

Commonwealth Edison Company  
Byron Generating Station  
4450 North German Church Road  
Byron, IL 61010-9794  
Tel 815-234-5441



October 4, 2000

LTR: BYRON 2000-0144  
File: 2.07.0300

United States Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Byron Station, Units 1 and 2  
Facility Operating License Nos. NPF-37 and NPF-66  
NRC Docket Nos. STN 50-454 and STN 50-455

Subject: Byron Station National Pollutant Discharge Elimination System (NPDES)  
Permit Renewal

In accordance with Facility Operating License Nos. NPF-37 and NPF-66, Appendix B, Environmental Protection Plan (Non-Radiological), Section 3.2, "Reporting Related to the NPDES Permit and State Certification", we are submitting a copy of NPDES Permit No. IL 0048313 for Byron Station. This permit was renewed by the Illinois Environmental Protection Agency and became effective on September 8, 2000, and expires August 31, 2005.

If there are any questions regarding this report, please contact Ms. P. Reister, Regulatory Assurance Manager, at (815) 234-5441, extension. 2280.

Sincerely,

A handwritten signature in black ink, appearing to read "W Levis", with a stylized flourish at the end.

William Levis  
Site Vice President  
Byron Station

WL/ED/al/dpk

Enclosure: NPDES Permit IL 0048313

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – Byron Station

cool



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

THOMAS V. SKINNER, DIRECTOR

217/782-0610

September 8, 2000

Commonwealth Edison Company  
10 South Dearborn, 35 FNW  
Chicago, Illinois 60603

Re: Commonwealth Edison Company  
NPDES Permit No. IL0048313  
Final Permit

Gentlemen:

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

The permit changes suggested in your letter dated July 3, 2000 were all incorporated into the final permit with the following exception:

Item 10 of the suggested changes to the Draft Permit (moving metal limits from Outfall 002 to Outfall E01) was not granted because Steam Generator Cleaning process waste was listed as a contributing wastestream for Outfall 002 and Outfall E01. Therefore, these limits should apply to both outfalls.

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

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

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

Very truly yours,

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

TGM:SFN:BAK:00062005.dlk

Attachment: Final Permit

cc: Records  
Compliance Assurance Section  
Rockford Region

GEORGE H. RYAN, GOVERNOR

NPDES Permit No. IL0048313

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: August 31, 2005

Issue Date: September 8, 2000  
Effective Date: September 8, 2000

Name and Address of Permittee:

Commonwealth Edison Company  
1411 Opus Place, Suite 250  
Downers Grove, Illinois 60515

Facility Name and Address:

Commonwealth Edison Company  
Byron Nuclear Power Station  
4450 North German Church Road  
Byron, Illinois 61010  
(Ogle County)

Discharge Number and Name:

No. 001 Cooling System Blowdown Line  
No. A01 Demineralizer Regenerant Waste  
No. B01 Sewage Treatment Plant Effluent  
No. C01 Wastewater Treatment Plant Effluent  
No. D01 Radwaste Treatment System Effluent  
No. E01 Stormwater Runoff Basin  
No. F01 Intake Screen Backwash  
No. 002 Stormwater Runoff Basin Overflow  
No. 003 East Station Area Runoff  
No. 004 West Station Area Runoff

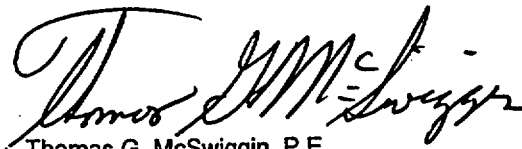
Receiving Waters:

Rock River

Woodland Creek  
Woodland Creek  
Unnamed Tributary to Rock River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

