MATTHEW G. BEVIN
GOVERNOR

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SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

AARON B. KEATLEY
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

October 6, 2017

Mr. Stephen Ocheltree
700 W. Jefferson Street
LaGrange, KY 40031

Re: KPDES Final Permit Issuance
KPDES No.: KY0040126
KY State Reformatory
AI ID: 8027
Oldham County, Kentucky

Dear Mr. Ocheltree:

Enclosed is the Kentucky Pollutant Discharge Elimination System (KPDES) permit for the above-referenced facility. This action constitutes a final permit issuance under 401 KAR 5:075, pursuant to KRS 224.16-050.

This permit will become effective on the date indicated in the attached permit provided that no request for adjudication is granted. All provisions of the permit will be effective and enforceable in accordance with 401 KAR 5:075, unless stayed by the Hearing Officer under Sections 11 and 13.

Any demand for a hearing on the permit shall be filed in accordance with the procedures specified in KRS 224.10-420, 224.10-440, 224.10-470 and any regulations promulgated thereto. Any person aggrieved by the issuance of a permit final decision may demand a hearing, pursuant to KRS 224.10-420(2), within thirty (30) days from the date of the issuance of this letter. Two (2) copies of request for hearing should be submitted in writing to the Energy and Environment Cabinet, Office of Administrative Hearings, 211 Sower Boulevard, Frankfort, Kentucky 40601 and the Commonwealth of Kentucky, Energy and Environment Cabinet, Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601. For your record keeping purposes, it is recommended that these requests be sent by certified mail. The written request must conform to the appropriate statutes referenced above.

If you have any questions regarding the KPDES decision, please contact the Wet Weather Section, Surface Water Permits Branch by phone at (502) 564-3410 or via email at SWPBSupport@ky.gov. Further information on procedures and legal matters pertaining to the hearing request may be obtained by contacting the Office of Administrative Hearings at (502) 564-7312.

Sincerely,

Sara J Anderson

Peter T. Goodmann, Director
Division of Water

PTG: SJB: asw
Enclosure

KPDES

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

FACT SHEET

KPDES No.: KY0040126

AI No.: 8027

Kentucky State Reformatory Wastewater Treatment Plant

1612 Dawkins Road

LaGrange, Oldham County, Kentucky

Date: October 6, 2017

Public Notice Information

Public Notice Start Date: August 17, 2017

Comment Due Date: September 18, 2017

Information concerning the public notice process may be obtained on the Division of Water's Public Notice Webpage at the following address:

http://dep.gateway.ky.gov/eSearch/Search_Pending_Approvals.aspx?Program=Wastewater&NumDaysDoc=30

Referenced Documents and Public Comments

All material and documents referenced or cited in this fact sheet are parts of the permit information, as described below, and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the Division of Water's Open Records Coordinator at (502) 564-3410 or by e-mail at DEP.KORA@ky.gov.

Comments may be filed electronically at the following e-mail address: DOWPublicNotice@ky.gov

THIS KPDES FACT SHEET CONSISTS OF THE FOLLOWING SECTIONS:

SECTION 1

FACILITY SYNOPSIS

1. FACILITY SYNOPSIS

1.1. Name and Address of Applicant

Oldham County Environmental Authority
700 W. Jefferson Street
LaGrange, Kentucky, 40031

1.2. Facility Location

Kentucky State Reformatory Wastewater Treatment Plant
1612 Dawkins Road
LaGrange, Oldham County, Kentucky

1.3. Description of Applicant's Operation

Publicly-Owned Treatment Works (POTW) and associated collection system. The POTW also administrates an approved Pretreatment Program.

1.4. Wastewaters Collected and Treatment

The following table lists the flow, wastewater types collected, and treatment type for each outfall:

TABLE 1.

Outfall No.	Average Flow	Wastewater Types Collected	Treatment Type
001	0.786 MGD	Domestic Sanitary Wastewater	Screening, Grinding, Oxidation Ditch, Activated Sludge, Clarification, Chlorine Disinfection, Dechlorination, Sludge Drying Beds, Landfill Disposal of Sludge

The Design Flow of the Facility is 1.0 MGD. The Average Annual Flow is 0.786 MGD.

1.5. Permitting Action

This is a reissuance of a major KPDES permit for an existing POTW [SIC Code 4952].

SECTION 2

RECEIVING/INTAKE WATERS

2. RECEIVING / INTAKE WATERS

2.1. Receiving Waters

All surface waters of the Commonwealth have been assigned stream use designations consisting of one or more of the following designations: Warmwater Aquatic Habitat (WAH), Primary Contact Recreation (PCR), Secondary Contact Recreation (SCR), Domestic Water Supply (DWS), Coldwater Aquatic Habitat (CAH) or Outstanding State Resource Water (OSRW)[401 KAR 10:026].

All surface waters of the Commonwealth are assigned one of the following antidegradation categories: Outstanding National Resource Water (ONRW), Exceptional Water (EW), Impaired Water (IW) or High Quality Water (HQ)[401 KAR 10:030].

Surface waters categorized as an IW are listed in Kentucky's most recently approved Integrated Report to Congress on the Condition of Water Resources in Kentucky - Volume II. 303(d) List of Surface Waters.

