

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

August 10, 2007

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STATE OF ILLINOIS
Pollution Control Board

Exelon Generation Company, L.L.C.)
Quad Cities Nuclear Power Station)
)
)
Petitioner,)
)
v.)
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

IEPA - 08-11
(Provisional Variance-Water)

Re: Provisional Variance From Special Condition 6B
of NPDES Permit IL0005037

Dear Mr. Gideon:

The Illinois Environmental Agency (Agency) has completed its technical review of the attached provisional variance request (Exhibit A) submitted by Exelon Generation Company, L.L.C. Quad Cities Nuclear Power Station (Exelon's Quad Cities Station) on August 8, 2007.

Based on the review, the Agency GRANTS the requested variance for a period of 45 days, subject to specific conditions set forth below.

Exelon's Quad Cities Station is a nuclear fueled steam electric generating facility located on the Mississippi River at River Mile 506.8 near Cordova, Illinois. It operates its cooling water system in open cycle mode. Cooling water is taken from the Mississippi River, passes through the plant system and is then discharged by diffusers into the Mississippi River. Maximum design flow of this system is 2,253 cfs. The Agency permitted the open cycle operation with diffusers on December 22, 1983.

Exelon's Quad Cities Station seeks a variance from Special Condition 6B of NPDES Permit IL0005037 (Attachment B). This condition establishes thermal discharge limits for Exelon's Quad Cities Station. Additionally, 6B allows Exelon's Quad Cities Station excursion hours from these limits. Excursion hours are periods of time in which the temperature at the edge of the mixing zone may be 3°F warmer than the temperature limit in the permit. Exelon's Quad Cities Station may only use 1% (87.6) of the hours in a 12-month period ending with any month as excursion hours.

Special Condition 6B also requires that water temperature in the Mississippi River at the edge of the mixing zone shall at no time exceed by 3°F the maximum limits of 86°F in July and August and 85°F in September. Normally, Exelon's Quad Cities Station can operate within these limits because the ambient temperature in the Mississippi River at the intake points (or above the plant) remains below the non-excursion hour temperature limit.

Under normal conditions, the Mississippi River has significant river flows. These flows enable Exelon's Quad Cities Station to meet its permit conditions even when ambient temperatures approach non-excursion hour temperature limit. At this time, however, the Mississippi River is at low flow conditions during a period of time of extreme summer heat. The river flow is currently at 31,000 cfs compared to a normal river flow of 42,000 cfs during this time of year. This low flow condition, coupled with high ambient river and air temperatures and the need to maintain power on the grid during this extreme weather condition period, have necessitated Exelon's Quad Cities Station's request for a provisional variance.

Due to the extremely hot conditions, Exelon's Quad Cities Station began using excursion hours on Thursday, August 2, 2007; it used 16.5 hours on that date. On Friday, August 3, 2007, Exelon's Quad Cities Station used an additional 17.5 hours. Exelon's Quad Cities Station expects to begin using excursion hours again during the afternoon of Thursday, August 9, 2007, and to continue to need them for the remainder of the week, given current forecasts and river flows. Exelon's Quad Cities predicts that it will use the rest of the permitted excursion hours on Saturday, August 11, 2007.

Besides needing additional excursion hours, high temperatures and low river flows have adversely affected the ability of Exelon's Quad Cities Station to meet its thermal discharge limits contain in Special Condition 6B. River flows are currently at 31,000 cfs, compared to the normal of 42,000 during this time of year. Discussions between Exelon's Quad Cities Station and the Rock Island Corps of Engineers indicate that river flow is predicted to hold in the 20,000 to 30,000 cfs range at Lock and Dam 14, with flows falling off to 14,000 cfs in about two weeks. If future forecasts are correct, the river flow will decrease even further. With mid-90's temperatures predicted over the next several days, river temperatures are expected to increase 3 to 4 degrees F. Based on a river flow of 18,000 cfs, the calculated downstream temperature rise is 3.5 degrees F. As a result, the inlet temperatures to the Exelon Quad Cities Station will approach 86 degrees F. Combined with the 3.5 degree rise by the facility, Exelon Quad Cities Station will exceed the August permitted discharge limit of 89 degrees F.