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



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

TGM:BAK:00062005.dlk

## NPDES Permit No. IL0048313

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 Cooling System Blowdown Line						
This discharge consists of:			Approximate Flow			
1. Cooling tower blowdown			16.13 MGD			
2. Non-Essential service water blowdown and strainer backwash			1.3 MGD			
3. Essential service water blowdown and strainer backwash			1.31 MGD			
4. Demineralizer regenerant waste			0.024 MGD			
5. Sewage treatment plant effluent			0.008 MGD			
6. Wastewater treatment plant effluent			0.040 MGD			
7. Radwaste treatment system effluent			0.024 MGD			
8. Stormwater runoff basin			0.003 MGD			
9. Secondary steam system (non-radioactive) process water			0.1 MGD			
10. Condenser Drain Discharge			Intermittent			
Flow					Daily	Continuous
pH	See Special Condition No. 1				1/Week	Grab
Total Residual Chlorine*		0.2	0.5		1/Week	Grab*
Total Residual Oxidant*			0.05		1/Week	Grab*
Temperature	See Special Condition No. 4				Daily	Continuous
Zinc (Total)		-	1.0		1/Week	Grab
Hydrazine	See Special Condition No. 12		-	0.031	Daily When Discharging	Grab
Copper (Total)**			0.071		1/Week	Grab

\*See Special Condition No. 3 and Special Condition No. 14.

\*\*See Special Condition No. 5.

## Outfall: A01 Demineralizer Regenerant Waste\*\*

This discharge consists of:			Approximate Flow			
				0.024 MGD		
1. Make-up demineralizer regenerant waste						
2. Condensate polisher sump discharge						
3. Make-up demineralizer area drains						
4. Well water sand filter backwash (Alternate Route)						
5. Steam generator(s) cleaning process waste once every 5-10 years				.16 MGD once every 5-10 years		
6. Temporary demineralizer regenerant waste						
7. Secondary Steam system (non radioactive) discharge (alternate route)				0.1 MGD		

NPDES Permit No. IL0048313

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:						
Flow					Daily	Continuous
Total Suspended Solids			15.0	30.0	1/Month	8 Hour Composite*

The following metal parameter(s) limitations and monitoring are to apply during steam generator(s) cleaning process periods:

Chromium (hexavalent)		0.1	0.2	Daily	Grab
Chromium (total)		1.0	2.0	Daily	Grab
Copper		0.5	1.0	Daily	Grab
Iron (total)		1.0	1.0	Daily	Grab
Lead		0.2	0.4	Daily	Grab
Nickel		1.0	2.0	Daily	Grab
Zinc (total)		1.0	2.0	Daily	Grab

\*Permittee may follow the sampling procedure identified as Byron Station Procedure BCP 300-40 for determination of total suspended solids by calculation from individual composites.

\*\*See Special Condition 17

Outfall: B01 Sewage Treatment Plant Effluent

					Approximate Flow 0.008 MGD (DMF 0.057 MGD)	
Flow					Daily	Continuous
pH	See Special Condition No. 1				2/Month	Grab
Total Suspended Solids	14.2	28.5	30.0	60.0	2/Month	24 Hour Composite
BOD <sub>5</sub>	14.2	28.5	30.0	60.0	2/Month	24 Hour Composite

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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: C01 Wastewater Treatment Plant Effluent\*\*\*\*

This discharge consists of:

## Approximate Flow

1. Turbine building floor drain sumps***	Intermittent
2. Turbine building fire and oil sump***	Intermittent
3. Turbine building equipment drains***	Intermittent
4. Essential service water drain sumps***	Intermittent
5. Units 1 and 2 tendon tunnel sumps	Intermittent
6. Reactor building roof drains	Intermittent
7. Auxiliary boiler blowdown	Intermittent
8. Units 1 and 2 diesel fuel storage tank sumps	Intermittent
9. Wastewater treatment system sand filter backwash	0.002 MGD
10. Well water sand filter backwash	Intermittent
11. Steam generators cleaning process waste	.16 MGD once every 5-10 years
12. Condenser drain discharge (alternate route)	Intermittent
13. Secondary steam system (non-radioactive) discharge (alternate route)	Intermittent
14. Generic metal cleaning activities	0.004 MGD
15. Miscellaneous non-contaminated drain water	0.004 MGD
- Chiller Condensate	
- Fire protection system drain water	
- Service water drains	
- Closed cooling system drain water	

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

The following metal parameter(s) limitations and monitoring are to apply during steam generator(s) cleaning process periods:

Chromium (hexavalent)	0.1	0.2	Daily	Grab
Chromium (total)	1.0	2.0	Daily	Grab
Copper	0.5	1.0	Daily	Grab
Iron (total)	1.0	1.0	Daily	Grab
Lead	0.2	0.4	Daily	Grab
Nickel	1.0	2.0	Daily	Grab
Zinc (total)	1.0	2.0	Daily	Grab

