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:** 

April 30. 2026

Issue Date: Aprif 3223, 2021 Effective Date: May 1, 2021

Name and Address of Permittee:

Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street

Chicago, Illinois 60611

Facility Name and Address:

MWRDGC Hanover Park WRP 1200 East Sycamore Hanover Park, Illinois 60133 (Cook County)

Receiving Waters: West Branch of DuPage River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, 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 Effluent Limitations, Monitoring, and Reporting requirements; Special Conditions and Attachment H Standard Conditions attached 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.

> Brant D. Fleming, P.E. Manager, Permit Section

Division of Water Pollution Control

ALD:GY:10060101.daa

# Effluent Limitations, Monitoring, and Reporting

# **FINAL**

Discharge Number(s) and Name(s): 007 WRP Outfall

Load limits computed based on a design average flow (DAF) of 12 MGD (design maximum flow (DMF) of 22 MGD, main treatment plant and retention ponds).

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:

	LOA	D LIMITS lbs/ DAF (DMF)*	'day		NCENTRAT LIMITS MG/			
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
CBOD <sub>5</sub> **,(1)	1001(1835)		2002(3670)	10		20	4 Days/Week	Composite
Suspended Solids (1)	1201(2202)		2402(4404)	12		24	4 Days/Week	Composite
рН	Shall be in the	e range of 6 to	9 Standard U	nits			4 Days/Week	Grab
Fecal Coliform***	The monthly than 10% of s	geometric me samples exce	an shall not exc eding 400 per 1	ceed 200 per 00 mL. (May	100 mL with through Oct	no more ober)	5 Days/Week	Grab
Chlorine Residual***						0.038 (2)	5 Days/Week	Grab
Ammonia Nitrogen as (N)								
April-May/SeptOct. June-August NovFeb. March	150 (275) 150 (275) 390 (716) 290 (532)	 380(697)  741 (1358)	651(1193) 651 (1193) 1151(2110) 1331(2440)	1.5 1.5 3.9 2.9	3.8  7.4	6.5 6.5 11.5 13.3	5 Days/Week 5 Days/Week 5 Days/Week 5 Days/week	Composite Composite Composite
Total Phosphorus (as P)****	100 (183)			1.0			1 Day/Week	Composite
Total Nitrogen (as N)	Monito	r Only					1 Day/Month	Composite
Dissolved Phosphorus	Monito	r Only					1 Day/Month	Composite
Nitrate/Nitrite	Monito	r Only					1 Day/Month	Composite
Total Kjeldahl Nitrogen (TKN)	Monito	r Only					1 Day/Month	Composite
Alkalinity	Monito	r Only					1 Day/Month	Grab
Temperature	Monito	r Only					1 Day/Month	Grab
Chloride	Monito	r Only					1 Day/Month	Composite
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
Dissolved Oxygen March - July August - February				N.A. 5.5	6.0 4.0	5.0 3.5	4 Days/Week 4 Days/Week	Grab Grab

<sup>\*</sup>Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

<sup>\*\*</sup> Carbonaceous BOD $_5$  (CBOD $_5$ ) or total organic carbon (TOC) may be measured. Testing shall be in accordance with 40 CFR 136. If TOC is measured, the results shall be converted to CBOD $_5$  using the equation, Log CBOD $_5$  = Log TOC\*1.60 – 1.17 and reported on the DMR as CBOD $_5$ . The TOC data shall also be reported on the DMR.

# Effluent Limitations, Monitoring, and Reporting

### **FINAL**

Discharge Number(s) and Name(s): 007 WRP Outfall (continued)

\*\*\*See Special Condition 10. During those months in which no chlorine is used, the Permittee is required to report on DMRs "No Chlorine Used".

\*\*\*\*See Special Condition 19.

 $^{(1)}$  BOD $_5$  and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be used for this calculation and available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD $_5$  concentration to determine the effluent BOD $_5$  concentration, BOD $_5$  may be measured directly, or TOC may be measured and converted to BOD $_5$  using the equation Log BOD $_5$  = Log TOC\*1.53 – 0.86. Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

(2) See Special Condition 20.

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 a monthly geometric mean and as a percentage of samples exceeding 400 count /100 mL.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on the DMR as daily maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Total Phosphorus shall be reported on the DMR as a monthly average and daily maximum value.