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

1. Exelon's Quad Cities Station will closely monitor the environmental impact from the requested relief and will immediately notify the Agency of any significant impact, along with actions taken to remedy the problem;
2. No other reasonable alternatives appear available;
3. No public water supplies will be affected;

4. No federal regulations will preclude the granting of this request; and
5. Exelon Quad Cities Station will face an arbitrary and unreasonable hardship if the request is not granted.

The Agency hereby GRANTS Exelon's Quad Cities Station a provisional variance from Special Condition 6B of NPDES Permit IL0005037, subject to the following conditions:

1. Exelon's Quad Cities Station is granted 200 provisional variance excursion hours.
2. The provisional variance will begin on the date that Exelon's Quad Cities Station either (1) exhausts the 87.6 permitted excursion hour, or (2) on the date that Exelon's Quad Cities Station first exceeds the current permitted excursion hour temperature limits in Special Condition 6B (August 89 degrees and September 90 degrees). The provisional variance will end on the date that the 200 provisional variance excursion hours are used, but in no case later than 45 days following the start of the provisional variance period.
3. Exelon's Quad Cities Station, during the 200 provisional variance excursion hours, may exceed the maximum temperature limits stated in Special Condition 6B by no more than 5 degrees (August 91 degrees and September 90 degrees)
4. During the variance period, Exelon Quad Cities Station 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;
5. Exelon Quad Cities Station shall document environmental conditions during the term of the provisional variance, including the activities described in 4. above of this Section, and submit the documentation to the Agency and the Department of Natural Resources within 30 days after the provisional variance expires;
6. Exelon's Quad Cities Station shall continue ongoing biological studies to characterize how fish and mussels respond to thermal conditions present in the affected portion of the Mississippi River. These studies include those mentioned on page 4 of Exelon's Quad Cities Station's August 8, 2007 Emergency Application for Provisional Variance. In addition, Exelon's Quad Cities Station must continue to conduct a mussel study specific to this provisional variance; to document this activity; and to submit the documentation for the mussel study to the Agency and the Department of Natural Resources within 60 days after completing the survey described herein. Specifically, Exelon's Quad Cities Station must prepare a study plan within three days of the beginning date of this provisional variance to address the issue of increased excursion hours (increase in thermal stress) on unionid mussels in the Mississippi River in the vicinity of the discharge. The plan must include a survey of the mussel beds identified in a recent report: Draft Report: Unionid Mussel Biothermal Assessment for the Quad Cities Nuclear Station, Mississippi River Miles 503.0 to 506.9 (attached). The survey must address the apparent health of the mussels within the mussel beds given the higher than

allowed river temperatures and longer duration of temperature excursions. Survey dives to ascertain effects on the mussel beds must begin as soon as possible after either the increase of excursion hours or maximum temperature relief afforded by the provisional variance are utilized. Conditions pertinent to the mussel populations to be recorded during the surveys will be much the same as conducted for the baseline study referenced above. These must include, but are not limited, to mussel species' occurrence and density, age, zebra mussel infestation and apparent condition, i.e., any outward signs of heat stress such as morbidity, reflex time, position in the substrate, etc. Plant discharge temperatures, upstream river temperatures, incidence of excursion hours and other pertinent information must be provided to build an understanding of the conditions to which the mussels have recently been exposed. Surveys must continue until excursion hours are no longer being used, or in other words, until the weather conditions causing the need for more excursion hours have moderated. The final report for this study must address the changes noted in mussel populations from the previous study. Verbal reports are due to the Agency at regular intervals during the surveys. These reports must include any information on mussel die-off. If mussel die-off downstream from the discharge is found and is attributable to the thermal affects of the effluent, as compared to the condition of upstream populations, a monetary settlement will be required as calculated by the formula the Illinois Department of Natural Resources uses for mussel die-off settlements;

