# 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 technologybased 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 353 of 538

# 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.

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# **SECTION 4**

# **MONITORING AND REPORTING REQUIREMENTS**

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# 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 28<sup>th</sup> 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: <u>http://water.ky.gov/permitting/Pages/netDMRInformation.aspx</u> or contact the DMR Coordinator at (502) 564-3410.



KPDES No.: KY0041122 AI No.: 4032 Moon River Marina & Resort 3025 Rockcastle Rd. Cadiz, Trigg County, Kentucky

Date: October 21, 2019

**Public Notice Information** 

Public Notice Start Date: June 17, 2019

Comment Due Date: July 17, 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: <u>DOWPublicNotice@ky.gov</u> 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 <u>EEC.KORA@ky.gov</u>.

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

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

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# **SECTION 1** FACILITY SYNOPSIS

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# 1. FACILITY SYNOPSIS

# 1.1. Name and Address of Applicant

Moon River Marina & Resort 3025 Rockcastle Rd. Cadiz, KY 42211

# 1.2. Facility Location

Moon River Marina & Resort 3025 Rockcastle Rd. Cadiz, Trigg County, Kentucky

# **1.3.** Description of Applicant's Operation

The applicant operates a domestic wastewater treatment plant serving a bait and tackle food store, restaurant, coin laundry, and 15 cottages.

# 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.			Wastewater Types Collected	Treatment Type							
001	0.0006	0.001	Domestic (Sanitary) Wastewater	Extended Aeration Clarifier Chlorine Disinfection							

# 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 361 of 538

# 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.

	TABLE 2.			
Receiving Water Name	Use Designation	Antidegradation Category	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Little River (Lake Barkley)	WAH, PCR, SCR, DWS	HQ	N/A (Lake)	N/A (Lake)

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

# 2.2. Intake Waters – Nearest Downstream Intake

	ТАВ	LE 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)
Cumberland River	Princeton Water Department Barkley Lake WTP	37.023111°	86.062656°	19.7	N/A (Lake)	N/A (Lake)

# SECTION 3 OUTFALL 001

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# 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						
Γ	External	36.868104°	87.888910°	Little River (Lake Barkley)	Domestic Wastewater					

#### 3.2. Reported Values

The following table summarizes the reported values for Outfall 001:

TABLE 5.										
		EFFLUENT								
Reported Parameters	Units	Loadings (lbs/day)			Concentrations					
Reported Parameters	Onits	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum			
Flow	MGD	0.0006	0.001 <sup>1</sup>	N/A	N/A	N/A	N/A			
рН	SU	N/A	N/A	6.36	N/A	N/A	8.21			
BOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	65.53	65.53	N/A			
Total Suspended Solids	mg/l	N/A	N/A	N/A	108.63	108.63	N/A			
Ammonia (as mg/l NH₃N)	mg/l	N/A	N/A	N/A	25.67	25.67 <sup>1</sup>	N/A			
E. Coli <sup>3</sup>	#/100 ml	N/A	N/A	N/A	4776.6 <sup>4</sup>	4776.6 <sup>5</sup>	N/A			
Dissolved Oxygen	mg/l	N/A	N/A	0.57	N/A	N/A	N/A			
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.02	0.02 <sup>1</sup>	N/A			
<sup>1</sup> Daily Maximum										
<sup>2</sup> BOD <sub>5</sub> – Biochemical Oxygen Demand, 5-day										
<sup>3</sup> E. Coli – Escherichia Coli Bacteria										
<sup>4</sup> Thirty (30) day Geometric Mean										
<sup>5</sup> Seven (7) day Geometric Mean										

The above values are based off of 5-year DMR averages from 09/30/14 to 03/31/19.

# 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	
		Loadings	(lbs/day)		Conce	entrations		Frequency		
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum		Sample Type	
Flow	MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous	
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab	
BOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite <sup>3</sup>	
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite <sup>3</sup>	
Ammonia (as mg/l NH <sub>3</sub> N)	mg/l	N/A	N/A	N/A	20	30 <sup>1</sup>	N/A	1/Quarter	Composite <sup>3</sup>	
Dissolved Oxygen	mg/l	N/A	N/A	2.0	N/A	N/A	N/A	1/Quarter	Grab	
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Quarter	Grab	
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Quarter	Grab	
<sup>1</sup> Daily Maximum										
<sup>2</sup> BOD <sub>5</sub> – Biochemical Oxygen	Demand, 5-day	1								
<sup>3</sup> A sample composed of four of that the aggregate sample re-	-		-		-	-	d no more than t	wenty-four hours	s and aggregated so	
<sup>4</sup> E. Coli – Escherichia Coli Bact	teria									
<sup>5</sup> Thirty (30) day Geometric M	ean									
<sup>6</sup> Seven (7) day Geometric Me	an									

# 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/Water/PermitCert/KPDES/Pages/default.aspx.

# 3.4.1. <u>Secondary Treatment Standards</u>

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						
BOD₅ (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. <u>Flow</u>

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. <u>BOD</u><sub>5</sub>

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)(e) & (i) – respectively].

