(a) thermal report which demonstrates no harm to indigenous aquatic populations to the IEPA, obtained comments, revised the report and then

resubmitted the document for agencies final review and comment. A follow-up meeting with the Agency was held on May 9, 2012 in Springfield when the Agency committed to provide Exelon with any remaining feedback on the Quad Cities Station 316(a) Demonstration within a month of the May 9, 2012 meeting. The Agency asked that we review and address any additional Agency comments prior to it being submitted to the Illinois Pollution Control Board in support of long term relief.

Assessment of Environmental Impacts

The biological structure and condition of the receiving water has been well documented due to the ongoing Quad Cities Station Long-term Monitoring Program which began in 1971. This data is annually presented to ILEPA as well as other stakeholders throughout the state. No adverse effects to the local fish or mussel populations have been observed from similar requests in the past. Therefore, no adverse effects are anticipated with this thermal discharge provisional variance. The station recently completed a draft 316(a) demonstration that the agency has in its possession.

Because Quad Cities Station is not proposing to increase cooling water flows or increase the temperature of cooling water discharges, 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 approximate 2°F between the upstream and downstream temperatures. Therefore, resident fish species will not be subject to any heat shock as a result of increasing the allotment of excursion hours for Quad Cities Station.

The biological studies undertaken as part of Exelon's above-mentioned investigation of long-term, permanent relief options considered the effects on species of fish and shellfish that could result from increasing the number of excursion hours available to the plant. These studies support the conclusion that granting the requested Provisional Variance will not cause significant or unacceptable adverse effects to these species. Species of fish that are likely to suffer from being exposed to temperatures in the excursion zone (i.e. up to 5°F above the monthly standard) will already have taken refuge from the higher than normal ambient river temperatures. In 2006, a species specific die-off occurred in the incoming and receiving water during an elevated water temperature period. Those temperatures were approximately 10 degrees F higher than those currently anticipated with this request. That specific incident continued for several weeks after QC Station first captured it in its dataset. The die-off was a result of temperatures increasing at a rate in excess of the mooneyes adaption capabilities. No fish kills have occurred as a result of the station discharge. Therefore, no fish mortality should result from operations authorized by the Provisional Variance.

This provisional variance request is due to the elevated temperature of the incoming water, not temperature differential; therefore, avoidance behavior outside the mixing

zone is not anticipated because adequate flows are occurring for a minimal temperature differential.

Shellfish do not have similar thermal avoidance capabilities. However, the recently conducted biological studies show that the mussel (unionid) species in beds that are closest to the plant's discharge are generally more temperature tolerant, and are capable of surviving relatively short-term elevated thermal exposures. Species thought to be less thermally-tolerant inhabit beds located further downstream, in the Cordova Bed, located about 1 mile downstream from the plant. However, because the considerable distance between the plant to the Cordova and the flow characteristics of the River (that cause much of the plant's thermal discharge to avoid the Cordova Bed) the Provisional Variance should not cause any appreciable harm to mussel species downstream of the plant.

If the variance is granted, the station will monitor the waters upstream, near the intake, and downstream for detrimental effects to the fishery as noted in previous provisional variances. Visual inspections will take place 3 times during the day and if necessary, a complete visual and water quality assessment will take place in the late afternoon of each day at prescribed areas up and downstream of the plant. This will only take place if any evidence of fish mortality is currently occurring or has occurred. The station fishery biologist will be responsible for this assessment with consultation with the local governing agencies, if necessary. Late afternoon is when the potential effects would be most noticeable, but assessments will occur at the first sign of an issue. Our current biological program will capture and short-term and long-term effects of a provisional variance.

Alternatives to Requested Relief

Historically, Quad Cities Station has used excursion hours during periods of extreme heat and low-river flows. Due in part to the mixing capacity provided by the Mississippi River, and the fact that ambient river temperatures rarely exceed the non-excursion hour NPDES Permit limits, only a relatively small percentage of the permitted excursion hours typically are used to cover any one of these periods. 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 recorded so far this spring and long range weather projections for the balance of the season, 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 exceed the applicable temperature limits. The only option is for the Station to shut down once the ambient River temperatures are at or exceed the NPDES permit monthly limit.

