

**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM****FACT SHEET****KPDES No.:** KY0045390**AI No.:** 1643

Airview Estates Subdivision WWTP
178 West Airview Drive
Elizabethtown, Hardin County, Kentucky

Date: March 9, 2020**Public Notice Information**

Public Notice Start Date: November 26, 2019

Comment Due Date: December 26, 2019

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

<https://eec.ky.gov/Environmental-Protection/Water/Pages/Water-Public-Notices-and-Hearings.aspx>.

Public Notice Comments

Comments must be received by the Division of Water no later than 4:30 PM on the closing date of the comment period. Comments may be submitted by e-mail at: DOWPublicNotice@ky.gov or written comments may be submitted to the Division of Water at 300 Sower Blvd, Frankfort, Kentucky 40601.

Reference Documents

A copy of this proposed fact sheet, proposed permit, the application, other supporting material and the current status of the application may be obtained from the Department for Environmental Protection's Pending Approvals Search Webpage:

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

Open Records

Copies of publicly-available documents supporting this fact sheet and proposed permit may also be obtained from the Department for Environmental Protection Central Office. Information regarding these materials may be obtained from the Open Records Coordinator at (502) 782-6849 or by e-mail at ECC.KORA@ky.gov.

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601

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THIS KPDES FACT SHEET CONSISTS OF THE FOLLOWING SECTIONS:

1. FACILITY SYNOPSIS.....4

1.1. Name and Address of Applicant.....4

1.2. Facility Location.....4

1.3. Description of Applicant’s Operation.....4

1.4. Wastewaters Collected and Treatment4

1.5. Permitting Action4

2. RECEIVING / INTAKE WATERS.....6

2.1. Receiving Waters.....6

2.2. Intake Waters – Nearest Downstream Intake.....6

3. OUTFALL 0018

3.1. Outfall Description8

3.2. Reported Values.....8

3.3. Effluent Limitations and Monitoring Requirements9

3.4. Pertinent Factors.....10

3.5. Justification of Requirements.....10

4. OTHER CONDITIONS.....13

4.1. Schedule of Compliance.....13

4.2. Antidegradation13

4.3. Standard Conditions.....13

4.4. Sufficiently Sensitive Analytical Methods13

4.5. Certified Laboratory13

4.6. Connection to Regional Sewer System.....13

4.7. Certified Operators13

4.8. Location Map.....14

SECTION 1

FACILITY SYNOPSIS

1. FACILITY SYNOPSIS

1.1. Name and Address of Applicant

Bluegrass Water Utility Operating Company, LLC.
 500 Northwest Plaza Dr., Suite 500
 St. Ann, Missouri 63074

1.2. Facility Location

Airview Estates Subdivision WWTP
 178 West Airview Drive
 Elizabethtown, Hardin County, Kentucky

1.3. Description of Applicant’s Operation

The applicant operates a domestic wastewater treatment plant serving a subdivision.

1.4. Wastewaters Collected and Treatment

The following table lists the actual average flow reported, the facility’s approved long-term average design treatment capacity, the wastewater types collected, and the treatment type for each outfall:

TABLE 1.				
Outfall No.	Avg. Flow (MGD)	Design Capacity (MGD)	Wastewater Types Collected	Treatment Type
001	0.057	0.055	Domestic Sanitary	Screening Aeration Sedimentation Chlorine Disinfection Dechloriantion Discharge to Surface Water

1.5. Permitting Action

This is a reissuance of a minor KPDES permit for an existing domestic wastewater treatment plant [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)
UT to Mill Creek Branch	WAH PCR SCR DWS	HQ	0.0	0.0

2.2. Intake Waters – Nearest Downstream Intake

TABLE 3.						
Intake Water Name	Public Water Supply Name	Latitude (N) Decimal Degrees	Longitude (W) Decimal Degrees	Miles Downstream	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Ohio River	Evansville Water Utility, IN	37.957651°	87.574393°	189.5	12,900	60,900

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	37.758472°	85.891817°	UT to Mill Creek Branch	Domestic Wastewater

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	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
Flow	MGD	0.057	0.090 ¹	N/A	N/A	N/A	N/A
pH	SU	N/A	N/A	5.80	N/A	N/A	9.68
CBOD ₅ ²	mg/l	8.07	17.79	N/A	33.14	64.41	N/A
Total Suspended Solids	mg/l	8.67	21.10	N/A	35.57	81.47	N/A
Ammonia (as mg/l NH ₃ N)							
May 1 – October 31	mg/l	1.77	3.56	N/A	7.55	17.14 ¹	N/A
November 1 – April 30	mg/l	1.79	4.11	N/A	7.11	13.10 ¹	N/A
E. Coli ³	#/100 ml	N/A	N/A	N/A	15509 ⁴	49607 ⁵	N/A
Dissolved Oxygen	mg/l	N/A	N/A	1.88	N/A	N/A	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	1.10	1.84 ¹	N/A
¹ Daily Maximum							
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day							
³ E. Coli – Escherichia Coli Bacteria							
⁴ Thirty (30) day Geometric Mean							
⁵ Seven (7) day Geometric Mean							

The above values are based off of 5-year DMR averages from 10/31/2014 to 09/30/2019.

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Month	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	25.0	37.5	N/A	1/Month	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 ¹	N/A	1/Month	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10.0	15.0 ¹	N/A	1/Month	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.00	N/A	N/A	N/A	1/Month	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Month	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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: <https://eec.ky.gov/Environmental-Protection/Forms%20Library/General%20Procedures%20for%20Limitations%20Development.pdf>.

3.4.1. Secondary Treatment Standards

Discharges of biochemically degradable wastes are subject to technology-based effluent limitations (TBELs) known as the Secondary Treatment Standards. Both state and federal regulations establish the requirements for secondary treatment. State regulations for secondary treatment only apply to non-POTWs [401 KAR 5:045].

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

3.5. Justification of Requirements

Chapters 5 and 10 of Title 401 of the Kentucky Administrative Regulations (KARs), cited in the following, have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

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 water quality-based effluent limitations (WQBELs) [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. Any WQBELs included in this permit are based upon the Kentucky Water Quality Standards (KYWQS) [401 KAR 10:031].

3.5.1. Flow

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)(ii)] and requirements for recording and reporting of monitoring results [401 KAR 5:050, Section 4 – 40 CFR 122.48].

3.5.2. CBOD₅

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. DOW found that it was necessary to impose WQBELs for this parameter in order to achieve water quality standards. [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [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.

3.5.3. Total Suspended Solids

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [401 KAR 10:031, Section 4(1)(g)].

3.5.4. 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)].

3.5.5. E. Coli

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 7].

3.5.6. pH

The limitations for this parameter are consistent Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(b) and Section 7].

3.5.7. Total Residual Chlorine

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

SECTION 4

OTHER CONDITIONS

4. OTHER CONDITIONS**4.1. Schedule of Compliance**

The permittee is required to comply with all effluent limitations by the effective date of the permit unless a compliance schedule is included with the permit. A schedule of compliance, if included with this permit, is consistent with the regulatory provisions for establishing a schedule of compliance [401 KAR 5:050, Section 4 and 40 CFR 122.47].

4.2. 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.

4.3. 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].

4.4. 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 [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)].

4.5. Certified Laboratory

All environmental analysis is to be performed by a certified laboratory is consistent with the certified wastewater laboratory requirements [401 KAR 5:320, Section 1].

4.6. Connection to Regional Sewer System

In accordance with 401 KAR 5:005, Section 4 if a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility.

4.7. 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 5:010].

4.8. Location Map



KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KY0045390

AGENCY INTEREST NO.: 1643

Pursuant to Authority in KRS 224,

Bluegrass Water Utility Operating Company, LLC.
500 Northwest Plaza Dr., Suite 500
St. Ann, Missouri 63074

is authorized to discharge from a facility located at

Airview Estates Subdivision WWTP
178 West Airview Drive
Elizabethtown, Hardin County, Kentucky

to receiving waters named

UT to Mill Creek Branch

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

This permit shall become effective on May 1, 2020.

This permit and the authorization to discharge shall expire at midnight, April 30, 2025.

Date Signed: March 9, 2020

A handwritten signature in black ink, appearing to read "Paul M. Miller".

Paul Miller, P.E.
Director, Division of Water

**DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601**

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THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:

- 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.....5**
- 1.1. Compliance Monitoring Locations (Outfalls) 5
- 1.2. Effluent Limitations and Monitoring Requirements 5
- 1.3. Standard Effluent Requirements 6
- 2. STANDARD CONDITIONS.....8**
- 2.1. Duty to Comply 8
- 2.2. Duty to Reapply..... 8
- 2.3. Need to Halt or Reduce Activity Not a Defense..... 8
- 2.4. Duty to Mitigate..... 8
- 2.5. Proper Operation and Maintenance..... 8
- 2.6. Permit Actions..... 8
- 2.7. Property Rights 8
- 2.8. Duty to Provide Information 8
- 2.9. Inspection and Entry 9
- 2.10. Monitoring and Records 9
- 2.11. Signatory Requirement 10
- 2.12. Reporting Requirements..... 10
- 2.13. Bypass 11
- 2.14. Upset..... 12
- 3. OTHER CONDITIONS15**
- 3.1. Schedule of Compliance..... 15
- 3.2. Other Permits..... 15
- 3.3. Continuation of Expiring Permit..... 15
- 3.4. Antidegradation 15
- 3.5. Reopener Clause 15
- 3.6. Connection to Regional Sewer System 15
- 3.7. Certified Operators 15
- 3.8. Outfall Signage 15
- 4. MONITORING AND REPORTING REQUIREMENTS17**
- 4.1. KPDES Outfalls..... 17
- 4.2. Sufficiently Sensitive Analytical Methods 17
- 4.3. Certified Laboratory Requirements 17
- 4.4. Submission of DMRs 17

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 latitude and longitude 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	37.758472°	85.891817°	UT to Mill Creek Branch	Domestic Wastewater

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Month	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	25.0	37.5	N/A	1/Month	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 ¹	N/A	1/Month	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10.0	15.0 ¹	N/A	1/Month	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.00	N/A	N/A	N/A	1/Month	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Month	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									

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		
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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.