7. Exelon Quad Cities Station shall immediately notify the Agency and the Department of Natural Resources of any unusual conditions, including mortalities to 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 Agency and the Department of Natural Resources as changes occur until normal conditions return; notify the Agency and the Department of Natural Resources when normal conditions return; and submit the documentation to the Agency and the Department of Natural Resources within 30 days after normal conditions return;
8. Exelon Quad Cities Station shall develop and implement a response and recovery plan to address any adverse environmental impact due to thermal conditions resulting from the provisional variance, including loss and damage to aquatic life;
9. By January 15, 2008, Exelon Quad Cities Station shall provide an interim report to the Agency that summarizes all additional fishery and mussel studies, and provides the status of all ongoing discussions with other agencies regarding thermal issues, and the status of research regarding long-term trends and possible alternative thermal compliance measures that will be implemented should Exelon's Quad Cities Station's request for alternate thermal limits under 316 (a) not be granted.
10. Exelon's Quad Cities Station shall notify Roger Callaway of the Agency by telephone at 217/782-9720 when the need for the 200 additional excursion hours begin and again if the excursion hours are totally used. 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

11. Exelon Quad Cities Station shall sign a certificate of acceptance of this provisional variance and forward that certificate to Roger Callaway at the address indicated above within one day of the date of this order. The certification should take the following form:

I (We) _____, hereby accept and agree to be bound by all terms and conditions of the provisional variance granted by the Agency in dated _____.

Petitioner

Authorized Agent

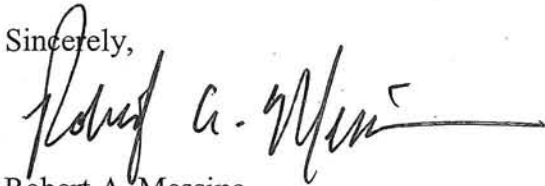
Title

Date

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

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,



Robert A. Messina
Chief Legal Counsel



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

PM-07-012

August 8, 2007

Mr. Mike Garretson
Manager, Compliance Assurance Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Subject: Quad Cities Nuclear Power Station
NPDES Permit No. IL0005037
Provisional Variance Request – Emergency Application

Dear Mr. Garretson:

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 Emergency Application for a provisional variance consistent with IEPA procedures at 35 Ill. Adm. Code 180.204. Quad Cities is located on the Mississippi River in Rock Island County. The Station discharges wastewater pursuant to NPDES Permit No. IL0005037, which IEPA issued on December 17, 2001. The Station submitted its NPDES Permit renewal application to the Agency on November 18, 2004.

Station Description

Quad Cities Station is a nuclear-fueled steam electric generating facility located near Cordova, Illinois, on the Mississippi River at River Mile 506.8. The two boiling water reactors have a combined maximum generating capacity of 1824 megawatts electric. Circulating water used to cool and condense the steam from the generating process is withdrawn from and discharged to the Mississippi River.

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 via diffusers into the Mississippi River (Outfalls 001 and 002). The maximum design flow is 2253 cfs or 1,011,000 gpm. Open cycle operation with the diffusers was initially permitted by the IEPA on December 22, 1983.

Relief Requested

A provisional variance is being requested from the restriction in Special Condition 6B of Quad Cities Station's NPDES Permit that limits the number of hours during which the Station discharge may exceed 86 °F in August and 85 °F in September to 87.6 hours (one percent of the hours in a 12 month period). Special Condition 6B also 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 maximum limit of 86 °F in August and 85 °F September, respectively.

In light of existing low Mississippi River flows caused by lack of rain in the upper Mississippi River watershed, high intake water temperatures, high ambient air temperatures, and power demands, Exelon requests a two-part order of stepwise implementation provisional variance for Quad Cities Station:

- Part 1 requests that a provisional variance be issued to Quad Cities Station granting an additional 200 excursion hours for a period designated to begin on the date that the permitted 87.6 excursion hours are exhausted which is projected to be Saturday, August 11, 2007 based on the extended forecast combined with the current Mississippi River flow projections.
- Part 2 requests that a provisional variance be issued that allows Quad Cities Station to exceed the maximum temperature limit stated in Special Condition 6B by no more than 5 °F (August 91 °F and September 90 °F).