In 2006, the station investigated the feasibility of installing cooling towers. Based on analytical evaluation of historical plant, river, and meteorological data, the proposed

towers performance and the resulting reduction in downstream river temperature could be quantified. When the actual days when excursion hours occurred in the last six year period (2000-2005) were evaluated, there was no appreciable reduction in the number of days when excursion hours would have occurred with the cooling towers in operation. The reason for this is the high upstream river temperatures experienced on most of the days when actual excursion hours were recorded. For ~80% of the days when excursion hours were recorded, the plant intake temperature was at the permit limited temperature or above (≥86°F), and for the remaining 20% of the days, the intake temperature was within half a degree of the permit limits. For most of these occurrences, even if adequate cooling tower capacity was in operation to achieve a zero thermal impact on the river (i.e., the plant discharge temperature equaled the intake temperature), excursion hours nonetheless would have been recorded. Estimated cost in 2006 for installation of cooling towers ranged from $48 to $61 million.

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, Quad Cities 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

Exelon requests that a provisional variance be issued to Quad Cities Station allowing the station to exceed the non-excursion hour temperature limit for May of 78°F stated in Special Condition 7(b) of NPDES Permit No. IL0005037 for the period of May 26, 2012 through May 29, 2012 by no more than 5°F (83°F for May) **or** 2°F above ambient river temperature, whichever is greater.

If you should have any questions regarding these matters, please feel free to contact Vicki Neels at (309) 227-3200 or Mark Stuhlman at (309) 227-2765 from Quad Cities or John Petro, Principal Environmental Analyst, Exelon Generation at (630) 657-3209.

Very Truly Yours,

Scott Davis for 5-24-12

Tim Hanley
Site Vice President
Quad Cities Station

TH/MS/sjo

CC: Mark Stuhlman
John Petro
Letterbook

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026
PAT QUINN, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217/782-0610

August 26, 2010

Exelon Generation Company, LLC
Quad Cities Generation Station
22710 206th Avenue North
Cordova, Illinois 61242

Re: Exelon Generation Company, LLC
Quad Cities Generating Station
NPDES Permit No. IL0005037
Final Permit

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. Failure 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 Agency received a letter dated November 22, 2008 from Student Allied for a Greener Earth (SAGE) regarding the draft NPDES permit. Based on the information provided the following change was made to the permit. Mass limits were added to internal outfall B01.

The Agency also added zinc monitoring to Outfall 001/002 due to an additive change made by the facility.

The Agency has begun a program allowing the submittal of electronic Discharge Monitoring Reports (eDMRs) instead of paper Discharge Monitoring Reports (DMRs). If you are interested in eDMRs, more information can be found on the Agency website, http://epa.state.il.us/water/edmr/index.html. If your facility is not registered in the eDMR program, a supply of preprinted paper DMR Forms for your facility 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.

The attached Permit is effective as of the date indicated on the first page of the Permit. Until the effective date of any re-issued Permit, the limitations and conditions of the previously-issued Permit remain in full effect. 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.

Should you have questions concerning the Permit, please contact Leslie R. Lowry at the telephone number indicated above.

Sincerely,

Alan Keller

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

SAK:LRL:05110101.bah

Attachment: Final Permit

cc: Records
Compliance Assurance Section
Rockford Region
Iowa Department of Natural Resources

NPDES Permit No. IL0005037

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

Iowa Department of Natural Resources
NPDES Section
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, Iowa 50319

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: August 31, 2015

Issue Date: August 26, 2010
Effective Date: September 1, 2010

Name and Address of Permittee:

Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, Illinois 60555

Facility Name and Address:

Quad Cities Generating Station
22710 206th Avenue North
Cordova, Illinois 61242
(Rock Island County)

Discharge Number and Name:

001/002 Open Cycle Diffusers

B01 Wastewater Treatment System

C01 Sanitary Waste Treatment Plant

A02 Radwaste Treatment System Blowdown

Receiving Waters:

Mississippi 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, the Iowa Code Section 455B.174 and rule 567-64.3 of the Iowa Administrative Code, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller

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

Steven D. Williams

Steven Williams
Iowa Department of Natural Resources
NPDES Section
Environmental Services Division

SAK:LRL:05110101.bah

NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

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

PARAMETER	LOAD LIMITS lbs/day DAF (DMF) 30 DAY AVERAGE	LOAD LIMITS lbs/day DAF (DMF) DAILY MAXIMUM	CONCENTRATION LIMITS mg/l 30 DAY AVERAGE	CONCENTRATION LIMITS mg/l DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 001/002 - Open Cycle Diffusers* (Total Average Flow = 1017.2 MGD)						
The discharge consists of:			Approximate Flow (MGD)			
Main Condenser Cooling Water			972.4			
House Service Water			44			
Radwaste Treatment System Blowdown (Outfall A02)			0.055			
Wastewater Treatment Plant (Outfall B01)			0.051			
Sanitary Waste Treatment Plant (Outfall C01)			0.004			
House Service Water Strainer Backwash			0.126			
Intake Screen Backwash			0.508			
Units 1 and 2 Oil/Water Separators (stormwater)			Intermittent			
Fish Culture Facilities			Intermittent			
Crib House Floor Drain Sump**			0.05			
Flow (MGD)	See Special Condition 1.				Daily	24-Hour Total
pH	See Special Condition 2.				1/Month	Grab
Total Residual Chlorine / Total Residual Oxidant***				0.05	1/Month	Grab
Temperature****	See Special Condition 7.				Daily	Continuous
Zinc (Total)*****			Monitor Only		1/Quarter	Grab

* - Outfall 001/002 consists two open cycle diffusers which are side by side and discharge equally into the Mississippi River. See Special Condition 5.
** - This sub-waste stream is an alternative routing from Outfall B01. See Special Condition 17.
*** - See Special Condition 4.
**** - Daily grab samples for Temperature are allowed when the Continuous Temperature Recorder is inoperable.
***** - Quarterly sampling for zinc shall only be done when using the zinc-phosphate corrosion inhibitor.

NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

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

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall B01 - Wastewater Treatment System* (DMF = 0.155 MGD)						
The discharge consists of:**		Approximate Flow (MGD)				
Crib House Floor Drain		0.050				
Aux. Boiler Blowdown		Seasonal				
Roof and Floor Drains		Intermittent				
Portable Demineralizer Rinse Water		Intermittent				
Flow (MGD)	See Special Condition 1.				2/Month	24-Hour Total
Total Suspended Solids	19	39	15	30	2/Month	8-Hour Composite
Oil and Grease	19	26	15	20	1/Month	Grab

* - Wastewater treatment system effluent is routed through an oil/water separator prior to discharge.
** - The listed contributory waste stream all pass through an oil/water separator (Units ½ oil/water separator) prior to entering the wastewater treatment plant. The crib house floor drain sump water may be discharged directly to Outfalls 001/002 as an alternative route. See Special Condition 17.

Outfall C01 - Sanitary Waste Treatment Plant (DMF = 0.06 MGD)						
Flow (MGD)	See Special Condition 1.				2/Month	24-Hour Total
pH	See Special Condition 2.				2/Month	Grab
BOD_5	15	30	30	60	2/Month	24-Hour Composite
Fecal Coliform	See Special Condition 13.				2/Month	Grab
Total Suspended Solids	15	30	30	60	2/Month	24-Hour Composite

NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

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

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall A02 - Radwaste Treatment System Blowdown* (Average Flow = 0.055 MGD)						
The discharge consists of:						
Laundry Wastewater Floor Drains Equipment Drains Reactor Water Filter Backwash from Reactor Cleanup Filter Backwash from Condensate Demineralizers Laboratory Wastewater Groundwater						
Flow (MGD)	See Special Condition 1.				Daily	24-Hour Total
Total Suspended Solids			15	30	1/Month	Grab
Oil and Grease			15	20	1/Month	Grab
Boron	See Special Condition 16.			Monitor Only	1/Discharge Event**	Grab

* - The Permittee shall comply with the Nuclear Regulatory Commission, Title 10, regulations for discharge and monitoring of radioactive wastewater discharges. Wastewater is generally batch treated and recycled, therefore the daily average discharge rate from Outfall A02 does not reflect influent flow rates.
** - When discharging sodium pentaborate.