SECTION 2

STANDARD CONDITIONS

2. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

2.1. 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.

2.2. 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.

2.3. 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.

2.4. 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.

2.5. 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.

2.6. 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.

2.7. Property Rights

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

2.8. 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.

2.9. 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.

2.10. 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.

2.11. 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.

2.12. Reporting Requirements**2.12.1. 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.

2.12.2. 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.

2.12.3. 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].

2.12.4. 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.

2.12.5. 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.

2.12.6. 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.

2.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 2.12.1, 2.12.4, 2.12.5 and 2.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 2.12.6.

2.12.8. 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.

2.13. Bypass

2.13.1. 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.

2.13.2. 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 2.13.3 and 2.13.4.

2.13.3. 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 2.12.6.

2.13.4. 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 2.13.3.

(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 2.13.4.

2.14. Upset**2.14.1. 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.

2.14.2. 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 2.14.3 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.

2.14.3. 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 2.12.6; and

(4) The permittee complied with any remedial measures required under Section 2.4.

2.14.4. Burden of Proof

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

SECTION 3

OTHER CONDITIONS

3. OTHER CONDITIONS

3.1. Schedule of Compliance

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

3.2. 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.

3.3. 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).

3.4. 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 Socioeconomic Demonstration and Alternatives Analysis (SDAA) submitted with the KPDES permit application.

3.5. 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.

3.6. Connection to Regional Sewer System

This WWTP is temporary and in no way supersedes the need of a regional sewer system. The permittee shall eliminate the discharge and WWTP plant by connection to a regional sewer system when it becomes available as defined in 401 KAR 5:002.

3.7. Certified Operators

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

3.8. Outfall Signage

This 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 4

MONITORING AND REPORTING REQUIREMENTS

4. MONITORING AND REPORTING REQUIREMENTS

4.1. 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.

4.2. 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.

4.3. 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.

4.4. 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.

**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM****FACT SHEET****KPDES No.:** KY0081299**AI No.:** 2809

Brooklyn WWTF

474 Eastern Bypass

Richmond, Madison County, Kentucky

Date: September 19, 2019**Public Notice Information**

Public Notice Start Date: July 17, 2019

Comment Due Date: August 16, 2019

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

<https://eec.ky.gov/Environmental-Protection/Water/Pages/Water-Public-Notices-and-Hearings.aspx>.

Public Notice Comments

Comments must be received by the Division of Water no later than 4:30 PM on the closing date of the comment period. Comments may be submitted by e-mail at: DOWPublicNotice@ky.gov or written comments may be submitted to the Division of Water at 300 Sower Blvd, Frankfort, Kentucky 40601.

Reference Documents

A copy of this proposed fact sheet, proposed permit, the application, other supporting material and the current status of the application may be obtained from the Department for Environmental Protection's Pending Approvals Search Webpage:

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

Open Records

Copies of publicly-available documents supporting this fact sheet and proposed permit may also be obtained from the Department for Environmental Protection Central Office. Information regarding these materials may be obtained from the Open Records Coordinator at (502) 782-6849 or by e-mail at ECC.KORA@ky.gov.

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601

Printed on Recycled Paper

THIS KPDES FACT SHEET CONSISTS OF THE FOLLOWING SECTIONS:

1. FACILITY SYNOPSIS.....4

1.1. Name and Address of Applicant.....4

1.2. Facility Location.....4

1.3. Description of Applicant’s Operation.....4

1.4. Wastewaters Collected and Treatment4

1.5. Permitting Action4

2. RECEIVING / INTAKE WATERS.....6

2.1. Receiving Waters.....6

2.2. Intake Waters – Nearest Downstream Intake.....6

3. OUTFALL 0018

3.1. Outfall Description8

3.2. Reported Values.....8

3.3. Effluent Limitations and Monitoring Requirements9

3.4. Pertinent Factors.....10

3.5. Justification of Requirements.....10

4. OTHER CONDITIONS.....13

4.1. Schedule of Compliance.....13

4.2. Antidegradation13

4.3. Standard Conditions.....13

4.4. Sufficiently Sensitive Analytical Methods13

4.5. Certified Laboratory13

4.6. Connection to Regional Sewer System.....13

4.7. Certified Operators13

4.8. Location Map.....14

SECTION 1

FACILITY SYNOPSIS

1. FACILITY SYNOPSIS

1.1. Name and Address of Applicant

Bluegrass Water Utility Operating Company, LLC
 500 Northwest Plaza Dr., Suite 500
 St. Ann, MO 63074

1.2. Facility Location

Brocklyn WWTF
 474 Eastern Bypass
 Richmond, Madison County, Kentucky

1.3. Description of Applicant’s Operation

The applicant operates a domestic wastewater treatment plant serving a residential subdivision.

1.4. Wastewaters Collected and Treatment

The following table lists the actual average flow reported, the facility’s approved long-term average design treatment capacity, the wastewater types collected, and the treatment type for each outfall:

TABLE 1.				
Outfall No.	Avg. Flow (MGD)	Design Capacity (MGD)	Wastewater Types Collected	Treatment Type
001	0.025	0.040	Domestic(Sanitary) Wastewater	Bar Screen, Aeration, Sedimentation, Lagoon, Disinfection, Post Aeration

1.5. Permitting Action

This is a reissuance of a minor KPDES permit for an existing domestic wastewater treatment plant [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)
UT to Taylor Fork	WAH, PCR, SCR, DWS	HQ	0.0	0.0

2.2. Intake Waters – Nearest Downstream Intake

TABLE 3.						
Intake Water Name	Public Water Supply Name	Latitude (N) Decimal Degrees	Longitude (W) Decimal Degrees	Miles Downstream	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Kentucky River	Lancaster Water Works/KY River Station WTP	37.72861°	84.57028°	22.7	50	950

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	37.73139°	84.34269°	UT to Taylor Fork	Domestic Wastewater

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	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
Flow	MGD	0.025	0.025 ¹	N/A	N/A	N/A	N/A
pH	SU	N/A	N/A	6.78	N/A	N/A	8.89
CBOD ₅ ²	mg/l	N/A	N/A	N/A	7.85	9.72	N/A
Total Suspended Solids	mg/l	N/A	N/A	N/A	5.20	5.22	N/A
Ammonia (as mg/l NH ₃ N)							
May 1 – October 31	mg/l	N/A	N/A	N/A	1.45	1.48 ¹	N/A
November 1 – April 30	mg/l	N/A	N/A	N/A	0.92	0.92 ¹	N/A
E. Coli ³	#/100 ml	N/A	N/A	N/A	2.90 ⁴	5.27 ⁵	N/A
Dissolved Oxygen	mg/l	N/A	N/A	7.05	N/A	N/A	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.0	0.0 ¹	N/A
¹ Daily Maximum							
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day							
³ E. Coli – Escherichia Coli Bacteria							
⁴ Thirty (30) day Geometric Mean							
⁵ Seven (7) day Geometric Mean							

The above values are based off of 5-year DMR averages from 05/31/14 to 04/30/19.

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Month	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	10	15	N/A	1/Month	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0 ¹	N/A	1/Month	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	5.0	7.5 ¹	N/A	1/Month	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Month	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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:

<https://eec.ky.gov/Environmental-Protection/Forms%20Library/General%20Procedures%20for%20Limitations%20Development.pdf>

3.4.1. Secondary Treatment Standards

Discharges of biochemically degradable wastes are subject to technology-based effluent limitations (TBELs) known as the Secondary Treatment Standards. Both state and federal regulations establish the requirements for secondary treatment. State regulations for secondary treatment only apply to non-POTWs [401 KAR 5:045].

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

3.5. Justification of Requirements

Chapters 5 and 10 of Title 401 of the Kentucky Administrative Regulations (KARs), cited in the following, have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

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 water quality-based effluent limitations (WQBELs) [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. Any WQBELs included in this permit are based upon the Kentucky Water Quality Standards (KYWQS) [401 KAR 10:031].

3.5.1. Flow

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)(ii)] and requirements for recording and reporting of monitoring results [401 KAR 5:050, Section 4 – 40 CFR 122.48].

3.5.2. CBOD₅

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. DOW found that it was necessary to impose WQBELs for this parameter in order to achieve water quality standards. [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [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.

3.5.3. Total Suspended Solids

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [401 KAR 10:031, Section 4(1)(g)].

3.5.4. 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)].

3.5.5. E. Coli

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 7].

3.5.6. pH

The limitations for this parameter are consistent Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(b) and Section 7].

3.5.7. Total Residual Chlorine

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

SECTION 4

OTHER CONDITIONS

4. OTHER CONDITIONS

4.1. Schedule of Compliance

The permittee is required to comply with all effluent limitations by the effective date of the permit unless a compliance schedule is included with the permit. A schedule of compliance, if included with this permit, is consistent with the regulatory provisions for establishing a schedule of compliance [401 KAR 5:050, Section 4 and 40 CFR 122.47].

4.2. 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.

4.3. 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].

4.4. 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 [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)].

4.5. Certified Laboratory

All environmental analysis is to be performed by a certified laboratory is consistent with the certified wastewater laboratory requirements [401 KAR 5:320, Section 1].

4.6. Connection to Regional Sewer System

In accordance with 401 KAR 5:005, Section 4 if a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility.

4.7. 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 5:010].

4.8. Location Map



KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KY0081299

AGENCY INTEREST NO.: 2809

Pursuant to Authority in KRS 224,

Bluegrass Water Utility Operating Company, LLC
500 Northwest Plaza Dr., Suite 500
St. Ann, MO 63074

is authorized to discharge from a facility located at

Brocklyn WWTF
474 Eastern Bypass
Richmond, Madison County, Kentucky

to receiving waters named

UT to Taylor Fork

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

This permit shall become effective on November 1, 2019.

This permit and the authorization to discharge shall expire at midnight, October 31, 2024.

