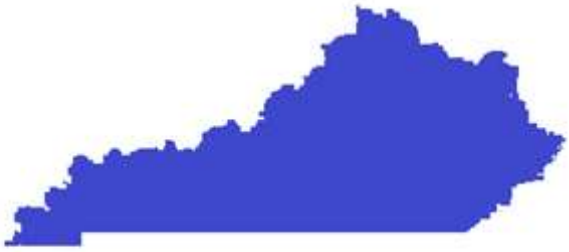
KPDES



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT NO.: KY0078956

AGENCY INTEREST NO.: 2163

Pursuant to Authority in KRS 224,

Louisville & Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville, Kentucky, 40203

is authorized to discharge from a facility located at

Derek Guthrie Water Quality Treatment Center
11621 Lower River Road
Louisville, Jefferson County, Kentucky

to receiving waters named

Ohio River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit shall become effective on May 1, 2026.

This permit and the authorization to discharge shall expire at midnight, April 30, 2031.

Date Signed: March 21, 2026

Sarah C. Marshall, Director
Division of Water

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601

THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS.

SECTION 1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1.1. Compliance Monitoring Locations (Outfalls)

The following table lists the outfalls authorized by this permit, the location and description of each, and the DOW assigned KPDES outfall number:

TABLE 1.

Outfall No.	Outfall Type	Latitude (N)	Longitude (W)	Receiving Water	Description of Outfall
001	External	38.089219°	85.901242°	Ohio River	Treated Municipal Wastewater from a Publicly Owned Treatment Works which includes an Approved Pretreatment Program

1.2. Effluent Limitations and Monitoring Requirements

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 001 shall comply with the following effluent limitations:

TABLE 2.

EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	Loadings (lb/day)		Concentrations				Frequency	Sample Type
	Monthly Average	Daily Maximum	Units	Minimum	Monthly Average	Daily Maximum		
Flow, Effluent (Reported as MGD)	Report	Report	MGD	N/A	N/A	N/A	Continuous	Recorder
Flow, Influent (Reported as MGD)	Report	Report	MGD	N/A	N/A	N/A	Continuous	Recorder
pH	N/A	N/A	SU	6.0	N/A	9.0	3/Week	Grab
BOD_5[2], Effluent	15,012	22,518	mg/l	N/A	30	45[1]	3/Week	24-Hr Composite[3]
BOD_5[2], Influent	N/A	N/A	mg/l	N/A	Report	Report[1]	3/Week	24-Hr Composite[3]
BOD_5[2] Percent Removal[4]	N/A	N/A	%	85	N/A	N/A	1/Month	Calculated[4]
TSS[5], Effluent	15,012	22,518	mg/l	N/A	30	45[1]	3/Week	24-Hr Composite[3]
TSS[5], Influent	N/A	N/A	mg/l	N/A	Report	Report[1]	3/Week	24-Hr Composite[3]
TSS[5], Percent Removal[4]	N/A	N/A	%	85	N/A	N/A	1/Month	Calculated[4]
Nitrogen, ammonia total (as N)	10,008	15,012	mg/l	N/A	20	30	3/Week	24-Hr Composite[3]
Dissolved Oxygen	N/A	N/A	mg/l	2.0	N/A	N/A	3/Week	Grab
E. coli[6]	N/A	N/A	#/100 ml	N/A	130[7]	240[8]	3/Week	Grab
Total Residual Chlorine[9]	N/A	N/A	mg/l	N/A	0.019	0.019	3/Week	Grab
Total Nitrogen[10], Effluent	N/A	N/A	mg/l	N/A	Report	Report	1/Week	24-Hr Composite[3]

TABLE 2.								
EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS	
Effluent Characteristic	Loadings (lb/day)		Concentrations				Frequency	Sample Type
	Monthly Average	Daily Maximum	Units	Minimum	Monthly Average	Daily Maximum		
Total Nitrogen[10], Influent	N/A	N/A	mg/l	N/A	Report	Report	1/Week	24-Hr Composite[3]
Total Phosphorus, Effluent	N/A	N/A	mg/l	N/A	Report	Report	1/Week	24-Hr Composite[3]
Total Phosphorus, Influent	N/A	N/A	mg/l	N/A	Report	Report	1/Week	24-Hr Composite[3]
Acute WET[11]	N/A	N/A	TU_A	N/A	N/A	1.00	1/Quarter	([12])
[1]Maximum Weekly Average								
[2] BOD_5 – Biochemical Oxygen Demand, 5-day								
[3]A 24-hour composite is a sample collected using an automated sampler set to collect equal volume aliquots of at least 100 ml each every 15 minutes over a 24 hour period. The sample must be maintained at between 0° C and 6° C at all times.								
[4]Minimum Percent Removal is a monthly average calculated using the following equation: $\text{Percent Removal} = \left[\frac{(\text{Monthly Average Influent} - \text{Monthly Average Effluent})}{\text{Monthly Average Influent}}\right] \times 100$								
[5]TSS – Total Suspended Solids								
[6]E. coli – *Escherichia coli* Bacteria								
[7]Thirty (30) day Geometric Mean								
[8]Seven (7) day Geometric Mean								
[9]Conditional Monitoring. Sampling for Total Residual Chlorine is required only when chlorine disinfection is used during the monitoring period. If chlorine disinfection is not used during the monitoring period, report NODI Code 9: "Conditional Monitoring – Not Required for this period" on the DMR.								
[10]Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen								
[11]WET – Whole Effluent Toxicity								
[12]Two (2) discrete grab samples shall be collected 12 hours apart. PWN: Choose only one #12								