The following table lists the stream use classifications associated with this permit.

TABLE 2.

Receiving Water Name	Use Designation	Antidegradation Category	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
North Fork of Cedar Creek	WAH PCR SCR DWS	HQ	0.0	0.0
This segment of North Fork of Cedar Creek is not listed as impaired in the 2014 303(d) List of Waters for Kentucky. However, the receiving stream lies within the impaired Harrods Creek watershed. The facility's wasteload allocation is consistent with the approved Harrods Creek Dissolved Oxygen TMDL, approved 1995. Harrods Creek (0.0 to 7.5) - WAH (Nonsupport), is impaired due to organic enrichment/metals from package plants, urban runoff, storm sewers, and septic tanks. PCR (Nonsupport), due to pathogens from package plants, urban runoff, storm sewers, and septic tanks.				

2.2. Intake Waters – Nearest Downstream Intake

TABLE 3.

Intake Water Name	Public Water Supply Name	Latitude (N)	Longitude (W)	Miles Downstream	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Ohio River	Louisville Water Company Crescent Hill WTP	38.281205°	85.702358°	25	10,600	45,300

SECTION 3

OUTFALL 001

3. OUTFALL 001

3.1. Outfall Description

The following table lists the outfall type, location, and description:

TABLE 4.				
Outfall Type	**Latitude (N)**	**Longitude (W)**	**Receiving Water**	**Description of Outfall**
External	38.40972°	-85.42611°	North Fork of Cedar Creek	Domestic Wastewater from a Publicly Owned Treatment Works which includes an Approved Pretreatment Program

3.2. Reported Values

The following table summarizes the reported values for Outfall 001:

TABLE 5.							
Reported Parameters	**Units**	**EFFLUENT**					
		Loadings (lbs./day)		**Concentrations**			
		Monthly Average	**Daily Maximum**	**Minimum**	**Monthly Average**	**Maximum Weekly Average**	**Maximum**
Flow, Effluent	MGD	0.786	1.21	N/A	N/A	N/A	N/A
Flow , Influent	MGD	0.739	1.14	N/A	N/A	N/A	N/A
pH	SU	N/A	N/A	6.57	N/A	N/A	8.80
$CBOD_5$[1], Effluent	mg/l	29.5	41.4	N/A	4.41	5.69	N/A
$CBOD_5$[1], Influent	mg/l	N/A	N/A	N/A	198	278	N/A
$CBOD_5$[1], Percent Removal	%	N/A	N/A	N/A	97.7	N/A	N/A
TSS[2], Effluent	mg/l	43.2	62.7	N/A	6.76	8.96	N/A
TSS[2], Influent	mg/l	N/A	N/A	N/A	173	285	N/A
TSS[2], Percent Removal	%	N/A	N/A	N/A	94.9	N/A	N/A
Ammonia (as mg/l NH_3N)							
May 1 – October 31	mg/l	N/A	N/A	N/A	0.738	1.73[5]	N/A
November 1 – April 30	mg/l	N/A	N/A	N/A	1.22	2.72[5]	N/A
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A
E. Coli[4]	#/100 ml	N/A	N/A	N/A	15.7[5]	115[6]	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.009	0.009[3]	N/A
Total Nitrogen[7]	mg/l	N/A	N/A	N/A	12.0	16.7[3]	N/A
Total Phosphorus	mg/l	N/A	N/A	N/A	2.61	3.66[3]	N/A

TABLE 5.							
Reported Parameters	**Units**	**EFFLUENT**					
		Loadings (lbs./day)		**Concentrations**			
		Monthly Average	**Daily Maximum**	**Minimum**	**Monthly Average**	**Maximum Weekly Average**	**Maximum**
Chronic WET[8]	TU_C	N/A	N/A	N/A	N/A	N/A	1
[1]$CBOD_5$ – Carbonaceous Biochemical Oxygen Demand, 5-day							
[2]Total Suspended Solids							
[3]Daily Maximum							
[4]E. Coli – Escherichia Coli Bacteria							
[5]Thirty (30) day Geometric Mean							
[6]Seven (7) day Geometric Mean							
[7]Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen							
[8]WET – Whole Effluent Toxicity							

The above values are based off of 5-year DMR averages from 08/31/2012 to 02/28/2017.

3.3. Effluent Limitations and Monitoring Requirements

The following table summarizes the effluent limitations and monitoring requirements for Outfall 001:

TABLE 6.									
EFFLUENT LIMITATIONS								**MONITORING REQUIREMENTS**	
Effluent Characteristic	**Units**	**Loadings (lbs/day)**		**Concentrations**				**Frequency**	**Sample Type**
		Monthly Average	**Maximum Weekly Average**	**Minimum**	**Monthly Average**	**Maximum Weekly Average**	**Maximum**		
Flow, Effluent	MGD	Report	Report	N/A	N/A	N/A	N/A	Continuous	Recorder
Flow, Influent	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Week	Calculated
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
$CBOD_5$[1], Effluent	mg/l	83.5	125	N/A	10	15	N/A	1/Week	24-Hr Composite[2]
$CBOD_5$[1], Influent	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite[2]
$CBOD_5$[1], Percent Removal	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated[3]
TSS[4], Effluent	mg/l	250	376	N/A	30	45	N/A	1/Week	24-Hr Composite[2]
TSS[4], Influent	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite[2]