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

\*\*\*\*See Special Condition 17

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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: D01 Radwaste Treatment System Effluent						
This discharge consists of:			Approximate Flow			
1. Steam generator condensate blowdown			Intermittent			
2. Cooling jacket blowdown			Intermittent			
3. Auxiliary building floor drains			Intermittent			
4. Laundry waste treatment system drains			0.001 MGD			
5. Auxiliary building equipment drains			Intermittent			
6. Radwaste demineralizer filter backwash			0.002 MGD			
7. Evaporator wastewater			Intermittent			
8. Turbine building floor drain sumps (Alternate Route)			Intermittent			
9. Turbine building fire and oil sump (Alternate Route)			Intermittent			
10. Turbine building equipment drains (Alternate Route)			Intermittent			
11. Essential service water drain sumps (Alternate Route)			Intermittent			
12. Boron recycle system blowdown			Intermittent			
13. Condensate polisher sump discharge (Alternate Route)			Intermittent			
14. Generic non-chemical metal cleaning activities			Intermittent			
15. Portable Demineralizer discharge			Intermittent			
16. Reactor coolant letdown			0.004 MGD			
17. Miscellaneous drain water			0.004 MGD			
- Shiller condensate						
- Fire protection system drain water						
- Service water drains						
- Closed cooling system drain water						
Flow					Daily	Continuous
Total Suspended Solids			15.0	30.0	1/Week	Discharge Tank Composite
Oil and Grease			15.0	20.0	1/Week	Grab

## Outfall: E01 Stormwater Runoff Basin\*\*\*\*\*

This discharge consists of:

Approximate Flow

- |   |                               |
|---|-------------------------------|
| 1. Parking lot runoff   | Intermittent                  |
| 2. Transformer area runoff  | Intermittent                  |
| 3. Station area runoff  | Intermittent                  |
| 4. Turbine building fire and oil sump*****                        | Intermittent                  |
| 5. Steam generators cleaning process waste                        | .16 MGD once every 5-10 years |
| 6. Generic non-chemical metal cleaning activities                 | Intermittent                  |
| 7. Secondary steam system (non-radioactive) discharge (alternate) | 0.1 MGD                       |
| 8. Condenser drain discharge (alternate route)                    | Intermittent                  |

Flow	2/month	24 Hour Total
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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		
Oil and Grease			15.0	20.0	2/month	Grab

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:

The following metal parameter(s) limitations and monitoring are to apply during steam generator(s) cleaning process periods:

Chromium (hexavalent)	0.1	0.2	Daily	Grab
Chromium (total)	1.0	2.0	Daily	Grab
Copper	0.5	1.0	Daily	Grab
Iron (total)	1.0	1.0	Daily	Grab
Lead	0.2	0.4	Daily	Grab
Nickel	1.0	2.0	Daily	Grab
Zinc (total)	1.0	2.0	Daily	Grab

\*\*\*\*For each week in which a discharge occurs from the Turbine building fire and oil sump to the Stormwater Runoff Basin, Outfall E01 and/or Outfall 002, shall be monitored and limited for the following additional parameters:

pH	The pH shall be in the range 6.0 to 9.0		1/week	Grab
Total Suspended Solids	15.0	30.0	1/week	Grab

\*\*\*\*\*See Special Condition 17

Outfall: F01 Intake Screen Backwash

There shall be no discharge of collected debris.

Outfall: 002 Stormwater Runoff Basin Overflow

This discharge consists of:

Approximate Flow

1. Parking lot runoff	Intermittent
2. Transformer Area Runoff	Intermittent
3. Station area runoff	Intermittent
4. Turbine building fire and oil sump*****	Intermittent
5. Steam generator cleaning process waste	Intermittent
6. Generic non-chemical metal cleaning activities	Intermittent
7. Secondary steam system (non-radioactive) discharge (alternate route)	Intermittent
8. Condenser drain discharge (alternate route)	Intermittent



