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

Modified (NPDES) Permit

Expiration Date: July 31, 2022

Issue Date: July 6, 2017 Effective Date: August 1, 2017 Modification Date: July 14, 2021

Name and Address of Discharger: Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street Chicago, Illinois 60611 Name and Address of Facility:

MWRDGC Terrence J. O'Brien Water Reclamation Plant 3500 West Howard Street Skokie, Illinois 60076 (Cook County)

Receiving Waters: North Shore Channel

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.

Darin E. LeCrone, P.E. Manager, Permit Section

Division of Water Pollution Control

BDF: KKD:21012501

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 WRP Outfall

Load Limits computed based on a design average flow (DAF) of 333 MGD (design maximum flow (DMF) of 450 MGD).

From the modification 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:

	LOAD LIMITS lbs/day* DAF (DMF)			CONCENTRATION LIMITS mg/L				
Parameter	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
CBOD5**,****	27,772 (37,530)	33,327 (45,036)		10	12		Daily	Composite
Suspended Solids****	33,327 (45,036)	49,990 (67,554)		12	18		Daily	Composite
pH	Shall be in	the range of	f 6 to 9 standa	rd units			Daily	Grab
Fecal Coliform	The month than 10% o (March – N	of the sample	mean shall nees collected in	ot exceed 200 a month sha	0 per 100 mL II exceed 400	and no more per 100 mL	5 Days/Week	Grab
Ammonia Nitrogen as (N)								
April-October	6,943 (9,383)		13,886 (18,765)	2.5	4	5.0	Daily	Composite
November-March	11,109 (15,012)		22,218 (30,024)	4.0		8.0	Daily	Composite
Hardness*****						Report	Daily	Composite
Cadmium*****						Report	Daily	Composite
Total Nitrogen*****				Report			Weekly	Composite
Total Phosphorus******	2777 (3753)			1.0			Weekly	Composite
TOC	Report		N. Committee				**	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen***					+			
March - July		7 8 3 1		N.A.	N.A	5.0	Daily	Grab
August - February				N.A.	4.0	3.5	Daily	Grab

*Load limits based on design average flow shall apply during design average flow regimes. Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

*** See Special Condition 17.

^{**} 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 - 1.12, and reported on the DMR as CBOD $_5$. TOC data shall also be reported on the DMR as a monthly average and weekly average and sampled daily if used to comply with CBOD $_5$.

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Effluent Limitations, Monitoring, and Reporting

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****BOD₅ 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 CBOD₅ concentration to determine the effluent BOD₅ concentration, BOD₅ may be measured directly, or TOC may be measured and converted to BOD₅ using the equation Log BOD₅ = Log TOC*1.28 - 0.32. 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.

*****Hardness and Cadmium concentration shall be reported on the DMR as a daily maximum.

******Total Nitrogen and Total Phosphorus concentration shall be reported on the DMR as a monthly average. See Special Condition 19. Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum. pH shall be reported on the DMR as a minimum and a maximum.

Dissolved oxygen shall be reported on DMR as minimum.

Fecal Coliform shall be reported on the DMR as a geometric mean and as a percentage of the samples exceeding 400 per 100 mL.

Effluent Limitations, Monitoring, and Reporting

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Discharge Number(s) and Name(s): 107 CSO at North Branch Pumping Station

Discharges from this outfall are CSOs, subject to the requirements of Special Condition 8 of this Permit.

From the modification 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:

		CONCENTRATION mg/L		
Parameter		Daily Maximum	Sample Frequency	Sample Type
Total Flow (MG)	See Below		Daily When Discharging	Continuous
BOD ₅ *		Report	Daily When Discharging	Composite
Suspended Solids		Report	Daily When Discharging	Composite
рН	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Hardness		Report	Daily When Discharging	Composite
Cadmium		Report	Daily When Discharging	Composite
тос		Report	*	Composite

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.

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

BOD₅ and Suspended Solids shall be reported on the DMR as a daily maximum concentration.

Multiple manual grab samples may be collected and analyzed for the composite samples, in accordance with Attachment H Standard Conditions.

*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 * 1.28 – 0.32, and reported on the DMR as BOD $_5$. TOC data shall be reported on the DMR as a daily maximum concentration and sampled daily when outfall 107 is discharged, if used to report BOD $_5$.

Influent Limitations, Monitoring, and Reporting

FINAL

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD ₅ *	Daily	Composite
Suspended Solids	Daily	Composite
TOC	*	Composite

Influent samples shall be taken at a point representative of the influent or influent data shall be adjusted to account for recycle flows.

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.

*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*1.28 - 0.32, and reported on the DMR as BOD $_5$. TOC data shall be reported on the DMR as a daily maximum concentration and sampled daily, if used to report BOD $_5$.

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, 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.

<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 the 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. Nothing in this provision limits IEPA from exercising its authority under any applicable law to require monitoring or to modify permits in situations not involving operational, maintenance or other problems resulting in possible effluent deterioration, including but not limited to IEPA's authority as referenced in Attachment H to this permit.

<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.

<u>SPECIAL CONDITION 6</u>. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 7.

- 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. 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. 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;
 - 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 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 <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.

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- 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 existing contributing jurisdictions, as necessary, to enable it to fulfill its requirements with respect to all IUs discharging to its system within one (1) month of the effective date of this Permit. The Permittee shall establish agreements with all new contributing jurisdictions proposing to connect to MWRDGC prior to any discharge.
- 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: http://cfpub.epa.gov/npdes/whatsnew.cfm?program_id=3. 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 nondomestic users. This review shall include: (1) an inventory of nondomestic discharges to the combined sewers system, focusing on those dischargers 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. Within 1 year from the effective date of this permit, the Permittee shall conduct a technical re-evaluation of its local limitations consistent with U.S. EPA's Local Limits Development Guidance (July 2004), and submit the evaluation and any proposed revisions to its local limits to IEPA and U.S. EPA Region 5 for review and approval. To demonstrate technical justification for new local industrial user limits or justification 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
 - c. 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)
 - i. Sludge flow to digester
 - Sludge flow to disposal
 - k. % solids in sludge to disposal, not as a decimal
 - % 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

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- 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
- 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 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 June 30 of each year, 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 Approval Authority.
 - d. Results of sampling and analysis of POTW influent, effluent, and sludge. The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the monitoring. 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.
 - 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).
- 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)(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 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.

