

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

May 8, 2012

Downers Grove Sanitary District	)	
	)	
Petitioner ,	)	
	)	
v.	)	IEPA – 12-16
	)	(Provisional Variance-Water)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

Re: Provisional Variance From the Designated Outfall Discharge Requirements  
Contained in NPDES Permit IL0028380

Dear Mr. Menninga:

The Illinois Environmental Protection Agency (Agency) has completed its technical review of the attached provisional variance request, dated April 4, 2012 (Attachment A) submitted by the Downers Grove Sanitary District (District). The District is seeking a provisional variance from the following requirement in its NPDES permit: "Excess flow facilities shall not be utilized until the main treatment facility is receiving its maximum flow." A provisional variance is needed to allow the District to discharge all treated effluent from Outfall 002 while it performs necessary maintenance on Outfall 001. This maintenance consists of removing tree roots that constrict the flow from Outfall 001, and installing equipment in the plant's outfall channel. Outfall 001 is the treatment plant's main outfall.

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

*Background*

The District is a publically owned sewerage district that collects and treats wastewater in the Downers Grove area. It serves approximately 65,000 P.E. (population equivalents). The District's customers are primarily residential, but also include commercial, institutional, and industrial ones.

The District's wastewater treatment plant is a 11.0 MGD (million gallons per day) Design Average Flow activated sludge process, and consists of the following units:

- One course bar screen
- Two mechanical bar screens
- Two screening compactors
- Twelve raw sewage pumps
- Four aerated grit chambers
- Two cyclone-type separators for grit removal
- Nine primary clarifiers
- Eleven aerations tanks
- Nine secondary clarifiers
- Three intermediate clarifiers
- Six sand filters
- One chlorine contact tank
- Four excess flow clarifiers

Treatment plant flows range from 6.5 MGD during dry weather, to over 100 MGD during very intense storms.

The wastewater treatment plant main outfall pipe carries treated effluent roughly two miles westward to Outfall 001, located on the East Branch of the Du Page River just south of the Burlington and Northern Rail Road bridge in Lisle, Illinois. The treatment plant is located on St. Joseph Creek immediately east of Interstate 355 in Downers Grove, where Outfall 002 is located.

The NPDES permit requires that during dry weather, flows be carried to outfall 001 via the main outfall gravity pipeline. During wet weather events when the capacity of the main outfall pipe is exceeded, flows back up over a weir, and are thereby diverted to outfall 002. In order to maintain the capacity of the main outfall pipe at or above 30 MGD, it is necessary to periodically remove the pipe from service and remove tree roots that constrict the flow.

For tree roots to be removed, Outfall 001 must be taken out of service during the removal, and all flows must be diverted to Outfall 002. This required maintenance activity will take approximately three to five days during a dry weather period. Flows being diverted will be normal dry weather flows, expected to range between 7 and 11 MGD. All flows being diverted to Outfall 002 will be provided with full treatment, and will be monitored for compliance with permit pollutant limits that apply to flows receiving complete treatment.

No adverse environmental impacts are expected to result from this activity. St. Joseph Creek carries mostly urban runoff. The excess flows normally permitted to be discharged at outfall 002 carry less stringent limits than the flows that will be discharged during this variance. The fully treated effluent is expected to have lower concentrations of pollutants that might impact the receiving stream health than background flows in the stream.

The only alternative to the requested diversion is to conduct temporary pumping of the plant effluent around each section of the outfall main as work is done in each section. This would cause an unreasonable hardship by significantly increasing the cost and difficulty of the work, and threatening the safety of the personnel doing the work.

The work is currently scheduled to be done during a three to five day dry period between May 14 and May 18, depending on the weather.<sup>1</sup>

*Relief Requested*

The District seeks a provisional variance from the designated outfall discharge requirement required in NPDES Permit IL0028380 (Attachment B), which states "Excess flows facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow."

*Agency Determinations*

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

1. No environmental impact should occur as a result of this variance;
2. No reasonable alternatives appear available;
3. No public water supplies should be affected;
4. No federal regulations will preclude the granting of this request; and
5. The District will face an arbitrary and unreasonable hardship if the request is not granted.