September 19, 2019

Date Signed

Peter T. Goodman, Director

Division of Water

**DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601**

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THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:

- 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.....4**
 - 1.1. Compliance Monitoring Locations (Outfalls) 4
 - 1.2. Effluent Limitations and Monitoring Requirements 4
 - 1.3. Standard Effluent Requirements 5
- 2. STANDARD CONDITIONS.....7**
 - 2.1. Duty to Comply 7
 - 2.2. Duty to Reapply..... 7
 - 2.3. Need to Halt or Reduce Activity Not a Defense..... 7
 - 2.4. Duty to Mitigate..... 7
 - 2.5. Proper Operation and Maintenance..... 7
 - 2.6. Permit Actions..... 7
 - 2.7. Property Rights 7
 - 2.8. Duty to Provide Information 7
 - 2.9. Inspection and Entry 8
 - 2.10. Monitoring and Records 8
 - 2.11. Signatory Requirement 9
 - 2.12. Reporting Requirements..... 9
 - 2.13. Bypass 10
 - 2.14. Upset 11
- 3. OTHER CONDITIONS14**
 - 3.1. Schedule of Compliance..... 14
 - 3.2. Other Permits..... 14
 - 3.3. Continuation of Expiring Permit..... 14
 - 3.4. Antidegradation 14
 - 3.5. Reopener Clause 14
 - 3.6. Connection to Regional Sewer System 14
 - 3.7. Certified Operators 14
 - 3.8. Outfall Signage 14
- 4. MONITORING AND REPORTING REQUIREMENTS16**
 - 4.1. KPDES Outfalls..... 16
 - 4.2. Sufficiently Sensitive Analytical Methods 16
 - 4.3. Certified Laboratory Requirements 16
 - 4.4. Submission of DMRs 16

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 latitude and longitude 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	37.73139°	84.34269°	UT to Taylor Fork	Domestic Wastewater

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Month	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	10	15	N/A	1/Month	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0 ¹	N/A	1/Month	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	5.0	7.5 ¹	N/A	1/Month	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Month	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									

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		
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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.

SECTION 2

STANDARD CONDITIONS

2. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

2.1. 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.

2.2. 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.

2.3. 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.

2.4. 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.

2.5. 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.

2.6. 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.

2.7. Property Rights

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

2.8. 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.

2.9. 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.

2.10. 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.

2.11. 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.

2.12. Reporting Requirements**2.12.1. 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.

2.12.2. 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.

2.12.3. 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].

2.12.4. 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.

2.12.5. 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.

2.12.6. 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.

2.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 2.12.1, 2.12.4, 2.12.5 and 2.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 2.12.6.

2.12.8. 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.

2.13. Bypass

2.13.1. 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.

2.13.2. 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 2.13.3 and 2.13.4.

2.13.3. 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 2.12.6.

2.13.4. 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 2.13.3.

(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 2.13.4.

2.14. Upset**2.14.1. 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.

2.14.2. 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 2.14.3 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.

2.14.3. 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 2.12.6; and

(4) The permittee complied with any remedial measures required under Section 2.4.

2.14.4. Burden of Proof

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

SECTION 3

OTHER CONDITIONS

3. OTHER CONDITIONS

3.1. Schedule of Compliance

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

3.2. 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.

3.3. 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).

3.4. 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 Socioeconomic Demonstration and Alternatives Analysis (SDAA) submitted with the KPDES permit application.

3.5. 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.

3.6. Connection to Regional Sewer System

This WWTP is temporary and in no way supersedes the need of a regional sewer system. The permittee shall eliminate the discharge and WWTP plant by connection to a regional sewer system when it becomes available as defined in 401 KAR 5:002.

3.7. Certified Operators

The wastewater treatment plant shall be under the primary responsibility of a Class I Wastewater Treatment Plant Certified Operator or higher.

3.8. Outfall Signage

This 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 4

MONITORING AND REPORTING REQUIREMENTS

4. MONITORING AND REPORTING REQUIREMENTS

4.1. 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.

4.2. 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.

4.3. 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.

4.4. 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.

KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KY0105325

AGENCY INTEREST NO.: 44397

Pursuant to Authority in KRS 224,

Darlington Creek Homeowners Association, INC (C/O Towne Properties)
500 Thomas More Parkway
Crestview Hills, KY 41017

is authorized to discharge from a facility located at

Darlington Creek Subdivision
US 27 & Highway 154
Alexandria, Campbell County, Kentucky

to receiving waters named

UT to Phillips Creek

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

This permit shall become effective on July 1, 2019.

This permit and the authorization to discharge shall expire at midnight, June 30, 2024.

May 13, 2019

Date Signed

**Peter T. Goodmann, Director
Division of Water**

**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:

- 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.....4**
- 1.1. Compliance Monitoring Locations (Outfalls) 4
- 1.2. Effluent Limitations and Monitoring Requirements 4
- 1.3. Standard Effluent Requirements 5
- 2. STANDARD CONDITIONS.....7**
- 2.1. Duty to Comply 7
- 2.2. Duty to Reapply..... 7
- 2.3. Need to Halt or Reduce Activity Not a Defense..... 7
- 2.4. Duty to Mitigate..... 7
- 2.5. Proper Operation and Maintenance..... 7
- 2.6. Permit Actions..... 7
- 2.7. Property Rights 7
- 2.8. Duty to Provide Information 7
- 2.9. Inspection and Entry 8
- 2.10. Monitoring and Records 8
- 2.11. Signatory Requirement 9
- 2.12. Reporting Requirements..... 9
- 2.13. Bypass 10
- 2.14. Upset..... 11
- 3. OTHER CONDITIONS14**
- 3.1. Schedule of Compliance..... 14
- 3.2. Other Permits..... 14
- 3.3. Continuation of Expiring Permit..... 14
- 3.4. Antidegradation 14
- 3.5. Reopener Clause 14
- 3.6. Connection to Regional Sewer System 14
- 3.7. Certified Operators 14
- 3.8. Outfall Signage 14
- 4. MONITORING AND REPORTING REQUIREMENTS16**
- 4.1. KPDES Outfalls..... 16
- 4.2. Sufficiently Sensitive Analytical Methods 16
- 4.3. Certified Laboratory Requirements 16
- 4.4. Submission of DMRs 16

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 latitude and longitude 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	38.852202°	84.387816	UT to Phillips Creek	Domestic Wastewater

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	15	22.5	N/A	1/Quarter	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 ¹	N/A	1/Quarter	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10	15.0 ¹	N/A	1/Quarter	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Quarter	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Quarter	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Quarter	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									

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EFFLUENT LIMITATIONS								MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
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⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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.

SECTION 2

STANDARD CONDITIONS

2. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

2.1. 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.

2.2. 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.

2.3. 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.

2.4. 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.

2.5. 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.

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

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(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;
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(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.

2.12.2. 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.

2.12.3. 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].

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Monitoring results shall be reported at the intervals specified elsewhere in this permit.

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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.

2.12.6. 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.

2.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 2.12.1, 2.12.4, 2.12.5 and 2.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 2.12.6.

2.12.8. 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.

2.13. Bypass

2.13.1. 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.

2.13.2. 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 2.13.3 and 2.13.4.

2.13.3. 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 2.12.6.

2.13.4. 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 2.13.3.

(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 2.13.4.

2.14. Upset**2.14.1. 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.

2.14.2. 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 2.14.3 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.

2.14.3. 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 2.12.6; and

(4) The permittee complied with any remedial measures required under Section 2.4.

2.14.4. Burden of Proof

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

SECTION 3

OTHER CONDITIONS

3. OTHER CONDITIONS

3.1. Schedule of Compliance

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

3.2. 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.

3.3. 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).

3.4. 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 Socioeconomic Demonstration and Alternatives Analysis (SDAA) submitted with the KPDES permit application.

3.5. 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.

3.6. Connection to Regional Sewer System

This WWTP is temporary and in no way supersedes the need of a regional sewer system. The permittee shall eliminate the discharge and WWTP plant by connection to a regional sewer system when it becomes available as defined in 401 KAR 5:002.

3.7. Certified Operators

The wastewater treatment plant shall be under the primary responsibility of a Class I Wastewater Treatment Plant Certified Operator or higher.

3.8. Outfall Signage

This 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 4

MONITORING AND REPORTING REQUIREMENTS

4. MONITORING AND REPORTING REQUIREMENTS

4.1. 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.

4.2. 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.

4.3. 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.

4.4. 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.

**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM****FACT SHEET****KPDES No.:** KY0105325**AI No.:** 44397

Darlington Creek Subdivision
US 27 South & Highway 154
Alexandria, Campbell County, Kentucky

Date: May 13, 2019**Public Notice Information**

Public Notice Start Date: November 20, 2018

Comment Due Date: December 20, 2018

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

<https://eec.ky.gov/Environmental-Protection/Water/Pages/Water-Public-Notices-and-Hearings.aspx>.

Public Notice Comments

Comments must be received by the Division of Water no later than 4:30 PM on the closing date of the comment period. Comments may be submitted by e-mail at: DOWPublicNotice@ky.gov or written comments may be submitted to the Division of Water at 300 Sower Blvd, Frankfort, Kentucky 40601.

Reference Documents

A copy of this proposed fact sheet, proposed permit, the application, other supporting material and the current status of the application may be obtained from the Department for Environmental Protection's Pending Approvals Search Webpage:

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

Open Records

Copies of publicly-available documents supporting this fact sheet and proposed permit may also be obtained from the Department for Environmental Protection Central Office. Information regarding these materials may be obtained from the Open Records Coordinator at (502) 782-6849 or by e-mail at ECC.KORA@ky.gov.

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601

Printed on Recycled Paper

THIS KPDES FACT SHEET CONSISTS OF THE FOLLOWING SECTIONS:

1. FACILITY SYNOPSIS.....4

1.1. Name and Address of Applicant.....4

1.2. Facility Location.....4

1.3. Description of Applicant’s Operation.....4

1.4. Wastewaters Collected and Treatment4

1.5. Permitting Action4

2. RECEIVING / INTAKE WATERS.....6

2.1. Receiving Waters.....6

2.2. Intake Waters – Nearest Downstream Intake.....6

3. OUTFALL 0018

3.1. Outfall Description8

3.2. Reported Values.....8

3.3. Effluent Limitations and Monitoring Requirements9

3.4. Pertinent Factors.....10

3.5. Justification of Requirements.....10

4. OTHER CONDITIONS.....13

4.1. Schedule of Compliance.....13

4.2. Antidegradation13

4.3. Standard Conditions.....13

4.4. Sufficiently Sensitive Analytical Methods13

4.5. Certified Laboratory13

4.6. Connection to Regional Sewer System.....13

4.7. Certified Operators13

4.8. Location Map.....14

SECTION 1

FACILITY SYNOPSIS

1. FACILITY SYNOPSIS

1.1. Name and Address of Applicant

Darlington Creek Homeowners Association, Inc. (C/O Towne Properties)
 500 Thomas More Parkway
 Crestview Hills, KY 41017

1.2. Facility Location

Darlington Creek Subdivision
 US 27 South & Highway 154
 Alexandria, Campbell County, Kentucky

1.3. Description of Applicant’s Operation

The applicant operates a domestic wastewater treatment plant serving a subdivision and small highway commercial lot.