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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. 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 monthly of final sludge, defined as sludge pumped to the Stickney WRP for treatment, and consist of a grab sample reported on a dry weight basis.

STORET		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 - grab)*	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00722	Cyanide (grab)* (available ***** or amenable to chlorination)****	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)***	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

* Influent and effluent only

***** USEPA Method OIA – 1677 or Standard Method 4500-CN G.

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, pesticides and PCBs shall be 24-hour composites.

Six (6) grab samples shall be collected during a 24-hour period 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 directly in the GC purge and trap apparatus in the laboratory.

Wastewater samples must be handled, prepared, and analyzed by gas chromatograph/electron capture detector in accordance with USEPA Method 608.3 and by gas chromatograph/mass spectrometer in accordance with USEPA Methods 624.1 and 625.1 of 40 CFR 136 as amended.

^{**}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.

^{***}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.

^{****}Analysis for cyanide (available or amenable to chlorination) is only required if cyanide (total) is detected at or above the minimum reporting limit.

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- 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.
- 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(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. 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 for each major contributing industry and be submitted with the annual report required in Special Condition 7. 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.
- E. 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 8.

AUTHORIZATION OF COMBINED SEWER AND TREATMENT PLANT DISCHARGES

The IEPA has determined that at least a portion of the collection system consists of combined sewers. References to the collection system and the sewer system refer only to those parts of the system which are owned and operated by the Permittee unless otherwise indicated. The Permittee is authorized to discharge from the combined sewer overflow(s) listed below provided the following terms and conditions are met:

Discharge Number	Location	Receiving Water
101	Sheridan Road	North Shore Channel
102	Greenbay Road	North Shore Channel
103	Emerson Street	North Shore Channel
104	Lake Street	North Shore Channel
105	Howard Street	North Shore Channel
106	Morse Avenue	North Shore Channel
107 *See Page 3	North Branch Pumping Station	North Branch of Chicago River
109	Rand Road	Des Plaines River
110	Niles Center Outlet Sewer - Oakton Street	North Shore Channel

Collection and Treatment Requirements

- All combined sewer overflows shall be given sufficient treatment to prevent pollution and the violation of applicable water quality standards. At a minimum, sufficient treatment shall consist of the following:
 - All dry weather flows and the first flush of storm flows shall be transported to the main STP and shall meet all applicable effluent standards and the effluent limitations required for the main STP outfall. Additional flows, but not less than ten times the average dry weather flow for the design year, shall receive the equivalent of primary treatment and disinfection with adequate retention time. Compliance with this requirement may be demonstrated by showing that a system that provides full secondary treatment to a volume less than 10 times the average dry weather flow (DWF) removes a pollutant loading that is equal to or greater than the pollutant loading that would be removed by providing primary treatment to 10 times the average DWF. This demonstration shall be completed annually and the results submitted no later than May 1st of each year.
- 2. All CSO discharges authorized by this Permit shall be treated, in whole or in part, to the extent necessary to prevent accumulations of sludge deposits, floating debris and solids in accordance with 35 III. Adm. Code 302.203 and 302.403 and to prevent depression of oxygen levels below the applicable water quality standard.

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- 3. The Permittee shall develop and implement a detailed minimization/prevention plan for the prevention and capture of floatables.
- 4. Overflows during dry weather are prohibited. Dry weather overflows, if discovered, shall be reported to the IEPA pursuant to Standard Condition 12(f) of this Permit (24 hour notice).
- 5. The collection system shall be operated and maintained to optimize transport of wastewater flows and minimize CSOs.
- 6. The treatment system shall be operated and maintained to maximize treatment of wastewater flows and minimize CSOs.

Nine Minimum Controls

- 7. The Permittee shall comply with the nine minimum controls contained in the National CSO Control Policy published in the <u>Federal</u> Register on April 19, 1994. The nine minimum controls are:
 - a. Proper operation and maintenance program for the sewer system and the CSOs;
 - b. Maximum use of the collection system for storage;
 - c. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
 - d. Maximization of flow to the POTW for treatment;
 - e. Prohibition of CSOs during dry weather;
 - f. Control of solids and floatable materials in CSOs;
 - g. Pollution prevention programs which focus on source control activities;
 - h. Public notification to ensure that citizens receive adequate information regarding CSO occurrences and CSO impacts; and
 - i. Monitoring to characterize impacts and efficiency of CSO controls.

Pollution Prevention Activities

8. The Permittee's Pollution Prevention activities are identified in Special Condition 7 Part A. 7.b.

Sensitive Area Considerations

9. Pursuant to Section II.C.3 of the federal CSO Control Policy of 1994, sensitive areas are any water likely to be impacted by a CSO discharge which meet one or more of the following criteria: (1) designated as an Outstanding National Resource Water; (2) found to contain shellfish beds; (3) found to contain threatened or endangered aquatic species or their habitat; (4) used for primary contact recreation; or, (5) within the protection area for a drinking water intake structure. The most recent Sensitive Area Consideration Report was dated February 2003.