*Conditions*

The Agency hereby GRANTS Downers Grove Sanitary District wastewater treatment facility a provisional variance from the designated Outfall requirements contained in NPDES Permit IL0028380, subject to the following conditions:

- A. The provisional variance shall not exceed a five-day period to occur between May 14 and May 18, 2012.

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<sup>1</sup> The April 4, 2012 request says that the work will be performed between April 30 and May 18. Because of wet conditions, however, work is now scheduled to start on May 14. (Telephone conversation between Roger Callaway and Nicholas Menninga, May 7, 2012)

- B. The District shall provide the best operation of its available equipment to produce the best effluent possible at all times. The outfall requirements of Outfall 001 shall be met at Outfall 2 during the provisional variance period.
- C. The District shall closely monitor St. Joseph Creek and immediately notify the Agency of any adverse environmental impacts. Should there be any adverse impacts, the District shall take immediate to eliminate them.
- D. The District shall notify Roger Callaway of the Agency by telephone at 217/782-9720 when Outfall 001 is removed from service and again when Outfall 001 is returned to service. Written confirmation shall be sent within five days to the following address:

Illinois Environmental Protection Agency  
Bureau of Water - Water Pollution Control  
Attention: Roger Callaway  
1021 North Grand Avenue East, MC #19  
Springfield, Illinois 62794-9276

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

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

\_\_\_\_\_  
Petitioner

\_\_\_\_\_  
Authorized Agent

\_\_\_\_\_  
Title

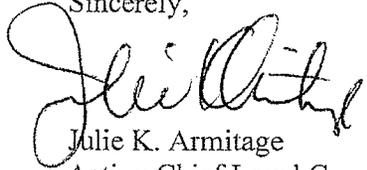
\_\_\_\_\_  
Date

The District shall continue to comply with all other conditions specified in its NPDES Permit No. IL0028380.

*Conclusion*

The Agency grants this provisional variance in accordance with its authority contained in Sections 35(b), 36 (c), and 37(b) of the Illinois Environmental Protection Act (415 ILCS 5/35(b), 36(c), and 37(b) (2004). The decision to grant this provisional variance is not intended to address compliance with any other applicable laws or regulations.

Sincerely,

A handwritten signature in black ink, appearing to read "Julie K. Armitage". The signature is fluid and cursive, with the first name "Julie" being particularly prominent.

Julie K. Armitage  
Acting Chief Legal Counsel

cc: Marcia Willhite  
Vera Herst  
Roger Callaway

**Board of Trustees**

Donald E. Eckmann  
*President*

Wallace D. Van Buren  
*Vice President*

Edward C. Richard  
*Clerk*

**Downers Grove**  
  
**Sanitary District**

2710 Curtiss Street  
P.O. Box 1412  
Downers Grove, IL 60515-0703  
Phone: 630-969-0664  
Fax: 630-969-0827  
www.dgsd.org

**Staff**

Nicholas J. Menninga  
*General Manager*

Sheila K. Henschel  
*Administrative Services  
Director*

**Legal Counsel**  
Michael C. Wiedel

*Providing a Better Environment for South Central DuPage County*

April 30, 2012

Illinois Environmental Protection Agency  
Bureau of Water  
Division of Water Pollution Control  
P.O. Box 19276  
Springfield, IL 62794-9276

RE: Provisional Variance for Maintenance Activity, NPDES Permit IL0028380

To Whom This Concerns:

The Downers Grove Sanitary District is hereby requesting a provisional variance to clear roots from our plant main outfall (001) pipe and to install equipment in our plant outfall channel. Our NPDES permit specifies that the first 30 MGD of effluent needs to be discharged into the main outfall (001) pipe. In order to conduct the maintenance activity, we propose to divert our normal plant effluent to permit outfall 002 temporarily until the work can be completed. The variance is being requested from the permit requirement calling for the first 30 MGD of effluent to be discharged via outfall 001.