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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		
Flow					2/Month	24 Hour Total
Oil and Grease		15.0		20.0	2/Month	Grab
The following metal parameter(s) limitations and monitoring are to apply during steam generator(s) cleaning process periods:						
Chromium (hexavalent)		0.1		0.2	Daily	Grab
Chromium (total)		1.0		2.0	Daily	Grab
Copper		0.5		1.0	Daily	Grab
Iron (total)		1.0		1.0	Daily	Grab
Lead		0.2		0.4	Daily	Grab
Nickel		1.0		2.0	Daily	Grab
Zinc (total)		1.0		2.0	Daily	Grab
*****For each week in which a discharge occurs from the Turbine building fire and oil sump to the Stormwater Runoff Basin, Outfall 002 and/or Outfall E01 shall be monitored and limited for the following additional parameters:						
pH	The pH shall be in the range 6.0 to 9.0				1/Week	Grab
Total Suspended Solids		15.0		30.0	1/Week	Grab

Outfall: 003 East Station Area Runoff  
004 West Station Area Runoff

See Special Condition 15

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Special Conditions

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

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

**SPECIAL CONDITION 3.** Chlorine or bromine may not be discharged from any unit's main condensers for more than two hours in any one day and not more than one unit in any plant may discharge Total Residual Oxidant at any one time. A concentration curve shall be generated once per week using grab samples of the cooling tower blowdown following initiation of a chlorination and/or bromination event of a single unit's condensers. When operating conditions permit, the permittee shall alternate the weekly sampling and reporting of the chlorination and/or bromination event for each unit. Grab samples shall be taken at five minute intervals or less during the discharge of oxidant from a unit condenser covering the period from the time of first detection to the time of last detection. The detection limit shall be less than or equal to 0.05 mg/l Total Residual Oxidant. Concentration curves shall be submitted with Discharge Monitoring Reports. The reported average concentration of Total Residual Oxidant is the average of all values measured for the curve and the reported maximum concentration is the highest value measured for a single grab sample. Total Residual Oxidant concentration shall be measured and reported in terms of Total Residual Chlorine.

**SPECIAL CONDITION 4.** Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:

- A. Maximum temperature rise above natural temperature must not exceed 5°F (2.8°C).
- B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F (1.7°C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	<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	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

- C. The maximum allowable blowdown temperature calculated according to existing station procedures shall be reported on an attachment to the Discharge Monitoring Report. The calculation is to be performed at least once per week and the date, calculated maximum allowable blowdown temperature, and maximum actual blowdown temperature for that date shall be reported. Any changes to the current calculation procedure must be reported to the Agency.

**SPECIAL CONDITION 5.** Copper monitoring of Outfall 001 shall be performed during periods when the station's copper ion system is being utilized for Zebra Mussel infestation control. In addition to monitoring the discharge from outfall 001 for copper (Total) the permittee shall measure the total mass of copper used during Zebra Mussel dosing and include that value with the Discharge Monitoring Report filed the month following the cessation of copper ion system discharge. This permit must be modified to accommodate use of the copper ion system for purposes other than Zebra Mussel control.

**SPECIAL CONDITION 6.** The discharge of one hundred twenty-four toxic pollutants (FR Vol. 47, No. 224, November 19, 1982, pp. 52309, Appendix A) is prohibited in detectable amounts from cooling tower discharges if the pollutants come from cooling tower maintenance chemicals. The use of cooling tower maintenance chemicals containing chromium is prohibited unless this permit has been modified to include the use and discharge of this chemical.

**SPECIAL CONDITION 7.** Commonwealth Edison Company's demonstration for the Byron Nuclear Power Station in accordance with Section 316(b) of the Clean Water Act has been approved by this Agency by letter dated May 15, 1989. It is determined that no additional intake monitoring or modification is being required for reissuance of this NPDES Permit.

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

**SPECIAL CONDITION 9.** Discharge of chemical metal cleaning agents EDTA, Elimin-Ox and/or hydrazine, and associated rinses are allowed once every 5-10 years per unit at Outfalls A01, C01 and E01.

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Special Conditions

**SPECIAL CONDITION 10.** The "Upset" defense provisions listed under 40 CFR 122.41(n) are hereby incorporated by reference.

**SPECIAL CONDITION 11.** Stormwater runoff from the switchyard and stormwater runoff from the west side of the Byron Station is discharged to unnamed drainage ditches which are tributary to the Rock River.