NPDES Permit No. IL0005037

Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the monthly Discharge Monitoring Report.

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

SPECIAL CONDITION 3. 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. All samples for Total Residual Chlorine shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration or other methods found in Standard Methods for Examination of Water and Wastewater, current edition. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results.

SPECIAL CONDITION 5. Compliance with discharge limitations for Outfall 001 shall be determined by representative sampling of Outfall 002. Due to the configuration of the discharge bay, which is immediately upstream of the two open cycle diffusers, the effluent from the discharge bay flows into the two open cycle diffuser pipes which equally release the discharge into the Mississippi River.

SPECIAL CONDITION 6. Nothing in this permit affects or abrogates the responsibilities or commitments of the Permittee herein as set forth in the agreement entered into by the Permittee in the consolidated cases of Izaak Walton League of America, et. al. v. Schlesinger, No. 2208-71 and People of the State of Illinois, et. al. v. United States Atomic Energy Commission, No. 2208-71 (U.S. District Court, District of Columbia).

SPECIAL CONDITION 7. 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:

A. Maximum temperature rise above natural temperature must not exceed 5°F.

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. (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.
°F	45	45	57	68	78	85	86	86	85	75	65	52

C. The area of diffusion of an effluent in the receiving water is a mixing zone, and that mixing zone shall not extend:

i) over more than 25 percent of the cross sectional area or volume of flow in the Mississippi River;

ii) more than 26 acres of the Mississippi River

The following data shall be collected and recorded:

1. Weekly determination of the river flow rate (daily when the river flows fall below 23,000 cfs).
2. Daily determination of the ambient river temperature (at or upstream of station intakes).
3. Daily recording of station discharge rate.
4. Daily continuous recording of the temperature of the station discharge.
5. Daily determination of station load.

NPDES Permit No. IL0005037

Special Conditions

6. As deemed necessary according to the above data, daily determination of the cross-sectional average temperature at the 500 foot downstream cross-section in the river.

Compliance with the thermal limitations of Special Condition 7 shall be demonstrated as follows:

1. When river flow is 21,000 cfs or greater and the ambient river temperature is 5° F or more lower than the monthly limiting temperatures, the temperature monitoring curve[1] establishes that the permittee is in compliance for all power generation levels;

2. When the river flow is less than 21,000 cfs and/or the ambient river temperature is within 5° F of the monthly limiting temperatures, the permittee shall demonstrate compliance using either:

   a. Plant load, river flow, ambient river temperature, and the temperature monitoring curve, or

   b. Field measurement[2] of the river cross-sectional average temperature taken 500 feet downstream of the diffusers.

In the event that compliance monitoring shows that the permittee has exceeded the monthly limiting temperature, the number of hours of such exceedance shall be reported on the permittee's Discharge Monitoring Report.

[1]The temperature monitoring curve identified as figure 2 in the December 2000 "Revised Temperature Monitoring Curve for Quad Cities Nuclear Generating Station".

[2] When conditions such as ice formation render the Mississippi River inaccessible to marine activity, the Permittee may demonstrate compliance with the thermal limitations of Special Condition 7 by using the most recent field measurement data collected at a river flow equal to or less than the flow for which field measurement data cannot be collected. The most recent field measurement data shall be normalized to the power production level for the day when the river was inaccessible.