TABLE 6.									
EFFLUENT LIMITATIONS								**MONITORING REQUIREMENTS**	
Effluent Characteristic	**Units**	**Loadings (lbs/day)**		**Concentrations**				**Frequency**	**Sample Type**
		Monthly Average	**Maximum Weekly Average**	**Minimum**	**Monthly Average**	**Maximum Weekly Average**	**Maximum**		
TSS[4], Percent Removal	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated[3]
Ammonia (as mg/l NH_3N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0[5]	N/A	1/Week	24-Hr Composite[2]
November 1 – April 30	mg/l	N/A	N/A	N/A	5.0	7.5[5]	N/A	1/Week	24-Hr Composite[2]
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Week	Grab
E. Coli[6]	#/100 ml	N/A	N/A	N/A	130[7]	240[8]	N/A	1/Week	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019[5]	N/A	1/Week	Grab
Total Nitrogen[9], Effluent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Total Nitrogen[9], Influent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Total Phosphorus, Effluent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Total Phosphorus, Influent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Hardness (as mg/l $CaCO_3$)	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite[2]
Copper, Total Recoverable	ug/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Chlorodibromomethane	ug/l	N/A	N/A	N/A	13	N/A	N/A	1/Week	24-Hr Composite[2]
Chronic WET[10]	TU_C	N/A	N/A	N/A	N/A	N/A	1.00	1/Quarter	([11])

[1]$CBOD_5$ – Carbonaceous Biochemical Oxygen Demand, 5-day

[2]A sample composed of four or more equal or flow-proportional aliquots collected over a period of no less than eight and no more than twenty-four hours and aggregated so that the aggregate sample reflects the average water quality of the effluent during the compositing or sample period

[3]Percent Removal is calculated using the following equation: $\text{Percent Removal} = \left[\frac{(\text{Monthly Average Influent} - \text{Monthly Average Effluent})}{\text{Monthly Average Influent}}\right] \times 100$

[4]Total Suspended Solids

[5]Daily Maximum

[6]E. Coli – Escherichia Coli Bacteria

[7]Thirty (30) day Geometric Mean

[8]Seven (7) day Geometric Mean

[9]Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen

TABLE 6.									
EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum		
[10]WET – Whole Effluent Toxicity									
[11]Three (3) 24-hour composite samples with one each collected every other day for a period of five (5) days, i.e. days 1, 3, & 5									

3.4. Pertinent Factors

The effluent limitations for this outfall were developed in accordance with DOW's General Procedures for Limitations Development located on DOW's webpage at:

http://dep.ky.gov/formslibrary/Documents/General%20Procedures%20for%20Limitations%20Development.pdf

3.4.1. Secondary Treatment Standards

Discharges from POTWs are subject to the technology-based effluent limitations (TBELs) known as the Secondary Treatment Standards. Both state and federal regulations establish the requirements for secondary treatment [401 KAR 5:045 and 401 KAR 5:080, Section 8(3) – 40 CFR 133.102 – respectively].

TABLE 7. State Defined Secondary Treatment Standards		
Pollutant or Pollutant Characteristic	**30-day average**	**7-day average**
BOD_5 (mg/l)	30	45
TSS (mg/l)	30	45

TABLE 8. Federal Defined Secondary Treatment Standards				
Pollutant or Pollutant Characteristic	**Minimum**	**30-day average**	**7-day average**	**Maximum**
BOD_5 (mg/l)	N/A	30	45	N/A
BOD_5 Percent Removal (%)	N/A	85	N/A	N/A
$CBOD_5$ (mg/l)	N/A	25	40	N/A
$CBOD_5$ Percent Removal (%)	N/A	85	N/A	N/A
TSS (mg/l)	N/A	30	45	N/A
TSS Percent Removal (%)	N/A	85	N/A	N/A
pH (standard units)	6.0	N/A	N/A	9.0

3.4.2. Water-Quality-Based Effluent Limitations

The following table lists those water quality-based pollutants and/or pollutant characteristics of concern that DOW has determined exhibit reasonable potential, and the basis of DOW's determination. These determinations are consistent with the DOW's reasonable potential analysis (RPA) procedures outlined in *Permitting Procedures For Determining "Reasonable Potential"* Kentucky Division of Water May 1, 2000.

TABLE 9.	
Pollutant or Pollutant Characteristic	**Basis**
Total Residual Chlorine	The POTW uses a chlorine-based disinfection process on this outfall
Whole Effluent Toxicity	The POTW is rated as a "major discharger" and has an approved pretreatment program. In accordance with the above RPA procedures, the discharge from this facility has reasonable potential to contribute nutrients to the receiving stream at a level that may result in an eutrophication problem. To satisfy Kentucky's narrative water quality standard for nutrients, a WET limit will be applied to Outfall 001.
Copper, total recoverable	The discharge concentration of this pollutant exceeds 70% of the calculated chronic water quality-based effluent limitations (WQBELs) for this pollutant.
Chlorodibromomethane	The discharge concentration of this pollutant exceeds 90% of the calculated chronic water quality-based effluent limitations (WQBELs) for this pollutant.

