



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/782-0610

September 30, 2014

Midwest Generation, LLC
1800 Channahon Road
Joliet, IL 60436

Re: Midwest Generation, LLC
Joliet 9 Generating Station
NPDES Permit No. IL0002216
Final Permit

Ladies and Gentlemen:

We have reviewed your comments to the public noticed permit and offer the following responses:

1. The pH limits were moved from outfalls A01, B01, and C01 to outfall 001 as requested. A pH limit is necessary to ensure compliance with 35 IAC 304.125.
2. The semi-annual metals monitoring requirement listed as Special Condition 15 is necessary to provide sufficient data on effluent quality and will remain.
3. The 7-Day BOD₅ and TSS limits were removed from outfalls B01 and 002 as requested.
4. Proposed internal monitoring point A04 for coal pile runoff was removed and the effluent limits now apply to the combined discharges from outfall 004.
5. The 0.05 mg/l total residual chlorine limit at outfall 001 will remain to ensure compliance with 35 IAC 302.410.
6. The mercury monitoring requirements of Special Condition 16 were consolidated into Special Condition 15 and Special Condition 16 was removed. Mercury monitoring at outfalls 001, 003, 004, and 005 is required on a monthly basis for the first two years and quarterly thereafter.
7. RO Reject and Boiler Blowdown meets the definition of low volume wastestream of 40 CFR 423.11(b) and thus the oil and grease limits of 40 CFR 423.12(b)(3) will remain.
8. Both TSS and Oil and grease are regulated per 40 CFR 423.12(b)(5) and thus both will be monitored at the same frequency of once per week.
9. Special Condition 7 was revised as requested.
10. Special Condition 10 now specifies that a reduction or elimination of dissolved oxygen monitoring may be requested after two years.
11. The sampling frequency was changed to "daily when discharging" as requested on page 8 of the permit.
12. Oil and grease sampling was changed to a "grab" sample on page 8 of the permit as requested.
13. TRC sampling is required once per week at outfall 001 when residuals are likely to be present in the discharge including low volume house service water treatment.
14. Special Condition 11 was revised to required submittal of a impingement mortality and entrainment characterization study and a compliance alternatives analysis.

15. The Offensive Discharges language of 35 Ill. Adm. Code 304.106 was added to the permit as Special Condition 19.

The discharger address was changed as requested in your June 20, 2014 letter.

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

The Agency has begun a program allowing the submittal of electronic Discharge Monitoring Reports (NetDMR) instead of paper Discharge Monitoring Reports (DMRs). If you are interested in NetDMR, more information can be found on the Agency website, <http://www.epa.state.il.us/water/net-dmr/index.html>. If your facility is not registered in the NetDMR program, a supply of preprinted paper DMR Forms for your facility will be sent to you prior to the initiation of DMR reporting under the New permit. Additional information and instructions will accompany the preprinted DMRs upon their arrival.

The attached Permit is effective as of the date indicated on the first page of the Permit. Until the effective date of any re-issued Permit, the limitations and conditions of the previously-issued Permit remain in full effect. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board within a 35 day period following the issuance date.

Should you have questions concerning the Permit, please contact Jaime Rabins at 217/782-0610.

Sincerely,



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

SAK:JAR:11011701.jar

Attachment: Final Permit

cc: Records
Compliance Assurance Section
Des Plaines Region
Billing
US EPA

NPDES Permit No. IL0002216

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: October 31, 2019

Issue Date: September 30, 2014
Effective Date: November 1, 2014

Name and Address of Permittee:

Midwest Generation, LLC
1800 Channahon Road
Joliet, IL 60436

Facility Name and Address:

Midwest Generation, LLC
Joliet 9 Generating Station
1601 South Patterson Road
Joliet, Illinois 60436
(Will County)

Discharge Number and Name:

001 Condenser Cooling Water and House Service Water
A01 Reverse Osmosis Reject
B01 Sanitary - Main
C01 Boiler Blowdown
002 Sanitary - Breaker House
003 Roof And Yard Area Runoff
A03 Chemical Treatment System Effluent
004 Coal Pile and Switchyard Area Runoff
005 Quarry (Ash Pond) Discharge
006 Cribhouse Area Runoff
007 Material Access Road Area Runoff

Receiving Waters:

Des Plaines River

Des Plaines River
Des Plaines River

Des Plaines River
Des Plaines River
Des Plaines River
Des Plaines 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.