Total Nitrogen shall be reported on the DMR as a monthly average and daily maximum value. Total Nitrogen is the sum total of Total Kjeldahl Nitrogen, Nitrate and Nitrite.

Chloride shall be reported on the DMR as a daily maximum value.

# 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>	4 days/week	Composite
Suspended Solids	4 days/week	Composite
Total Phosphorus (as P)	1 day/month	Composite
Total Nitrogen (as N)	1 day/Month	Composite
TOC	*	Composite

<sup>\*</sup>BOD $_5$  or total organic carbon (TOC) may be measured. Testing shall be in accordance with 40 CFR 136. If TOC is measured, the results shall be converted to BOD $_5$  using the equation, Log BOD $_5$  = Log TOC\*1.53 – 0.86, and reported on the DMR as BOD $_5$ . TOC data shall also be reported on the DMR as a monthly average and sampled 4 Days/Week.

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.

BOD5 and Suspended Solids shall be reported on the DMR as a monthly average concentration.

Total Phosphorus and Total Nitrogen shall be reported on the DMR as a maximum value.

# **Special Conditions**

<u>SPECIAL CONDITION 1</u>. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. 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.

<u>SPECIAL CONDITION 3</u>. 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.

<u>SPECIAL CONDITION 4</u>. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

<u>SPECIAL CONDITION 5</u>. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302 and 303.

<u>SPECIAL CONDITION 6.</u> The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic 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 is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <a href="https://mxww2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/pages/quick-answer-guide.aspx">https://mxww2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/pages/quick-answer-guide.aspx</a>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25<sup>th</sup> day of the following month, unless otherwise specified by the permitting authority.

Permittees that have been granted a waiver 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 Attention: Compliance Assurance Section, Mail Code # 19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

<u>SPECIAL CONDITION 8</u>. Samples taken in compliance with the effluent monitoring requirements shall be taken after the flows from the retention ponds have combined with the flows which have received complete treatment.

<u>SPECIAL CONDITION 9</u>. Consistent with permit modification procedures in 40 CFR 122.62 and 63, 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.

# Sewer Use Ordinances:

- a) The Permittee shall implement and enforce all conditions and requirements of the Infiltration/Inflow Control Program (IICP) contained in Article 8 of the Watershed Management Ordinance. The steps used to implement the IICP shall be included in the OMP contained in Paragraph F of this Special Condition.
- b) The Permittee shall report to the IEPA's Compliance Assurance Section on an annual basis the progress obtained in the satellite entities' efforts to meet the following goals: 1) Prevention of water pollution; 2) Elimination of basement sewage backups and adverse surcharging conditions that cause health hazards and financial losses; 3) Minimization of extraneous flows transported to the Permittee's facilities. Also included in this report shall be the results of the District's efforts to reduce and effectively control sources of infiltration and inflow. The report shall be submitted by November 15<sup>th</sup> of each year and shall include the most recent October 1 through September 30 time period.
- c) In the event that local sewer system owners have excessive I/I (any wet weather flows exceeding 150 gpcpd 24-hour average with peak flow not to exceed 100 gpcpd times an allowable peaking factor in accordance with the Illinois Recommended Standards for Sewage Works) in their separate sewer systems that cause or contribute to basement back-ups and/or sanitary sewer overflows, the Permittee shall require that the local sewer system owner implement measures in addition to those required under

# **Special Conditions**

the IICP in an effort to reduce the excessive I/I. Such additional remedies may include sewer system evaluation studies, sewer rehabilitation or replacement, inflow source removal, and restrictions on the issuance of additional sewer connection permits. A summary of such additional measures shall be included with the IICP Report.

<u>SPECIAL CONDITION 10</u>. Fecal Coliform limits for Discharge Number 007 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 11.