1.3. Standard Effluent Requirements

The discharges to waters of the Commonwealth shall not produce floating solids, visible foam or a visible sheen on the surface of the receiving waters.

1.4. Pretreatment Program Monitoring Requirements

Beginning on the effective date and lasting through the term of this permit, discharges from Outfall 001 shall comply with the following monitoring requirements, and the results shall be reported on the pretreatment scan outfall limit set designator 001P.

TABLE 3.					
PRETREATMENT MONITORING REQUIREMENTS					
Effluent Characteristic	**Concentrations (Specify Units)**		**Monitoring**		
	Monthly Average	**Daily Maximum**	**Location**	**Frequency**	**Sample Type**
Arsenic, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Cadmium, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Chloride (As Cl)	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Chromium, Hexavalent	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	Grab
Chromium, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Copper, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Cyanide, Free (amenable to Chlorination)	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	Grab
Iron, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Lead, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Mercury, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	Grab
Nickel, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Oil & Grease	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	Grab
Phenolics, Total	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	Grab
Phosphorus, Total	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Selenium, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Silver, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
Zinc, Total Recoverable	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
[1]A 24-hour composite is a sample collected using an automated sampler set to collect equal volume aliquots of at least 100 ml each every 15 minutes over a 24 hour period. The sample must be maintained at between 0° C and 6° C at all times.					

1.5. Application Monitoring

POTWs are required to complete application Form A which requires a minimum of three (3) samples to be collected and analyzed. To ensure that sufficient samples are collected and analyzed, DOW shall impose minimum annual sampling during years two (2) through four (4) of the permit term, for those parameters required to be analyzed and reported on the application (See table below). Of the three (3) samples, two (2) shall be taken no closer than four (4) months together and no greater than eight (8) months apart. The results of the application monitoring shall be submitted on an annual Discharge Monitoring Repot (DMR) and summarized on the renewal application. The permittee shall report NODI Code 9: "Conditional Monitoring – Not Required for this period" on the DMR for years 1 and 5 of the permit.

TABLE 4.
RENEWAL APPLICATION MONITORING REQUIREMENTS

Effluent Characteristic	Units	Concentrations		Frequency	Sample Type
		Average	Maximum		
Temperature (May 1- October 31)	°F	Report	Report	3/5 years	Grab
Temperature (November 1- April 30)	°F	Report	Report	3/5 years	Grab
Total Kjeldahl Nitrogen (TKN)	mg/l	Report	Report	3/5 years	24-Hr Composite[1]
Nitrate Plus Nitrite Nitrogen	mg/l	Report	Report	3/5 years	24-Hr Composite[1]
Oil & Grease	mg/l	Report	Report	3/5 years	Grab
Phosphorus (Total)	mg/l	Report	Report	3/5 years	24-Hr Composite[1]
Total Dissolved Solids (TDS)	mg/l	Report	Report	3/5 years	24-Hr Composite[1]
Antimony, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Arsenic, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Beryllium, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Cadmium, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Chromium, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Chloride	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Copper, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Lead, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Mercury, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Nickel, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Selenium, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Silver, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Thallium, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Zinc, Total Recoverable	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Cyanide, Free (amenable to chlorination)	µg/l	Report	Report	3/5 years	Grab
Phenolic Compounds, Total	µg/l	Report	Report	3/5 years	Grab
Hardness, Total (as CaCO3)	mg/l	Report	Report	3/5 years	24-Hr Composite[1]
Acrolein	µg/l	Report	Report	3/5 years	Grab