1.4. Wastewaters Collected and Treatment

The following table lists the actual average flow reported, the facility’s approved long-term average design treatment capacity, the wastewater types collected, and the treatment type for each outfall:

TABLE 1.				
Outfall No.	Avg. Flow (MGD)	Design Capacity (MGD)	Wastewater Types Collected	Treatment Type
001	0.0155	0.0495	Domestic	Screening Nitrification/Denitrification Activated Sludge Sedimentation Anaerobic Digestion Chlorine Disinfection Dechlorination Post Aeration

1.5. Permitting Action

This is a reissuance of a minor KPDES permit for an existing domestic wastewater treatment plant [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)
UT to Phillips Creek	WAH, PCR, SCR, DWS	HQ	0.0	0.0

2.2. Intake Waters – Nearest Downstream Intake

TABLE 3.						
Intake Water Name	Public Water Supply Name	Latitude (N) Decimal Degrees	Longitude (W) Decimal Degrees	Miles Downstream	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Licking River	Northern KY WD Plant A Taylor Mill WTP	39.031587°	84.490282°	31	63	589

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	38.852202°	84.387816	UT to Phillips Creek	Domestic Wastewater

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	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
Flow	MGD	0.0155	0.0155 ¹	N/A	N/A	N/A	N/A
pH	SU	N/A	N/A	6.83	N/A	N/A	8.08
CBOD ₅ ²	mg/l	N/A	N/A	N/A	4.77	5.96	N/A
Total Suspended Solids	mg/l	N/A	N/A	N/A	6.64	6.64	N/A
Ammonia (as mg/l NH ₃ N)							
May 1 – October 31	mg/l	N/A	N/A	N/A	0.80	1.27 ¹	N/A
November 1 – April 30	mg/l	N/A	N/A	N/A	1.24	2.12 ¹	N/A
E. Coli ³	#/100 ml	N/A	N/A	N/A	11.79 ⁴	11.79 ⁵	N/A
Dissolved Oxygen	mg/l	N/A	N/A	7.20	N/A	N/A	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.01	0.01 ¹	N/A
¹ Daily Maximum							
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day							
³ E. Coli – Escherichia Coli Bacteria							
⁴ Thirty (30) day Geometric Mean							
⁵ Seven (7) day Geometric Mean							

The above values are based off of 5-year DMR averages from 10/31/13 to 09/30/18.

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	15	22.5	N/A	1/Quarter	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 ¹	N/A	1/Quarter	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10	15.0 ¹	N/A	1/Quarter	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Quarter	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Quarter	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Quarter	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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:

<https://eec.ky.gov/Environmental-Protection/Forms%20Library/General%20Procedures%20for%20Limitations%20Development.pdf>

3.4.1. Secondary Treatment Standards

Discharges of biochemically degradable wastes are subject to technology-based effluent limitations (TBELs) known as the Secondary Treatment Standards. Both state and federal regulations establish the requirements for secondary treatment. State regulations for secondary treatment only apply to non-POTWs [401 KAR 5:045].

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

3.5. Justification of Requirements

Chapters 5 and 10 of Title 401 of the Kentucky Administrative Regulations (KARs), cited in the following, have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

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 water quality-based effluent limitations (WQBELs) [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. Any WQBELs included in this permit are based upon the Kentucky Water Quality Standards (KYWQS) [401 KAR 10:031].

3.5.1. Flow

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)(ii)] and requirements for recording and reporting of monitoring results [401 KAR 5:050, Section 4 – 40 CFR 122.48].

3.5.2. CBOD₅

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. DOW found that it was necessary to impose WQBELs for this parameter in order to achieve water quality standards. [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [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.

3.5.3. Total Suspended Solids

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [401 KAR 10:031, Section 4(1)(g)].

3.5.4. 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)].

3.5.5. E. Coli

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 7].

3.5.6. pH

The limitations for this parameter are consistent Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(b) and Section 7].

3.5.7. Total Residual Chlorine

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

SECTION 4

OTHER CONDITIONS

4. OTHER CONDITIONS**4.1. Schedule of Compliance**

The permittee is required to comply with all effluent limitations by the effective date of the permit unless a compliance schedule is included with the permit. A schedule of compliance, if included with this permit, is consistent with the regulatory provisions for establishing a schedule of compliance [401 KAR 5:070, Section 3 and 40 CFR 122.47].

4.2. 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.

4.3. 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].

4.4. 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 [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)].

4.5. Certified Laboratory

All environmental analysis is to be performed by a certified laboratory is consistent with the certified wastewater laboratory requirements [401 KAR 5:320, Section 1].

4.6. Connection to Regional Sewer System

In accordance with 401 KAR 5:005, Section 4 if a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility.

4.7. 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 5:010].

4.8. Location Map

Darlington Creek Subdivision HOA



This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DGI), located in Frankfort KY. The data are available at <http://kygeonet.ky.gov>

Darlington Creek Subdivision HOA

- County Boundary Lines
- ▲ WWTP Outfalls
- Package Treatment Plants
- Sewer Lines

Prepared by
Matthew Fields, Ky Division of Water
Date: 11/14/18



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM****FACT SHEET****KPDES No.:** KY0079049**AI No.:** 3901

Delaplain Disposal Company

249 West Yusen Dr.

Georgetown, Scott County, Kentucky

Date: December 10, 2020**Public Notice Information**

Public Notice Start Date: July 21, 2020

Comment Due Date: August 20, 2020

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

<https://eec.ky.gov/Environmental-Protection/Water/Pages/Water-Public-Notices-and-Hearings.aspx>.

Public Notice Comments

Comments must be received by the Division of Water no later than 4:30 PM on the closing date of the comment period. Comments may be submitted by e-mail at: DOWPublicNotice@ky.gov or written comments may be submitted to the Division of Water at 300 Sower Blvd, Frankfort, Kentucky 40601.

Reference Documents

A copy of this proposed fact sheet, proposed permit, the application, other supporting material and the current status of the application may be obtained from the Department for Environmental Protection's Pending Approvals Search Webpage:

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

Open Records

Copies of publicly-available documents supporting this fact sheet and proposed permit may also be obtained from the Department for Environmental Protection Central Office. Information regarding these materials may be obtained from the Open Records Coordinator at (502) 782-6849 or by e-mail at ECC.KORA@ky.gov.

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601

Printed on Recycled Paper

THIS KPDES FACT SHEET CONSISTS OF THE FOLLOWING SECTIONS:

1. FACILITY SYNOPSIS.....4

1.1. Name and Address of Applicant.....4

1.2. Facility Location.....4

1.3. Description of Applicant’s Operation.....4

1.4. Wastewaters Collected and Treatment4

1.5. Permitting Action4

2. RECEIVING / INTAKE WATERS.....6

2.1. Receiving Waters.....6

2.2. Intake Waters – Nearest Downstream Intake.....6

3. OUTFALL 0018

3.1. Outfall Description8

3.2. Reported Values.....8

3.3. Effluent Limitations and Monitoring Requirements9

3.4. Pertinent Factors.....11

3.5. Justification of Requirements.....11

4. OTHER CONDITIONS.....14

4.1. Schedule of Compliance.....14

4.2. Antidegradation14

4.3. Standard Conditions.....14

4.4. Sufficiently Sensitive Analytical Methods14

4.5. Certified Laboratory14

4.6. Connection to Regional Sewer System.....14

4.7. Certified Operators14

4.8. Location Map.....15

SECTION 1

FACILITY SYNOPSIS

1. FACILITY SYNOPSIS

1.1. Name and Address of Applicant

Delaplain Disposal Company
 1029 Monarch St.
 Lexington, KY 40513

1.2. Facility Location

Delaplain Disposal Company
 249 West Yusen Dr.
 Georgetown, Scott County, Kentucky

1.3. Description of Applicant’s Operation

The applicant operates a domestic wastewater treatment plant serving a wastewater treatment plant that services several businesses, as well as residential areas.

1.4. Wastewaters Collected and Treatment

The following table lists the actual average flow reported, the facility’s approved long-term average design treatment capacity, the wastewater types collected, and the treatment type for each outfall:

TABLE 1.				
Outfall No.	Avg. Flow (MGD)	Design Capacity (MGD)	Wastewater Types Collected	Treatment Type
001	0.236	0.24	Domestic Sanitary Wastewater	Rapid Sand Filtration Sedimentation Equalization Chlorine Disinfection Post Aeration Screening Dechlorination Activated Sludge Discharge to Surface Water

1.5. Permitting Action

This is a reissuance of a minor KPDES permit for an existing domestic wastewater treatment plant [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)
UT to Dry Run	WAH, PCR, SCR, DWS	HQ	0.00	0.00

2.2. Intake Waters – Nearest Downstream Intake

TABLE 3.						
Intake Water Name	Public Water Supply Name	Latitude (N) Decimal Degrees	Longitude (W) Decimal Degrees	Miles Downstream	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Kentucky River	Kentucky American Water WTP C	38.356122°	84.874986°	62	172	1,322

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	38.286450°	84.556780°	UT to Dry Run	Domestic Wastewater

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	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
Flow	MGD	0.236	0.355 ¹	N/A	N/A	N/A	N/A
pH	SU	N/A	N/A	6.04	N/A	N/A	8.55
CBOD ₅ ²	mg/l	N/A	N/A	N/A	39.71	44.05	N/A
Total Suspended Solids	mg/l	N/A	N/A	N/A	37.41	96.39	N/A
Ammonia (as mg/l NH ₃ N)							
May 1 – October 31	mg/l	N/A	N/A	N/A	2.15	3.79 ¹	N/A
November 1 – April 30	mg/l	N/A	N/A	N/A	1.94	3.08 ¹	N/A
E. Coli ³	#/100 ml	N/A	N/A	N/A	363.50 ⁴	1205.41 ⁵	N/A
Dissolved Oxygen	mg/l	N/A	N/A	0.30	N/A	N/A	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.14	0.42 ¹	N/A
Total Nitrogen ⁶	mg/l	N/A	N/A	N/A	9.41	16.02	N/A
Total Phosphorus	mg/l	N/A	N/A	N/A	2.69	3.96	N/A
Chronic WET ⁷	TU _c	N/A	N/A	N/A	N/A	N/A	4.02
¹ Daily Maximum							
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day							
³ E. Coli – Escherichia Coli Bacteria							
⁴ Thirty (30) day Geometric Mean							

TABLE 5.