# 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 November 18, 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 and regulations. All definitions in this section unless specifically otherwise defined in this section, are those definitions listed in 40 CFR 403.3. USEPA Region 5 is the Approval Authority for the administration of pretreatment programs in Illinois. The Permittee shall:
  - a. Develop and implement procedures to ensure compliance with the requirements of a pretreatment program as specified in 40 CFR 403.8 (f) (2).
  - b. 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;
  - c. Evaluate whether each SIU needs a slug control plan or other action to control slug discharges. If needed, the SIU slug control plan shall include the items specified in 40 CFR 403.8(f)(2)(vi). For IUs identified as significant prior to November 14, 2005, this evaluation must have been conducted at least once by October 14, 2006; additional SIUs must be evaluated within 1 year of being designated an SIU;
  - d. Update its inventory of Industrial Users (IUs) at least annually and as needed to ensure that all SIUs are properly identified, characterized, and categorized;
  - 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;
  - f. 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;
  - g. Require development, as necessary, of compliance schedules by each industrial user to meet applicable pretreatment standards; and,
  - h. Maintain an adequate revenue structure and staffing level 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)(B).
- 3. The Permittee shall develop, maintain, and enforce, as necessary, local limits to implement the general and specific prohibitions in 40 CFR § 403.5 which prohibit the introduction of any pollutants which cause pass through or interference and the introduction of specific pollutants to the waste treatment system from <u>any</u> source of nondomestic discharge.
- 4. In addition to the general limitations expressed in Paragraph 3 above, applicable pretreatment standards must be met by <u>all industrial users</u> 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.

# **Special Conditions**

- 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 revisions of the Pretreatment Streamlining Rule (which became effective on November 14, 2005), which are considered required changes, as described in the Pretreatment Streamlining Rule Fact Sheet 2.0: Required changes, available at: <a href="https://www.epa.gov/npdes/npdes-pretreatment-streamlining-rule-fact-sheets">https://www.epa.gov/npdes/npdes-pretreatment-streamlining-rule-fact-sheets</a>. This includes any necessary revisions to the Permittee's Enforcement Response Plan (ERP).
  - a. The permittee will review and modify, as appropriate, its existing industrial pretreatment program to minimize combined sewer overflow impacts related to discharges to the collection system from non-domestic users. This review shall include: (1) An inventory of nondomestic discharges to the combined sewers system, focusing on those discharges with the greatest potential to impact CSOs (2) Assessment of the impact of these discharges on CSOs, and (3) Evaluation of feasible modifications to the pretreatment program to minimize CSO impacts, including the prohibition of batch discharges during wet weather events.
  - b. The Permittee shall maintain all current pollution prevention (P2) activities with the Illinois Waste Management and Research Center (WMRC)/ University of Illinois Sustainable Technology Center (ISTC). Reports on pollution prevention activities shall be included in the annual pretreatment report submitted to the Agency.
- 8. A technical re-evaluation dated December 29, 2014 and an amended version dated August 31, 2017 were reviewed by the Agency and approved on August 31, 2017. The technical re-evaluation of its local limitations must be consistent with U.S. EPA's Local Limits Development Guidance (July 2004). Submit the evaluation and any proposed revisions to its local limits to IEPA and U.S. EPA Region 5 for review and approval. U.S. EPA Region 5 will request Permittee to submit the evaluation and any proposed revisions to its local limits on the spreadsheet "Region 5 Pretreatment Limit Spreadsheet Illinois/Indiana" found at <a href="https://www.epa.gov/npdes-permits/illinois-npdes-permits">www.epa.gov/npdes-permits/illinois-npdes-permits</a>. To demonstrate technical justification for new local industrial user limits or iustification for retaining existing limits, the following information must be submitted to U.S. EPA:
  - a. Total plant flow
  - b. Domestic/commercial pollutant contributions for pollutants of concern
  - Industrial pollutant contributions and flows
  - d. Current POTW pollutant loadings, including loadings of conventional pollutants
  - e. Actual treatment plant removal efficiencies, as a decimal (primary, secondary, across the wastewater treatment plant)
  - f. Safety factor to be applied
  - g. Identification of applicable criteria:
    - i. NPDES permit conditions
      - Specific NPDES effluent limitations
      - ·Water-quality criteria
      - •Whole effluent toxicity requirements
      - ·Criteria and other conditions for sludge disposal
    - ii. Biological process inhibition
      - Nitrification
      - Sludge digester
    - iii. Collection system problems
  - h. The Permittee's sludge disposal methods (land application, surface disposal, incineration, landfill)
  - Sludge flow to digester
  - j. Sludge flow to disposal
  - k. % solids in sludge to disposal, not as a decimal
  - I. % solids in sludge to digester, not as a decimal
  - m. Plant removal efficiencies for conventional pollutants
  - n. If revised industrial user discharge limits are proposed, the method of allocating available pollutants loads to industrial users
  - o. A comparison of maximum allowable headworks loadings based on all applicable criteria listed in g, above
  - p. Pollutants that have caused:
    - i. Violations or operational problems at the POTW, including conventional pollutants
    - ii. Fires and explosions
    - iii. Corrosion
    - iv. Flow obstructions
    - v. Increased temperature in the sewer system
    - vi. Toxic gases, vapors or fumes that caused acute worker health and safety problems
    - vii. Toxicity found through Whole Effluent Toxicity testing
    - viii. Inhibition
  - q. Pollutants designated as "monitoring only" in the NPDES permit