3.5. Limitation Calculations

3.5.1. Water Quality-Based Effluent Limitations

These calculations were preformed using a Microsoft EXCEL based workbook developed by DOW. The workbook is designed to compare effluent data to the applicable water quality standards while also incorporating the characteristics of the receiving water and any regulatory ZID and/or MZ. The following table summarizes the results of these calculations for this outfall: 001

Effluent Characteristic	Units	Average Limitaion	Average Discharge %	Average Requireme	Maximum Limitation	Maximum Discharge %	Maximum Requirem	Justification	Requireme	RPA
Bromoform	µg/L	140	5.43	No Requirement	N/A	N/A	N/A	Fish	No Requirement	X
Chlorodibromomethane	µg/L	13	93.85	13	N/A	N/A	N/A	Fish	Limit	X
Chloroform	µg/L	470	1.26	No Requirement	N/A	N/A	N/A	Fish	No Requirement	X
Copper	µg/L	20.6204091	82.44	Monitoring	33.5675416	59.58	No Requirement	Chronic	Monitoring	X
Cyanide, Free	µg/L	5.2	0.15	No Requirement	22	0.06	No Requirement	Chronic	No Requirement	X
Dichlorobromomethane	µg/L	17	63.53	No Requirement	N/A	N/A	N/A	Fish	No Requirement	X
Zinc	µg/L	263.0754607	5.32	No Requirement	263.0754607	5.70	No Requirement	Acute	No Requirement	X

3.6. Justification of Requirements

The Title 401 Chapters 5 and 10 of the Kentucky Administrative Regulations (KARs) and Title 40 of the Code of Federal Regulations (CFR) cited in the following have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs) and the Clean Water Act (CWA) respectively.

At a minimum all permits shall contain technology-based effluent limitations (TBELs) [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(a)]. When necessary to achieve water quality standards all permits shall contain WQBELs [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. The WQBELs included in this permit are based upon the KYWQS [401 KAR 10:031].

3.6.1. Flow (Effluent & Influent)

The monitoring requirements for these parameters are consistent with the KPDES permit program requirements for establishing effluent limitations, standards, and permit conditions [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)(1)(ii)] and requirements for recording and reporting of monitoring results [401 KAR 5:070, Section 3 – 40 CFR 122.48].

3.6.2. $CBOD_5$ (Effluent)

The limitations for this parameter are the secondary treatment standards for POTWs as defined in both state and federal regulations [401 KAR 5:045, Section 2, 401 KAR 5:080, Section 8(3) – 40 CFR 133.102]. DOW found that it was necessary to impose WQBELs for this parameter in order to achieve water quality standards [401 KAR 5:65, Section 2(4) – 40 CFR 122.44(d)]. These effluent limitations are also consistent with KYWQS [401 KAR 10:031, Section 4(1)(e) & (i) respectively]. The EPA's River and Stream Water Quality Model (QUAL 2E/K) was used to develop these limitations.

3.6.3. TSS (Effluent)

The limitations for this parameter are the secondary treatment standards for POTWs as defined in both state and federal regulations [401 KAR 5:045, Section 2, 401 KAR 5:080, Section 8(3) – 40 CFR 133.102 respectively]. These effluent limitations are also consistent with KYWQS [401 KAR 10:031, Section 4(1)(f)].

3.6.4. $CBOD_5$ (Influent) and TSS (Influent)

The monitoring requirements for these parameters are consistent with the KPDES permit program requirements for establishing effluent limitations, standards, and permit conditions [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)(1)(i)] and requirements for recording and reporting of monitoring results [401 KAR 5:070, Section 3 – 40 CFR 122.48].

3.6.5. $CBOD_5$ (Percent Removal) and TSS (Percent Removal)

The limitations for these parameters are the secondary treatment standards for POTWs as defined in federal regulations. [401 KAR 5:080, Section 8(3) – 40 CFR 133.102]

3.6.6. Ammonia and Dissolved Oxygen

The limitations for these parameters are WQBELs developed using the EPA's River and Stream Water Quality Model (QUAL 2E/K) [401 KAR 10:031, Section 4(1)(e) & (i)].

3.6.7. E. Coli

The limitations for E. Coli are consistent with the KYWQS [401 KAR 10:031, Section 7].

3.6.8. pH

The limitations for this parameter are both TBELs and WQBELs. The limitations are consistent the secondary treatment standards for POTWs as defined in federal regulations and the KYWQS [401 KAR 5:080, Section 8(3) – 40 CFR 133.102, and 401 KAR 10:031, Sections 4(1)(b) and 7 – respectively].

3.6.9. Total Residual Chlorine

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Sections 4(1)(k)].+

3.6.10. Dichlorobromomethane

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 6].

3.6.11. Dichlorobromomethane and Copper, Total Recoverable

The monitoring requirements for these parameters are consistent with the KPDES permit program requirements for establishing effluent limitations, standards, and permit conditions [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)(1)(i)] and requirements for recording and reporting of monitoring results [401 KAR 5:070, Section 3 – 40 CFR 122.48].

3.6.12. Chronic WET

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Sections 4(1)(j)].