Quad Cities will notify the Agency when Parts 1 and 2 of this particular provisional variance are triggered. The provisional variance period will end on the date that the additional 200 excursion hours are used, but in no case later than 45 days following the start of the provisional variance period.

Necessity for Request

Special Condition 6B of NPDES Permit limits the temperature at the edge of the mixing zone to 86°F August, 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 this limit. Historically, Quad Cities Station has been able to meet the edge of the mixing zone limit of 86 °F during August due to the fact that the ambient temperatures of the Mississippi River (measured upstream of the discharge) generally remain below the non-excursion hour limit during this time of year. Even when the ambient river temperatures begin to approach the non-excursion hour limits, the significant river flows, which are generally characteristic of the Mississippi River, are sufficient to allow the Station to avoid using a significant percentage of its excursion hour allowance. 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 river flows that the Station is forced to use its excursion hour allowance.

During July and August 2006, extreme drought conditions existed and ambient temperatures in the Mississippi River exceeded Exelon's discharge limit of 86 °F reaching 88 °F. During this time period, the Station used 223 excursion hours (117 excursion hours in July and 106 excursion hours in August), authorized by emergency provisional variances issued by Illinois EPA.

This year, Illinois again faces unusually hot summertime condition. Quad Cities Station first began using excursion hours on Thursday, August 2, 2007 when it used 16.5 hours and again on Friday, August 3, 2007 when it used 17.5 hours. Quad Cities Station predicts that its original NPDES permit allotment of 87.6 hours will be used up Saturday, August 11, 2007. The river flow is presently at 31,000 cfs compared to a normal river flow for this time of year of 42,000 cfs. The plant is expected to begin using excursion hours during the afternoon hours on Thursday, August 9, 2007 and remain on the excursion hour clock through the remainder of this week based on forecasted hot and humid weather conditions, absence of cooling during the evening hours and drastically low river flows. The river is not cooling off during the evening hours as is typical this time of year. Based on recent discussions with the Rock Island Corps of Engineers, river flow is predicted to hold between 20,000–30,000 cfs at Lock & Dam 14 with flow falling off to 14,000 cfs two weeks out. Exelon expressed concern to the Rock Island Corps of Engineers regarding the flow forecast. The Rock Island Corps of Engineers in turn has communicated Exelon's concerns to the St. Paul Corps of Engineers District hydrologist to hopefully avoid a repeat of last year's perturbation that suddenly dropped river flow to 12,600 cfs. Unfortunately, the projected falling river flows in 2007 are a repeat of what was experienced in 2006 and are a result of lack of precipitation in the upper Mississippi Valley.

Mississippi River flow is forecast to further decrease through the end of the month. With the current forecast of highs in the mid-90's for the next several days, river temperature is expected to increase another 3 to 4 °F. At a river flow of 18,000 cfs, the calculated downstream temperature rise is 3.5 °F. If the weather forecast holds true, inlet temperatures are expected to approach 86 °F, which when combined with a 3.5 °F delta T rise will place the Station over its maximum permitted August discharge temperature limit of 89 °F. The forecast for the upcoming week calls for a string of mid-90°F days with lows in the mid-seventies. Precipitation has been extremely low in many areas, most notably in the region of the headwaters of the Mississippi River in Minnesota.

Assessment of Environmental Impacts

Under the auspices of IEPA, IDNR, Iowa DNR, USFWS and USEPA, Exelon has been conducting long-term thermal studies for Quad Cities Station. On April 19, 2007, Exelon Generation informed USEPA and IEPA of its plans to conduct additional fishery and mussel studies related to Quad Cities Station's thermal discharges. These additional studies are designed to supplement the extensive data and information previously obtained in order to more fully assess whether alternate thermal limits under 316(a) are

appropriate and, if so, what those limits should be. Exelon plans to provide an interim status report to the Agency by January 15, 2008 which summarizes the additional fishery and mussel studies, status of ongoing discussions with the agencies, and additional research regarding long-term trends and possible alternative thermal compliance measures.