# **Special Conditions**

- r. Supporting data, assumptions, and methodologies used in establishing the information a through q above
- 9. The Permittee's Pretreatment Program has been modified to incorporate a Pretreatment Program Amendment approved on February 6, 1995, July 24, 1997, and September 27, 2005. 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 non-substantial modifications. All requests should be sent in electronic format to r5npdes@epa.gov, Attention: NPDES Program Branch.

# 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 June 30 of each year to USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: Water Enforcement & Compliance Assurance Branch, and shall be in the format set forth in IEPA's POTW Pretreatment Report Package which contains information regarding:
  - a. An updated listing of the Permittee's significant industrial users, indicating additions and deletions from the previous year, along with brief explanations for deletions. The list shall specify which categorical Pretreatment standards, if any, are applicable to each Industrial User.
  - b. 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.
  - c. 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 USEPA.
  - d. Results of sampling and analysis of POTW influent, effluent, and sludge.
  - e. 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).
- 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)(viii), in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the Permittee or based on any more restrictive definition of SNC that the POTW may be using.
- 4. The Permittee shall provide written notification to the USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: NPDES Programs Branch and 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

# **Special Conditions**

# C. Monitoring Requirements

1. The Permittee shall monitor its influent, effluent and sludge and report concentrations of the following parameters on Discharge Monitoring Report (DMR) electronic forms, unless otherwise specified by the IEPA, and include them in its annual report. Influent and effluent samples shall be taken at weekly 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, defined as digester draw, on a monthly basis and consist of a grab sample reported on a dry weight basis.

STORE	T	Minimum
CODE	PARAMETER	reporting limit
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) *	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00720	Cyanide (total) (grab)****	5.0 μg/L
00722	Cyanide (grab)*(available ***** or amenable to chlorination)****	5.0 μg/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)***	1.0 ng/L and 1.0 ug/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

<sup>\*</sup> Influent and effluent only

The USEPA Method OIA-1677 or Standard Method SM 4500-CN G will be effective one (1) year after the effective date of this permit. This will provide time to purchase equipment and implement operating procedures.

Minimum reporting limits are defined as - (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservatives, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

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.

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:

<sup>\*\*</sup> Minimum reporting limit of 1 ng/L = 1 part per trillion when utilizing Method 1631E and 1 ug/L = 1 part per billion when utilizing Method 3112 and SW-846.

<sup>\*\*\*</sup>Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E, other approved methods may be used for influent (composite) and sludge.

<sup>\*\*\*\*</sup>Analysis for cyanide (available or amenable to chlorination) is only required if cyanide (total) is detected at or above the minimum reporting limit.

<sup>\*\*\*\*\*\*</sup>USEPA Method OIA – 1677 or Standard Method SM 4500-CN G.

## **Special Conditions**

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, pesticides, and polychlorinated biphenyls shall be 24-hour composites.

Six (6) grab samples shall be collected each monitoring day to be analyzed for volatile organic compounds. A single analysis for volatile pollutants (Method 624.1) may be run for each monitoring day by compositing equal volumes of each grab sample in the laboratory right before the analysis and loading the composite sample vial in the automated purge and trap system.

Wastewater samples must be handled, prepared, and analyzed by gas chromatograph/electron capture detector in accordance with USEPA Methods 624.1 and 625.1 of 40 CFR 136 as amended.

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 608.3, 624.1, and 625.1 unless an alternate method has been approved by IEPA.

- c. Sample collection, preservation and storage shall conform to approved USEPA procedures and requirements.
- In addition, the Permittee shall monitor any new toxic substances as defined by the Clean Water Act, as amended, following notification by the IEPA or USEPA.
- Permittee shall report any noncompliance with effluent or water quality standards in accordance with Standard Condition 12(f)
  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.