3.6.13. Total Phosphorus

The monitoring requirements for this parameter are consistent with the KPDES permit program requirements for establishing effluent limitations, standards, and permit conditions [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)(1)(i)] and requirements for recording and reporting of monitoring results [401 KAR 5:070, Section 3 – 40 CFR 122.48].

3.6.14. Total Nitrogen

The monitoring requirements for this pollutant are consistent with the KPDES permit program requirements for establishing effluent limitations, standards, and permit conditions [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)(1)(i)] and requirements for recording and reporting of monitoring results [401 KAR 5:070, Section 3 – 40 CFR 122.48].

SECTION 4

COLLECTION SYSTEM REQUIREMENTS

4. COLLECTION SYSTEM REQUIREMENTS

4.1. General 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, wastestreams 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.

These prohibitions are consistent with Kentucky's general prohibition against water pollution, the Combined Sewer Overflow Control Policy of 1994 (CSO Policy), and the national pretreatment standards prohibited discharges applicable to all POTW collection systems [KRS 224.70-110, 33 U.S.C. 1342 (q) and 401 KAR 5:057, Section 3 – 40 CFR 403.5 respectively]

4.2. Capacity, Management, Operation and Maintenance (CMOM) Programs

The permittee shall develop and implement CMOM programs that: (1) better manages, operates, and maintains collection systems, (2) investigates capacity constrained areas of the collection system, (3) proactively prevents or minimizes SSOs, and (4) responds to SSO events.

Guidance for the development of effective CMOM programs is available at the following EPA web address: http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf

This requirement replaces the requirement to develop and implement a Best Management Practices (BMP) plan imposed in prior permits. The imposition of this requirement is consistent with the standard conditions applied to all permits regarding the proper operation and maintenance of all facilities and systems of treatment and control including all related appurtenances [401 KAR 5:065, Section 2(1) – 40 CFR 122.41(e)].

4.3. Pretreatment Program

The pretreatment regulations apply to the discharge of pollutants from non-domestic sources subject to pretreatment standards that are indirectly discharged into or transported by truck or rail to a POTW. Additionally this regulation applies to POTWs that receive wastewaters from sources subject to National Pretreatment Standards. The objectives of these regulations are to prevent the introduction of pollutants into a POTW that will interfere with the operation of the POTW, pass through the POTW, be incompatible with the POTW, or interfere with the use or disposal of the POTW sludge [401 KAR 5:057 – 40 CFR 403].

DOW has approved the Pretreatment Program developed by the permittee. This approved Pretreatment Program has been incorporated into the permit as enforceable conditions consist with the state and federal pretreatment regulations [401 KAR 5:057 – 40 CFR 403].

SECTION 5

OTHER CONDITIONS

5. OTHER CONDITIONS

5.1. Schedule of Compliance

The permittee will comply with all effluent limitations by the effective date of the permit except as specified below [401 KAR 5:070, Section 2 – 40 CFR 122.47].

All conditions of the Agreed Order; in *Commonwealth of Kentucky Environmental and Public Protection Cabinet v. Oldham County Environmental Authority,* Case No. DOW-08322, entered March 31, 2016, are hereby incorporated as enforceable conditions of this KPDES permit, including the submission of all required reports and plans by the dates specified by the Agreed Order.

5.2. Antidegradation

The conditions of Kentucky's Antidegradation Policy have been satisfied [401 KAR 10:029, Section 1]. This permitting action is a reissuance of a KPDES permit that does not authorize an expanded discharge from a POTW. The POTW has developed an approved regional facility plan in accordance with state wastewater planning requirements for regional planning agencies [401 KAR 5:006]. This approved plan constitutes compliance with socioeconomic demonstration and alternatives analysis of the Antidegradation Policy Implementation Methodology [401 KAR 10:030, Section 1(3)(b)2b].

5.3. 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].

5.4. Standard Conditions

The conditions listed in the Standard Conditions Section of the permit are consistent with the conditions applicable to all permits [401 KAR 5:065, Section 2(1) – 40 CFR 122.41].

5.5. Sufficiently Sensitive Analytical Methods

Analytical methods utilized to demonstrate compliance with the effluent limitations established in this permit shall be sufficiently sensitive to detect pollutant levels at or below the required effluent limit, i.e. the Method Minimum Level (ML) shall be at or below the effluent limit. In that instance where an EPA-approved method does not exist that has an ML at or below the established effluent limitation, the permit shall: (1) use the method specified in the permit; or (2) the EPA-approved method with an ML that is nearest to the established effluent limit [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)].

5.6. Certified Laboratory

All environmental analysis to be performed by a certified laboratory is consistent with the certified wastewater laboratory requirements [401 KAR 5:320, Section 3].

5.7. Certified Operators

Wastewater treatment plants and wastewater collection systems that accept wastewaters containing domestic sewage are to be operated by a certified operator [401 KAR 5:10].

5.8. Pretreatment Monitoring

POTWs with approved pretreatment programs are required to submit monitoring results with their annual report. To ensure that sufficient samples are collected and analyzed, DOW placed sampling requirements within the permit. The results of the pretreatment monitoring shall be submitted on an annual DMR and summarized in the annual pretreatment report.

5.9. 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 placed sampling requirements within the permit. The results of the application monitoring shall be submitted on an annual DMR and summarized on the renewal application [401 KAR 5:065, Section 2(1) – 40 CFR 122.41(j) and 401 KAR 5:070, Section 3 – 40 CFR 122.48].