Reported Parameters	Units	EFFLUENT					
		Loadings (lbs/day)		Concentrations			
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
⁵ Seven (7) day Geometric Mean							
⁶ Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen							
⁷ WET – Whole Effluent Toxicity							

The above values are based off of 5-year DMR averages from 05/31/15 to 05/31/20.

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Week	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	10	15	N/A	1/Week	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Week	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0 ¹	N/A	1/Week	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	5.0	7.5 ¹	N/A	1/Week	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Week	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Week	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Week	Grab
Total Nitrogen ⁶	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Composite ³
Total Phosphorus	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Composite ³
Chronic WET ⁷	TU _c	N/A	N/A	N/A	N/A	N/A	1.00	1/Quarter	(⁸)

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		
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									
⁶ Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen									
⁷ WET – Whole Effluent Toxicity									
⁸ Three 24-hr composite samples collected every other day for a period of five 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: <https://eec.ky.gov/Environmental-Protection/Forms%20Library/General%20Procedures%20for%20Limitations%20Development.pdf>.

3.4.1. Federally-Listed Threatened or Endangered Aquatic Species

There are no know federally-listed threatened or endangered aquatic species.

3.4.2. Secondary Treatment Standards

Discharges of biochemically degradable wastes are subject to technology-based effluent limitations (TBELs) known as the Secondary Treatment Standards. Both state and federal regulations establish the requirements for secondary treatment. State regulations for secondary treatment only apply to non-POTWs [401 KAR 5:045].

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

3.5. Justification of Requirements

Chapters 5 and 10 of Title 401 of the Kentucky Administrative Regulations (KARs), cited in the following, have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

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 water quality-based effluent limitations (WQBELs) [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. Any WQBELs included in this permit are based upon the Kentucky Water Quality Standards (KYWQS) [401 KAR 10:031].

3.5.1. Flow

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)(ii)] and requirements for recording and reporting of monitoring results [401 KAR 5:050, Section 4 – 40 CFR 122.48].

3.5.2. CBOD₅

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. DOW found that it was necessary to impose WQBELs for this parameter in order to achieve water quality standards. [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [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.

3.5.3. Total Suspended Solids

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [401 KAR 10:031, Section 4(1)(g)].

3.5.4. 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)].

3.5.5. E. Coli

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 7].

3.5.6. pH

The limitations for this parameter are consistent Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(b) and Section 7].

3.5.7. Total Residual Chlorine

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

3.5.8. Chronic WET

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

3.5.9. Total Phosphorus and Total Nitrogen

Effluent limitations are not included in this permit because the reasonable potential analysis performed did not indicate that this effluent would cause or contribute to an impairment for nutrients. Because excess nutrients impede water quality by causing adverse effects on natural water chemistry and indigenous aquatic community, monitoring is included in this permit for use in future reasonable potential analyses. 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 5:050, Section 4 – 40 CFR 122.48]

SECTION 4

OTHER CONDITIONS

4. OTHER CONDITIONS

4.1. Schedule of Compliance

The permittee is required to comply with all effluent limitations by the effective date of the permit unless a compliance schedule is included with the permit. A schedule of compliance, if included with this permit, is consistent with the regulatory provisions for establishing a schedule of compliance [401 KAR 5:050, Section 4 and 40 CFR 122.47].

4.2. 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.

4.3. 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].

4.4. 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 [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)].

4.5. Certified Laboratory

All environmental analysis is to be performed by a certified laboratory is consistent with the certified wastewater laboratory requirements [401 KAR 5:320, Section 1].

4.6. Connection to Regional Sewer System

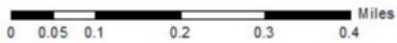
In accordance with 401 KAR 5:005, Section 4 if a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility.

4.7. 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 5:010].

4.8. Location Map

Delaplain Disposal



This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DGI), located in Frankfort KY. The data are available at <http://kygeonet.ky.gov>

Delaplain Disposal

- County Boundary Lines
- Water Treatment Plants
- WWTP Outfalls
- Sewer Lines
- Package Treatment Plants

Prepared by
Matthew Fields, Ky Division of Water
Date: 07/02/20



KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KY0079049

AGENCY INTEREST NO.: 3901

Pursuant to Authority in KRS 224,

Delaplain Disposal Company
1029 Monarch St.
Lexington, KY 40513

is authorized to discharge from a facility located at

Delaplain Disposal Company
249 West Yusen Dr.
Georgetown, Scott County, Kentucky

to receiving waters named

UT to Dry Run

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

This permit shall become effective February 1, 2021.

This permit and the authorization to discharge shall expire at midnight, January 31, 2026.

Date Signed: December 10, 2020

A handwritten signature in black ink, appearing to read "Paul M. Miller".

**Paul Miller, P.E.
Director, Division of Water**

**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:

- 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.....5**
 - 1.1. Compliance Monitoring Locations (Outfalls) 5
 - 1.2. Effluent Limitations and Monitoring Requirements 5
 - 1.3. Standard Effluent Requirements 6
- 2. STANDARD CONDITIONS.....8**
 - 2.1. Duty to Comply 8
 - 2.2. Duty to Reapply..... 8
 - 2.3. Need to Halt or Reduce Activity Not a Defense..... 8
 - 2.4. Duty to Mitigate..... 8
 - 2.5. Proper Operation and Maintenance..... 8
 - 2.6. Permit Actions..... 8
 - 2.7. Property Rights 8
 - 2.8. Duty to Provide Information..... 8
 - 2.9. Inspection and Entry 8
 - 2.10. Monitoring and Records 9
 - 2.11. Signatory Requirement..... 9
 - 2.12. Reporting Requirements..... 10
 - 2.13. Bypass 11
 - 2.14. Upset..... 12
- 3. WET TESTING REQUIREMENTS14**
 - 3.1. Sampling Requirements 14
 - 3.2. Test Requirements 14
 - 3.3. Serial Dilutions 14
 - 3.4. Controls..... 14
 - 3.5. Test Methods 15
 - 3.6. Reduction to Single Species Testing..... 15
 - 3.7. Reduction in Monitoring Frequency 15
 - 3.8. Reporting Requirements..... 15
 - 3.9. Test Results 15
 - 3.10. Accelerated Testing..... 16
 - 3.11. WET TRE 16
- 4. OTHER CONDITIONS18**
 - 4.1. Schedule of Compliance..... 18
 - 4.2. Other Permits..... 18

- 4.3. Continuation of Expiring Permit..... 18
- 4.4. Antidegradation 18
- 4.5. Reopener Clause 18
- 4.6. Connection to Regional Sewer System 18
- 4.7. Certified Operators 18
- 4.8. Outfall Signage 18
- 5. MONITORING AND REPORTING REQUIREMENTS20**
- 5.1. KPDES Outfalls..... 20
- 5.2. Sufficiently Sensitive Analytical Methods 20
- 5.3. Certified Laboratory Requirements 20
- 5.4. Submission of DMRs 20

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 latitude and longitude 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	38.286450°	84.556780°	UT to Dry Run	Domestic Wastewater

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Week	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	10	15	N/A	1/Week	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Week	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0 ¹	N/A	1/Week	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	5.0	7.5 ¹	N/A	1/Week	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Week	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Week	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Week	Grab
Total Nitrogen ⁶	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Composite ³
Total Phosphorus	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Composite ³
Chronic WET ⁷	TU _C	N/A	N/A	N/A	N/A	N/A	1.00	1/Quarter	(⁸)

¹Daily Maximum

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		
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									
⁶ Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen									
⁷ WET – Whole Effluent Toxicity									
⁸ Three 24-hr composite samples collected every other day for a period of five 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.

SECTION 2

STANDARD CONDITIONS

2. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

2.1. 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.

2.2. 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.

2.3. 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.

2.4. 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.

2.5. 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.

2.6. 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.

2.7. Property Rights

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

2.8. 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.

2.9. 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.

2.10. 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.

2.11. 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.

2.12. Reporting Requirements

2.12.1. 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.

2.12.2. 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.

2.12.3. 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].

2.12.4. 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.

2.12.5. 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.

2.12.6. 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.

2.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 2.12.1, 2.12.4, 2.12.5 and 2.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 2.12.6.

2.12.8. 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.

2.13. Bypass

2.13.1. 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.

2.13.2. 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 2.13.3 and 2.13.4.

2.13.3. 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 2.12.6.

2.13.4. 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 2.13.3.

(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 2.13.4.

2.14. Upset

2.14.1. 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.

2.14.2. 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 2.14.3 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.

2.14.3. 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 2.12.6; and
- (4) The permittee complied with any remedial measures required under Section 2.4.

2.14.4. Burden of Proof

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

SECTION 3

WET TESTING REQUIREMENTS

3. 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.

3.1. Sampling Requirements

Tests shall be conducted on a minimum of three (3) 24-hour composite samples 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°C during collection, storage, transport and until used in the test by the laboratory.

3.2. 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.

3.3. 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.

3.4. 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.

3.5. 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 (4th Edition), EPA-821-R-02-013, the most recent edition of this publication, or as approved in advance by DOW.

3.6. 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.