Within six (6) months from the completion of Stage 1 of the McCook Reservoir, the Permittee shall submit two (2) copies of documentation indicating which of the outfalls listed in this Special Condition do not discharge to sensitive areas. Such documentation shall include information regarding the use of the receiving water for primary contact activities (swimming, water skiing, etc.). If the Permittee believes that it is not possible for primary contact recreation to occur in the areas impacted or potentially impacted by the CSOs listed in this Special Condition, then justification as to why primary contact recreation is not possible shall be submitted. Adequate justification may include, but is not limited to: (1) inadequate water depth; (2) presence of physical obstacles sufficient to prevent access to or for primary contact recreation; and, (3) uses of adjacent land sufficient to discourage primary contact activities. The IEPA will make a determination based on this documentation and other information available to the IEPA.

Should the IEPA conclude that any of the CSOs listed in this Special Condition discharge to a sensitive area, the IEPA will notify the Permittee in writing. Within three (3) months of the date of notification, or such other date contained in the notification letter, the Permittee shall submit two (2) copies of either a schedule to relocate, control, or treat discharges from these outfalls. If none of these options are possible, the Permittee shall submit adequate justification as to why these options are not possible. Such justification shall be in accordance with Section II.C.3 of the National CSO Control Policy.

Special Conditions

Operational and Maintenance Plans

10. The IEPA received a CSO operational and maintenance plan "CSO O&M plan" for this sewerage system dated January 16, 2007. The Permittee shall review and revise, if needed, the CSO O&M plan to reflect system changes and any comments previously sent to the Permittee by the IEPA. The CSO O&M plan shall be presented to the general public at a public information meeting conducted by the Permittee by December 31, 2019. The Permittee shall submit documentation that the public information meeting was held by March 31, 2020. Such documentation shall be submitted to the IEPA by March 31, 2020 and shall include a summary of all significant issues raised by the public, the Permittee's response to each issue, and two (2) copies of the "CSO Operational Plan Checklist and Certification" are available online at http://www.epa.state.il.us/water/permits/waste-water/forms/cso-checklist.pdf. Following the public meeting, the Permittee shall implement the CSO O&M plan within one (1) year and shall maintain a current CSO O&M plan, updated to reflect system modifications, on file at the sewage treatment works or other acceptable location and made available to the public. The Permittee shall review its O&M from time to time, but at least annually, and revise the plan if necessary employing a process that actively involves the affected communities. The CSO O&M plan revisions shall be submitted to the IEPA one (1) month from the revision date.

The objectives of the CSO O&M plan are to reduce the total loading of pollutants and floatables entering the receiving stream and to mitigate impacts from such loadings to the greatest extent practicable. These plans, tailored to the local government's collection and waste treatment system, shall include mechanisms and specific procedures where applicable to ensure:

- a. Collection system inspection on a scheduled basis;
- b. Sewer, catch basin, and regulator cleaning and maintenance on a scheduled basis;
- c. Inspections are made and preventive maintenance is performed on all pump/lift stations;
- d. Collection system rehabilitation and replacement, where necessary;
- e. Detection and elimination of illegal connections;
- f. Detection, prevention, and elimination of dry weather overflows;
- g. The collection system is operated to maximize storage capacity and the combined sewer portions of the collection system are operated to delay storm water entry into the system; and,
- The treatment and collection systems are operated to maximize treatment.

Sewer Use Ordinances

11.

- 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 10 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; and 3) Minimization 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 15th 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 Treatment 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 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.

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Compliance with Water Quality Standards

12. Pursuant to Section 301 of the federal Clean Water Act and 40 CFR § 122.4, discharges from the outfalls listed in this Special Condition shall not cause or contribute to violations of applicable water quality standards or cause or contribute to designated use impairment in the receiving waters. The Permittee, no later than December 1 of each year, shall submit documentation of water quality data for the waterway systems within its jurisdiction. The Permittee shall also work with the IEPA and Municipalities with CSO outfall structures connected to TARP, or planned to be connected to TARP, to develop and implement a plan to assess, and if necessary, abate, impacts from CSO discharges. The Permittee shall provide semi-annual progress reports to the Agency by January 1st and July 1st of each year until the McCook Reservoir Stage 1 and Stage 2 improvements to the reservoir portions of TARP are completed.

Within six (6) months of the completion date of TARP, the Permittee shall develop and submit to IEPA at least two (2) copies of a plan to determine whether or not the CSOs in the TARP service area have the potential to cause or contribute to either violations of applicable water quality standards or use impairment in the waterways that receive MWRDGC and tributary communities' CSOs. Such a plan should be developed with input from other CSO communities within the service area and may include input from the general public. Once submitted, the Permittee shall submit a written response to any IEPA comments within sixty (60) days of receiving such comments. This plan shall be implemented within six (6) months of IEPA approval, or such other date as contained in the IEPA approval letter.

Reporting, Monitoring, and Notification Requirements

13. Beginning on the effective date of this Permit, the Permittee shall monitor the frequency of discharge (number of discharges per month) and estimate the duration (in hours) of each discharge of the following CSO outfalls: 101, 102, and 104. The Permittee shall also implement the CSO Representative Monitoring plan dated August 1, 2014. The Permittee shall include this plan as an addendum to the CSO operational and maintenance plan. In accordance with the CSO Representative Monitoring Plan, the Permittee shall monitor the frequency of discharge (number of discharges per month) and estimate the duration (in hours) of the discharge from the following CSO outfalls listed below. If the District requests that the permit be modified to allow it to monitor a different CSO outfall or outfalls in lieu of monitoring any of the specific CSO outfalls listed below and IEPA agrees with that request, then such request can be included in this permit as a minor modification to this permit, provided that the total number of CSO outfalls that must be monitored in accordance with this permit is not decreased.