Acrylonitrile	µg/l	Report	Report	3/5 years	Grab
Benzene	µg/l	Report	Report	3/5 years	Grab
Bromoform	µg/l	Report	Report	3/5 years	Grab
Carbon tetrachloride	µg/l	Report	Report	3/5 years	Grab
Chlorobenzene	µg/l	Report	Report	3/5 years	Grab
Chlorodibromomethane	µg/l	Report	Report	3/5 years	Grab
Chloroethane	µg/l	Report	Report	3/5 years	Grab
2-Chloroethylvinyl ether (mixed)	µg/l	Report	Report	3/5 years	Grab
Chloroform	µg/l	Report	Report	3/5 years	Grab
Dichlorobromomethane	µg/l	Report	Report	3/5 years	Grab
1,1-Dichloroethane	µg/l	Report	Report	3/5 years	Grab
1,2-Dichloroethane	µg/l	Report	Report	3/5 years	Grab
Trans-1,2-Dichloroethylene	µg/l	Report	Report	3/5 years	Grab
1,1-Dichloroethylene	µg/l	Report	Report	3/5 years	Grab
1,2-Dichloropropane	µg/l	Report	Report	3/5 years	Grab
1,3-Dichloropropylene	µg/l	Report	Report	3/5 years	Grab
Ethylbenzene (34371)	µg/l	Report	Report	3/5 years	Grab
Methyl bromide (Bromomethane)	µg/l	Report	Report	3/5 years	Grab
Methyl chloride (Chloromethane)	µg/l	Report	Report	3/5 years	Grab
Methylene chloride	µg/l	Report	Report	3/5 years	Grab
1,1,2,2-Tetrachloroethane	µg/l	Report	Report	3/5 years	Grab
Tetrachloroethylene	µg/l	Report	Report	3/5 years	Grab
Toluene	µg/l	Report	Report	3/5 years	Grab
1,1,1-Trichloroethane	µg/l	Report	Report	3/5 years	Grab
1,1,2-Trichloroethane	µg/l	Report	Report	3/5 years	Grab
Trichloroethylene	µg/l	Report	Report	3/5 years	Grab
Vinyl chloride	µg/l	Report	Report	3/5 years	Grab
p-Chloro-m-cresol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2-Chlorophenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2,4-Dichlorophenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2,4-Dimethylphenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
4,6-Dinitro-o-cresol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2,4-Dinitrophenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2-Nitrophenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
4-Nitrophenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Pentachlorophenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]

Phenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2,4,6-Trichlorophenol	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Acenaphthene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Acenaphthylene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Anthracene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Benzidine	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Benzo(a)Anthracene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Benzo(a)pyrene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
3,4-Benzofluoranthene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Benzo(ghi) perylene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Benzo(k)fluoranthene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Bis(2-chloroethoxy) methane	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Bis(2-chloroethyl)ether	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Bis(2-chloroisopropyl) ether	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Bis(2-ethylhexyl) phthalate	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
4-Bromophenyl phenyl ether	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Butyl benzyl phthalate	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2-Chloronaphthalene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
4-Chlorophenyl phenyl ether	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Chrysene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Di-n-butyl phthalate	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Dibenzo(a,h)Anthracene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
1,2-Dichlorobenzene	µg/l	Report	Report	3/5 years	Grab
1,3-Dichlorobenzene	µg/l	Report	Report	3/5 years	Grab
1,4-Dichlorobenzene	µg/l	Report	Report	3/5 years	Grab
3,3'-Dichlorobenzidine	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Diethyl phthalate	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Dimethyl phthalate	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2,4-Dinitrotoluene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
2,6-Dinitrotoluene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
1,2-Diphenylhydrazine	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Fluoranthene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Fluorene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Hexachlorobenzene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Hexachlorobutadiene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Hexachlorocyclo-pentadiene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]

Hexachloroethane	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Indeno(1,2,3-cd)pyrene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Isophorone	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Naphthalene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Nitrobenzene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
N-Nitrosodi-N-propylamine	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
N-Nitrosodimethylamine (NDMA)	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
N-Nitrosodiphenylamine	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Phenanthrene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
Pyrene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]
1,2,4-Trichlorobenzene	µg/l	Report	Report	3/5 years	24-Hr Composite[1]

[1]A 24-hour composite is a sample collected using an automated sampler set to collect equal volume aliquots of at least 100 ml each every 15 minutes over a 24 hour period. The sample must be maintained at between 0° C and 6° C at all times.

SECTION 2

COLLECTION SYSTEM REQUIREMENTS

2. COLLECTION SYSTEM REQUIREMENTS

2.1. Prohibitions

The following prohibitions apply to the collection system and its users:

(1) There shall be no sanitary sewer overflows (SSOs);
(2) No user shall introduce any pollutant or pollutants that will cause pass through or interference with the operation of the POTW and the collection system; or
(3) No user shall introduce any of the following pollutants:
   a) Pollutants which create a fire or explosion hazard, including but not limited to, waste streams with a closed cup flashpoint of less than 140 ^{o}F (60 ^{o}C);
   b) Pollutants which will cause corrosive structural damage or have a pH less than 5.0 standard units unless the POTW is designed to accommodate such pH levels;
   c) Solid or viscous pollutants in amounts that would obstruct the flow to the POTW thus resulting in interference;
   d) Any pollutant released in a discharge at such a volume or strength as to cause interference in the POTW;
   e) Heat in such quantities that the temperature at the POTW treatment plant exceeds 104 ^{o}F (40 ^{o}C) unless the POTW requests and the Approval Authority grants alternate temperature limits;
   f) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through;
   g) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and,
   h) Any trucked or hauled waste except, at discharge points designated by the POTW.