3.7. Reduction in Monitoring Frequency

The permittee may request a reduction in the frequency of WET testing upon demonstration that no test failures, incomplete tests, or invalid tests occurred during the following specified timeframes:

- (1) Existing facilities: four (4) consecutive quarters;
- (2) New or expanded facilities: eight (8) consecutive quarters.

New and expanded facilities are defined in the above Requirements Effective Dates Section of this permit. In the event of the failure of an annual test or non-submission by January 28th of the year following the completion of the test, the permittee will again be subject to quarterly WET testing.

3.8. 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.

3.9. 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 IC₂₅ (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.

3.10. 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.

3.11. 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 4

OTHER CONDITIONS

4. OTHER CONDITIONS

4.1. Schedule of Compliance

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

4.2. 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.

4.3. 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).

4.4. 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 Socioeconomic Demonstration and Alternatives Analysis (SDAA) submitted with the KPDES permit application.

4.5. 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.

4.6. Connection to Regional Sewer System

This WWTP is temporary and in no way supersedes the need of a regional sewer system. The permittee shall eliminate the discharge and WWTP plant by connection to a regional sewer system when it becomes available as defined in 401 KAR 5:002.

4.7. Certified Operators

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

4.8. Outfall Signage

This 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 5

MONITORING AND REPORTING REQUIREMENTS

5. MONITORING AND REPORTING REQUIREMENTS

5.1. 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.

5.2. 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.

5.3. 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.

5.4. 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.

**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM****FACT SHEET****KPDES No.:** KY0086967**AI No.:** 1388

Fox Run WWTF

U.S. Highway 60 West

Frankfort, Franklin County, Kentucky

Date: November 19, 2019**Public Notice Information**

Public Notice Start Date: July 17, 2019

Comment Due Date: August 16, 2019

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

<https://eec.ky.gov/Environmental-Protection/Water/Pages/Water-Public-Notices-and-Hearings.aspx>.

Public Notice Comments

Comments must be received by the Division of Water no later than 4:30 PM on the closing date of the comment period. Comments may be submitted by e-mail at: DOWPublicNotice@ky.gov or written comments may be submitted to the Division of Water at 300 Sower Blvd, Frankfort, Kentucky 40601.

Reference Documents

A copy of this proposed fact sheet, proposed permit, the application, other supporting material and the current status of the application may be obtained from the Department for Environmental Protection's Pending Approvals Search Webpage:

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

Open Records

Copies of publicly-available documents supporting this fact sheet and proposed permit may also be obtained from the Department for Environmental Protection Central Office. Information regarding these materials may be obtained from the Open Records Coordinator at (502) 782-6849 or by e-mail at ECC.KORA@ky.gov.

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601

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THIS KPDES FACT SHEET CONSISTS OF THE FOLLOWING SECTIONS:

1. FACILITY SYNOPSIS.....4

1.1. Name and Address of Applicant.....4

1.2. Facility Location.....4

1.3. Description of Applicant’s Operation.....4

1.4. Wastewaters Collected and Treatment4

1.5. Permitting Action4

2. RECEIVING / INTAKE WATERS.....6

2.1. Receiving Waters.....6

2.2. Intake Waters – Nearest Downstream Intake.....6

3. OUTFALL 0018

3.1. Outfall Description8

3.2. Reported Values.....8

3.3. Effluent Limitations and Monitoring Requirements9

3.4. Pertinent Factors.....10

3.5. Justification of Requirements.....10

4. OTHER CONDITIONS.....13

4.1. Schedule of Compliance.....13

4.2. Antidegradation13

4.3. Standard Conditions.....13

4.4. Sufficiently Sensitive Analytical Methods13

4.5. Certified Laboratory13

4.6. Connection to Regional Sewer System.....13

4.7. Certified Operators13

4.8. Location Map.....14

SECTION 1

FACILITY SYNOPSIS

1. FACILITY SYNOPSIS

1.1. Name and Address of Applicant

Bluegrass Water Utility Operating Company, LLC
 500 Northwest Plaza Dr., Ste. 500
 St. Ann, MO 63074

1.2. Facility Location

Fox Run WWTF
 U.S. Highway 60 West
 Frankfort, Franklin County, Kentucky

1.3. Description of Applicant’s Operation

The applicant operates a domestic wastewater treatment plant serving a subdivision.

1.4. Wastewaters Collected and Treatment

The following table lists the actual average flow reported, the facility’s approved long-term average design treatment capacity, the wastewater types collected, and the treatment type for each outfall:

TABLE 1.				
Outfall No.	Avg. Flow (MGD)	Design Capacity (MGD)	Wastewater Types Collected	Treatment Type
001	0.012	0.020	Sanitary	Aeration, Clarifier, Sand Filter, Disinfection, Dechlorination, Post Aeration

1.5. Permitting Action

This is a reissuance of a minor KPDES permit for an existing domestic wastewater treatment plant [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)
UT to UT to South Benson Creek	WAH PCR SCR DWS	HQ	0.0	0.0
This segment of UT to UT to South Benson Creek is not listed as impaired in the 2016 303(d) List of Waters for Kentucky.				

2.2. Intake Waters – Nearest Downstream Intake

TABLE 3.						
Intake Water Name	Public Water Supply Name	Latitude (N) Decimal Degrees	Longitude (W) Decimal Degrees	Miles Downstream	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Kentucky River/ 48.8	Kentucky American Water WTP Plant C	38.356122°	84.874986°	29.8	172	1,322

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	38.17043°	84.93664°	UT to UT to South Benson Creek at milepost 5.5	Domestic Wastewater

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	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
Flow	MGD	0.017	0.019 ¹	N/A	N/A	N/A	N/A
pH	SU	N/A	N/A	6.3	N/A	N/A	8.3
CBOD ₅ ²	mg/l	N/A	N/A	N/A	15.02	33.2	N/A
Total Suspended Solids	mg/l	N/A	N/A	N/A	8.04	31	N/A
Ammonia (as mg/l NH ₃ N)							
May 1 – October 31	mg/l	N/A	N/A	N/A	7.48	49.4 ¹	N/A
November 1 – April 30	mg/l	N/A	N/A	N/A	1.87	6.93 ¹	N/A
E. Coli ³	#/100 ml	N/A	N/A	N/A	80.3 ⁴	169 ⁵	N/A
Dissolved Oxygen	mg/l	N/A	N/A	7	N/A	N/A	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.0087	0.04 ¹	N/A
¹ Daily Maximum							
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day							
³ E. Coli – Escherichia Coli Bacteria							
⁴ Thirty (30) day Geometric Mean							
⁵ Seven (7) day Geometric Mean							

The above values are based off of 5-year DMR averages from 5/1/14 to 6/27/19.

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Month	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 ¹	N/A	1/Month	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10	15 ¹	N/A	1/Month	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Month	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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:

<https://eec.ky.gov/Environmental-Protection/Forms%20Library/General%20Procedures%20for%20Limitations%20Development.pdf>

3.4.1. Federally-Listed Threatened or Endangered Aquatic Species

There are no know federally-listed threatened or endangered aquatic species.

3.4.2. Secondary Treatment Standards

Discharges of biochemically degradable wastes are subject to technology-based effluent limitations (TBELs) known as the Secondary Treatment Standards. Both state and federal regulations establish the requirements for secondary treatment. State regulations for secondary treatment only apply to non-POTWs [401 KAR 5:045].

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

3.5. Justification of Requirements

Chapters 5 and 10 of Title 401 of the Kentucky Administrative Regulations (KARs), cited in the following, have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

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 water quality-based effluent limitations (WQBELs) [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. Any WQBELs included in this permit are based upon the Kentucky Water Quality Standards (KYWQS) [401 KAR 10:031].

3.5.1. Flow

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)(ii)] and requirements for recording and reporting of monitoring results [401 KAR 5:050, Section 4 – 40 CFR 122.48].

3.5.2. CBOD₅

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. DOW found that it was necessary to impose WQBELs for this parameter in order to achieve water quality standards. [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [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.

3.5.3. Total Suspended Solids

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. These effluent limitations are also consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(g)].

3.5.4. 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)].

3.5.5. E. Coli

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 7].

3.5.6. pH

The limitations for this parameter are consistent Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(b) and Section 7].

3.5.7. Total Residual Chlorine

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

SECTION 4

OTHER CONDITIONS

4. OTHER CONDITIONS

4.1. Schedule of Compliance

The permittee is required to comply with all effluent limitations by the effective date of the permit unless a compliance schedule is included with the permit. A schedule of compliance, if included with this permit, is consistent with the regulatory provisions for establishing a schedule of compliance [401 KAR 5:050, Section 4 and 40 CFR 122.47].

4.2. 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.

4.3. 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].

4.4. 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 [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)].

4.5. Certified Laboratory

All environmental analysis is to be performed by a certified laboratory is consistent with the certified wastewater laboratory requirements [401 KAR 5:320, Section 1].

4.6. Connection to Regional Sewer System

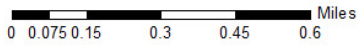
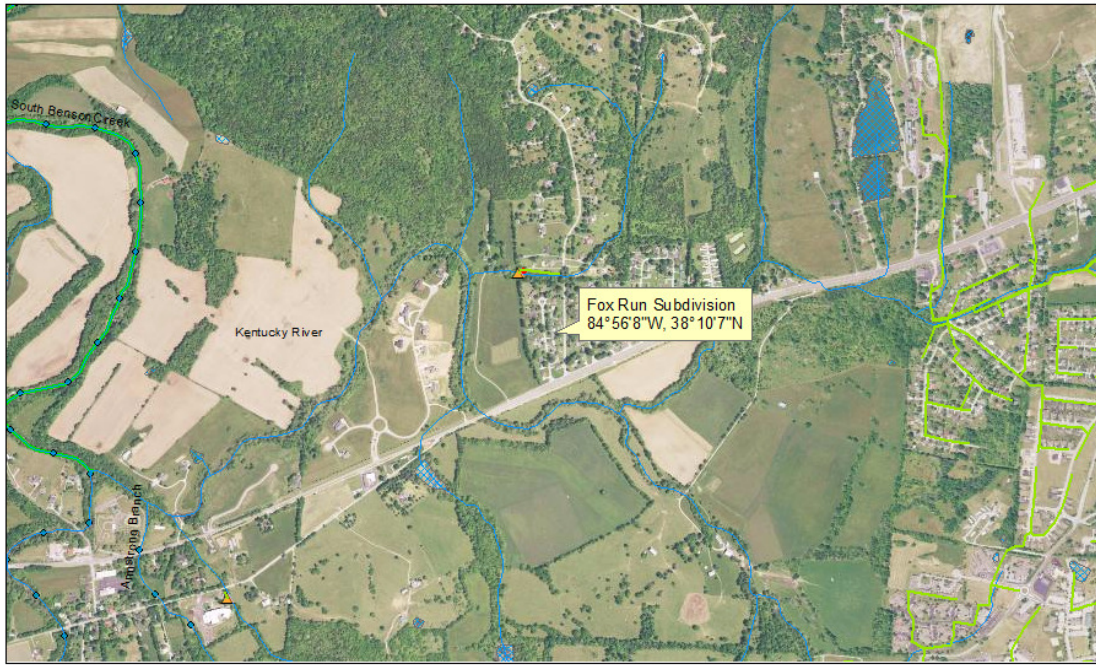
In accordance with 401 KAR 5:005, Section 4 if a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility.