The Downers Grove Sanitary District is the publicly owned sewerage district collecting and treating wastewater in the Downers Grove, Illinois area. We serve roughly 65,000 P.E. including primarily residential but also commercial, institutional, and industrial customers. Treatment plant flows range from 6.5 MGD during dry weather to over 100 MGD during very intense storms. The wastewater treatment plant main outfall pipe carries treated effluent roughly 2 miles westward to outfall 001, located on the East Branch of the DuPage River just south of the BNR bridge in Lisle, Illinois. The treatment plant is located on St. Joseph Creek immediately east of Interstate 355 in Downers Grove, where outfall 002 is located. The NPDES permit requires that during dry weather, flows be carried to outfall 001 via the main outfall gravity pipeline. During wet weather events when the capacity of the main outfall pipe is exceeded, flows back up over a weir, and are thereby diverted to outfall 002. In order to maintain the capacity of the main outfall pipe at or above 30 MGD, it is necessary to periodically remove the pipe from service and remove tree roots that constrict the flow.

Illinois EPA  
April 30, 2012  
Page 2 of 2

The required maintenance activity will be done over a 3-5 day period of dry weather. Flows being diverted will be normal dry weather plant flows, expected to range between 7 and 11 MGD. All flows being diverted to outfall 002 will be provided with full treatment, and will be monitored for compliance with permit pollutant limits that apply to flows receiving complete treatment.

No adverse impacts are expected to result from this activity. St. Joseph Creek carries mostly urban runoff. The excess flows normally permitted to be discharged at outfall 002 carry less stringent limits than the flows that will be discharged during this variance. The fully treated effluent is expected to have lower concentrations of pollutants that might impact the receiving stream health than background flows in the stream.

The only alternative to the requested diversion is to conduct temporary pumping of the plant effluent around each section of the outfall main as work is done in each section. This would cause an unreasonable hardship by significantly increasing the cost and difficulty of the work, and threatening the safety of the personnel doing the work.

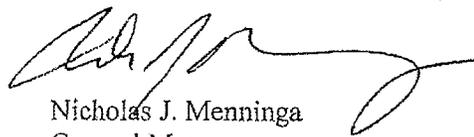
We are planning to conduct this work between May 7 and May 25, 2012, weather permitting. The variance is being requested for this period.

The Downers Grove Sanitary District has not been granted any provisional variances within the calendar year. The subject NPDES permit is in full effect at this time. The Downers Grove Sanitary District is not currently a party in any matters currently before the Pollution Control Board, nor are there any Board orders currently in effect regarding the District's activities.

Please do not hesitate to contact me at the above address and phone with any comments or questions regarding this request.

Very truly yours,

DOWNERS GROVE SANITARY DISTRICT



Nicholas J. Menninga  
General Manager

NJM

C: Board of Trustees, Michael C. Weidel

IEPA 12-15

Attachment B



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. Box 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

217/782-0610

ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

JUN 26 2007

Downers Grove Sanitary District  
2710 Curtiss Street  
Downers Grove, Illinois 60515

**MAJOR**

Re: Downers Grove Sanitary District  
Downers Grove S. D. Wastewater Treatment Center  
NPDES Permit No. IL0028380  
Final Permit

Gentlemen:

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

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

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

Should you have questions concerning the Permit, please contact Abel A. Haile at the telephone number indicated above.

Sincerely,

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

SAK:ALD:AAH:06111701.daa

Attachment: Final Permit

cc: Records  
Compliance Assurance Section  
Des Plaines Region  
Downers Grove San. Dist. WWTP  
NIPC  
USEPA

**RECEIVED**

JUN 26 2007

**IEPA**

EFF - 9-1-07  
exp 8-21-12

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760 • Des PLAINES - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000  
ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 • PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463  
BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462 • CHAMPAIGN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800  
SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892 • COLLINSVILLE - 2009 Mail Street, Collinsville, IL 62234 - (618) 346-5120  
MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