The Permittee shall include with its February, May, August and November DMR reports to IEPA a detailed report, on an outfall by outfall basis, of all CSO discharges that occurred from the monitored CSO locations in the previous quarter (October – December, January – March, April – June and July – September) and the estimated durations of all such discharges. For frequency reporting, all discharges from the same storm, or occurring within 24 hours, shall be reported as one. The date that a discharge commences and the duration and the volume of the discharge shall be recorded for each outfall. The reports shall also include estimates of storm duration and the total rainfall for each storm event. In addition to the above required information, these reports shall include estimates of the pounds of BOD discharged, and the pounds of suspended solids discharged through CSO's located on, or scheduled to be connected to the legs of TARP tributary to the Terrence J. O'Brien Water Reclamation Plant. Models or other appropriate mechanisms may be used to make these estimates. The report shall also include estimates of the pounds of BOD, pounds of suspended solids, and volume of combined sewage treated at the Terrence J. O'Brien Water Reclamation Plant.

Summary of Monitored	CSO Outfalls
North Shore Channel	16
North Branch of Chicago River	30
Total Representative CSO Outfalls	46

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Receiving Water: North Shore Channel (total: 16)					
Discharge No.	TARP Structure	Outfall Location	CSO Outfall Owner(s)		
010	TG-M94	Ardmore, (E)	1 - Chicago		
002	DS-M97	Pratt Ave., (E)	1 - Chicago		
003	DS-M97	North Shore Ave., (E)	1 - Chicago		
A13	DS-M101	Mulford St., (E)	1 - Evanston		
010	DS-M104E	Main St., (E)	1 - Evanston		
009	TG-M105E	Greenleaf St., (E)	1 - Evanston		
A07	DS-M107-2	Emerson St., (W)	1 - Evanston		
A04	DS-M109S	Green Bay Rd. & McCormick Blvd., (W)	1 – Evanston		
105	DS-M100	Howard Street, (W)	1 - MWRD		
104	DS-M106E	Lake St., (E)	1 – MWRD		
102	DS-M109N	Green Bay & McCormick, (W)	1 - MWRD		
101	DS-M114N	(Wilmette PS) Sheridan Rd. (W)	1 - MWRD		
005	DS-M104W	Main St., (W)	1 - Skokie		
002	DS-M105W	Greenwood & McCormick Blvd., (W)	1 - Skokie		
003	DS-M107-1	Emerson, (W)	1 – Skokie		
001	DS-M114N-2	Sheridan Rd., (W)	1 - Wilmette		

Special Conditions

ischarge No.	TARP Structure	Outfall Location	CSO Outfall Owner(s
073	DS-M76	Fullerton, (W)	1 - Chicago
068	DS-M79	Diversey, (W)	1 - Chicago
070	DS-M79	Logan, S of Diversey, (W)	1 – Chicago
067	DS-M80	Leavitt St. (NE), SW of DS-M80	1 – Chicago
065	TG-M81	Western Ave., (NE)	1 – Chicago
064	DS-M82	Belmont Ave., (W)	1 – Chicago
238	DS-M83	Melrose St. & Rockwell St., (W)	1 - Chicago
063	DS-M84	Roscoe St., (W)	1 - Chicago
061	DS-M85	Addison St., (E), (Inside ComEd's property)	1 – Chicago
231	DS-M86	Grace St., (W), N of DS-M86	1 - Chicago
057	DS-M88	Berteau Ave., (W)	1 - Chicago
042	DS-LAT	Lawrence Ave., (W)	1 - Chicago
030	DS-N02	Foster Ave. and Keeler, (W)	1 - Chicago
029	DS-N03	Bryn Mawr and Kilbourn Ave., (N)	1 - Chicago
026	DS-N04	Cicero, S. of Forest Glen, (N)	1 - Chicago
024	DS-N05	Forest Glen Ave., W of Cicero (S)	1 - Chicago
234	DS-N06	Ardmore Ave. (Indian and Ardmore), (W)	1 - Chicago
021	DS-N07	Central Ave., (N), (5900-6100 North)	1 - Chicago
020	DS-N08	Mango Ave. (Ext.), (W) (Leonard & Miltmore)	1 – Chicago
018	DS-N09	Miami Ave., (W) (Indian & Monitor)	1 - Chicago
016	DS-N10A	Wildwood Ave.(Ext.), (E) (Caldwell & Tonty)	1 - Chicago
017	DS-N10B	Imlay St. & Milwaukee Ave., (W)	1 - Chicago
236/008	DS-N13R	Franks and Nieman, (W)	1 - Chicago/ Niles
107	DS-M90 & DS- M91	North Branch Pump Station (NBPS) (E)	1 – MWRD
002	DS-N19	Dempster and Lincoln, (E)	1 - Morton Grove
009	DS-N11	Forestview Lane & Riverside Dr., (W)(East of Milwaukee)	1 - Niles
010	DS-N12	Caldwell & Touhy Ave., (E) (Harts & Touhy)	1 - Niles
003	DS-N16	Nordica and Dobson, (W)	1 - Niles
002	DS-N17	Cleveland St., E. of Caldwell Ave. (W)	1 - Niles
001	DS-N18	Main St. (Ext), E of Caldwell Ave. (W)	1 - Niles

12 months from the effective date of this Permit

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14. A public notification program in accordance with Section II.B.8 of the federal CSO Control Policy of 1994 and the Wet Weather Act of 2000 shall continue to be implemented by the Permittee and the CSO Public Notification Plan and program shall be modified should conditions change since the original plan was approved. The Permittee shall review the plan on an annual basis and make any needed changes and implementations by the commencement of the recreation season. The most recent CSO Public Notification Plan was dated February 2017.

The Permittee shall notify potable water supply agencies in Cook County, Illinois and Lake County, Indiana withdrawing water from Lake Michigan and other municipal units of government, that include primary contact beach managing agencies, in Cook County, Illinois and Lake County, Indiana, including the Cities of Hammond, East Chicago and Whiting, Indiana on the Lake Michigan Shore each time flows from the North Shore Channel and/or Chicago River are expected to be discharged to Lake Michigan.