All POTW's, in cases where pollutants contributed by user(s) of the collection system are likely to result in reoccurring interference or pass-through, shall develop and enforce specific effluent limits for industrial user(s), and all other users, as appropriate, which, together with appropriate changes in the POTW treatment plant's facilities or operation, are necessary to ensure renewed and continued compliance with the POTW's KPDES permit or sludge use or disposal practices. POTW's with approved Pretreatment Programs meet this requirement.

2.2. Capacity, Management, Operation and Maintenance (CMOM) Program

2.2.1. Applicability

These conditions apply to all permittees with sewage infrastructure including the sewer system and wastewater treatment plant.

2.2.2. Goals

The goals of a comprehensive CMOM Program are:

(1) To better manage, operate, and maintain the collection system;
(2) Investigate capacity constrained areas of the collection system;
(3) Proactively prevent or minimize SSOs;
(4) Respond to SSO events; and
(5) Proactively prevent or minimize the potential for the release of pollutants from ancillary activities through plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from storage areas.

To achieve these goals, the permittee shall complete a CMOM self-assessment using the checklist in the "Guide for Evaluating Capacity, Management, Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems," EPA 305-B-05-002 to determine the scope of the CMOM program.

The guide is available at: http://www3.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf. Upon completion of the checklist, the permittee shall develop a proposed plan of action to achieve the goals of the CMOM program.

2.2.3. CMOM Plan of Action

At a minimum the plan of action shall include the following:

(1) Self-Assessment Summary (including recommended improvements and schedules);
(2) Collection System Diagram;
(3) Sewer Overflow Response Protocol (SORP);
(4) Best Management Practices (BMPs); and
(5) Any other constituent programs necessary to achieve the goals of the CMOM program

2.2.4. Collection System Diagram

The collection system diagram shall include the following:

(1) Scale;
(2) North arrow;
(3) Date the map was drafted and most recent revision;
(4) Street names;
(5) Surface waters;
(6) Service area boundaries;
(7) Manholes and other access points (including structure IDs);
(8) Sewer lines;
(9) Pump stations (including structure IDs);
(10) Wastewater treatment plants;
(11) Permitted discharge points or outfalls (including CSO outfalls);
(12) CSO regulators, for combined sewer systems; and
(13) Locations of recurring SSOs that occurred within the last five (5) years prior to the effective date of this permit.

2.2.5. Sewer Overflow Response Protocol (SORP)

At a minimum the SORP shall include the following elements:

(1) An overflow response procedure including designated responders for the permittee, response times, and cleanup methods;
(2) A public advisory procedure;
(3) A regulatory agency notification procedure;
(4) A manhole and pump station inspection schedule;
(5) A procedure for addressing discharges to buildings caused by blockage, flow condition, or other malfunction in sewer infrastructure owned or operationally-controlled by the permittee; and
(6) A requirement to include the structure ID for reported incidents.

2.2.6. Best Management Practices (BMPs)

BMPs are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Section 2.1 of this permit. 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 materials storage.

2.2.7. Implementation

Unless this is the first issuance of the permit, the permittee shall have completed implementation of the CMOM program upon the effective date of this permit. A new facility receiving the first issuance of a permit shall implement the CMOM program as soon as possible, but no later than one year from the effective date of the permit or as specified in the schedule of compliance for this permit.

2.2.8. Documentation

The permittee shall maintain all applicable CMOM program documents at the facility and make them available upon request to EEC personnel. Initial copies and modification thereof shall be sent to DOW upon request.

2.2.9. Modification

The permittee shall amend CMOM Programs documentation whenever there is a change in the facility or change in operation of the facility which materially affects the requirements specified in applicable documents.

2.2.10. Modification for Ineffectiveness

If any of the CMOM programs prove to be ineffective in achieving the general objective of preventing and eliminating SSOs and other unauthorized discharges, the permit, and/or specific CMOM programs shall be subject to modification to address deficiencies. If at any time following the issuance of this permit any of the CMOM programs are found to be inadequate pursuant to a state or federal site inspection or review, affected CMOM program documents shall be modified to incorporate such changes necessary to resolve concerns.

2.3. Pretreatment Program

The Pretreatment Program developed by the permittee was approved by the DOW on July 15, 1981.

This permit incorporates the permittee's approved pretreatment program, including the last modification for Local Limits re-evaluation approved on October 4, 2021, as enforceable conditions of the permit.

The permittee shall:

(1) Be responsible for the performance of all pretreatment requirements contained in 40 CFR Part 403;
(2) Implement and enforce its approved POTW pretreatment program;
(3) Enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Act;
(4) Cause industrial users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge; and
(5) Be subject to enforcement actions, penalties, fines, and other remedies by the Cabinet.

Per 40 CFR 403.5, the permittee has developed and implemented local limits. The permittee shall re-evaluate local limits every 5 years or in response to change in industrial users, plant operations, plant design, KPDES permit issuance or other considerations that may affect the prevention of pass through and/or interference.