## D. Pretreatment Reporting

USEPA Region 5 is the Approval Authority for administering the pretreatment program in Illinois. All requests for modification of pretreatment program elements should be submitted in redline/strikeout format and must be sent to USEPA at r5npdes@epa.gov.

Permittee shall upon notice from USEPA, modify any pretreatment program element found to be inconsistent with 40 CFR 403.

- E. The Permittee shall report names of all significant contributing industries annually to both IEPA and USEPA. The report shall include the flow and the Standard Industrial Classification and/or North American Industrial Classification for each major contributing industry and be submitted with the annual report required in Special Condition 8. The Permittee shall furnish industrial waste data for any specific industrial group that IEPA or USEPA requests, where such requests are reasonable in scope. Otherwise, at the request of IEPA or USEPA the Permittee shall provide access to files and guidance to IEPA or USEPA personnel for reviewing data related to industrial users.
- F. To the extent different requirements are imposed by the Permittee's approved pretreatment program and this Permit, the stricter requirements shall be applicable.

SPECIAL CONDITION 12. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for parameters due to sustained compliance. The IEPA may require that the influent and effluent sampling frequency for these parameters be increased without Public Notice. This provision does not limit EPA's authority to require additional monitoring, information or studies pursuant to Section 308 of the CWA.

SPECIAL CONDITION 13. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by this permit and by III. Adm. Code 306.304. In order to accomplish these goals of complying with this prohibition and mitigating the adverse impacts of any such overflows if they do occur, the Permittee shall (A) identify and report to IEPA all SSOs that occur and (B) develop, implement

### **Special Conditions**

and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within twenty four (24) months of the effective date of this Permit or review and revise any existing plan accordingly. The permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they were designed.

The CMOM plan shall include the following elements:

## a. Measures and Activities:

- 1. A complete map and system inventory for the collection system owned and operated by the Permittee;
- Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
- Documentation of unplanned maintenance:
- An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and back-ups occur or are likely to occur; use flow monitoring as necessary;
- 5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee;
- 6. Operational control, including documented system control procedures, scheduled inspections and testing;
- 7. The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of the collection system. Asset management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets and develop long-term funding strategies; and
- . Asset management shall include but is not limited to the following elements:
  - a. Asset Inventory and State of the Asset;
  - b. Level of Service;
  - c. Critical Asset Identification;
  - d. Life Cycle Cost; and
  - e. Long-Term Funding Strategy.

# b. Design and Performance Provisions:

- 1. Monitor the effectiveness of CMOM:
- 2. Upgrade the elements of the CMOM plan as necessary; and
- 3. Maintain a summary of CMOM activities.

# c. Overflow Response Plan:

- 1. Know where overflows and back-ups within the facilities owned and operated by the Permittee occur;
- 2. Respond to each overflow or back-up to determine additional actions such as clean up; and
- 3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow /infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.

# d. System Evaluation Plan:

- 1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
- Evaluate plans to reduce I/I and eliminate SSOs;
- 3. Special provisions for Pump Stations and force mains and other unique system components; and
- 4. Construction plans and schedules for correction.

# e. Reporting and Monitoring Requirements:

- 1. Program for SSO detection and reporting; and
- 2. Program for tracking and reporting basement back-ups, including general public complaints.
- f. Third Party Notice Plan:

## **Special Conditions**

- Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
- Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
- 3. Identifies who shall receive the notification:
- 4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
- 5. Includes a description of the lines of communication; and
- 6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to the following web site addresses.

http://www.epa.gov/npdes/pubs/cmom guide for collection systems.pdf and

http://water.epa.gov/type/watersheds/wastewater/upload/guide smallsystems assetmanagement bestpractices.pdf

<u>SPECIAL CONDITION 14</u>. By August 31st of each year MWRDGC shall submit the District's Annual Financial Report which will include a Balance Sheet and Statement of Revenue and Expenditures for all funds. The submittal shall be made to Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section.

SPECIAL CONDITION 15. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 007.