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

SAK:JAR:11011701.jar

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|--|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Outfall 001: Condenser Cooling Water and House Service Water (DAF = 315.52 MGD) | | | | | | |
| This discharge consists of: | | | | | | |
| <ol style="list-style-type: none"> 1. Main Condenser Cooling Water 2. Reverse Osmosis Reject 3. Boiler Blowdown and Drains 4. Sanitary - Main 5. House Service Water 6. Intake Screen Backwash | | | | | | |
| Flow (MGD) | See Special Condition 1 | | | | Daily | Continuous |
| pH | See Special Condition 2 | | | | 1/Week | Grab |
| Total Residual Chlorine | See Special Condition 3 | | | 0.05 | * | Grab |
| Temperature | See Special Condition 4 | | | | Daily | Continuous |

*Total Residual Chlorine shall be sampled 1/week whenever chlorination or biocide addition is being performed or residuals are likely to be present in the discharge including low volume house service water treatment. If chlorination and biocide addition are not used during the month it shall be so indicated on the DMR.

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|--|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Outfall A01: Reverse Osmosis Reject (DAF = 0.15 MGD) | | | | | | |
| Flow (MGD) | See Special Condition 1 | | | | 1/Week | 24-Hour Total |
| Total Suspended Solids | | | 15 | 30 | 1/Week | Grab |
| Oil and Grease | | | 15 | 20 | 1/Week | Grab |

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|---|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Outfall B01: Sanitary - Main (DAF = 0.01 MGD) | | | | | | |
| Flow (MGD) | See Special Condition 1 | | | | 1/Week | 24-Hour Total |
| Total Suspended Solids | | | 30 | 60 | 1/Week | 24-Hour Composite |
| BOD ₅ | | | 30 | 60 | 1/Week | 24-Hour Composite |

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|---|----------------------------------|------------------|------------------------------|-------------------|---------------------|---------------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Outfall C01: Boiler Blowdown (Intermittent Discharge) | | | | | | |
| | This discharge consists of: | | | Approximate Flow: | | |
| | 1. Boiler Blowdown | | | Intermittent | | |
| | 2. Boiler Drains | | | Intermittent | | |
| Flow (MGD) | See Special Condition 1 | | | | 1/Week | 24-Hour Total |
| Total Suspended Solids | | | 15 | 30 | 1/Month | 8-Hour Composite |
| Oil and Grease | | | 15 | 20 | 1/Month | Grab |

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|--|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Outfall 002: Sanitary – Breaker House (DAF = 0.0005 MGD) | | | | | | |
| Flow (MGD) | See Special Condition 1 | | | | 1/Week | 24-Hour Total |
| pH | See Special Condition 2 | | | | 1/Week | Grab |
| Total Suspended Solids | | | 30 | 60 | 1/Week | 24-Hour Composite |
| BOD ₅ | | | 30 | 60 | 1/Week | 24-Hour Composite |

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|-----------|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |

Outfall 003: Roof and Yard Runoff (DAF = 0.62 MGD)

This discharge consists of:

1. Plant Floor Drain Sump Discharge
2. Plant Roof and Year Area Storm Runoff
3. Gas Side Non-Chemical Metal Cleaning Wastes
4. Reverse Osmosis Reject (Alternate Route)
5. Slag Transport Water (Alternate Route)

| | | | | | | |
|------------------------|-------------------------|--|----|----|--------|-------------------|
| Flow (MGD) | See Special Condition 1 | | | | 1/Week | 24-Hour Estimate |
| pH | See Special Condition 2 | | | | 1/Week | Grab |
| Total Suspended Solids | | | 15 | 30 | 1/Week | 24-Hour Composite |
| Oil and Grease | | | 15 | 20 | 1/Week | Grab |

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|---|----------------------------------|------------------|------------------------------|------------------|---------------------------|---------------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Outfall A03: Gas Side Non-Chemical Metal Cleaning Wastes (Intermittent Discharge) | | | | | | |
| Flow (MGD) | See Special Condition 1 | | | | Daily When Discharging | 24-Hour Total |
| Total Suspended Solids | | | 30 | 100 | Daily When Discharging | 8-Hour Composite |
| Oil and Grease | | | 15 | 20 | Daily When Discharging | Grab |
| Iron | | | 1.0 | 1.0 | Daily When Discharging | 8-Hour Composite |
| Copper | | | 1.0 | 1.0 | Daily When Discharging | 8-Hour Composite |

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|--|----------------------------------|------------------|------------------------------|------------------|---------------------------|----------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Outfall 004: Coal Pile and Switchyard Area Runoff (DAF = Intermittent Discharge) | | | | | | |
| Flow (MGD) | See Special Condition 1 | | | | Daily When Discharging | Continuous |
| pH | See Special Condition 2 | | | | Daily When Discharging | Grab |
| Total Suspended Solids | | | 15 | 30 | Daily When Discharging | Grab |

The above discharges may be routed to the Quarry system tributary to outfall 005 in order to obtain additional treatment.