The pretreatment program and all of its elements are incorporated as enforceable conditions of the KPDES permit. The Cabinet may initiate enforcement action against a POTW and against an industrial user for noncompliance with applicable standards and requirements as provided in KRS 224.16-050(1), 224.70-110, and 224.73-120, and pursuant to the Clean Water Act.

During the 4th quarter of the reporting year DOW shall provide the permittee with instructions on the preparation and submittal of the Annual Pretreatment Program Report. The annual report shall be prepared in accordance with these instructions and shall be in the proper format and include sufficient detail such that DOW can ascertain compliance with the Pretreatment Program Requirements. The report is to be submitted per requirements specified in the instructions no later than March 1st of the following calendar year. An annual report that is not in the proper format, that does not include all the necessary elements, that does not include sufficient detail, or that is received after March 1st is incomplete and is a violation of the KPDES permit unless DOW has granted an extension.

Influent, effluent and sludge monitoring of the permittee's WWTP(s) is a requirement of the permittee's pretreatment program. The results shall be reported on the permittee's Annual Pretreatment Program Report even if required to be reported on a Discharge Monitoring Report to meet other requirements in this permit. Reporting sludge information on the Annual Pretreatment Program Report does not relieve the permittee of sludge reporting requirements for other regulatory programs.

SECTION 3

STANDARD CONDITIONS

3. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

3.1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Any person who violates applicable statutes or who fails to perform any duty imposed, or who violates any determination, permit, administrative regulation, or order of the Cabinet promulgated pursuant thereto shall be liable for a civil penalty as provided at KRS 224.99.010.

3.2. 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.

3.3. 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.

3.4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

3.5. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3.6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. 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.

3.7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

3.8. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

3.9. Inspection and Entry

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

(1) 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;

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

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

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

3.10. Monitoring and Records

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

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 401 KAR 5:065, Section 2(10) [40 CFR 503]), 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 three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

a) The date, exact place, and time of sampling or measurements;
b) The individual(s) who performed the sampling or measurements;
c) The date(s) analyses were performed;
d) The individual(s) who performed the analyses;
e) The analytical techniques or methods used; and
f) The results of such analyses.

(4) Monitoring must be conducted according to test procedures approved under 401 KAR 5:065, Section 2(8) [40 CFR 136] unless another method is required under 401 KAR 5:065, Section 2(9) or (10) [40 CFR subchapters N or O].

(5) KRS 224.99-010 provides that any person who knowingly violates KRS 224.70-110 or other enumerated statutes, or who knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall be guilty of a Class D felony and, upon conviction, shall be punished by a fine of not more than $25,000, or by imprisonment for not less than one (1) year and not more than five (5) years, or by both fine and imprisonment for each separate violation. Each day upon which a violation occurs shall constitute a separate violation.

3.11. Signatory Requirement

(1) All applications, reports, or information submitted to the Director shall be signed and certified pursuant to 401 KAR 5:060, Section 4 [40 CFR 122.22].

(2) KRS 224.99-010 provides that any person who knowingly provides false information in any document filed or required to be maintained under KRS Chapter 224 shall be guilty of a Class D felony and upon conviction thereof, shall be punished by a fine not to exceed twenty-five thousand dollars ($25,000), or by imprisonment, or by fine and imprisonment, for each separate violation. Each day upon which a violation occurs shall constitute a separate violation

3.12. Reporting Requirements

3.12.1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one (1) of the criteria for determining whether a facility is a new source in KRS 224.16-050 [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 under KRS 224.16-050 [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.

3.12.2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3.12.3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under KRS 224 [CWA; see 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory].

3.12.4. 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) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

(2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 401 KAR 5:065, Section 2(8) [40 CFR 136], or another method required for an industry-specific waste stream under 401 KAR 5:065, Section 2(9) or (10) [40 CFR subchapters N or O], the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

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

3.12.5. 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 fourteen (14) days following each schedule date.

3.12.6. Twenty-Four-Hour Reporting

1) The permittee shall report any noncompliance which may endanger health or the environment to the DOW Regional Office. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided

within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2) The following shall be included as information which must be reported within twenty-four (24) hours under this paragraph:

a) Any unanticipated bypass which exceeds any effluent limitation in the permit [40 CFR 122.41 (g)].
b) Any upset which exceeds any effluent limitation in the permit.
c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within twenty-four (24) hours.

3) The Director may waive the written report on a case-by-case basis under 40 CFR 122.41 (l), if the oral report has been received within twenty-four (24) hours.

4) The permittee is assigned to the Department for Environmental Protection's Louisville Regional Field Office.

a. Reporting shall be as required in paragraphs 1 through 3 of this subsection except that, if a spill or release of pollutants or contaminants, bypass, upset, or other event of non-compliance occurs that may present an imminent or substantial danger to the environment or the public health or welfare, the permittee shall immediately notify the regional field office by calling the Louisville Regional Field Office at (502) 429-7122.
b. If a report required by this subsection is made during other than normal business hours, it shall be made through the **twenty-four (24) hour environmental emergency telephone number at (800) 928-2380.**
c. The reporting requirements of this subsection does not relieve the permittee of reporting required under other laws, regulations, programs, or emergency response plans.