NPDES Permit No. IL0028380

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, 2012

Issue Date: June 26, 2007

Effective Date: September 1, 2007

Name and Address of Permittee:

Downers Grove Sanitary District  
2710 Curtiss Street  
Downers Grove, Illinois 60515

Facility Name and Address:

Downers Grove S.D. Wastewater Treatment Center  
5003 Walnut Avenue  
Downers Grove, Illinois 60515  
(DuPage County)

Receiving Waters: East Branch of DuPage River and St. Joseph Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C, Chapter I, 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:AAH\06111701.DAA

NPDES Permit No. IL0028380

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 Mixing Chamber Discharge to the East Branch of the DuPage River

Load limits computed based on a design average flow (DAF) of 11.0 MGD (design maximum flow (DMF) of 22.0 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

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

Parameter	LOAD LIMITS lbs/day		CONCENTRATION		Sample Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow (MGD)					Continuous	
CBOD <sub>5</sub> **	917 (1,835)	1,835 (3,670)	10	20	2 Days/Week	Composite
Suspended Solids	1,101 (2,202)	2,202 (4,404)	12	24	2 Days/Week	Composite
Dissolved Oxygen <sup>1</sup>	Monitoring Only				2 Days/Week	Grab
pH	Shall be in the range of 6 to 9 Standard Units				2 Days/Week	Grab
Fecal Coliform <sup>2</sup>	Daily Maximum shall not exceed 400 per 100 mL (May through October)				2 Days/Week	Grab
Chlorine Residual				0.05	<del>2 Days/Week</del> 0299	Grab
Ammonia Nitrogen as (N)						
April - October	138 (275)	275 (550)	1.5	3.0	2 Days/Week	Composite
November - March	367 (734)	734 (1468)	4.0	8.0	2 Days/Week	Composite

\*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.  
 \*\*Carbonaceous BOD<sub>5</sub> (CBOD<sub>5</sub>) testing shall be in accordance with 40 CFR 136.

<sup>1</sup> See Special Condition 16.  
<sup>2</sup> See Special Condition 8.

- Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.
- Fecal Coliform shall be reported on the DMR as daily maximum.
- pH shall be reported on the DMR as a minimum and a maximum.
- Chlorine Residual shall be reported on DMR as daily maximum.
- Dissolved oxygen monitoring results shall be reported on the DMR.

KL ABC

NPDES Permit No. IL0028380

Effluent Limitations, Monitoring, and Reporting

Final

Discharge Number(s) and Name(s): <sup>Comb</sup> (A01 Mixing Chamber Discharge to the East Branch of the DuPage River\*  
 002 Mixing Chamber Discharge to St. Joseph Creek\*\*)

These flow facilities shall not be utilized until the main treatment facility is receiving its maximum practical flow.

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

Parameter	CONCENTRATION LIMITS mg/l		Sample Frequency	Sample Type
	See Below	Monthly Average		
- Total Flow (MG)	See Below		Continuous When Discharging	
- BOD <sub>5</sub>		30	Daily When Discharging	Composite
- Suspended Solids		30	Daily When Discharging	Composite
- Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 ml		Daily When Discharging	Grab
- pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
- Chlorine Residual		0.75	Daily When Discharging	Grab

Total flow in million gallons for A01 shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column. Total flow in million gallons for 002 shall be reported in the comment section of the DMR.

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the Discharge Monitoring Report (DMR) as Daily Maximum.

Chlorine Residual shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

pH shall be reported on the Discharge Monitoring Report (DMR) as a minimum and a maximum.

BOD<sub>5</sub> and Suspended Solids shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

\* These limitations for this outfall are effective when flows to the treatment plant are greater than 22 MGD and the excess flow facilities are in operation.

\*\* Outfall 002 becomes operational when the combined effluent from 001 Outfall, A01 Excess Flow Outfall and B01 Excess Flow Outfall exceed 30 MGD (the hydraulic capacity of the outfall pipe to the East Branch of the DuPage River).

Samples taken in compliance with the effluent monitoring requirements for this outfall shall be taken at a point after 001 combines with the excess flow but prior to entry into the receiving stream.