Most of the ongoing biological field work is planned for the warmer months in 2007 and 2008 and is designed to gather additional information regarding ecological conditions in the relevant portion of the river and to permit a more detailed assessment of the expected and existing biological community in the area. A significant portion of the biological work will focus on gaining more insight into the mussel community as well as fish species that may be important to mussel reproduction. Mussel bed substrate temperature probes (which were also utilized in 2006) were installed on May 22, 2007, and will remain in place through September (substrate temperature probe data will be downloaded on a monthly basis).

On June 7, 2007, we received a letter from U.S. Fish and Wildlife Service's (USFWS) providing comments on Exelon Generation's long term thermal study plans. USFWS provided important guidance regarding Habitat Conservation Planning and Incidental Take Permit Processing. We have accepted USFWS invitation to coordinate our work on those issues and expect to be meeting with the Agency in August to discuss details.

On June 20, 2007, Iowa Department of Natural Resources (DNR) responded to Exelon Generation's April 19, 2007 letter. Exelon and Iowa DNR are engaged in discussions regarding the process for pursuing relief under Section 316 (a).

The fishery studies (field work) detailed in our April 19, 2007 letter to USEPA began in mid-May and will continue on a biweekly basis. Dives to characterize additional mussel beds upstream and downstream of Quad Cities Station were performed June 21 through June 26. The goal of Exelon's long-term thermal relief proposal is to substantially mitigate the need for the emergency-type relief requested herein.

The biological studies already completed 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. Preliminary results from the ongoing studies fully support the conclusion that granting the requested Provisional Variance will not cause significant or unacceptable adverse effects to these species.

This year's fish sampling of the mussel beds in the vicinity of Quad Cities Station began on May 16, 2007 and is currently being conducted. Three sample sessions have occurred to date. The numbers, density, and species of fish collected in the specific habitats are similar to those found within the general area of the mussel beds. Exelon also conducts fish surveys as part of its long-term monitoring program. These surveys

are conducted twice a month from June through September. The species and abundance of fish observed are similar between the two sampling studies. Also during these sampling events, no unusual occurrences have been noted.

The recent ambient river temperature increase near Quad Cities has been gradual. Species of fish that may possibly suffer from being exposed to temperatures in the excursion zone will already have taken refuge from the higher than normal ambient river temperatures. This movement is seen annually in connection with our long-term monitoring programs. Fish species that are observed to take refuge include walleye, sauger, northern pike, and a few redhorse species. As a result, such resident fish species will not be subject to any heat shock as a result of the requested additional excursion hours requested herein. Further, since Quad Cities Station is not proposing to increase cooling water intake, there will be no increase in impingement or entrainment as a result of the issuance of the requested Provisional Variance.

The recently conducted biological studies show that the mussel 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. Mussel data shows that threatened and endangered species did not appear to be affected by the warm river temperatures in July and August 2006.

Alternatives to Requested Relief

Quad Cities Station generally uses excursion hours during periods of extreme heat and low-river flows, as discussed above. 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. Additional hours are kept in reserve to deal with future periods of extreme weather or other contingencies. Based on river temperatures recorded so far this summer and projections for the balance of this month, it is likely that there will be days during which ambient river temperatures will approach or reach NPDES permit limits. Neither de-rating the units nor obtaining additional temporary cooling capacity will allow the Station to maintain compliance if the ambient river temperatures at the intake exceed the applicable discharge temperature limits. Under such conditions, the only option if the Station is to comply with its permit limits is for the Station to shut down. Without the power that Quad Cities Station could generate as a result of the requested provisional variance, there is a risk that the energy needs of Exelon's customers may not be met. In addition, depending on the operating status of other generating stations in the area,

Quad Cities Station continued operation may be essential for voltage support for the Commonwealth Edison Company and Mid American Transmission systems.