# 3.5.3. <u>Total Suspended Solids</u>

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)].

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# 3.5.5. <u>E. Coli</u>

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

# 3.5.6. <u>pH</u>

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

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# 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



# Moon River Marina & Resort

liles

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

#### Moon River Marina & Resort

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

Prepared by Matthew Fields, Ky Division of Water Date: 06/12/19



Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 370 of 538



# AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

**PERMIT NO.: KY0041122** 

# AGENCY INTEREST NO.: 4032

#### Pursuant to Authority in KRS 224,

Moon River Marina & Resort 3025 Rockcastle Rd. Cadiz, KY 42211

#### is authorized to discharge from a facility located at

Moon River Marina & Resort 3025 Rockcastle Rd. Cadiz, Trigg County, Kentucky

#### to receiving waters named

Little River (Lake Barkley)

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

This permit shall become effective on December 1, 2019.

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

October 21, 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:

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# **SECTION 1**

# EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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# 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 Outfall Type Latitude (N) Longitude		Longitude (W)	Receiving Water	Description of Outfall							
001	External	36.868104°	87.888910°	Little River (Lake Barkley)	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.									
	MONITORIN	MONITORING REQUIREMENTS							
		Loadings	(lbs/day)		Conce	entrations			
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type
Flow	MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab
BOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite <sup>3</sup>
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite <sup>3</sup>
Ammonia (as mg/l NH₃N)	mg/l	N/A	N/A	N/A	20	30 <sup>1</sup>	N/A	1/Quarter	Composite <sup>3</sup>
Dissolved Oxygen	mg/l	N/A	N/A	2.0	N/A	N/A	N/A	1/Quarter	Grab
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Quarter	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Quarter	Grab
<sup>1</sup> Daily Maximum									
<sup>2</sup> BOD <sub>5</sub> – Biochemical Oxygen I	Demand, 5-day	/							
<sup>3</sup> 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									
<sup>4</sup> E. Coli – Escherichia Coli Bact	eria								
<sup>5</sup> Thirty (30) day Geometric Me	ean								
<sup>6</sup> Seven (7) day Geometric Mea	an								

# 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.

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# **SECTION 2** STANDARD CONDITIONS

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# 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.

(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 (I), 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 technologybased 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 383 of 538

# 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.

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# **SECTION 4**

# **MONITORING AND REPORTING REQUIREMENTS**

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# 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 28<sup>th</sup> 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: <u>https://eec.ky.gov/Environmental-Protection/Water/SubmitReport/Pages/NetDMR.aspx</u> or contact the DMR Coordinator at (502) 564-3410.


KPDES No.: KY0090956 Al No.: 3955 Persimmon Ridge Subdivision 72 Persimmon Ridge Drive Louisville, Shelby County, Kentucky

Date: August 2, 2018

**Public Notice Information** 

Public Notice Start Date: June 26, 2018

Comment Due Date: July 26, 2018

General information concerning the public notice process may be obtained on the Division of Water's Public Notice Webpage at the following address: <u>http://water.ky.gov/Pages/PublicNotices.aspx</u>.

#### 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: <u>DOWPublicNotice@ky.gov</u> 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 <u>EEC.KORA@ky.gov</u>.

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:

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### **SECTION 1** FACILITY SYNOPSIS

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#### 1. FACILITY SYNOPSIS

#### 1.1. Name and Address of Applicant

PR Wastewater Management, Incorporated 72 Persimmon Ridge Drive Louisville, Kentucky 40245

#### 1.2. Facility Location

Persimmon Ridge Subdivision 72 Persimmon Ridge Drive Louisville, Shelby County, Kentucky

#### **1.3.** Description of Applicant's Operation

The applicant operates a domestic wastewater treatment system serving a subdivision and golf course.