Effluent Limitations and Monitoring

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

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|-----------|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |

Outfall 005: Quarry (Ash Pond) Discharge (DAF = 6.93 MGD)

This discharge consists of:

1. Sand Filter Backwash
2. Slag Transport Water
3. Coal Pile and Switchyard Area Runoff (Alternate Route)
4. Sand Filter Backwash, Bottom Ash Transport and Economizer Ash Transport from Joliet 29 Station. (Alternate Route – NPDES Permit No. IL0064254)

| | | | | | | |
|------------------------|-------------------------|--|----|----|--------|----------------------|
| Flow (MGD) | See Special Condition 1 | | | | 1/Week | Estimate |
| pH | See Special Condition 2 | | | | 1/Week | Grab |
| Total Suspended Solids | | | 15 | 30 | 1/Week | 24-Hour Composite |
| Oil and Grease | | | 15 | 20 | 1/Week | Grab |

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:

Outfall 006: Cribhouse Area Runoff (Intermittent Discharge)

Outfall 007: Material Access Road Area Runoff (Intermittent Discharge)

Discharges shall be managed in accordance with Special Condition 20.

Special Conditions

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

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

SPECIAL CONDITION 3. All samples for TRC shall be grab samples and analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.

SPECIAL CONDITION 4. Pursuant to Illinois Pollution Control Board Order AS 96-10, dated October 3, 1996 and amended March 16, 2000 the facility shall comply with the following temperature limitations:

A. At the point of discharge the receiving waters are designated as Secondary Contact and Indigenous Aquatic Life Waters and shall meet the following standards from Section 302.408, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:

Temperatures at the edge of the mixing zone shall not exceed 93°F (34°C) more than 5% of the time, or 100°F (37.8°C) at any time. Compliance with this part shall be determined by the following equation:

$$T_{FM} = \frac{T_D Q_{CW} + T_{US}(0.25 * Q_{AV})}{Q_{CW} + (0.25 * Q_{AV})}$$

- T_{FM} Calculated fully-mixed receiving water temperature in degrees Fahrenheit.
 T_D Actual condenser cooling water discharge temperature in degrees Fahrenheit from the continuous temperature monitor.
 Q_{CW} Condenser cooling water flow in cubic feet per second based on the number of circulating water pumps on at the time in question. Each of the two circulating water pumps is rated at 130,600 gpm (291 cfs).
 Q_{AV} Available receiving stream dilution flow in cfs determined by subtracting condenser cooling water flow from the upstream river flow. If the upstream river flow is equal to or less than the condenser cooling water flow, the available receiving stream dilution flow is zero. Upstream river flow is the average value of flow recorded during the 24-hour period preceding the time in question. The primary source of flow data is the gauging station operated by the USACE at the Brandon Road Lock and Dam. Secondary sources for flow data are gauging stations on the Chicago Sanitary and Ship Canal at Lemont operated by the USGS, and the Des Plaines River gauging station at Riverside, operated by the USACE.
 T_{US} Upstream river temperature in degrees Fahrenheit from the continuous temperature monitor located in the stations intake canal.

B. The monthly maximum temperature at the edge of the mixing zone (T_{FM}) and the cumulative number of hours in which temperatures at the edge of the mixing zone exceed 93°F (34°C) shall be reported on the DMR.

C. In the main channel of the Lower Des Plaines River, at the I-55 Bridge, the effluent shall not alone or in combination with other sources cause temperatures to exceed the temperatures set forth in the following table, except in accordance with the allowable monthly excursions detailed below:

| | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> | <u>Apr</u> | <u>Apr</u> | <u>May</u> | <u>May</u> | <u>June</u> | <u>June</u> | <u>July</u> | <u>Aug</u> | <u>Sept</u> | <u>Oct</u> | <u>Nov</u> | <u>Dec</u> |
|----|------------|------------|------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|------------|-------------|------------|------------|------------|
| | | | | <u>1-15</u> | <u>16-30</u> | <u>1-15</u> | <u>16-31</u> | <u>1-15</u> | <u>16-30</u> | | | | | | |
| °F | 60 | 60 | 65 | 73 | 80 | 85 | 90 | 90 | 91 | 91 | 90 | 85 | 75 | 65 | |

These standards are in lieu of the requirements of 35 Ill. Adm. Code 302.211(d) and (e) and may be exceeded by no more than 3°F during 2% of the hours in the 12-month period ending December 31, except that at no time shall Midwest Generation's plants cause the water temperature at the I-55 Bridge to exceed 93°F. Excursion hours for the purposes of this part is defined as the hours in which the temperatures of this part are exceeded.