Mitigative Actions to be Taken During the Variance Period

During the period when the Station operates under 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; (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 the Agency recommend the issuance of a two-part order of stepwise implementation provisional variance for Quad Cities Station to include: (1) an additional 200 excursion hours during which time the river temperature could exceed 86 °F in August and 85 °F in September. This part 1 of the provisional variance would become effective on the date that the permitted 87.6 excursion hours are exhausted through 45 days following the start of the provisional variance period and (2) approval to exceed that maximum temperature limit stated in Special Condition 6B in NPDES Permit IL 0005037 by no more than 5 °F (August 91 °F and September 90 °F). Quad Cities Station will notify the Agency when each part of the provisional variance is implemented and will keep the Agency updated on changing conditions. The provisional variance period will end on the date that the additional 200 excursion hours are used, but in no case later than 45 days following the start of the provisional variance period.

Exelon believes that not granting this provisional variance to Quad Cities Station will impose an arbitrary and unreasonable hardship. A negative decision will almost certainly result in a loss of generating capacity in Northern Illinois during periods of great electrical demand and could impact voltage support for the Commonwealth Edison Company and Mid American Transmission systems, which includes Illinois and portions of Iowa. There are presently no provisional variance orders in effect for Quad Cities Station.

Illinois Environmental Protection Agency
August 8, 2007
Page 7 of 7

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, Senior Environmental Analyst, Exelon Generation at (630) 657-3209.

Very Truly Yours,



William R. Gideon
Plant Manager
Quad Cities Station

WRG/MS/jas



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

RENEE CIPRIANO, DIRECTOR

217/782-0610

December 17, 2001



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

Re: Exelon Generation Company, LLC
Quad Cities Generating Station
NPDES Permit No. IL005037
Modification of NPDES Permit (After Public Notice)

Gentlemen:

The Illinois Environmental Protection Agency has reviewed the request for modification of the above-referenced NPDES Permit and issued a public notice based on that request. The final decision of the Agency is to modify the Permit as follows:

Special Condition 6 of the NPDES permit has been changed to reflect a modification of the Temperature Monitoring Curve which is used in conjunction with power capacity and stream data to determine compliance with the the temperature limits at the edge of the mixing zone 500 feet downstream of the diffusers. The compliance language of Special Condition 6 has also been reorganized to provide greater clarity in establishing what data is to be collected and the frequency of collection.

Enclosed is a copy of the modified Permit. You have the right to appeal this modification to the Illinois Pollution Control Board within a 35 day period following the modification date shown on the first page of the permit.

Should you have any question or comments regarding the above, please contact Blaine Kinsley of my staff.

Very truly yours,

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

TGM:BAK:99123001.daa

Attachment: Modified Permit

cc: Records
Compliance Assurance Section
Peoria Region
US EPA

GEORGE H. RYAN, GOVERNOR

NPDES Permit No. IL0005037

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

Iowa Department of Natural Resources
Wastewater Section
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, Iowa 50316

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified (NPDES) Permit

Expiration Date: May 31, 2005

Issue Date: May 26, 2000
Effective Date: June 1, 2000
Modification Date: December 17, 2001

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:

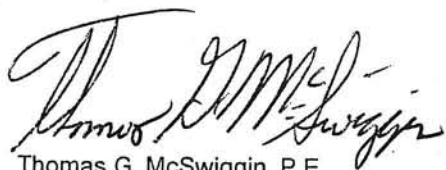
001/002 Open Cycle Diffusers
B01 Wastewater Treatment System
C01 Sanitary Waste Treatment Plant
A02 Radwaste Treatment System Blowdown

Receiving Waters:

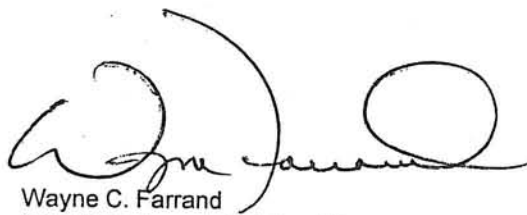
Mississippi River
Mississippi River
Mississippi River
Mississippi River

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, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

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



Thomas G. McSwiggin, P.E.
Illinois Environmental Protection Agency
Manager, Permit Section
Division of Water Pollution Control