NPDES Permit No. IL0028380

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): B01 Excess Flow Outfall to the East Branch of the DuPage River\*

These flow facilities shall not be utilized until the main treatment facility is receiving its maximum practical flow.

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

Parameter	CONCENTRATION LIMITS mg/l		Sample Frequency	Sample Type
	Monthly Average			
- Total Flow (MG)	See Below		Estimated When Discharging	
- BOD <sub>5</sub>	30		Daily When Discharging	Grab
- Suspended Solids	30		Daily When Discharging	Grab
- Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 ml		Daily When Discharging	Grab
- pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
- Chlorine Residual	0.75		Daily When Discharging	Grab

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the Discharge Monitoring Report (DMR) as Daily Maximum.

Chlorine Residual shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

pH shall be reported on the Discharge Monitoring Report (DMR) as a minimum and a maximum.

BOD<sub>5</sub> and Suspended Solids shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

\* These limitations for this outfall are effective when flows to the main treatment plant are greater than 22 MGD and the excess flow facilities are in operation. Samples taken in compliance with the effluent monitoring requirements for this outfall shall be taken at a point after the excess flow effluent combines with 001 Mixing Chamber Discharge to the East Branch of the DuPage River but prior to entry into the receiving stream. Flow shall be estimated prior to combining with the discharge from 001 Outfall.

NPDES Permit No. IL0028380

Effluent Limitations, Monitoring, and Reporting

Final

Discharge Number(s) and Name(s): 003 Excess Flow Outfall to St. Joseph Creek\*

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

Parameter	CONCENTRATION LIMITS mg/l		Sample Frequency	Sample Type
	Monthly Average			
- Total Flow (MG)	See Below		Estimated When Discharging	
- BOD <sub>5</sub>	30		Daily When Discharging	Grab
- Suspended Solids	30		Daily When Discharging	Grab
- Fecal Colliform	Daily Maximum Shall Not Exceed 400 per 100 ml		Daily When Discharging	Grab
- pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
- Chlorine Residual	0.75		Daily When Discharging	Grab

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

Fecal Colliform shall be reported on the Discharge Monitoring Report (DMR) as Daily Maximum.

Chlorine Residual shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

pH shall be reported on the Discharge Monitoring Report (DMR) as a minimum and a maximum.

BOD<sub>5</sub> and Suspended Solids shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

\* These limitations for this outfall are effective when flows to the main treatment plant are greater than 22 MGD and the excess flow facilities are in operation. Outfall 003 becomes operational when the combined effluent from 001 Outfall, A01 Excess Flow Outfall and B01 Excess Flow Outfall exceed 30 MGD (the hydraulic capacity of the outfall pipe to the East Branch of the DuPage River). Samples taken in compliance with the effluent monitoring requirements for this outfall shall be taken at a point representative of the excess flow treatment but prior to entry into the receiving stream. Flow shall be estimated prior to discharge.

NPDES Permit No. IL0028380

Influent Monitoring and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD <sub>5</sub>	2 Days/Week	Composite
Suspended Solids	2 Days/Week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD<sub>5</sub> and Suspended Solids shall be reported on the Discharge Monitoring Report (DMR) as a monthly average concentration.

NPDES Permit No. IL0028380

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

SPECIAL CONDITION 6. Samples taken in compliance with the effluent monitoring requirements shall be taken:

- A. For Discharge Number 001 - During dry weather flows (no excess flow discharge), samples shall be taken at a point representative of the flows but prior to entry into the receiving stream. During periods of excess flow discharge, CBOD<sub>5</sub>, Suspended Solids, and Ammonia Nitrogen, if Ammonia Nitrogen monitoring and sampling is required on the Effluent Limitations, Monitoring, and Reporting Page of this Permit, shall be monitored at a point representative of the discharge but prior to admixture with the excess flow. If Fecal Coliform limits are different for Discharge Numbers 001, A01/002, 003, and B01 sampling shall occur at a point representative of the discharge and prior to admixture, if hardware allows. Other parameters may be sampled after admixture but prior to entry into the receiving stream.
- B. For Discharge Number A01/002, 003, and B01- Samples for all parameters shall be taken at a point representative of the discharge but prior to entry into the receiving stream. If Fecal Coliform limits are different for Discharge Numbers 001, A01/002, 003 and B01, sampling shall occur at a point representative of the discharge and prior to admixture, if hardware allows. The sampling point for other parameters may be at a point after admixture with the dry weather flows.