D. When it appears that discharges from Outfall 001 have the reasonable potential to cause water temperatures at the I-55 Bridge to exceed the values set forth in the above table, the permittee shall determine whether, and the extent to which, station operations must be restricted to avoid violating the above-stated limits. The permittee shall make such a determination based upon the outputs of a predictive model reasonably suited for such a purpose and which has been submitted to the Agency.

The permittee shall demonstrate to the Agency that the facility has obtained alternate thermal standards from the Illinois Pollution Control Board pursuant to Section 316(a) of the Clean Water Act, and 35 Ill. Adm. Code 304.141(c), in accordance with the procedures as found in 35 Ill. Adm. Code Part 106, Subpart K. This demonstration is only necessary if the permittee intends to obtain relief from the applicable water quality standards for temperature effective at the time the renewal application is filed. This demonstration (if applicable) shall be filed with the renewal application for this permit.

Alternately, the Permittee may demonstrate to the Agency that relief granted in AS 96-10, or other site specific water quality standards for temperature approved by the Illinois Pollution Control Board, and USEPA, meets the requirements of 40 CFR 131 and the Illinois Environmental Protection Act.

Special Conditions

SPECIAL CONDITION 5. 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 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

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

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

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

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

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

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 7. In the event that the permittee shall require a change in the use of water treatment additives, the permittee must request a change in this permit in accordance with the Standard Conditions -- Attachment H.

SPECIAL CONDITION 8. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 9. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 10. The cooling water prior to entering the plant intake structure and at the discharge from outfall 001 shall be grab sampled once per week at the same time of day within ½ hour of each other between 9:00 a.m. and 3:00 p.m. in a randomized fashion for dissolved oxygen. The results in mg/l and the time of day the influent and effluent sample was taken shall be reported to the Agency as an attachment to the DMR. After 2 years of data has been submitted to the Agency, the permittee may apply to Agency to have the monitoring reduced or eliminated, but in no case shall monitoring change unless notified by the Agency in writing.

SPECIAL CONDITION 11. Cooling Water Intake Structure. Based on available information, the Agency has determined that the operation of the cooling water intake structure met the equivalent of Best Technology Available (BTA) in accordance with the Best Professional Judgment provisions of 40 CFR 125.3, at the time of its construction. However, in order to further evaluate cooling water intake structure operations based on the most up to date information, the permit shall comply with the requirements below:

A. The permittee shall submit the following information/studies within 180 days from the permit effective date:

1. Source Water Physical Data to include:
 - a. A narrative description and scaled drawings showing the physical configuration of all source water bodies used by the facility including aerial dimensions, depths, salinity and temperature regimes;
 - b. Identification and characterization of the source waterbody's hydrological and geomorphological features, as well as the methods used to conduct any physical studies to determine the intake's area of influence and the results of such studies; and
 - c. Location maps.
2. Source Waterbody Flow Information

Special Conditions

The permittee shall provide the annual mean flow of the waterbody, any supporting documentation and engineering calculations to support the analysis of whether the design intake flow is greater than five percent of the mean annual flow of the river or stream for purposes of determining applicable performance standards. Representative historical data (from a period of time up to 10 years) shall be used, if available.

3. Impingement Mortality and Entrainment Characterization Study

The permittee shall submit an Impingement Mortality and Entrainment Characterization Study whose purpose is to provide information to support the development of a calculation baseline for evaluating impingement mortality and entrainment and to characterize current impingement mortality and entrainment. The Study shall include the following in sufficient detail to support establishment of baseline conditions:

- a. Taxonomic identification of all life stages of fish and shellfish and any species protected under Federal, State, or Tribal law (including threatened or endangered species) that are in the vicinity of the cooling water intake structure(s) and are susceptible to impingement and entrainment;
- b. A characterization of all life stages of fish and shellfish, and any species protected under Federal, or State law, including a description of the abundance and temporal and spatial characteristics in the vicinity of the cooling water intake structure(s). These may include historical data that are representative of the current operation of the facility and of biological conditions at the site; and
- c. Documentation of the current impingement mortality and entrainment of all life stages of fish, shellfish, and any species protected under Federal, State, or Tribal Law (including threatened or endangered species) and an estimate of impingement mortality and entrainment to be used as the calculation baseline. The documentation may include historical data that are representative of the current operation of the facility and of biological conditions at the site. Impingement mortality and entrainment samples to support the calculations required must be collected during periods of representative operational flows for the cooling water intake structure and the flows associated with the samples must be documented.