15. If any of the CSO discharge points listed in this Special Condition are eliminated, or if additional CSO discharge points, not listed in this Special Condition, are discovered, the Permittee shall notify the IEPA in writing within one month of the respective outfall elimination or discovery. Such notification shall be in the form of a request for the appropriate modification of this NPDES permit.

Summary of Compliance Dates in this CSO Special Condition

16. The following summarizes the dates that submittals contained in this Special Condition are due at the IEPA:

Solids Demonstration (Paragraph 1) Every May 1st

Infiltration/Inflow Control Program (IICP) (Paragraph 11) Every November 15th

CSO Monitoring Data Report (Paragraph 13)

Quarterly

Water Quality Data (Paragraph 12)

Every December 1st

Floatables Minimization/ Prevention Plan (Paragraph 3) 6 months from the effective date of this Permit

Elimination of a CSO or Discovery of Additional CSO 1 month from discovery or elimination locations (Paragraph 15)

Pollution Prevention Report (Paragraph 8 and Special Condition 7.A.7.b) Every June 30th

Sensitive Area Documentation (Paragraph 9)

6 months from the completion of Phase 1 of the

McCook Reservoir

Progress Reports on TARP (Paragraph 12)

Every January 1st and July 1st until TARP is

completed

Water Quality Study (Paragraph 12) 6 months from the completion of TARP

Reopening and Modifying this Permit

CSO O & M Final Plan (Paragraph 10)

17. The IEPA may initiate a modification for this Permit at any time to include requirements and compliance dates which have been submitted in writing by the Permittee and approved by the IEPA, or other requirements and dates which are necessary to carry out the provisions of the Illinois Environmental Protection Act, the Clean Water Act, or regulations promulgated under those Acts. Public Notice of such modifications and opportunity for public hearing shall be provided. Such modifications may include, but are not limited to changes in designated uses and water quality standards and in waterway management strategies necessary to comply with such uses and standards that are the result of the final Chicago Area Waterway System Use Attainability Analysis appealable order that has not been stayed and associated modifications of the rules and regulations by the Illinois Pollution Control Board (IPCB).

SPECIAL CONDITION 9. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 001

Biomonitoring

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 <u>Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R</u>

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02-012. Unless substitute tests are pre-approved; the following tests are required:

- a. Fish 96 hour static LC₅₀ Bioassay using fathead minnows (Pimephales promelas).
- b. Invertebrate 48-hour static LC₅₀ Bioassay using Ceriodaphnia.
- 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.
- 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.
- 4. Toxicity Should a bioassay result in toxicity to >20% of organisms test 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 (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 shall immediately notify IEPA in writing of the test results.
- Toxicity Reduction Evaluation and Identification Should the biomonitoring program identify toxicity and result in notification by IEPA, the permittee shall develop a plan for toxicity reduction evaluation and identification. This plan shall be developed and implemented in accordance with <u>Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants</u>, 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 within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days of notification date of the permittee above or other such date as is received by letter from 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 and toxicity reduction evaluation, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants and additional whole effluent toxicity monitoring to confirm the results of the evaluation. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 10. The District shall maintain supplemental aeration capability in the North Branch Chicago River via instream aeration stations. Operation shall be provided at all times necessary to achieve compliance with the minimum acceptable dissolved oxygen concentration in the North Branch Chicago River and the North Shore Channel downstream of the Terrence J. O'Brien WRP.

The District shall submit the dissolved oxygen continuous monitoring results from samples taken in the North Shore Channel, the North Branch Chicago River, the Chicago River, the South Branch Chicago River and its South Fork and the Chicago Sanitary and Ship Canal from locations contained in the continuous dissolved oxygen monitoring plan previously approved by the Agency. The results shall be submitted quarterly and shall include data collected from the previous quarter as follows: data collected December 1 to February 28 or 29 shall be submitted by the following July 15; data collected March 1 to May 31 shall be submitted by the following September 15; data collected June 1 to August 31 shall be submitted by the following December 15; and data collected September 1 to November 30 shall be submitted by the following March 15.

The District shall also submit with their Discharge Monitoring Reports dissolved oxygen monitoring results from monthly bridge grab samples collected from the Terrence J. O'Brien WRP and associated CSO effluent receiving streams.

SPECIAL CONDITION 11. 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 U.S. EPA and 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

Modification Date: July 14, 2021

Special Conditions

Standard Condition 25 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 this permit or 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 12</u>. By August 31 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 the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section.

<u>SPECIAL CONDITION 13</u>. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic forms using one such form for each outfall (001 WRP Outfall and 107 CSO at North Branch Pumping Station) each month.

In the event that outfall (107 CSO at North Branch Pumping Station) 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, https://meta-nter.netdmr/pages/quick-answer-guide.aspx.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th 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

<u>SPECIAL CONDITION 14</u>. For Discharge No. 001, any use of chlorine to control slime growths odors or as an operational control, etc. shall not exceed the limit of 0.05 mg/l (daily maximum) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMR's on a monthly basis.

<u>SPECIAL CONDITION 15.</u> The Permittee shall provide a dry-weather flow quantification on a mass basis of discharge for Discharge Number 001 for the parameters listed in Special Condition 7.C.1. This data shall be provided on an annual basis and submitted to the IEPA no later than June 30 of each year.