SPECIAL CONDITION 7. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

SPECIAL CONDITION 8. Fecal Coliform limits for discharge point 001 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

SPECIAL CONDITION 9. The Permittee shall monitor the effluent for the following parameters monthly for a period of six (6) consecutive months, beginning three (3) months from the effective date of this Permit. 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 on the DMR's to IEPA. The parameters to be sampled and the minimum detection limits to be attained are as follows:

STORET			
<u>CODE</u>	<u>PARAMETER</u>		Minimum reporting limit
01092	Zinc (dissolved)	12-01-07 - 5-31-08 01/30 24 ALL Y's	0.025 mg/L

In addition the Permittee shall monitor for a period of six (6) consecutive months, beginning three (3) months from the effective date of this Permit for Zinc (dissolved) upstream of the discharge point using a grab sample.

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.

NPDES Permit No. IL0028380

Special Conditions

SPECIAL CONDITION 10.

A. Publicly Owned Treatment Works (POTW) Pretreatment Program General Provisions

1. The Permittee shall implement and enforce its approved Pretreatment Program which was approved on June 28, 1985 and all approved subsequent modifications thereto. The Permittee shall maintain legal authority adequate to fully implement the Pretreatment Program in compliance with Federal (40 CFR 403), State, and local laws. The Permittee shall:
  - a. Carry out independent inspection and monitoring procedures at least once per year, which will determine whether each significant industrial user (SIU) is in compliance with applicable pretreatment standards;
  - b. Perform an evaluation, at least once every two (2) years, to determine whether each SIU needs a slug control plan. If needed, the SIU slug control plan shall include the items specified in 40 CFR § 403.8 (f)(2)(v);
  - c. Update its inventory of Industrial Users (IUs) at least annually and as needed to ensure that all SIUs are properly identified, characterized, and categorized;
  - d. Receive and review self monitoring and other IU reports to determine compliance with all pretreatment standards and requirements, and obtain appropriate remedies for noncompliance by any IU with any pretreatment standard and/or requirement;
  - e. Investigate instances of noncompliance, collect and analyze samples, and compile other information with sufficient care as to produce evidence admissible in enforcement proceedings, including judicial action;
  - f. Require development, as necessary, of compliance schedules by each industrial user for the installation of control technologies to meet applicable pretreatment standards; and,
  - g. Maintain an adequate revenue structure for continued operation of the Pretreatment Program.
2. The Permittee shall issue/reissue permits or equivalent control mechanisms to all SIUs prior to expiration of existing permits or prior to commencement of discharge in the case of new discharges. The permits at a minimum shall include the elements listed in 40 CFR § 403.8(f)(1)(iii).
3. The Permittee shall develop, maintain, and enforce, as necessary, local limits to implement the prohibitions in 40 CFR § 403.5 which prohibit the introduction of specific pollutants to the waste treatment system from any source of nondomestic discharge.
4. In addition to the general limitations expressed in Paragraph 3 above, applicable pretreatment standards must be met by all industrial users of the POTW. These limitations include specific standards for certain industrial categories as determined by Section 307(b) and (c) of the Clean Water Act, State limits, or local limits, whichever are more stringent.
5. The USEPA and IEPA individually retain the right to take legal action against any industrial user and/or the POTW for those cases where an industrial user has failed to meet an applicable pretreatment standard by the deadline date regardless of whether or not such failure has resulted in a permit violation.
6. The Permittee shall establish agreements with all contributing jurisdictions, as necessary, to enable it to fulfill its requirements with respect to all IUs discharging to its system.
7. Unless already completed, the Permittee shall within six (6) months of the effective date of this Permit submit to USEPA and IEPA a proposal to modify and update its approved Pretreatment Program to incorporate Federal revisions to the general pretreatment regulations. The proposal shall include all changes to the approved program and the sewer use ordinance which are necessary to incorporate the regulations commonly referred to as PIRT and DSS, which were effective November 16, 1988 and August 23, 1990, respectively. This includes the development of an Enforcement Response Plan (ERP) and a technical re-evaluation of the Permittee's local limits.