4.7. 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 5:010].

4.8. Location Map

Fox Run Subdivision- KY0086967



This data is distributed by the Commonwealth of Kentucky, Division of Geographic Information (DGI), located in Frankfort KY
 The data are available at <http://kygeonet.ky.gov>

Legend

- Sewer Lines
- DOW Domestic Water Supply Intakes
- WWTP Outfalls
- Wastewater Treatment Plants
- DOW River Mile Points
- 24K NHD Flowline Features (Streams, ditches, etc.)
- Water Treatment Plants

Prepared by
 Tyler Cook, Ky Division of Water
 Date: 7/1/2019



KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KY0086967

AGENCY INTEREST NO.: 1388

Pursuant to Authority in KRS 224,

Bluegrass Water Utility Operating Company, LLC
500 Northwest Plaza Dr., Ste. 500
St. Ann, MO 63074

is authorized to discharge from a facility located at

Fox Run WWTF
U.S. Highway 60 West
Frankfort, Franklin County, Kentucky

to receiving waters named

UT to UT to South Benson Creek

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

This permit shall become effective on January 1, 2020.

This permit and the authorization to discharge shall expire at midnight, December 31, 2024.

November 19, 2019

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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THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.....4

1.1. Compliance Monitoring Locations (Outfalls) 4

1.2. Effluent Limitations and Monitoring Requirements 4

1.3. Standard Effluent Requirements 5

2. STANDARD CONDITIONS.....7

2.1. Duty to Comply 7

2.2. Duty to Reapply..... 7

2.3. Need to Halt or Reduce Activity Not a Defense..... 7

2.4. Duty to Mitigate 7

2.5. Proper Operation and Maintenance 7

2.6. Permit Actions..... 7

2.7. Property Rights 7

2.8. Duty to Provide Information 7

2.9. Inspection and Entry 8

2.10. Monitoring and Records 8

2.11. Signatory Requirement 9

2.12. Reporting Requirements..... 9

2.13. Bypass 10

2.14. Upset 11

3. OTHER CONDITIONS14

3.1. Schedule of Compliance..... 14

3.2. Other Permits..... 14

3.3. Continuation of Expiring Permit..... 14

3.4. Antidegradation 14

3.5. Reopener Clause 14

3.6. Connection to Regional Sewer System 14

3.7. Certified Operators 14

3.8. Outfall Signage 14

4. MONITORING AND REPORTING REQUIREMENTS16

4.1. KPDES Outfalls..... 16

4.2. Sufficiently Sensitive Analytical Methods 16

4.3. Certified Laboratory Requirements 16

4.4. Submission of DMRs 16

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 latitude and longitude 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	38.17043°	84.93664°	UT to UT to South Benson Creek at milepost 5.5	Domestic Wastewater

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Month	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 ¹	N/A	1/Month	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10	15 ¹	N/A	1/Month	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Month	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									

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		
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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.

SECTION 2

STANDARD CONDITIONS

2. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

2.1. 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.

2.2. 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.

2.3. 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.

2.4. 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.

2.5. 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.

2.6. 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.

2.7. Property Rights

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

2.8. 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.

2.9. 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.

2.10. 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.

2.11. 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.

2.12. Reporting Requirements**2.12.1. 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.

2.12.2. 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.

2.12.3. 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].

2.12.4. 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.

2.12.5. 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.

2.12.6. 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.

2.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 2.12.1, 2.12.4, 2.12.5 and 2.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 2.12.6.

2.12.8. 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.

2.13. Bypass

2.13.1. 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.

2.13.2. 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 2.13.3 and 2.13.4.

2.13.3. 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 2.12.6.

2.13.4. 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 2.13.3.

(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 2.13.4.

2.14. Upset**2.14.1. 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.

2.14.2. 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 2.14.3 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.

2.14.3. 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 2.12.6; and

(4) The permittee complied with any remedial measures required under Section 2.4.

2.14.4. Burden of Proof

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

SECTION 3

OTHER CONDITIONS

3. OTHER CONDITIONS

3.1. Schedule of Compliance

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

3.2. 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.

3.3. 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).

3.4. 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 Socioeconomic Demonstration and Alternatives Analysis (SDAA) submitted with the KPDES permit application.

3.5. 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.

3.6. Connection to Regional Sewer System

This WWTP is temporary and in no way supersedes the need of a regional sewer system. The permittee shall eliminate the discharge and WWTP plant by connection to a regional sewer system when it becomes available as defined in 401 KAR 5:002.

3.7. Certified Operators

The wastewater treatment plant shall be under the primary responsibility of a Class I Wastewater Treatment Plant Certified Operator or higher.

3.8. Outfall Signage

This 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 4

MONITORING AND REPORTING REQUIREMENTS

4. MONITORING AND REPORTING REQUIREMENTS

4.1. 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.

4.2. 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.

4.3. 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.

4.4. 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.

**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM****FACT SHEET**

KPDES No.: KY0044164
AI No.: 2935
Golden Acres WWTP
U.S. Highway 68 Golden Acres Loop
Calvert City, Marshall County, Kentucky

Date: June 3, 2020

Public Notice Information

Public Notice Start Date: February 18, 2020

Comment Due Date: March 19, 2020

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

<https://eec.ky.gov/Environmental-Protection/Water/Pages/Water-Public-Notices-and-Hearings.aspx>.

Public Notice Comments

Comments must be received by the Division of Water no later than 4:30 PM on the closing date of the comment period. Comments may be submitted by e-mail at: DOWPublicNotice@ky.gov or written comments may be submitted to the Division of Water at 300 Sower Blvd, Frankfort, Kentucky 40601.

Reference Documents

A copy of this proposed fact sheet, proposed permit, the application, other supporting material and the current status of the application may be obtained from the Department for Environmental Protection's Pending Approvals Search Webpage:

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

Open Records

Copies of publicly-available documents supporting this fact sheet and proposed permit may also be obtained from the Department for Environmental Protection Central Office. Information regarding these materials may be obtained from the Open Records Coordinator at (502) 782-6849 or by e-mail at ECC.KORA@ky.gov.

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601

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THIS KPDES FACT SHEET CONSISTS OF THE FOLLOWING SECTIONS:

1. FACILITY SYNOPSIS.....4

1.1. Name and Address of Applicant.....4

1.2. Facility Location.....4

1.3. Description of Applicant’s Operation.....4

1.4. Wastewaters Collected and Treatment4

1.5. Permitting Action4

2. RECEIVING / INTAKE WATERS.....6

2.1. Receiving Waters.....6

2.2. Intake Waters – Nearest Downstream Intake.....6

3. OUTFALL 0018

3.1. Outfall Description8

3.2. Reported Values.....8

3.3. Effluent Limitations and Monitoring Requirements9

3.4. Pertinent Factors.....10

3.5. Justification of Requirements.....10

4. OTHER CONDITIONS.....13

4.1. Schedule of Compliance.....13

4.2. Antidegradation13

4.3. Standard Conditions.....13

4.4. Sufficiently Sensitive Analytical Methods13

4.5. Certified Laboratory13

4.6. Connection to Regional Sewer System.....13

4.7. Certified Operators13

4.8. Location Map.....14

SECTION 1

FACILITY SYNOPSIS

1. FACILITY SYNOPSIS

1.1. Name and Address of Applicant

Bluegrass Water Utility Operating Company, LLC
 500 Northwest Plaza Drive, Suite 500
 St. Ann, Missouri 63074

1.2. Facility Location

Golden Acres WWTP
 U.S. Highway 68 Golden Acres Loop
 Calvert City, Marshall County, Kentucky

1.3. Description of Applicant’s Operation

The applicant operates a domestic wastewater treatment plant serving a subdivision.

1.4. Wastewaters Collected and Treatment

The following table lists the actual average flow reported, the facility’s approved long-term average design treatment capacity, the wastewater types collected, and the treatment type for each outfall:

TABLE 1.				
Outfall No.	Avg. Flow (MGD)	Design Capacity (MGD)	Wastewater Types Collected	Treatment Type
001	0.019	0.025	Domestic Sanitary	Screening Aeration Basin Sedimentation Chlorine Disinfection Dechlorination Discharge to Surface Water

1.5. Permitting Action

This is a reissuance of a minor KPDES permit for an existing domestic wastewater treatment plant [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)
UT to Clarks River	WAH PCR SCR DWS	HQ	0.0	0.0

2.2. Intake Waters – Nearest Downstream Intake

TABLE 3.						
Intake Water Name	Public Water Supply Name	Latitude (N) Decimal Degrees	Longitude (W) Decimal Degrees	Miles Downstream	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Ohio River	Paducah Water Works	37.099114°	88.607375°	24.5	51,000	175,000

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	36.972741°	88.480964°	UT to Clarks River	Domestic Wastewater

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	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
Flow	MGD	0.019	0.019 ¹	N/A	N/A	N/A	N/A
pH	SU	N/A	N/A	6.3	N/A	N/A	8.2
CBOD ₅ ²	mg/l	1.52	1.58	N/A	11.7	14.8	N/A
Total Suspended Solids	mg/l	1.53	1.53	N/A	10.8	12.4	N/A
Ammonia (as mg/l NH ₃ N)							
May 1 – October 31	mg/l	0.88	0.88	N/A	7.09	7.09 ¹	N/A
November 1 – April 30	mg/l	0.41	0.41	N/A	4.81	6.20 ¹	N/A
E. Coli ³	#/100 ml	N/A	N/A	N/A	3957 ⁴	3815 ⁵	N/A
Dissolved Oxygen	mg/l	N/A	N/A	1.8	N/A	N/A	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.022	0.022 ¹	N/A
¹ Daily Maximum							
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day							
³ E. Coli – Escherichia Coli Bacteria							
⁴ Thirty (30) day Geometric Mean							
⁵ Seven (7) day Geometric Mean							

The above values are based off of 5-year DMR averages from 03/31/2015 to 12/31/2019.