3.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 3.12.1, 3.12.4, 3.12.5 and 3.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 3.12.6.

3.12.8. 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 Director, it shall promptly submit such facts or information.

3.13. Bypass

3.13.1. Definitions

(1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

3.13.2. Bypass Not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section 3.13.3 and 3.13.4.

3.13.3. 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 (10) days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section 3.12.6.

3.13.4. Prohibition of Bypass

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

   a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
   b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
   c) The permittee submitted notices as required under Section 3.13.3.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three (3) conditions listed above in Section 3.13.4

3.14. Upset

3.14.1. 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.

3.14.2. 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 Section 3.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

3.14.3. 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 Section 3.12.6; and

(4) The permittee complied with any remedial measures required under Section 3.4.

3.14.4. Burden of Proof

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

SECTION 4

ADDITIONAL CATEGORICAL CONDITIONS

4. Additional Categorical Conditions

The following conditions apply to all POTWs. All POTWs must provide adequate notice to the Director of the following:

(1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and

(2) 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.

(3) 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.

SECTION 5

WET TESTING REQUIREMENTS

5. WET TESTING REQUIREMENTS

At the frequency specified in the Effluent and Monitoring Requirements section of this permit, the permittee shall initiate or continue the series of tests described below to evaluate wastewater toxicity of the discharge from Outfall 001.

5.1. Sampling Requirements

Tests shall be conducted on each of two grab samples collected over the period of discharge, (i.e., discrete sample #1 taken at commencement of discharge, sample #2 taken approximately 12 hours later, sooner if discharge is expected to cease). The elapsed time between the collection of each grab sample and the initiation of each test shall not exceed 36 hours.

5.2. Test Requirements

The acute WET test consists of two 48-hour static non-renewal toxicity tests with water flea (Ceriodaphnia dubia, Daphnia magna, or Daphnia pulex) and two 48-hour static non-renewal toxicity tests with fathead minnow (Pimephales promelas) performed on discrete grab samples of 100% effluent (1.00 TU_A) at the frequency specified. Testing of each sample shall begin within 36 hours of the collection of that sample.

5.3. Serial Dilutions

Effluent concentrations for the tests must include the percent effluent required by the permit and at least four additional effluent concentrations.

For a required percent effluent of 100%, test concentrations shall be 20%, 40%, 60%, 80% and 100%.

For a required percent effluent less than 100% but greater than or equal to 75%, the test concentrations shall include the required percent effluent, two (2) concentrations below that are based on a 0.5 dilution factor, and two (2) concentrations above: one (1) at mid-point between 100% and the required percent effluent, and one (1) at 100% effluent.

For a required percent effluent less than 75%, test concentrations shall include the required percent effluent, two (2) concentrations below on a 0.5 dilution factor, and two (2) concentrations above the required percent effluent based on a 0.5 dilution factor, if possible; otherwise, one (1) at mid-point between 100% and the required percent effluent, and one (1) at 100% effluent.

Selection of different effluent concentrations must be approved by DOW prior to testing. Controls shall be conducted concurrently with effluent testing using synthetic water.

5.4. Controls

Control tests shall be conducted concurrent with effluent testing using synthetic water. The analysis will be deemed reasonable and good only if the minimum control requirements are met.

Any test that does not meet the control acceptability criteria shall be repeated as soon as practicable within the monitoring period.

Within 30 days prior to initiating an effluent toxicity test, a reference toxicant test must be completed for the method used; alternatively, the reference toxicant test may be run concurrent with the effluent toxicity test.

Control survival is 90% or greater in test organisms held in synthetic water.

5.5. Test Methods

All test organisms, procedures, and quality assurance criteria used shall be in accordance with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-

821-R-02-012 (5th edition), the most recently published edition of this publication, or as approved in advance by DOW.

5.6. Reduction to Single Species Testing

After at least six (6) consecutive passing toxicity tests using both, the water flea and the fathead minnow, a request for testing with only the most sensitive species may be submitted to DOW. Upon approval, the most sensitive species may be considered as representative and all subsequent compliance tests may be conducted using only that species unless directed at any time by DOW to change or revert to both.

5.7. Reporting Requirements

Results of all toxicity tests conducted with any species shall be reported according to the most recent format provided by DOW (See the Section for Submission of DMRs of this permit). Notification of failed test shall be made to DOW within five days of test completion. Test reports shall be submitted to DOW within thirty (30) days of completion. A control chart including the most recent reference toxicant test endpoints for the effluent test method (minimum of 5, up to 20 if available) shall be part of the report.