NPDES Permit No. IL0028380

Special Conditions

8. The Permittee's Pretreatment Program has been modified to incorporate a Pretreatment Program Amendment approved on October 22, 1997. The amendment became effective on the date of approval and is a fully enforceable provision of your Pretreatment Program.

Modifications of your Pretreatment Program shall be submitted in accordance with 40 CFR § 403.18, which established conditions for substantial and nonsubstantial modifications.

B. Reporting and Records Requirements

1. The Permittee shall provide an annual report briefly describing the permittee's pretreatment program activities over the previous calendar year. Permittees who operate multiple plants may provide a single report providing all plant-specific reporting requirements are met. Such report shall be submitted no later than April 28 of each year, and shall be in the format set forth in IEPA's POTW Pretreatment Report Package which contains information regarding:
- An updated listing of the Permittee's industrial users.
  - A descriptive summary of the compliance activities including numbers of any major enforcement actions, (i.e., administrative orders, penalties, civil actions, etc.), and the outcome of those actions. This includes an assessment of the compliance status of the Permittee's industrial users and the effectiveness of the Permittee's Pretreatment Program in meeting its needs and objectives.
  - A description of all substantive changes made to the Permittee's Pretreatment Program. Changes which are "substantial modifications" as described in 40 CFR § 403.18(c) must receive prior approval from the Approval Authority.
  - Results of sampling and analysis of POTW influent, effluent, and sludge.
  - A summary of the findings from the priority pollutants sampling. As sufficient data becomes available the IEPA may modify this Permit to incorporate additional requirements relating to the evaluation, establishment, and enforcement of local limits for organic pollutants. Any permit modification is subject to formal due process procedures pursuant to State and Federal law and regulation. Upon a determination that an organic pollutant is present that causes interference or pass through, the Permittee shall establish local limits as required by 40 CFR § 403.5(c).
2. The Permittee shall maintain all pretreatment data and records for a minimum of three (3) years. This period shall be extended during the course of unresolved litigation or when requested by the IEPA or the Regional Administrator of USEPA. Records shall be available to USEPA and the IEPA upon request.
3. The Permittee shall establish public participation requirements of 40 CFR 25 in implementation of its Pretreatment Program. The Permittee shall at least annually, publish the names of all IU's which were in significant noncompliance (SNC), as defined by 40 CFR § 403.8(f)(2)(vii), in the largest daily paper in the municipality in which the POTW is located or based on any more restrictive definition of SNC that the POTW may be using.
4. The Permittee shall provide written notification to the Deputy Counsel for the Division of Water Pollution Control, IEPA, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 within five (5) days of receiving notice that any Industrial User of its sewage treatment plant is appealing to the Circuit Court any condition imposed by the Permittee in any permit issued to the Industrial User by Permittee. A copy of the Industrial User's appeal and all other pleadings filed by all parties shall be mailed to the Deputy Counsel within five (5) days of the pleadings being filed in Circuit Court.

NPDES Permit No. IL0028380

Special Conditions

C. Monitoring Requirements

1. The Permittee shall monitor its influent, effluent and sludge and report concentrations of the following parameters on monitoring report forms provided by the IEPA and include them in its annual report. Samples shall be taken at annual intervals at the indicated reporting limit or better and consist of a 24-hour composite unless otherwise specified below. Sludge samples shall be taken of final sludge and consist of a grab sample reported on a dry weight basis.