## Biomonitoring

- A. 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:
  - Fish 96-hour static LC<sub>50</sub> Bioassay using fathead minnows (Pimephales promelas).
  - 2. Invertebrate 48-hour static LC<sub>50</sub> Bioassay using Ceriodaphnia.
- B. Testing Frequency The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Sample collection and testing must be conducted in the 18<sup>th</sup>, 15<sup>th</sup>, 12<sup>th</sup>, and 9<sup>th</sup> month prior to the expiration date of this Permit. When possible, bioassay sample collection should coincide with sample collection for metals analysis or other parameters that may contribute to effluent toxicity.
- C. Reporting Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be mailed to IEPA, Bureau of Water, Compliance Assurance Section or emailed to EPA.PrmtSpecCondtns@Illinois.gov within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16<sup>th</sup>, 13<sup>th</sup>, 10<sup>th</sup>, and 7<sup>th</sup> month prior to the expiration date of this Permit.
   D. Toxicity Should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment, the IEPA may require,
- D. Toxicity Should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within one (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification and reduction evaluation process as outlined below.
- E. Toxicity Identification and Reduction Evaluation Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatment, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification evaluation process in accordance with Methods for Aquatic Toxicity Identification Evaluations, EPA/600/6-91/003. The IEPA may also require, upon notification, that the Permittee prepare a plan for toxicity reduction evaluation to be developed in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/005, which 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.

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.

#### **Special Conditions**

SPECIAL CONDITION 16. Discharge Number 005 is an emergency high level bypass. Discharges from this outfall are prohibited. Permittee shall maintain continuous electronic monitors capable of detecting all discharges from each prohibited discharge outfall or shall inspect each listed prohibited discharge outfall listed above within 24 hours of receiving .25 inches of precipitation or greater within a 24 hour period as recorded at the nearest National Weather Service Reporting Station. Permittee shall utilize chalk or block devices or other discharge confirming devices approved by the Agency to enhance visual monitoring. These prohibited discharges, if they occur, are subject to conditions A-E listed below.

#### A. Definitions

"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 discharge. Severe property damage does not mean economic loss caused by delays in production.

### B. Notice

- 1. Anticipated discharge. If the Permittee knows in advance of the need for a prohibited discharge from Discharge Number 005, it shall submit prior notice, if possible at least ten days before the date of the discharge.
- 2. Unanticipated discharge. The Permittee shall submit notice of an unanticipated discharge as required in Standard Condition 12(f) of this Permit (24-hour notice).
- C. Limitation on IEPA enforcement discretion. The IEPA may take enforcement action against a Permittee for prohibited discharges from Discharge Number 005, unless:
  - 1. Discharge was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - 2. There was no feasible alternatives to the discharge, 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 discharge which occurred during normal periods of equipment downtime or preventive maintenance; and
  - 3. The Permittee submitted notices as required under Standard Condition 12(f) of this Permit.
- D. Emergency discharges when discharging, shall be monitored daily by grab sample for BOD<sub>5</sub>, Suspended Solids and Fecal Coliform. The Permittee shall submit the monitoring results on Discharge Monitoring Report forms using one such form for each month in which discharging occurs. The Permittee shall specify the number of discharges per month that occur and shall report this number in the quantity daily maximum column. The Permittee shall report the highest concentration value of BOD<sub>5</sub>, Suspended Solids, and Fecal Coliform discharged in the concentration daily maximum column.
- E. The above limitations on enforcement discretion apply only with respect to IEPA. They do not serve as a limitation on the ability of any other governmental agency or person to bring an enforcement action in accordance with the Federal Clean Water Act.

SPECIAL CONDITION 17. 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 25 for a period of at least five (5) years from the date of this Permit.

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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.

The Permittee shall comply with existing federal and state regulations governing sewage sludge use or disposal.

The Permittee shall comply with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

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

<u>SPECIAL CONDITION 18</u>. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study, an approved Nutrient Implementation Plan, or an approved trading program.

#### SPECIAL CONDITION 19.

- The Permittee shall participate in the DuPage River Salt Creek Workgroup (DRSCW). The Permittee shall work with other
  watershed members of the DRSCW to determine the most cost effective means to remove dissolved oxygen (DO) and
  offensive condition impairments in the DRSCW watersheds.
- 2. The Permittee shall ensure that the following projects and activities set out in the DRSCW Implementation Plan (April 16, 2015), are completed (either by the permittee or through the DRSCW) by the schedule dates set forth below; and that the short term objectives are achieved for each by the time frames identified below:

Project Name	Completion Date	Short Term Objectives	Long Term Objectives
Oak Meadows Golf Course dam removal	December 31, 2016 (Completed)	Improve DO	Improve fish passage
Oak Meadows Golf Course stream restoration	December 31. 2017 (Completed)	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi
Fawell Dam Modification	December 31, 2021	Modify dam to allow fish passage	Raise fiBi upstream of structure
Spring Brook Restoration and dam removal	December 31, 2019 (Completed)	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
Fullersburg Woods dam modification concept plan development	December 31, 2016 (Completed)	Identify conceptual plan for dam modification and stream restoration	Build consensus among plan stakeholders

# **Special Conditions**

Fullersburg Woods dam modification	December 31, 2021	Improve DO, improve aquatic habitat (QHEI)	Raise miBi and fiBi
Fullersburg Woods dam modification area stream restoration	December 31, 2022	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
Southern West Branch Physical Enhancement	December 31, 2022	Improve aquatic habitat (QHEI)	Raise miBi and fiBi
Southern East Branch Stream Enhancement	December 31, 2023	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
QUAL 2K East Branch and Salt Creek	December 31, 2023	Collect new baseline data and update model	Quantify improvements in watershed. Identify next round of projects for years beyond 2024.
NPS Phosphorus Feasibility Analysis	December 31, 2021	Assess NPS performance from reductions leaf litter and street sweeping	Reduce NPS contributions to lowest practical levels

- 3. The Permittee shall participate in implementation of a watershed Chloride Reduction Program, either directly or through the DRSCW. The program shall work to decrease DRSCW watershed public agency chloride application rates used for winter road safety, with the objective of decreasing watershed chloride loading. The Permittee shall submit an annual report on the annual implementation of the program identifying the practices deployed, chloride application rates, estimated reductions achieved, analyses of watershed chloride loads, precipitation, air temperature conditions and relative performance compared to a baseline condition. The report shall be provided to the Agency by March 31 of each year reflecting the Chloride Abatement Program performance for the preceding year (example: 2015-16 winter season report shall be submitted no later than March 31, 2017). The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW permittees.
- 4. The Permittee shall submit an annual progress report on the projects listed in the table of paragraph 2 above to the Agency by March 31 of each year. The report shall include project implementation progress. The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW permittees.
- 5. The Permittee shall develop a written Phosphorus Discharge Optimization Plan. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor low cost facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The permittee's evaluation shall include, but not necessarily be limited to, an evaluation of the following optimization measures:
  - a. WWTF influent reduction measures.
    - i. Evaluate the phosphorus reduction potential of users.
    - ii. Determine which sources have the greatest opportunity for reducing phosphorus (e.g., industrial, commercial, institutional, municipal, and others).
      - 1. Determine whether known sources (e.g., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
      - 2. Evaluate implementation of local limits on influent sources of excessive phosphorus.

### **Special Conditions**

- b. WWTF effluent reduction measures.
  - i. Reduce phosphorus discharges by optimizing existing treatment processes without causing non-compliance with permit effluent limitations or adversely impacting stream health.
    - 1. Adjust the solids retention time for biological phosphorus removal.
    - 2. Adjust aeration rates to reduce DO and promote biological phosphorus removal.
    - 3. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
    - 4. Minimize impact on recycle streams by improving aeration within holding tanks.
    - 5. Adjust flow through existing basins to enhance biological nutrient removal.
    - 6. Increase volatile fatty acids for biological phosphorus removal.
- 6. Within 24 months of the effective date of this permit, the Permittee shall finalize the written Phosphorus Discharge Optimization Evaluation Plan and submit it to IEPA. The plan shall include a schedule for implementing all of the evaluated optimization measures that can practically be implemented and include a report that explains the basis for rejecting any measure that was deemed impractical. The schedule for implementing all practical measures shall be no longer than 36 months after the effective date of this permit. The Permittee shall implement the measures set forth in the Phosphorus Discharge Optimization Plan in accordance with the schedule set forth in that Plan. The Permittee shall modify the Plan to address any comments that it receives from IEPA and shall implement the modified plan in accordance with the schedule therein.

Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year beginning 24 months from the effective date of the permit.