5.8. Persistence Evaluation for Test Failure

If noncompliance occurs in an initial test, the permittee shall repeat the test using new samples. Results of this second round of testing will be used to evaluate the persistence of the toxic event and the possible need for a Toxicity Reduction Evaluation (TRE). The repeat sampling shall commence as soon as practicable. The repeat test shall not be used as a substitution for any test. Failing either species in a two-species test requires retesting for persistence using both species.

Noncompliance is demonstrated if the LC_{50} is less than 100% effluent. If noncompliance occurs in an initial test, the permittee shall repeat the test using new grab samples collected approximately twelve (12) hours apart. Sampling must be initiated within ten (10) days of completing the failed test. The second round of testing shall include both species unless approved for only the most sensitive species by DOW.

5.9. Accelerated Testing

If the second round of testing also demonstrates noncompliance, the permittee will be required to perform accelerated testing as specified in the following paragraphs.

Complete four (4) additional rounds of testing to evaluate the frequency and degree of toxicity within sixty (60) days of completing the second failed round of testing. Results of the initial and second rounds of testing specified above plus the four (4) additional rounds of testing will be used in deciding if a TRE shall be required.

If results from any two (2) of six (6) rounds of testing show a significant noncompliance with the Toxicity limit, i.e., ≥1.2 times the TU, or results from any four of the six tests show toxicity as defined above, a TRE will be required.

The permittee shall provide written notification to DOW within five (5) days of completing the accelerated testing, stating that: (1) toxicity persisted and that a TRE will be initiated; or (2) that toxicity did not persist and normal testing will resume.

Should toxicity prove not to be persistent during the accelerated testing period, but reoccur within twelve (12) months of the initial failure at a level ≥ 1.2 times the TU, then a TRE shall be required.

5.10. WET TRE

Having determined that a TRE is required, the permittee shall initiate and/or continue at least monthly testing with both species until such time as a specific TRE plan is approved by DOW. A TRE plan shall be developed by the permittee and submitted to DOW within thirty (30) days of determining a TRE is required.

The plan shall be developed in accordance with the most recent Environmental Protection Agency (EPA) and DOW guidance. Questions regarding this process may be submitted to DOW.

The TRE plan shall include Toxic Identification Evaluation (TIE) procedures, treatability studies, and evaluations of chemical usage including changes in types, handling and suppliers; operational and process procedures; housekeeping and maintenance activities; and raw materials. The TRE plan will establish an implementation schedule to begin immediately upon approval by DOW, to have duration of at least six (6) months, and not to exceed twenty-four (24) months. The implementation schedule shall include quarterly progress reports being submitted to DOW, due the last day of the month following each calendar quarter.

Upon completion of the TRE, the permittee shall submit a final report detailing the findings of the TRE and actions taken or to be taken to prevent the reoccurrence of toxicity. This final report shall include: the toxicant(s), if any are identified; treatment options; operational changes; and the proposed resolutions including an implementation schedule not to exceed one-hundred-eighty (180) days.

Should the permittee determine the toxicant(s) and/or a workable treatment prior to the planned conclusion of the TRE, the permittee will notify DOW within five (5) days of making that determination and take appropriate actions to implement the solution within one-hundred-eighty (180) days of that notification.

SECTION 6

OTHER CONDITIONS

6. OTHER CONDITIONS

6.1. Schedule of Compliance

The permittee shall attain compliance with all requirements of this permit on the effective date of this permit unless otherwise stated below:

6.2. Other Permits

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

6.3. Continuation of Expiring Permit

This permit shall be continued in effect and enforceable after the expiration date of the permit provided the permittee submits a timely and complete application in accordance with 401 KAR 5:060, Section 2(4).

6.4. Antidegradation

For those discharges subject to the provisions of 401 KAR 10:030, Section 1(3)(b)5, the permittee shall install, operate, and maintain wastewater treatment facilities consistent with those identified in the approved regional facility plan.

6.5. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved in accordance with 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

(1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
(2) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

6.6. Sludge Disposal

The disposal or final use of sewage sludge generated during the treatment of domestic sewage by a POTW shall be disposed of in accordance with state and federal requirements [401 KAR Chapter 45 and 40 CFR 503].

6.7. Certified Operators

The wastewater treatment plant shall be under the primary responsibility of Class IV Wastewater Treatment Plant Certified Operators.

The collection system shall be under the primary responsibility of Class IV Collection System Certified Operators.

6.8. Outfall Signage

The permittee shall comply with the permanent marker requirements of ORSANCO's Pollution Control Standards.

6.9. Nutrient Reduction Evaluation

(1) The permittee shall complete a nutrient reduction evaluation.

a) The permittee shall identify a summary of source reduction measures, operational procedures (including biological phosphorus removal), unit process configuration improvements, and additional treatment measures that are currently being performed which contribute to decreased total phosphorus and total nitrogen discharges.
b) The permittee shall identify potential measures (separated into: Source Reduction Measures, Operational Improvement Measures, Unit Process Configuration Improvement Measures and Additional Treatment Measures) to achieve the target effluent discharge values for TP and TN. The target TP value is ≤ 1.0 mg/l avg. monthly concentration. The target TN value is ≤ 10 mg/l avg. monthly concentration. In addition, identify the associated estimated capital and annual operating and maintenance costs and reasoning for the annual cost (electric cost, time, chemical cost, etc.)
c) The permittee shall identify the selected best management practices and measures to reduce nutrient effluent discharge. From the potential measures identified in part (1)(b), identify the measure(s) selected by the permittee to achieve the target nutrient effluent discharge values.