Wayne C. Farrand
Iowa Department of Natural Resources
Supervisor
Wastewater Permit Section
Environmental Protection Division

NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------|------------------------------|------------------|---------------------|------------------------------------------------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| 1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows: | | | | | | |
| Outfall(s): 001 and 002 Open Cycle Diffusers | | | | | | |
| This discharge consists of: | | | | | | |
| | | | | | Approximate Flow | |
| | | | | | | Main Condenser Cooling Water 970.4 MGD |
| | | | | | | House Service Water 40MGD |
| | | | | | | Radwaste Treatment System Blowdown* 0.051 MGD |
| | | | | | | Wastewater Treatment Plant Effluent 0.034 MGD |
| | | | | | | Sanitary Waste Treatment Plant Effluent 0.008 MGD |
| | | | | | | House Service Water Strainer Backwash 0.126 MGD |
| | | | | | | Intake Screen Backwash 0.508 MGD |
| | | | | | | Units 1 and 2 Oil/Water Separators Intermittent |
| | | | | | | Fish Culture Facilities Intermittent |
| | | | | | | Crib House Floor Drain Sump** |
| Flow (MGD) | | | | | Daily | 24 hr total |
| pH | See Special Condition No. 1 | | | | 1/Month | Grab |
| Total Residual Chlorine/Total Residual Oxidant*** | | | 0.2 | | 1/Week | Grab |
| Temperature | See Special Condition No. 6 | | | | Daily | Continuous Recording |

*This sub-waste stream discharges only through Outfall 002, all other sub-waste streams are common to both Outfalls 001 and 002.

**This sub-waste stream is an alternate routing from Outfall 001(b). See Special Condition 18.

***See Special Conditions 3 and 4. The discharge limit of 0.2 mg/l applies when chlorine compounds are used as the sole biocide. See Special Condition 15 for requirements when bromine biocides are used.

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 | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|---------------------------------------------------------------|-----------------------------|---------------|------------------------------|---------------|---------------------------------|-----------------|
| | 30 DAY AVG. | DAILY MAX. | 30 DAY AVG. | DAILY MAX. | | |
| Outfall(s): B01 Wastewater Treatment System**** | | | | | | |
| This discharge consists of:***** | | | | | Approximate Flow (MGD) | |
| | | | | | 0.033 | |
| | | | | | 0.0015 | |
| | | | | | Intermittent | |
| | | | | | Intermittent | |
| Flow (MGD) | | | | | 1/Week | 24 hr total |
| Total Suspended Solids | | | 15 | 30 | 1/Week | 8 hr Composite |
| Oil and Grease | | | 15 | 20 | 1/Month | Grab |
| Outfall(s): C01 Sanitary Waste Treatment Plant (DMF 0.06 MGD) | | | | | | |
| | | | | | Approximate Flow 0.008 (MGD) | |
| Flow (MGD) | | | | | 2/Month | 24 hr total |
| pH | See Special Condition No. 1 | | | | 2/Month | Grab |
| BOD ₅ | 15 | 30 | 30 | 60 | 2/Month | 24 hr Composite |
| Fecal Coliform | See Special Condition No. 9 | | | | 2/Month | Grab |
| Total Suspended Solids | 15 | 30 | 30 | 60 | 2/Month | 24 hr Composite |

****Wastewater Treatment System effluent is routed through an oil/water separator prior to discharge.

*****The listed contributory waste streams all pass through an oil/water separator (Unit 1/2 oil/water separator) prior to entering the wastewater treatment plant. Crib House Floor Drain Sump water may be discharged directly to Outfalls 001/002 open cycle diffuser as an alternate route. See Special Condition 18.

NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

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

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

Outfall(s): A02 Radwaste Treatment System Blowdown*****

This discharge consists of:

Approximate Flow 0.0422 (MGD)

- Reactor Water
- Contaminated Floor Drains
- Equipment Drains
- Condensate Demineralizer Filter Backwash
- Reactor Cleanup Demineralizer Filter Backwash
- Laboratory Wastewater
- Sodium Pentaborate Tank Testing Drainage

| | | | | | | |
|------------------------|------------------------------|--|----|----|--------------------------------|-------------|
| Flow (MGD) | | | | | Daily | 24 hr total |
| Total Suspended Solids | | | 15 | 30 | 1/Week When Discharging | Grab |
| Oil and Grease | | | 15 | 20 | 1/Month When Discharging | Grab |
| Boron | See Special Condition No. 17 | | | | 1/Discharge Period | Grab |

*****The permittee shall comply with the Nuclear Regulatory Commission Title 10 (10 CFR 0.735-1) regulations for discharge and monitoring of radioactive wastewater discharges. Wastewater is generally batch treated and recycled, therefore the daily average discharge rate from Outfall No. A02 does not reflect influent flow rates.

NPDES Permit No. IL0005037

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. A minimum of three grab samples shall be taken at approximately five minute intervals in the discharge bay at the diffuser pipes during the respective sodium bromide and/or chlorine injection period of a generating unit allowing for lag time between the initiation of injection and the point of sampling before the first grab sample is taken. The individual values and average (mean) values for each set of samples shall be reported including the Unit sampled, the times samples were collected, the time and duration of the sodium bromide and/or chlorine dosing period plus the rate and amount (lbs.) of sodium bromide and/or chlorine applied. For purposes of reporting, the daily discharge shall be the average of all non-zero values measured in a day and the monthly average shall be the average of all daily discharges.

For the purpose of determining compliance, the highest single instantaneous TRC/TRO concentration measured on any day will be regarded as the daily maximum concentration. Total residual oxidant concentration shall be measured and reported in terms of total residual chlorine.

SPECIAL CONDITION 4. Neither total residual chlorine nor total residual oxidant may be discharged from any unit's main condenser for more than two hours in any one day. Not more than one of the unit's main condensers may discharge total residual chlorine or total residual oxidant at any one time unless the permittee can demonstrate to the Agency that doing so will not violate water quality limitations of the State. Simultaneous chlorination of the generating units will require a modification of the permit. The Agency will public notice the permit modification.

SPECIAL CONDITION 5. 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 6. 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.)

| | <u>Jan.</u> | <u>Feb.</u> | <u>Mar.</u> | <u>Apr.</u> | <u>May</u> | <u>June</u> | <u>July</u> | <u>Aug.</u> | <u>Sept.</u> | <u>Oct.</u> | <u>Nov.</u> | <u>Dec.</u> |
|----|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|
| °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:
- over more than 25 percent of the cross sectional area or volume of flow in the Mississippi River;
 - more than 26 acres of the Mississippi River

NPDES Permit No. IL0005037

Special Conditions

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.
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 6 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 curve¹ 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 measurement² 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.

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

²When 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 6 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 7. There shall be no discharge of polychlorinated biphenyl compounds from any discharge.

SPECIAL CONDITION 8. 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 9. The daily maximum fecal coliform count examined twice per month shall not exceed 400 per 100 ml.

SPECIAL CONDITION 10. Commonwealth Edison Company's 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 Permit Section and Compliance Assurance Section by July 28, each year.
- B. The permittee shall monitor water temperatures as described in Special Condition 6.

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 Agency shall revise or modify the permit in accordance with the promulgated standard and shall notify the permittee.

SPECIAL CONDITION 13. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

SPECIAL CONDITION 14. The completed Discharge Monitoring Report forms shall be mailed and received by the IEPA no later than the 28th day of the following month, unless otherwise specified by the permitting authority. Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62706
Attention: Compliance Assurance Section

SPECIAL CONDITION 15. A discharge limit of 0.05 mg/l (instantaneous maximum) shall be achieved for total residual oxidant when bromine biocides are used for condenser biofouling control, in accordance with Special Condition 3.

SPECIAL CONDITION 16. 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 17. 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 18. 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.

ATTACHMENT H

Standard Conditions

Definitions

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

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

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

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

USEPA means the United States Environmental Protection Agency.

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

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

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

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

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

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

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

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

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

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

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

- (6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit.
- (9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the 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 recurrence 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 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.**