SPECIAL CONDITION 16. The Permittee shall notify the Agency whenever any waterway gates or locks are opened which may allow flow to discharge to Lake Michigan and shall notify the Agency of any fish kills in the Chicago area waterways or of any water pollution related emergencies. The Permittee shall report any of the above activities to the Des Plaines Regional Field Operations Office at (847) 294-4000 in accordance with Standard Condition 12(f). Cook County, Illinois; Lake County, Indiana; and the Cities of Hammond, East Chicago, and Whiting, Indiana shall be notified whenever a flow reversal would discharge to Lake Michigan. In addition, the Lake

Special Conditions

County, Indiana Emergency Management Agency shall be notified at (219) 755-3549 whenever a flow reversal would discharge to Lake Michigan.

SPECIAL CONDITION 17. A dissolved oxygen limit of a minimum of 5.0 mg/L at any time during the period of March through July; and during the period of August through February: 4.0 mg/L as a daily minimum averaged over 7 days; and 3.5 mg/L at any time shall become effective two (2) years from the effective date of this Permit. Reporting shall be submitted on the DMR's on a monthly basis. .

The Permittee shall enhance or construct dissolved oxygen equipment in accordance with the following schedule:

1.	Progress Report on Increased Blower Usage Test #1 (maximum aeration)	6 months from effective date of permit
2.	Progress Report on Increased Blower Usage Test #2 (scaled down aeration)	12 months from effective date of permit
3.	Progress Report on Increased Blower Usage Test #3 (optimize aeration)	18 months from effective date of permit
4.	Finalize Testing and Achieve Operational Level	24 months from effective date of permit

REPORTING

The Permittee shall submit progress reports for items 1, 2, 3, and 4 of the compliance schedule indicating: a) the date the item was completed, or b) that the item was not completed, the reasons for non-completion and the anticipated completion date to the Agency Compliance Section.

SPECIAL CONDITION 18. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan within twelve (12) months of the effective date of this Permit. 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 of the collection system owned and operated by the Permittee;
- 2. Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
- 3. 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 backups occur or are likely to occur; and
- 4. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee.

b. Design and Performance Provisions:

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

c. Overflow Response Plan:

- 1. Know where overflows within the facilities owned and operated by the Permittee occur;
- 2. Respond to each overflow to determine additional actions such as clean up; and
- 3. Implement measures with respect to local sewer system owners as described in Special Condition 8.11., as appropriate.
- d. System Evaluation Plan.
- e. Reporting and Monitoring Requirements.

Special Conditions

Third Party Notice Plan:

- 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;
- Includes a description of the lines of communication; and
- Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

SPECIAL CONDITION 19. A phosphorus monthly average concentration effluent limitation of 1.0 mg/L and associated loading limitations shall become effective August 1, 2027. In order to achieve a phosphorus effluent limit of 1.0 mg/L, the Permittee shall submit progress reports in compliance with the following schedule.

Initiate Construction of Additional Aeration Tank in Battery D; Initiate Pilot Test of Active Solids Recovery on One Final Tank (Final Tank Enhancements); Initiate Evaluation of Phosphorus Loading from Egan WRP; Investigate Phosphorus Source Control via the Industrial Pretreatment Program and the Use of Algae to Recover Phosphorus from the Liquid Stream

February 1, 2018

Complete Pilot Test of Active Solids Recovery on One Final Tank (Final Tank Enhancements); Initiate Tests for Supplemental Carbon Process; Progress Report on Construction of Additional Aeration Tank, Evaluation of Phosphorus Loading from Egan WRP, Investigation of Phosphorus Source Control, and the Use of Algae to Recover Phosphorus

August 1, 2018

Complete Evaluation of Phosphorus Loading from Egan WRP; Initiate Design of Centrate Treatment System at Egan WRP; Progress Report on Construction of Additional Aeration Tank, Final Tank Enhancements, Tests for Supplemental Carbon Process, Investigation of Phosphorus Source Control, and the Use of Algae to Recover Phosphorus

February 1, 2019

Complete Construction of Additional Aeration Tank in Battery D; Initiate Study to Determine the Feasibility of Implementing Bio-P Removal in Aeration Tanks; Finalize Determination of Final Tank Enhancements and Initiate Final Tank Enhancements Project; Progress Report on Tests for Supplemental Carbon Process, Design of Centrate Treatment System at Egan WRP, Investigation of Phosphorus Source Control, and the Use of Algae to Recover Phosphorus

August 1, 2019

Progress Report on Final Tank Enhancements Project, Study of Bio-P Removal in Aeration Tanks, Tests for Supplemental Carbon Process, Design of Centrate Treatment System at Egan WRP, Investigation of Phosphorus Source Control, and the Use of Algae to Recover **Phosphorus**

February 1, 2020

Complete Design and Initiate Construction of Centrate Treatment August 1, 2020 System at Egan WRP; Pending Results of Bio-P Feasibility Study Initiate Installation of Anaerobic Zone in One Battery; Progress Report on Final Tank Enhancements, Tests for Supplemental Carbon Process, Investigation of Phosphorus Source Control, and the Use of Algae to Recover Phosphorus