5.10. 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 Monthly Operating Report (MOR) workbook available on the Department for Environmental Protection's Forms webpage at:

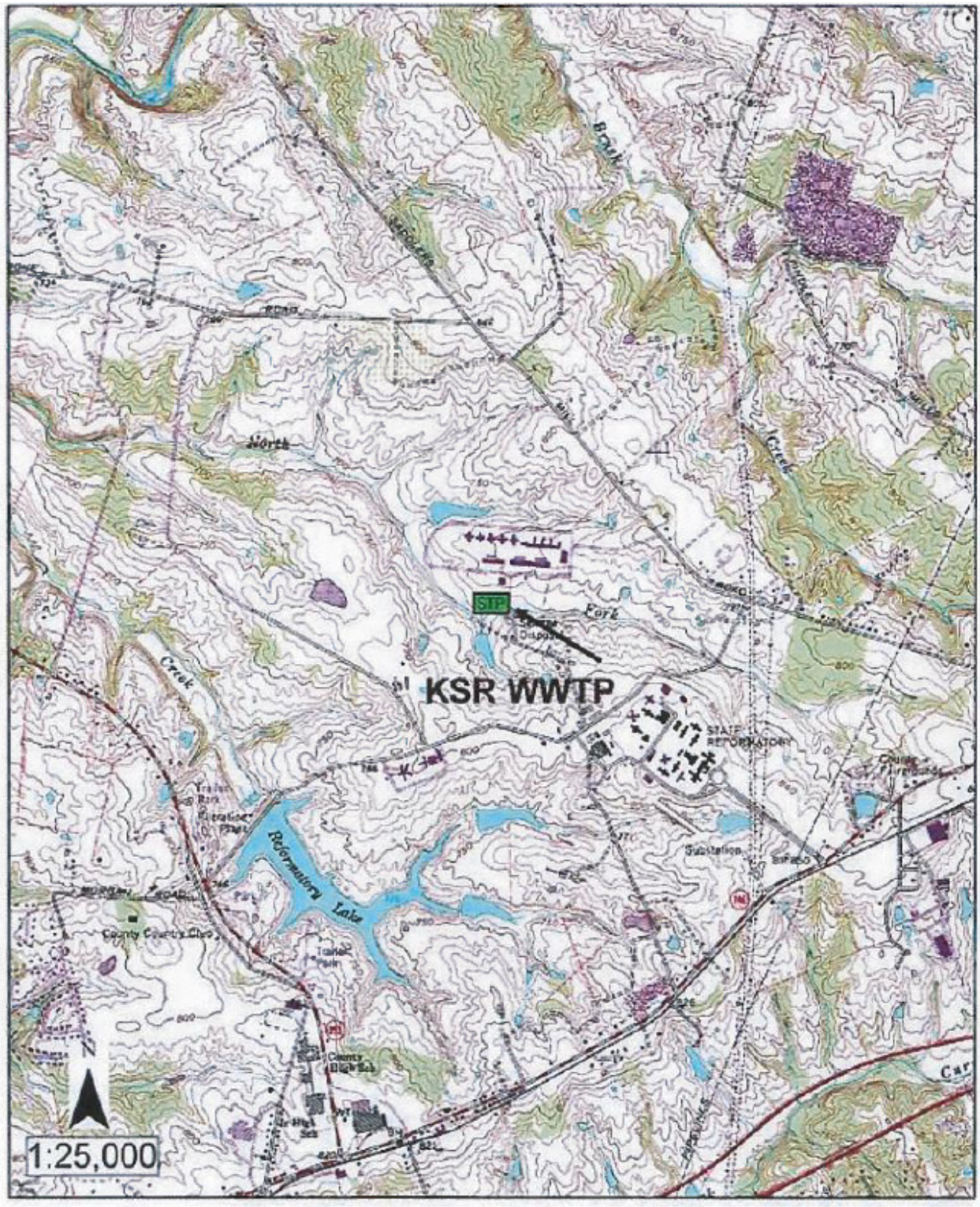
http://dep.ky.gov/formslibrary/Pages/default.aspx

Alternatively, the permitee may choose to use their own electronic 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.

These additional monitoring requirements are consistent with state and federal regulations that require the permit to include as appropriate monitoring requirements to assure compliance with the permit limitations [401 KAR 5:070, Section 3 – 40 CFR 122.48].

5.11. Location Map



KPDES

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT NO.: KY0040126

AGENCY INTEREST NO.: 8027

Pursuant to Authority in KRS 224,

Oldham County Environmental Authority
700 W. Jefferson Street
LaGrange, Kentucky, 40031

is authorized to discharge from a facility located at

Kentucky State Reformatory Wastewater Treatment Plant
1612 Dawkins Road
LaGrange, Oldham County, Kentucky

to receiving waters named

North Fork of Cedar Creek

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

This permit shall become effective on December 1, 2017.

This permit and the authorization to discharge shall expire at midnight, November 30, 2022.