B. The permittee shall comply with the following requirements:

1. At all times properly operate and maintain the intake equipment.
 2. Inform IEPA of any proposed changes to the cooling water intake structure or proposed changes to operations at the facility that affect impingement mortality and/or entrainment.
 3. Debris collected on intake screens is prohibited from being discharged back to the canal. Debris does not include living fish or other living aquatic organisms.
 4. Compliance Alternatives. The permittee must evaluate each of the following alternatives for establishing best available technology for minimizing adverse environmental impacts at the facility due to operation of the intake structure:
 - a. Evaluate operational procedures and/or propose facility modifications to reduce the intake through-screen velocity to less than 0.5 ft/sec. The operational evaluation may consider modified circulating water pump operation; reduced flow associated with capacity utilization, recalculation or determination of actual total water withdrawal capacity. The evaluation report and any implementation plan for the operational changes and/ or facility modification shall be submitted to the Agency with the renewal application for this permit.
 - b. Complete a fish impingement and entrainment mortality minimization alternatives evaluation. The evaluation may include an assessment of modification of the traveling screens, consideration of a separate fish and debris return system and include time frames and cost analysis to implement these measures. The evaluation report and implementation plan for any operational changes and/ or facility modifications shall be submitted to the Agency with the renewal application for this permit.
- C. All required reports shall be submitted to the Industrial Unit, Permit Section and Compliance Assurance Section at the address in special condition 6.

This special condition does not relieve the permittee of the responsibility of complying with any laws, regulations, or judicial orders issued pursuant to Section 316(b) of the Clean Water Act. New final federal regulations governing the operation of cooling water intake structures at existing facilities (when effective), shall supersede the requirements of this condition. Unless the final effective federal rules for existing facilities require otherwise, the permittee shall comply with the above requirements of this special condition.

SPECIAL CONDITION 12. There shall be not discharge of polychlorinated biphenyl compounds.

Special Conditions

SPECIAL CONDITION 13. The bypass provisions of 40 CFR 122.41(m) and upset provisions of 40 CFR 122.41(n) are hereby incorporated by reference.

SPECIAL CONDITION 14. The Agency has determined that the effluent limitations for outfalls 003, 004 and 005 constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 15. The Permittee shall monitor the effluent from outfall 001, 003, 004, and 005 for the following parameters on a semi-annual basis. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted to the address in special condition 6 in June and December. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

| <u>STORET _CODE</u> | <u>PARAMETER</u> | <u>Minimum reporting limit</u> |
|-------------------------|--|------------------------------------|
| 01002 | Arsenic | 0.05 mg/L |
| 01007 | Barium | 0.5 mg/L |
| 01027 | Cadmium | 0.001 mg/L |
| 01032 | Chromium (hexavalent) (grab) | 0.01 mg/L |
| 01034 | Chromium (total) | 0.05 mg/L |
| 01042 | Copper | 0.005 mg/L |
| 00718 | Cyanide (grab) (available*** or amendable to chlorination) | 5.0 ug/L |
| 00720 | Cyanide (grab not to exceed 24 hours) (total) | 5.0 ug/L |
| 00951 | Fluoride | 0.1 mg/L |
| 01045 | Iron (total) | 0.5 mg/L |
| 01046 | Iron (Dissolved) | 0.5 mg/L |
| 01051 | Lead | 0.05 mg/L |
| 01055 | Manganese | 0.5 mg/L |
| 71900 | Mercury (grab)** | 1.0 ng/L* |
| 01067 | Nickel | 0.005 mg/L |
| 00556 | Oil (hexane soluble or equivalent) (Grab Sample only) | 5.0 mg/L |
| 32730 | Phenols (grab) | 0.005 mg/L |
| 01147 | Selenium | 0.005 mg/L |
| 01077 | Silver (total) | 0.003 mg/L |
| 01092 | Zinc | 0.025 mg/L |

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E. Mercury shall be monitored monthly for the first two years and quarterly thereafter. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The quarterly monitoring results shall be submitted on the March, June, September and December DMRs.