Special Conditions

- 7. Complete Tests and Initiate Construction of Supplemental Carbon February 1, 2021 Process; Progress Report on Construction of Centrate Treatment System at Egan WRP, Installation of Anaerobic Zone in One Battery, Final Tank Enhancements, Investigation of Phosphorus Source Control, and the Use of Algae to Recover Phosphorus
- 8. Progress Report on Construction of Supplemental Carbon Process, August 1, 2021 Construction of Centrate Treatment System at Egan WRP, Installation of Anaerobic Zone in One Battery, Final Tank Enhancements, Investigation of Phosphorus Source Control, and the Use of Algae to Recover Phosphorus
- Progress Report on Construction of Supplemental Carbon Process, Construction of Centrate Treatment System at Egan WRP, Installation of Anaerobic Zone in One Battery, Final Tank Enhancements, Investigation of Phosphorus Source Control, and the Use of Algae to Recover Phosphorus
- 10. Complete Construction of Centrate Treatment System at Egan WRP and Supplemental Carbon Process Modifications; Determine if Phosphorus Source Control via the Industrial Pretreatment Program is a Viable Option; Determine if Using Algae to Recover Phosphorus from the Liquid Stream is a Viable Option; Progress Report on Installation of Anaerobic Zone in One Battery, and Final Tank Enhancements.
- 11. Progress Report on Installation of Anaerobic Zone in One Battery, Final February 1, 2023 Tank Enhancements, Phosphorus Source Control if Viable Option, and the Use of Algae to Recover Phosphorus if Viable Option
- 12. Complete Installation and Analysis of Anaerobic Zone in One Battery; August 1, 2023 Initiate Installation of Anaerobic Zones in all Batteries; Progress Report on Final Tank Enhancements, Phosphorus Source Control if Viable Option, and the Use of Algae to Recover Phosphorus if Viable Option
- 13. Investigate Feasibility of Sidestream Phosphorus Recovery Measures; Progress Report on Installation of Anaerobic Zones in all Batteries, Final Tank Enhancements, Phosphorus Source Control if Viable Option, and the Use of Algae to Recover Phosphorus if Viable Option
- 14. Pending Results of Feasibility Study Initiate Construction of Additional Sidestream Phosphorus Recovery; Progress Report on Installation of Anaerobic Zones in all Batteries, Final Tank Enhancements, Phosphorus Source Control if Viable Option, and the Use of Algae to Recover Phosphorus if Viable Option
- 15. Progress Report on Construction of Additional Sidestream Phosphorus Recovery, Installation of Anaerobic Zones in all Batteries, Final Tank Enhancements, Phosphorus Source Control if Viable Option, and the Use of Algae to Recover Phosphorus if Viable Option
- 16. Complete Installation of Anaerobic Zones in all Batteries, Progress August 1, 2025 Report on Construction of Additional Sidestream Phosphorus Recovery, Final Tank Enhancements, Phosphorus Source Control if Viable Option, and the Use of Algae to Recover Phosphorus if Viable Option
- Progress Report on Construction of Additional Sidestream Phosphorus
 Recovery, Final Tank Enhancements, Phosphorus Source Control if
 Viable Option, and the Use of Algae to Recover Phosphorus if Viable
 Option

Special Conditions

18. Complete Construction of Additional Sidestream Phosphorus Recovery Process; Evaluate and Optimize Bio-P Removal in All Batteries and Develop Process Control Protocols; Complete Final Tank Enhancements Project; Final Progress Report on Phosphorus Source Control if Viable Option, and the Use of Algae to Recover Phosphorus if Viable Option

August 1, 2026

19. Progress Report on Process Control Tests (Acclimation Period)

February 1, 2027

20. Achieve Monthly Concentration and Loading Effluent Limitations for Total August 1, 2027 Phosphorus

In addition, the IEPA may initiate a modification of the schedule set forth in this permit at any time, to include other dates which are necessary to carry out the provisions of the Environmental Protection Act, the Federal Clean Water Act or regulations promulgated under those Acts or compliance dates which have been submitted in writing by the Permittee and approved by the IEPA. Public Notice of such modifications and opportunity for public hearing shall be provided consistent with 40 CFR 122.63.

The Permittee shall submit the above reports for each number 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 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

SPECIAL CONDITION 20.

2.

1. The Permittee shall assist in the formation of, and work cooperatively with, a Chicago Area Waterways Nutrient Oversight Committee ("NOC") to prepare the implementation plan, as defined below.

The NOC shall consist of three (3) members, one chosen by the Permittee, one chosen by the Illinois Environmental Protection Agency (the "Agency"), and one chosen collectively by Environmental Law and Policy Center (ELPC), Prairie Rivers Network, Natural Resources Defense Council, Inc., Gulf Restoration Network and Friends of the Chicago River. The member chosen by the Agency shall not have previously been retained by the Permittee, Natural Resources Defense Council, Inc., Prairie Rivers Network, ELPC, Friends of Chicago River, Gulf Restoration Network or Sierra Club, Inc. The NOC shall be responsible for the selection of a consultant to study, develop, and prepare an implementation plan. Subject to the NOC's approval, the consultant shall engage biologists, engineers, or other contractors with expertise the consultant and the NOC deem necessary. In accordance with Permittee's applicable procurement rules and all applicable laws, the Permittee shall be responsible for payment for the consultant's work to develop an implementation plan.

Permittee shall be responsible for installing a gauge to be located at Illinois Route 53 (Ruby St.) and the Des Plaines River in Joliet, Illinois that will provide continuous monitoring (subject to reasonable planned and unplanned disruptions) of flow, dissolved oxygen, temperature, pH, conductivity, chlorophyll-a, turbidity, nitrate plus nitrite as nitrogen, and dissolved phosphate as phosphorus. Permittee shall operate and maintain this gauge for a period of four (4) years after installation. Permittee may engage in a cost share to satisfy this condition.

- A. If the Illinois Nutrient Science Advisory Committee proposes or releases numeric nutrient criteria or targets applicable to the CAWS on or before December 31, 2018, the consultant's implementation plan shall be developed as follows:
 - In Phase One, the consultant shall identify phosphorus input reductions or other measures reasonably calculated to meet the numeric nutrient criteria or targets applicable to the CAWS that are proposed by the Illinois Nutrient Science Advisory Committee. The consultant shall consider all point and non-point source discharges when identifying such phosphorus input reductions or other measures reasonably calculated for the CAWS to meet the applicable numeric nutrient criteria or targets.
 - In Phase Two, the consultant shall prepare and submit to the NOC by December 31, 2023, a plan and schedule for implementation of the phosphorus input reductions or other measures identified in Phase One.
- B. If the Illinois Nutrient Science Advisory Committee does not propose numeric nutrient criteria or targets by December 31, 2018, the consultant's implementation plan shall be developed as follows:

Special Conditions

In Phase One, the consultant shall identify in a written report any areas within the CAWS with recurring diurnal pre-dawn excursions from dissolved oxygen water quality standards, supersaturation in dissolved oxygen levels, and chlorophyll-a levels indicating the presence of unnatural plant or algal growth. If the consultant identifies any such recurring conditions, the consultant shall propose phosphorus input reductions or other measures reasonably calculated to eliminate the conditions. The consultant shall consider all point and non-point source discharges when identifying such phosphorus input reductions or other measures.