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Minimum reporting limit</u>
01097	Antimony	0.07 mg/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01012	Beryllium	0.005 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hex - grab not to exceed 24 hours)*	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (grab) (weak acid dissociable)*	5.0 ug/L
00720	Cyanide (grab) (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 (effluent grab using USEPA Method 1631 or equivalent)***	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
01059	Thallium	0.3 mg/L
01092	Zinc	0.025 mg/L

\* Influent and effluent only

\*\*1 ng/L = 1 part per trillion.

\*\*\* Other approved methods may be used for influent (composite) and sludge

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. Where constituents are commonly measured as other than total, the phase is so indicated.

2. The Permittee shall conduct an analysis for the one hundred and ten (110) organic priority pollutants identified in 40 CFR 122 Appendix D, Table II as amended. This monitoring shall be done annually and reported on monitoring report forms provided by the IEPA and shall consist of the following:

- a. The influent and effluent shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. The sampling shall be done during a day when industrial discharges are expected to be occurring at normal to maximum levels.

Samples for the analysis of acid and base/neutral extractable compounds shall be 24-hour composites.

Five (5) grab samples shall be collected each monitoring day to be analyzed for volatile organic compounds. A single analysis for volatile pollutants (Method 624) may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than one (1) mL of each grab included in the composite.

Wastewater samples must be handled, prepared, and analyzed by GC/MS in accordance with USEPA Methods 624 and 625 of 40 CFR 136 as amended.

NPDES Permit No. IL0028380

Special Conditions

b. The sludge shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. A sludge sample shall be collected concurrent with a wastewater sample and taken as final sludge.

Sampling and analysis shall conform to USEPA Methods 624 and 625 unless an alternate method has been approved by IEPA.

c. Sample collection, preservation and storage shall conform to approved USEPA procedures and requirements.

3. In addition, the Permittee shall monitor any new toxic substances as defined by the Clean Water Act, as amended, following notification by the IEPA.

4. Permittee shall report any noncompliance with effluent or water quality standards in accordance with Standard Condition 12(e) of this Permit.

5. Analytical detection limits shall be in accordance with 40 CFR 136. Minimum detection limits for sludge analyses shall be in accordance with 40 CFR 503.

✓  
14 SPECIAL CONDITION 11. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 12. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 001.

Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:

a. Fish - 96 hour static LC<sub>50</sub> Bioassay using fathead minnows (*Pimephales promelas*).

b. Invertebrate 48-hour static LC<sub>50</sub> Bioassay using *Ceriodaphnia*.

✓  
14 2. Testing Frequency - The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit. *exp - 8-31-12*

3. Reporting - Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation; and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit. *2/11 5/11 8/11 11/11*

4. Toxicity Reduction Evaluation - Should the results of the biomonitoring program identify toxicity, the IEPA may require that the Permittee prepare a plan for toxicity reduction evaluation and identification. This plan shall be developed in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the IEPA. *4/30/11 7/31/11 10/31/11 01/31/12*

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

NPDES Permit No. IL0028380

Special Conditions

✓ SPECIAL CONDITION 13. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 23 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency  
Bureau of Water  
Compliance Assurance Section  
Mail Code #19  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

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

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

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

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

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

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

Attention: Compliance Assurance Section, Mail Code # 19

Special Conditions

SPECIAL CONDITION 15. The Permittee may collect data in support of developing a site-specific metals translator for Zinc (dissolved). Total and dissolved metals for a minimum of twelve weekly samples need to be collected from the effluent and at a downstream location indicative of complete mixing between the effluent and the receiving water to determine a metal translator for these parameters. The IEPA will review submitted sample data and may reopen and modify this Permit to eliminate or include revised effluent limitations for these parameters based on the metal translator determined from the collected data.

SPECIAL CONDITION 16. This permit may be modified by the Agency to include any modified Dissolved Oxygen limitation pursuant to final rule making by the Illinois Pollution Control Board under Docket #R04-25.

SPECIAL CONDITION 17. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon completion of an alternate East Branch of DuPage River Water Quality Study.