***USEPA Method OIA-1677

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

SPECIAL CONDITION 17. The permittee shall continue to conduct annually, during the period of May through September, the Upper Illinois Waterway Fisheries Investigation in the Chicago Sanitary & Ship Canal and the Lower Des Plaines River between approximately river mile (RM) 274.4 and RM 296.0. The annual investigation shall include both the same number of sampling locations and scope of work as described in previous annual investigation reports entitled "Upper Illinois Waterway Fisheries Investigation RM 274.4-296.0." Data analysis shall be done according to established fisheries monitoring protocols. Physicochemical measurements shall be taken at each established electrofishing location. All results shall be tabulated in a written report and submitted to the Agency not later than September 30 of the next calendar year following each study period. The annual report also shall include a comparison of the investigation results with the previous years' investigation data to identify any statistically significant changes in the data results.

In the event that the results of the annual investigation demonstrate any adverse, statistically significant change in data results caused by

Special Conditions

discharges from the facility, the Agency has the right to re-open and modify this permit to include additional requirements necessary to address any such change.

SPECIAL CONDITION 18. If an applicable thermal standard is promulgated under the Clean Water Act for the receiving water during the term of the permit, and that standard is more stringent than any effluent standard or limitation in the permit, the Agency has the right to re-open and modify this permit to include additional requirements necessary to address any such change. The Agency shall provide the permittee with opportunity to comment on any such modification pursuant to applicable Illinois regulations for the issuance of modified NPDES permits.

SPECIAL CONDITION 19. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. 302.

SPECIAL CONDITION 20.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility except that which is discharged from outfalls 006 and 007. 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. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.

1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.

Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act

For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

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 H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.

E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.
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;

Special Conditions

- 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.
 - x. Areas under items iv and ix above may be withheld from the site for security reasons.
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. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
 2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
 3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
 4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
 5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
 - i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling

Special Conditions

equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.

- 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. Minimize the quantity of storm water entering areas where material handling equipment of activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.
 - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
 - vii. Storm Water Reduction - Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspire runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.
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. The plan shall 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. Non-Storm Water Discharge - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.
- H. Quarterly Visual Observation of Discharges - The requirements and procedures of quarterly visual observations are applicable to all outfalls covered by this condition.
1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.
 2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4.
 3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

Special Conditions

4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
5. Representative Outfalls - If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).
6. The visual observation documentation shall be made available to the Agency and general public upon written request.
- I. 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.
- J. 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.
- K. The plan is considered a report that shall be available to the public at any reasonable time upon request.
- L. 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.
- M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

- N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights thereunder.
- O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
- P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
- Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

- R. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part I of this condition. 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). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.
- S. 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.

Special Conditions

- T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.
- U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be submitted to the following email and office addresses: epa.npdes.inspection@illinois.gov

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

- V. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.

Attachment H

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

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

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

USEPA means the United States Environmental Protection Agency.

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

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

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

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

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

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

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

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

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

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

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. 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 or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), 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. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA 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.
- (d) **Certification.** Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(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. Notice is required when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).
 - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- (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) **Transfers.** This permit is not transferable to any person except after notice to the Agency.
- (d) **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.
- (e) **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.
- (f) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:
- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (2) Any upset which exceeds any effluent limitation in the permit.
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.
The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.
- (g) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).
- (h) **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) **Bypass.**
- (a) Definitions.
 - (1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).
 - (c) Notice.
 - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).
 - (d) Prohibition of bypass.
 - (1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:
 - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (iii) The permittee submitted notices as required under paragraph (13)(c).
 - (2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).
- (14) **Upset.**
- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
 - (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).
 - (4) The permittee complied with any remedial measures required under paragraph (4).
 - (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- (15) **Transfer of permits.** Permits may be transferred by modification or automatic transfer as described below:
- (a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - (b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically

transferred to a new permittee if:

- (1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
 - (2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
 - (3) 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.
- (16) 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.
- (17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
- (a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
- (a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
 - (b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
 - (c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (19) 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.
 - (20) 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.
 - (21) 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.
 - (22) 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 \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 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. Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).
 - (23) 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 this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
 - (24) 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, 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.
 - (25) 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.
 - (26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
 - (27) 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 or any court with jurisdiction.
 - (28) 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.