Sara J Lindersun

October 6, 2017

Date Signed

Peter T. Goodmann, Director

Division of Water

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

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

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KPDES

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

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

Printed on Recycled Paper

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	38.40972°	-85.42611°	North Fork of Cedar Creek	Domestic 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	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum		
Flow, Effluent	MGD	Report	Report	N/A	N/A	N/A	N/A	Continuous	Recorder
Flow, Influent	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Week	Calculated
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
$CBOD_5$[1], Effluent	mg/l	83.5	125	N/A	10	15	N/A	1/Week	24-Hr Composite[2]
$CBOD_5$[1], Influent	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite[2]
$CBOD_5$[1], Percent Removal	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated[3]
TSS[4], Effluent	mg/l	250	376	N/A	30	45	N/A	1/Week	24-Hr Composite[2]
TSS[4], Influent	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite[2]
TSS[4], Percent Removal	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated[3]
Ammonia (as mg/l NH_3N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0[5]	N/A	1/Week	24-Hr Composite[2]
November 1 – April 30	mg/l	N/A	N/A	N/A	5.0	7.5[5]	N/A	1/Week	24-Hr Composite[2]
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Week	Grab
E. Coli[6]	#/100 ml	N/A	N/A	N/A	130[7]	240[8]	N/A	1/Week	Grab

TABLE 2.									
EFFLUENT LIMITATIONS								**MONITORING REQUIREMENTS**	
Effluent Characteristic	**Units**	**Loadings (lbs/day)**		**Concentrations**				**Frequency**	**Sample Type**
		Monthly Average	**Maximum Weekly Average**	**Minimum**	**Monthly Average**	**Maximum Weekly Average**	**Maximum**		
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019[5]	N/A	1/Week	Grab
Total Nitrogen[9], Effluent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Total Nitrogen[9], Influent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Total Phosphorus, Effluent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Total Phosphorus, Influent	mg/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite[2]
Hardness (as mg/l $CaCO_3$)	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite[2]
Copper, Total Recoverable	ug/l	N/A	N/A	N/A	Report	Report[5]	N/A	1/Week	24-Hr Composite2
Chlorodibromomethane	ug/l	N/A	N/A	N/A	13	N/A	N/A	1/Week	24-Hr Composite2
Chronic WET[10]	TU_C	N/A	N/A	N/A	N/A	N/A	1.00	1/Quarter	([11])
[1]$CBOD_5$ – Carbonaceous Biochemical Oxygen Demand, 5-day									
[2]A sample composed of four or more equal or flow-proportional aliquots collected over a period of no less than eight and no more than twenty-four hours and aggregated so that the aggregate sample reflects the average water quality of the effluent during the compositing or sample period									
[3]Percent Removal is calculated using the following equation: $\text{Percent Removal} = \left[\frac{(\text{Monthly Average Influent} - \text{Monthly Average Effluent})}{\text{Monthly Average Influent}}\right] \times 100$									
[4]Total Suspended Solids									
[5]Daily Maximum									
[6]E. Coli – Escherichia Coli Bacteria									
[7]Thirty (30) day Geometric Mean									
[8]Seven (7) day Geometric Mean									
[9]Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen									
[10]WET – Whole Effluent Toxicity									
[11]Three (3) 24-hour composite samples with one each collected every other day for a period of five (5) days, i.e. days 1, 3, & 5									

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 Proposed Monitoring Requirements

The following table summarizes the pretreatment-related monitoring for Outfall 001P required in the annual report:

TABLE 3.					
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	24-Hr Composite[1]
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	Grab
Oil & Grease	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	Grab
Phenolics, Total	Report (mg/l)	Report (mg/l)	Influent & Effluent	Annually	24-Hr Composite[1]
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 sample composed of four or more equal or flow-proportional aliquots collected over a period of no less than eight and no more than twenty-four hours and aggregated so that the aggregate sample reflects the average water quality of the effluent during the compositing or sample period					

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 3 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 DMR and summarized on the renewal application. The permittee shall report No Discharge – Conditional Monitoring Not Required This Period (NODI 9) for years 1 and 5 of the permit.

TABLE 4.

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	Grab
Nitrate Plus Nitrite Nitrogen	mg/l	Report	Report	3/5 years	Grab
Oil & Grease	mg/l	Report	Report	3/5 years	Grab
Phosphorus (Total)	mg/l	Report	Report	3/5 years	Grab
Total Dissolved Solids (TDS)	mg/l	Report	Report	3/5 years	Grab
Antimony, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Arsenic, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Beryllium, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Cadmium, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Chromium, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Copper, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Lead, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Mercury, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Nickel, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Selenium, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Silver, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Thallium, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
Zinc, Total Recoverable	µg/l	Report	Report	3/5 years	Grab
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	Grab
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	Grab
2-Chlorophenol	µg/l	Report	Report	3/5 years	Grab
2,4-Dichlorophenol	µg/l	Report	Report	3/5 years	Grab
2,4-Dimethylphenol	µg/l	Report	Report	3/5 years	Grab
4,6-Dinitro-o-cresol	µg/l	Report	Report	3/5 years	Grab
2,4-Dinitrophenol	µg/l	Report	Report	3/5 years	Grab
2-Nitrophenol	µg/l	Report	Report	3/5 years	Grab
4-Nitrophenol	µg/l	Report	Report	3/5 years	Grab
Pentachlorophenol	µg/l	Report	Report	3/5 years	Grab

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

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

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, wastestreams 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://www.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

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

Implementation shall be 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

DOW has approved the Pretreatment Program developed by the permittee on June 15, 2015.