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

SPECIAL CONDITION 9. 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 10. Demonstration for the Quad Cities Nuclear Power Station in accordance with Section 316(a) and 316(b) of the Clean Water Act was approved by IEPA by letter dated July 28, 1981 and by the Iowa Department of Environmental Quality (IDEQ) by letter dated May 18, 1981. Based on these conclusions the following actions by the permittee are required:

A. The permittee shall monitor fish impingement once per week, year round. Each year's data shall be tabulated and compared to historical fish impingement data for the same period with the results submitted to IEPA Compliance Assurance Section and Iowa Department of Natural Resources by July 28, each year.

   Iowa Department of Natural Resources
   Attn. Fisheries Management Biologist
   Bellevue Research Station
   24143 Highway 52
   Bellevue, Iowa 52031

B. The permittee shall monitor water temperatures as described in Special Condition 7.

SPECIAL CONDITION 11. A permittee who wishes to establish the affirmative defense of upset as defined in 40 CFR 122.41(n) shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: An upset occurred and that the permittee can identify the cause(s) of the upset; the permitted facility was at the time being properly operated; the permittee submitted notice of the upset as required in standard condition 12 of this permit; and the permittee complied with any remedial measures required in standard condition 4 of this permit.

NPDES Permit No. IL0005037

Special Conditions

SPECIAL CONDITION 12. Discharge is allowed from the Unit 1 oil/water separator and the Unit 2 oil/water separator in accordance with the Spill Prevention Control and Countermeasure Plan (SPCC). If an applicable effluent standard or water quality related effluent limitation is promulgated under Section 301 and 302 of the Clean Water Act (CWA) and that effluent or water quality standard or limitation is more stringent than any effluent or water quality limitations in this permit, or controls a pollutant not limited in this NPDES Permit, the Agencies shall revise or modify the permit in accordance with the promulgated standard and shall notify the permittee.

SPECIAL CONDITION 13. The daily maximum fecal coliform count shall not exceed 400 per 100 ml.

SPECIAL CONDITION 14. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/edmr/index.html.

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

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

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

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 15. 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 16. The permittee shall monitor for boron during periods when Sodium Pentaborate is discharged as a result of tank testing and connection drainage from components in the radwaste treatment system. The effluent boron concentration in the subject discharge shall not cause the receiving stream to exceed the water quality standards in Section 302 of 35 Ill. Adm. Code, Chapter 1, Subtitle C. This permit may be modified to include effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The Agency will public notice the permit modification.

SPECIAL CONDITION 17. Crib House Floor Drain Sump shall only be routed to the Outfall 001/002 Open Cycle Diffusers during periods when increased pump seal cooling water leakage is significant enough so as to overload the wastewater treatment plant. Alternate routing of this discharge shall not take place in lieu of proper maintenance and operation of the circulating pumps.

SPECIAL CONDITION 18. This permit authorizes the use of water treatment additives that were requested as part of this renewal. The use of any new additives, or change in those previously approved by the Agencies, or if the permittee increases the feed rate or quantity of the additives used beyond what has been approved by the Agencies, the permittee shall request a modification of this permit in accordance with the Standard Condition - Attachment H.

The permittee shall submit to the Agencies on a yearly basis a report summarizing their efforts with water treatment suppliers to find a suitable alternative to phosphorus based additives.

NPDES Permit No. IL0005037

Special Conditions

SPECIAL CONDITION 19. In order for the Agency to evaluate the potential impacts of cooling water intake structure operations pursuant to 40 CFR 125.90(b), the permittee shall prepare and submit information to the Agency outlining current intake structure conditions at this facility, including a detailed description of the current intake structure operation and design, description of any operational or structural modifications from original design parameters, source waterbody flow information, or other information as necessary. The information submitted should be in accordance with the previously submitted information collection proposal received by the Agency on May 10, 2005.

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

Upon the receipt and review of this information, the permit may be modified to require the submittal of additional information based on a Best Professional Judgement review by the Agency. This permit may also be revised or modified in accordance with any laws, regulations, or judicial orders pursuant to Section 316(b) of the Clean Water Act.

Attachment H

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 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 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 discharge 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 the USEPA, or required to be maintained under this permit.

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

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

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

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

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

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

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

(Rev. 3-13-98)