**SPECIAL CONDITION 12.** Outfall 001 shall be monitored for hydrazine when there is a discharge of the steam generator chemical cleaning solution and associated rinses containing hydrazine into the cooling water system. On those occasions monitoring shall be performed at Outfall 001 on a daily basis using a minimum of three grab samples taken at periodic intervals during the discharge of Steam generator chemical cleaning solution and associated rinses containing hydrazine. Sample collection and analysis procedures shall be in accordance with station practice for measuring hydrazine and standard methods. The quantity of hydrazine discharged in steam generator chemical cleaning solution and associated rinses to the cooling water system, the duration of this discharge to the cooling water system and the analytical results shall be submitted with the monthly Discharge Monitoring Report. The permittee shall submit a letter to the Agency requesting a modification to this permit if hydrazine is to be used during normal steam generator lay-up.

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

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 28th 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 62794-9276

Attention: Compliance Assurance Section

**SPECIAL CONDITION 14.** The limit of 0.5 for TRC (Total Residual Chlorine) measured as an instantaneous maximum, shall only apply to the intermittent use of chlorine. Intermittent usage is defined as the times when Total Residual Chlorine is being discharged from any single generating unit's main condensers for two hours per day or less. During times when TRC is being discharged continuously, that is for more than two hours per day, the limit shall be 0.05 TRC measured as an instantaneous maximum. All uses of sodium bromide shall be subject to a discharge limit of 0.05 mg/l Total Residual Oxidant (TRO).

**SPECIAL CONDITION 15. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

- A. A storm water pollution prevention plan shall be developed by the permittee for the storm water associated with industrial activity discharged from Outfalls 003 and 004. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
- B. The plan shall be completed within 180 days of the effective date of this permit. Plans shall provide for compliance with the terms of the plan within 365 days of the effective date of this permit. The owner or operator of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request. [Note: if the plan has already been developed and implemented it shall be maintained in accordance with all the requirements of this Special Condition.]
- C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph G of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objectives of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the Agency for review upon request.

NPDES Permit No. IL0048313

Special Conditions

- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:
1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.
  2. A site map showing:
    - i. The storm water conveyance and discharge structures;
    - ii. An outline of the storm water drainage areas for each storm water discharge point;
    - iii. Paved areas and buildings;
    - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
    - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
    - vi. Surface water locations and/or municipal storm drain locations
    - vii. Areas of existing and potential soil erosion;
    - viii. Vehicle service areas;
    - ix. Material loading, unloading, and access areas.
  3. A narrative description of the following:
    - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
    - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
    - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
    - iv. Industrial storm water discharge treatment facilities;
    - v. Methods of onsite storage and disposal of significant materials;
  4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities.
  5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
  6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.

NPDES Permit No. IL0048313

Special Conditions

2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
  - i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff;
  - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;
  - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges;
  - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
  - v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination;
  - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion and describe measures to limit erosion.
7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
- H. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.

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Special Conditions

- I. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.
- J. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.

REPORTING

- K. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part G of the Storm Water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s).
- L. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- M. Annual inspection reports shall be mailed to the following address:

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

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

SPECIAL CONDITION 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 samples taken in compliance with the steam generator(s) cleaning process monitoring requirements shall be taken at a point representative of the discharge, but prior to mixing with any other waste water and storm water runoff. If the permittee requires further treatment within the station's wastewater treatment system [Outfall C01] in order to comply with limits, the steam generator(s) cleaning wastes shall not be co-treated with other wastewaters (except for incidental amounts) unless this permit has been modified to allow for such co-treatment.

SPECIAL CONDITION 18. Except as allowed in Special Condition No. 9 of this permit, there shall be no discharge of complexed metal bearing waste streams or associated rinses from chemical metal cleaning unless this permit has been modified to include the new discharge.

## 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 reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:
- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
- (2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit to be reported within 24 hours;
- The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- (f) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12)(c), (d), or (e), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12)(e).
- (g) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.
- (13) **Transfer of permits.** A permit may be automatically transferred to a new permittee if:
- (a) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
- (b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees; and
- (c) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (14) **All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:**
- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
- (1) One hundred micrograms per liter (100 ug/l);
- (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
- (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
- (4) The level established by the Agency in this permit.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
- (15) **All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:**
- (a) Any new introduction of pollutants into that POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
- (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (16) **If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:**
- (1) User charges pursuant to Section 204(b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
- (2) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
- (3) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (17) **If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.**
- (18) **Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.**
- (19) **The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.**
- (20) **The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than \$2,500, nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.**
- (21) **The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.**
- (22) **The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit shall, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.**
- (23) **Collected 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.**