   If the targets cannot be met:

   i. Identify any difficulties or problems believed to interfere with the facility's ability to achieve the target nutrient effluent discharge values, and
   ii. Identify the measures that can be taken and the target nutrient effluent discharge value for these measures.

   For each measure selected identify the estimated timeframe necessary to fully implement the measure.

(2) The permittee's nutrient reduction evaluation shall be submitted **no later than 180 days prior to the expiration date of this permit.**
(3) The Division has provided a form titled "Nutrient Reduction Evaluation" for the permittee to utilize as a guide. The form may be found at the following link: https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Pages/default.aspx.

SECTION 7

MONITORING AND REPORTING REQUIREMENTS

7. MONITORING AND REPORTING REQUIREMENTS

7.1. KPDES Outfalls

Discharge samples and measurements shall be collected at the compliance point for each KPDES Outfall identified in this permit. Each sample shall be representative of the volume and nature of the monitored discharge.

7.2. Monthly Operating Reports (MORs)

In addition to the monitoring of effluent as specified by the permit, the permittee shall conduct process control monitoring on a daily basis. Process control monitoring is that monitoring performed by the operators of the wastewater treatment plant to determine if the wastewater system is operating at its optimum efficiency. This monitoring includes but is not limited to influent and effluent quality and quantity monitoring, chemical usage, sludge monitoring including volume produced, wasted, and disposed, and monitoring of internal units such as aeration basins and oxidation ditches.

The data is recommended to be recorded using the Microsoft EXCEL-based Municipal Monthly Operating Report (MOR) workbook available on the Department for Environmental Protection's Forms webpage at:

https://eec.ky.gov/Environmental-Protection/resources/Pages/Forms-Library.aspx.

Alternatively, the permittee may choose to use their own electronic or paper MOR workbook, as long as it includes the information required by the above form and/or is approved by the Division's Regional Field Office Supervisor.

The updated workbook shall be maintained on-site and made available upon request by Cabinet personnel.

7.3. Sufficiently Sensitive Analytical Methods

Analytical methods utilized to demonstrate compliance with the effluent limitations established in this permit, shall be sufficiently sensitive to measure pollutant levels using the Minimum Reporting Level (MRL) which is at or below the required effluent limit. In the instance where an EPA-approved method does not exist that has a MRL at or below the established effluent limitation, the permittee shall use the EPA-approved method with a demonstrated MRL that is nearest to the established effluent limit. It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

MRL is defined as: The lowest concentration of an analyte (i.e. permit parameter) that can be reliably quantified that is greater than the method detection limit, of sufficient accuracy and precision to meet the intended purpose, and meeting acceptable quality control criteria for the analyte at this concentration. This defined concentration can be no lower than the concentration of the lowest calibration standard for that analyte or, in non-calibrated methods, the limitations defined by the equipment and volumes utilized.

Sufficiently Sensitive Method is defined by EPA in the Federal Register notice as:

1) The method minimum level (Kentucky defined as minimum reporting level – MRL) is at or below the level of the applicable water quality criterion or permit limitation for the measured pollutant or pollutant parameter;
2) In the case of permit applications, the method minimum level (MRL) is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
3) The method has the lowest minimum level (MRL) of the EPA-approved analytical methods.

7.4. Certified Laboratory Requirements

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by a laboratory holding the appropriate general or field-only certification issued by the Cabinet pursuant to 401 KAR 5:320.

7.5. Submission of DMRs

The completed DMR for each monitoring period must be entered into the DOW approved electronic system no later than midnight on the 28th day of the month following the monitoring period for which monitoring results were obtained.

For more information regarding electronic submittal of DMRs, please visit the Division's website at: https://eec.ky.gov/Environmental-Protection/Water/SubmitReport/Pages/NetDMR.aspx or contact the DMR Coordinator at (502) 564-3410.

7.6. DMRs and Permit-Authorized Change for Total Residual Chlorine

The permittee may request removal of Total Residual Chlorine (TRC) monitoring if the permittee has, through a DOW-authorized construction permit, eliminated a chlorine-based disinfection system and completed its replacement. The request shall be submitted in writing to the Division of Water's Surface Water Permit Branch. The permittee shall continue to complete DMRs for TRC until the Surface Water Permits Branch has removed TRC from the DMR(s). A DMR may be completed with a pollutant specific No Data Indicator (NODI) code of "Not Required this Monitoring Period" if chlorine-based disinfection was not utilized during the monitoring period.