In Phase Two, the consultant shall prepare and submit to the NOC by December 31, 2023 a plan and schedule for implementation of the phosphorus input reductions or other measures identified in Phase One.

In either Section 2A or 2B, if Permittee does not object to the consultant's implementation plan, Permittee shall thereafter begin implementation of the consultant's plan and apply for a permit modification seeking to have the consultant's implementation plan included as a condition to this permit. If Permittee objects to the consultant's implementation plan, Permittee shall promptly thereafter develop an alternative implementation plan, apply for a permit modification seeking to have the alternative implementation plan included as a condition to this permit, and shall be obligated to proceed only through the design phase of the consultant's implementation plan until such time as Permittee's modification application (including any appeals) is resolved. If any other person objects to the permit modification seeking to have the consultant's implementation plan included as a condition of the permit, the Permittee shall be obligated to proceed only through the design phase of the consultant's implementation plan until such time as Permittee's modification application (including any appeals) is resolved.

- If monitoring in the Lower Des Plaines River and/or the Illinois River indicates unnatural plant or algal growth in those waters, and if
 a watershed group is formed to develop a nutrient control implementation plan for those waters; then, Permittee shall participate in
 such watershed group.
- 4. Permittee does not waive any right to contest or appeal any permit conditions other than special conditions 20, 21, and 22. Permittee retains the right to challenge the findings of the Illinois Nutrient Science Advisory Committee and/or the consultant including, but not limited to, the extent those findings are used as the basis for any rulemaking, permit limits or conditions.
- 5. Should a trading program be developed in any of the watersheds within the State of Illinois to which Permittee could avail itself, Permittee shall be allowed to participate in that trading program to satisfy its obligations under this Permit.

SPECIAL CONDITION 21. A technology based effluent limit of 0.5 mg/L Total Phosphorus annual geometric mean will be applicable to Permittee beginning January 1, 2030, unless: (1) the Permittee can demonstrate that this limit is not technologically feasible; or (2) this limit would result in substantial and widespread economic or social impact; or (3) this limit can only be met by addition of phosphorus reducing chemicals into Permittee's treatment process in addition to those currently contemplated; or (4) the implementation plan determines that a greater phosphorus input reduction is necessary and is attainable before 2030; or (5) the implementation plan determines that a greater phosphorus input reduction is necessary and attainable, and imposition of a 0.5 mg/L Total Phosphorus annual geometric mean limit in 2030 would impose costs on the Permittee that are disproportional to any benefit realized from meeting the 0.5 mg/L Total Phosphorus annual geometric mean is demonstrated not to be feasible in 2030, it should be met as soon as it is feasible.

SPECIAL CONDITION 22. The Permittee shall, within 24 months of the effective date of this permit, prepare and submit to the Agency a feasibility study that identifies the method, timeframe, and costs of reducing phosphorus levels in its discharge to a level consistently meeting a potential future effluent limit of 0.5 mg/L, 0.3 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 Operation & Maintenance 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 ad valorem tax rate and user charge would need to increase if the Permittee constructed and operated the specific type of technology to achieve the specific phosphorus discharge level. The Permittee shall provide the CAWS NOC with a copy of the study at the same time it is submitted to the Agency.

<u>SPECIAL CONDITION 23:</u> The equations to convert TOC to CBOD $_5$ and BOD $_5$ must be revalidated prior to the expiration date of the permit, and a request to continue TOC measurement must be submitted with the NPDES renewal application including all data and other necessary information to support your request.

Attachment H Standard Conditions

Definitions

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

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

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

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

USEPA means the United States Environmental Protection Agency.

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

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

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

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

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

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

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

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

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

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

- (1) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- (2) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.

(3) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- (4) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (6) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) Duty to provide information. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit. (9) Inspection and entry. The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:

 (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records

must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit:

 (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) Monitoring and records.

 (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.
- (c) Records of monitoring information shall include:
 - The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) Signatory requirement. All applications, reports or information submitted to the Agency shall be signed and certified.
 - (a) Application. All permit applications shall be signed as follows:
 - (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation:
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
 - (b) Reports. All reports required by permits, or other information requested by the Agency shall be signed by a

person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person

described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) **Certification**. Any person signing a document under paragraph (a) or (b) of this section shall make the

following certification:

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

(12) Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29

(b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

(b) Anticipated noncompliance. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in

noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person

except after notice to the Agency.

(d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. (e) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge

Monitoring Report (DMR).

(2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in

the permit.

- Twenty-four hour reporting. The permittee shall report (f) any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (2) Any upset which exceeds any effluent limitation in the permit.
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.

The Agency may waive the written report on a caseby-case basis if the oral report has been received within 24-hours.

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).

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.

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 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 equipment downtime or preventive maintenance; and

(iii) The permittee submitted notices as required under paragraph (13)(c).

(2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

(14)Upset.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant

evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).

(4) The permittee complied with any remedial measures

required under paragraph (4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

- (15) Transfer of permits. Permits may be transferred by modification or automatic transfer as described below:
 - (a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - (b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:
 - (1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
 - (2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
 - (3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 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
- 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.