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.

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 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 to DOW's Surface Water Permits Branch no later than March 1st of the following calendar year. Annual reports not in the proper format, that do not include all the necessary elements, that are not sufficient detail, or are received after March 1st are incomplete and is a violation of the KPDES permit unless DOW has granted an extension.

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 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 more than one (1) year, or both. 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 b 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. 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 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. (See §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.

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 preceding the permittee seeking to establish the occurrence of an upset has the burden of proof.

SECTION 4

WET TESTING REQUIREMENTS

4. WET TESTING REQUIREMENTS

The permittee shall initiate, within thirty (30) days of the effective date of this permit, or continue the series of tests described below to evaluate wastewater toxicity of the discharge from Outfall 001.

4.1. Sampling Requirements

Tests shall be conducted on a minimum of three (3) 24-hour composite samples shall be collected at a frequency of one (1) 24-hour composite every other day. For example, the first sample would be used for test initiation on day 1 and for test solution renewal on day 2. The second sample would be used for test solution renewal on days 3 and 4. The third sample would be used for test solution renewal on days 5, 6, and 7. Each 24-hour composite shall be collected using a refrigerated automatic sampler. Each 24-hour composite sample shall consist of not less than forty-eight (48) discrete aliquots of effluent. Aliquots shall be of equal volume and time-proportional unless effluent flow is expected to vary by more than 10% from one hour to another or by 50% over the 24-hour collection period (as predicted from historical trends, significant rainfall events, etc.). With anticipated effluent flow variation of greater than 10% per hour or 50% overall, the frequency, and volume of each aliquot shall be flow-proportional. The lapsed time from collection of the last aliquot of the composite and its first use for test initiation or for test solution renewal shall not exceed 36 hours.

Samples shall be iced and maintained at not greater than 6 ^{o}C during collection, storage, transport and until used in the test by the laboratory.

4.2. Test Requirements

The Chronic WET test requirements consists of 1 short-term static-renewal water flea (Ceriodaphnia dubia) life-cycle test and 1 short-term static-renewal fathead minnow (Pimephales promelas) growth test on 100% effluent (1.00 TU_C) at the frequency specified. The test shall begin within 36 hours of the collection of the day 1 sample. The test shall be renewed daily using: samples collected on days 1, 3; and 5 in accordance with test method specified in the Test Methods Section below.

4.3. 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.

4.4. 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.

For the Ceriodaphnia test: at least 80% survival of all control organisms and an average of fifteen (15) or more young per surviving female in the control solutions; and 60% of surviving control females must produce three broods.

For the fathead minnow test: at least 80% survival in controls and the average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg.

4.5. Test Methods

All test organisms, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (4^{th} Edition), EPA-821-R-02-013, the most recent edition of this publication, or as approved in advance by DOW.

4.6. 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.

4.7. 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.

4.8. Test Results

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).

Noncompliance with the toxicity limit is demonstrated if the IC_{25} (inhibition concentration) for reproduction or growth is less than 100 % effluent. If noncompliance occurs in an initial test, the permittee must repeat the test using a new set of three (3) composite samples. Sampling must be initiated within fifteen (15) 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.

4.9. 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.

4.10. 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 5

OTHER CONDITIONS

5. OTHER CONDITIONS

5.1. 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:

All conditions of the Agreed Order; in Commonwealth of Kentucky Environmental and Public Protection Cabinet v. Oldham County Environmental Authority, Case No. DOW-08322, entered March 31, 2016, are hereby incorporated as enforceable conditions of this KPDES permit, including the submission of all required reports and plans by the dates specified by the Agreed Order.

5.2. 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.

5.3. 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).

5.4. 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.

5.5. 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.

5.6. 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].

5.7. Certified Operators

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

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

5.8. Outfall Signage

The KPDES permit establishes monitoring points, effluent limitations, and other conditions to address discharges from the permitted facility. In an effort to better document and clarify these locations the permittee should place and maintain a permanent marker at each of the monitoring locations.

SECTION 6

MONITORING AND REPORTING REQUIREMENTS

6. MONITORING AND REPORTING REQUIREMENTS

6.1. 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.

6.2. 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 Monthly Operating Report (MOR) workbook available on the Department for Environmental Protection's Forms webpage at:

http://dep.ky.gov/formslibrary/Pages/default.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.

6.3. Sufficiently Sensitive Analytical Methods

Analytical methods utilized to demonstrate compliance with the effluent limitations established in this permit shall be sufficiently sensitive to detect pollutant levels at or below the required effluent limit, i.e. the Method Minimum Level shall be at or below the effluent limit. In the instance where an EPA-approved method does not exist that has a Method Minimum Level at or below the established effluent limitation, the permittee shall:

(1) Use the method specified in the permit; or
(2) The EPA-approved method with an ML 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.

6.4. Certified Laboratory Requirements

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by EEC certified general wastewater laboratories.

6.5. 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: http://water.ky.gov/permitting/Pages/netDMRInformation.aspx or contact the DMR Coordinator at (502) 564-3410.