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab
CBOD ₅ ²	mg/l	N/A	N/A	N/A	25	37.5	N/A	1/Quarter	Composite ³
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite ³
Ammonia (as mg/l NH ₃ N)									
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 ¹	N/A	1/Quarter	Composite ³
November 1 – April 30	mg/l	N/A	N/A	N/A	10	15 ¹	N/A	1/Quarter	Composite ³
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Quarter	Grab
E. Coli ⁴	#/100 ml	N/A	N/A	N/A	130 ⁵	240 ⁶	N/A	1/Quarter	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 ¹	N/A	1/Quarter	Grab
¹ Daily Maximum									
² CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day									
³ 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									
⁴ E. Coli – Escherichia Coli Bacteria									
⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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: <https://eec.ky.gov/Environmental-Protection/Forms%20Library/General%20Procedures%20for%20Limitations%20Development.pdf>.

3.4.1. Secondary Treatment Standards

Discharges of biochemically degradable wastes are subject to technology-based effluent limitations (TBELs) known as the Secondary Treatment Standards. Both state and federal regulations establish the requirements for secondary treatment. State regulations for secondary treatment only apply to non-POTWs [401 KAR 5:045].

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

3.5. Justification of Requirements

Chapters 5 and 10 of Title 401 of the Kentucky Administrative Regulations (KARs), cited in the following, have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

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 water quality-based effluent limitations (WQBELs) [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. Any WQBELs included in this permit are based upon the Kentucky Water Quality Standards (KYWQS) [401 KAR 10:031].

3.5.1. Flow

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)(ii)] and requirements for recording and reporting of monitoring results [401 KAR 5:050, Section 4 – 40 CFR 122.48].

3.5.2. CBOD₅

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. DOW found that it was necessary to impose WQBELs for this parameter in order to achieve water quality standards. [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(d)]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [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.

3.5.3. Total Suspended Solids

The limitations for this parameter are consistent with the secondary treatment standards for biochemically degradable wastes as defined in state regulations [401 KAR 5:045, Section 3]. These effluent limitations are also consistent with Kentucky’s Water Quality Standards [401 KAR 10:031, Section 4(1)(g)].

3.5.4. 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)].

3.5.5. E. Coli

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 7].

3.5.6. pH

The limitations for this parameter are consistent Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(b) and Section 7].

3.5.7. Total Residual Chlorine

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

SECTION 4

OTHER CONDITIONS

4. OTHER CONDITIONS

4.1. Schedule of Compliance

The permittee is required to comply with all effluent limitations by the effective date of the permit unless a compliance schedule is included with the permit. A schedule of compliance, if included with this permit, is consistent with the regulatory provisions for establishing a schedule of compliance [401 KAR 5:050, Section 4 and 40 CFR 122.47].

4.2. 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.

4.3. 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].

4.4. 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 [401 KAR 5:065, Section 2(4) – 40 CFR 122.44(i)].

4.5. Certified Laboratory

All environmental analysis is to be performed by a certified laboratory is consistent with the certified wastewater laboratory requirements [401 KAR 5:320, Section 1].

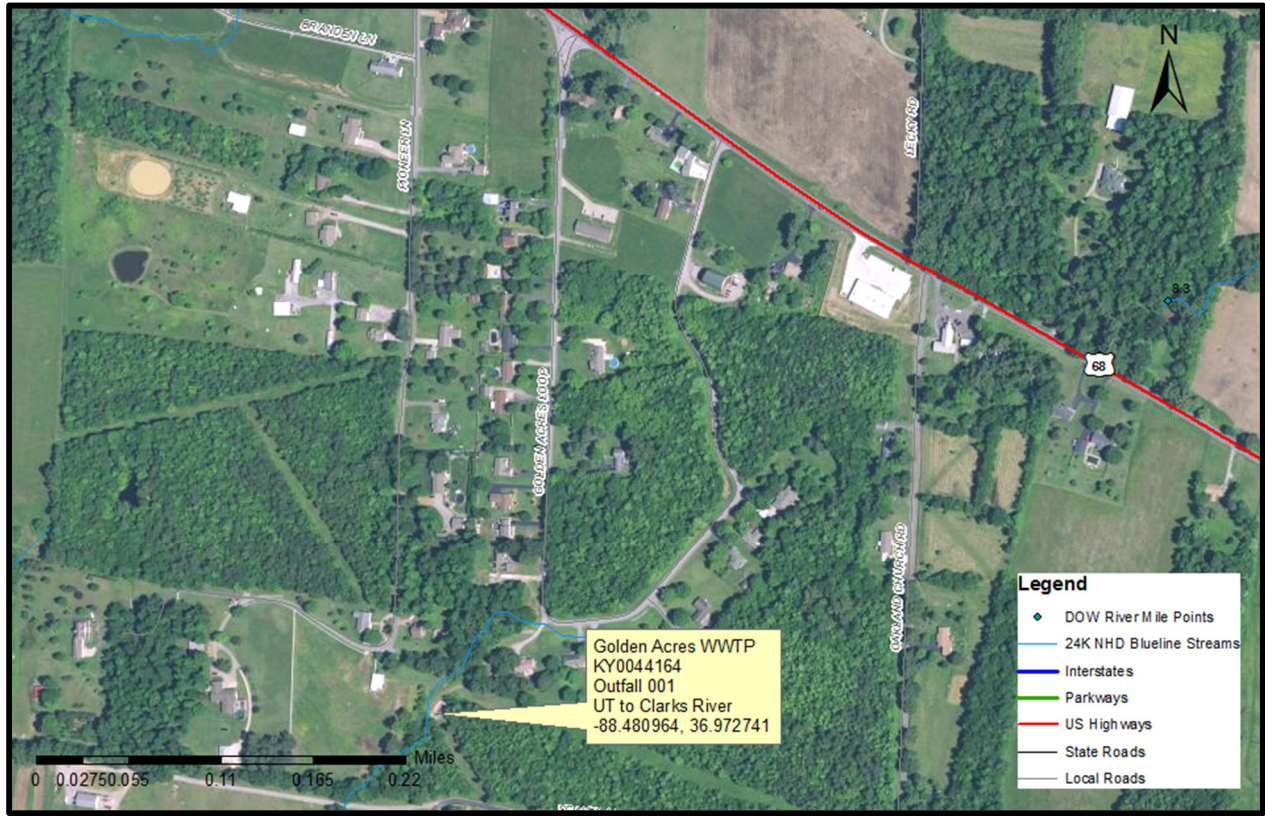
4.6. Connection to Regional Sewer System

In accordance with 401 KAR 5:005, Section 4 if a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility.

4.7. 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 5:010].

4.8. Location Map



KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KY0044164

AGENCY INTEREST NO.: 2935

Pursuant to Authority in KRS 224,

Bluegrass Water Utility Operating Company, LLC
500 Northwest Plaza Drive, Suite 500
St. Ann, Missouri 63074

is authorized to discharge from a facility located at

Golden Acres WWTP
U.S. Highway 68 Golden Acres Loop
Calvert City, Marshall County, Kentucky

to receiving waters named

UT to Clarks River

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

This permit shall become effective on August 1, 2020.

This permit and the authorization to discharge shall expire at midnight, July 31, 2025.

Date Signed: June 3, 2020

A handwritten signature in black ink, appearing to read "Paul Miller".

Paul Miller, P.E.
Director, Division of Water

**DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 300 Sower Blvd, Frankfort, Kentucky 40601**

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THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:

- 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.....4**
- 1.1. Compliance Monitoring Locations (Outfalls) 4
- 1.2. Effluent Limitations and Monitoring Requirements 4
- 1.3. Standard Effluent Requirements 5
- 2. STANDARD CONDITIONS.....7**
- 2.1. Duty to Comply 7
- 2.2. Duty to Reapply..... 7
- 2.3. Need to Halt or Reduce Activity Not a Defense..... 7
- 2.4. Duty to Mitigate..... 7
- 2.5. Proper Operation and Maintenance..... 7
- 2.6. Permit Actions..... 7
- 2.7. Property Rights 7
- 2.8. Duty to Provide Information 7
- 2.9. Inspection and Entry 8
- 2.10. Monitoring and Records 8
- 2.11. Signatory Requirement 9
- 2.12. Reporting Requirements..... 9
- 2.13. Bypass 10
- 2.14. Upset..... 11
- 3. OTHER CONDITIONS14**
- 3.1. Schedule of Compliance..... 14
- 3.2. Other Permits..... 14
- 3.3. Continuation of Expiring Permit..... 14
- 3.4. Antidegradation 14
- 3.5. Reopener Clause 14
- 3.6. Connection to Regional Sewer System 14
- 3.7. Certified Operators 14
- 3.8. Outfall Signage 14
- 4. MONITORING AND REPORTING REQUIREMENTS16**
- 4.1. KPDES Outfalls..... 16
- 4.2. Sufficiently Sensitive Analytical Methods 16
- 4.3. Certified Laboratory Requirements 16
- 4.4. Submission of DMRs 16

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 latitude and longitude 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	36.972741°	88.480964°	UT to Clarks River	Domestic Wastewater

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	MGD	Report	Report ¹	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab
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⁵ Thirty (30) day Geometric Mean									
⁶ Seven (7) day Geometric Mean									

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.