- 7. The Permittee shall, within 24 months of the effective date of this permit, complete a feasibility study that evaluates the timeframe, and construction and O & M costs of reducing phosphorus levels in its discharge to a level consistently meeting a limit of 1 mg/L, 0.5 mg/L and 0.1 mg/L utilizing a range of treatment technologies including, but not necessarily limited to, biological phosphorus removal, chemical precipitation, or a combination of the two. The study shall evaluate the construction and O & M costs of the different treatment technologies for these limits on a monthly, seasonal, and annual average basis. For each technology and each phosphorus discharge level evaluated, the study shall also evaluate the amount by which the Permittee's typical household annual sewer rates would increase if the Permittee constructed and operated the specific type of technology to achieve the specific phosphorus discharge level. Within 24 months of the effective date of this Permit, the Permittee shall submit to the Agency and the DRSCW a written report summarizing the results of the study.
- 8. Total phosphorus in the effluent shall be limited as follows:
  - a. If the Permittee will use chemical precipitation to achieve the limit, the effluent limitation shall be 1.0 mg/L on a monthly average basis, effective 10 years after the effective date of this permit unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within 10 years of the effective date of this permit.
  - b. If the Permittee will primarily use biological phosphorus removal to achieve the limit, the effluent limitation shall be 1.0 mg/L monthly average to be effective 11 years after the effective date of this permit unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within 11 years of the effective date of this permit.
  - c. The Agency may modify this permit if the DRSCW has developed and implemented a trading program for POTWs in the DRSCW watersheds, providing for reallocation of allowed phosphorus loadings between two or more POTWs in the DRSCW watersheds, that delivers the same results of overall watershed phosphorus point-source reduction and loading anticipated from the uniform application of the applicable 1.0 mg/L monthly average effluent limitation among the POTW permits in the DRSCW watersheds and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203.
  - d. The Agency may modify this permit if the DRSCW has demonstrated and implemented an alternate means of reducing watershed phosphorus loading to a comparable result within the timeframe of the schedule of this condition and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203.
- 9. The Permittee shall monitor the wastewater effluent, consistent with the monitoring requirements on Page 2 of this permit, for total phosphorus, dissolved phosphorus, nitrate/nitrite, total Kjeldahl nitrogen (TKN), ammonia, total nitrogen (calculated),

## **Special Conditions**

alkalinity and temperature at least once a month. The Permittee shall monitor the wastewater influent for total phosphorus and total nitrogen at least once a month. The results shall be submitted on NetDMRs to the Agency unless otherwise specified by the Agency.

10. The Permittee shall submit a Nutrient Implementation Plan (NIP) for the DRSCW watersheds that identifies phosphorus input reductions by point source discharges, non-point source discharges and other measures necessary to remove DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203. The NIP shall also include a schedule for implementation of the phosphorus input reductions and other measures. The Permittee may work cooperatively with the DRSCW to prepare a single NIP that is common among DRSCW permittees. The NIP shall be submitted to the Agency by December 31, 2023.

# SPECIAL CONDITION 20. Schedule for Chlorine Residual Effluent Limitations

Compliance is required with the 0.038 mg/L daily maximum chlorine residual effluent limit two years (2) years from the effective date of this Permit. From the effective date of this Permit until compliance with the 0.038 mg/L daily maximum chlorine residual effluent limit is achieved, the 0.05 mg/L daily maximum chlorine residual effluent limit applies.

The Permittee shall achieve compliance with the final effluent limitations as specified in this Permit for Discharge Number(s) B01 by completion of the effluent limit described above in accordance with the following compliance schedule:

<u>ITEM</u>		COMPLETION DATE		
A.	Interim progress report	6 months from the effective date of this Permit		
В.	Procurement of equipment	12 months from the effective date of this Permit		
C.	Achieve compliance with the 0.038 mg/L daily maximum chlorine residual effluent limit	24 months from the effective date of this Permit		

This Permit may be modified, with Public Notice, to include revised compliance dates set out in this Permit. In addition, the IEPA may initiate a modification of the compliance schedule set out in this Permit at any time, to include other dates which are necessary to carry out the provisions of the Illinois Environmental Protection Act, the Federal Clean Water Act or regulations promulgated under those Acts. Public Notice of such modification and opportunity for public hearing shall be provided.

## Reporting

The Permittee shall submit a report no later than fourteen (14) days following the completion dates indicated for each lettered item in the compliance schedule, indicating, a) the date the item was completed, or b) that the item was not completed. All reports shall be submitted to <u>IEPA</u> at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

#### 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 seg.

**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 millilliters 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.

 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:

- 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:

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:

 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.

 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.

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 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 The following shall be included as noncompliance. 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 caseby-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;

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 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 preventive equipment downtime or 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:

 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.

(2) 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 2methyl-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 III. 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 III. 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.