#### **1.4.** Wastewaters Collected and Treatment

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

	TABLE 1.											
Outfall No.	Average Flow	Wastewater Types Collected	Treatment Type									
002	0.055 MGD	Domestic Wastewater	Two aeration ponds in series, chlorine disinfection and de-chlorination									

The Design Flow of the domestic wastewater treatment plant is 0.142 MGD. The average annual flow from Outfall 002 is 0.055 MGD.

#### 1.5. Permitting Action

This is a reissuance of a minor KPDES permit for discharges from an existing domestic wastewater treatment plant [SIC Codes 4952]. The previous permit allowed for the land application of treated wastewater. Outfall 001 was an overflow from the irrigation lake and has been removed from the permit. All wastewater is now discharged directly from Outfall 002 to Floyds Fork.

### **SECTION 2** RECEIVING/INTAKE WATERS

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#### 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.

	TABLE 2.										
Receiving Water Name	Use Designation	Antidegradation Category	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)							
Floyds Fork (RMI 49.4)	WAH, PCR, SCR, DWS	IW	0	0.5							
This segment of Floyds Fork (mile point 45.7 to 61.9) is listed as impaired in the 2014 303(d) List of Waters for											
Kentucky. Impaired uses are Primary and		• • •									

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

This segment of Floyds Fork (mile point 45.7 to 61.9) is listed as impaired in the 2014 303(d) List of Waters for Kentucky. Impaired uses are Primary and Secondary Contact Recreation (Nonsupport) and Warmwater Aquatic Habitat (Partial Support). The pollutants of concern are Escherichia Coli, Fecal Coliform, Nutrient/Eutrophication Biological Indicators and Sedimentation/Siltation. The suspected sources are package plants or other permitted small flow discharges, municipal point source discharges, wet weather discharges (non-point source) and wet weather discharges (point source and a combination of stormwater, SSO or CSO). A Total Maximum Daily Load (TMDL) has been established for Floyds Fork for Escherichia Coli and for nutrients.

	-	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, Indiana	37.95765°	87.57439°	236	12,900	60,900

#### 2.2. Intake Waters – Nearest Downstream Intake

Page 8

### SECTION 3 OUTFALL 002

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#### 3. OUTFALL 002

#### 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	38.29694°	85.44055°	Floyds Fork	Domestic Wastewater									
This outfall was	previously an interna	al outfall, which disch	arged to a large retention basin tha	t is used as an irrigation lake.									

#### 3.2. Reported Values

The following table summarizes the reported values for Outfall 002:

			TABLE 5.							
		EFFLUENT								
Penarted Parameters	Units	Loadings (lbs/day)			Con	centrations				
Reported Parameters	Onits	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum			
Flow	MGD	0.055	0.438	N/A	N/A	N/A	N/A			
рН	SU	N/A	N/A	6.4	N/A	N/A	8.8			
BOD <sub>5</sub> <sup>1</sup>	mg/l	N/A	N/A	N/A	4	197	N/A			
Total Suspended Solids	mg/l	N/A	N/A	N/A	5	54	N/A			
E. Coli <sup>3</sup>	#/100 ml	N/A	N/A	N/A	99 <sup>4</sup>	60,000 <sup>5</sup>	N/A			
<sup>1</sup> BOD <sub>5</sub> – Biochemical Oxygen Demand	l, 5-day		· ·			· ·				
<sup>2</sup> Daily Maximum										
<sup>3</sup> E. Coli – Escherichia Coli Bacteria										
<sup>4</sup> Thirty (30) day Geometric Mean										
<sup>5</sup> Seven (7) day Geometric Mean										

The above values are based off of 5-year DMR averages from 12/31/2012 to 10/31/2017. The data was collected from the internal monitoring point.

#### 3.3. Effluent Limitations and Monitoring Requirements

The following table summarizes the effluent limitations and monitoring requirements for Outfall 002:

				TABL	E 6.				
	MONITORIN	G REQUIREMENTS							
		Loadings	(lbs/day)		Conce	entrations			
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	2/Month	Instantaneous
ЭΗ	SU	N/A	N/A	6.0	N/A	N/A	9.0	2/Month	Grab
CBOD <sub>5</sub> <sup>1</sup>	mg/l	11.8	17.8	N/A	10	15	N/A	2/Month	Composite <sup>2</sup>
Total Suspended Solids	mg/l	35.5	53.3	N/A	30	45	N/A	2/Month	Composite <sup>2</sup>
Ammonia (as mg/l NH₃N)									
May 1 – October 31	mg/l	2.4	3.6	N/A	2.0	3.0 <sup>3</sup>	N/A	2/Month	Composite <sup>2</sup>
November 1 – April 30	mg/l	5.9	8.9	N/A	5.0	7.5 <sup>3</sup>	N/A	2/Month	Composite <sup>2</sup>
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	2/Month	Grab
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	2/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>3</sup>	N/A	2/Month	Grab
Fotal Phosphorus	mg/l	N/A	N/A	N/A	Report	Report	N/A	2/Month	Composite <sup>2</sup>
Total Nitrogen <sup>7</sup>	mg/l	N/A	N/A	N/A	Report	Report	N/A	2/Month	Composite <sup>2</sup>
CBOD <sub>5</sub> – Carbonaceous Biocł	nemical Oxygei	n Demand, 5-c	lay				•		
A sample composed of four on hat the aggregate sample reference to the segregate sample reference to the second seco					•	•	d no more than t	wenty-four hours	and aggregated so
Daily Maximum									
E. Coli – Escherichia Coli Bact	teria								
Thirty (30) day Geometric M	ean								
Seven (7) day Geometric Me	an								
Total Nitrogen is the summa	tion of the ana	lytical results	for Total Nitrate	es, Total Nitrite	s and Total Kjel	dahl Nitrogen			

#### 3.4. Pertinent Factors

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

http://dep.ky.gov/formslibrary/Documents/General%20Procedures%20for%20Limitations%20Developm ent.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									
BOD₅ (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. <u>Flow</u>

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 5:070, Section 3 – 40 CFR 122.48].

#### 3.5.2. <u>pH</u>

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

#### 3.5.3. <u>CBOD</u><sub>5</sub>

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 2]. 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.

#### 3.5.4. <u>Total Suspended Solids</u>

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 2]. These effluent limitations are also consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 4(1)(g)].

#### 3.5.5. 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)].

#### 3.5.6. <u>E. Coli</u>

The limitations for this parameter are consistent with Kentucky's Water Quality Standards [401 KAR 10:031, Section 7]. The numerical limitations established for this pollutant are consistent with the Floyds Fork Bacteria TMDL approved by EPA on September 9, 2014 [40 CFR 130.7 and 401 KAR 10:031, Section 1].

#### 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. Total Phosphorus and Total Nitrogen

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

# SECTION 4 OTHER CONDITIONS

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 399 of 538

#### 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 2 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 3].

#### 4.6. Connection to Regional Sewer System

In accordance with 401 KAR 5:005, 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



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

**PERMIT NO.: KY0090956** 

#### **AGENCY INTEREST NO.: 3955**

#### Pursuant to Authority in KRS 224,

PR Wastewater Management, Incorporated 72 Persimmon Ridge Drive Louisville, Kentucky 40245

#### is authorized to discharge from a facility located at

Persimmon Ridge Subdivision 72 Persimmon Ridge Drive Louisville, Shelby County, Kentucky

#### to receiving waters named

Floyds Fork

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

This permit shall become effective on October 1, 2018.

This permit and the authorization to discharge shall expire at midnight, September 30, 2023.

August 2, 2018

bun M-

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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 402 of 538

#### THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:

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### **SECTION 1**

### EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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#### 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								
002	External	38.29694°	85.44055°	Floyds 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 002 shall comply with the following effluent limitations:

TABLE 2.											
	MONITORIN	MONITORING REQUIREMENTS									
		Loadings	(lbs/day)		Conce	entrations					
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	2/Month	Instantaneous		
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	2/Month	Grab		
CBOD <sub>5</sub> <sup>1</sup>	mg/l	11.8	17.8	N/A	10	15	N/A	2/Month	Composite <sup>2</sup>		
Total Suspended Solids	mg/l	35.5	53.3	N/A	30	45	N/A	2/Month	Composite <sup>2</sup>		
Ammonia (as mg/l NH <sub>3</sub> N)											
May 1 – October 31	mg/l	2.4	3.6	N/A	2.0	3.0 <sup>3</sup>	N/A	2/Month	Composite <sup>2</sup>		
November 1 – April 30	mg/l	5.9	8.9	N/A	5.0	7.5 <sup>3</sup>	N/A	2/Month	Composite <sup>2</sup>		
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	2/Month	Grab		
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	2/Month	Grab		
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>3</sup>	N/A	2/Month	Grab		
Total Phosphorus	mg/l	N/A	N/A	N/A	Report	Report	N/A	2/Month	Composite <sup>2</sup>		
Total Nitrogen <sup>7</sup>	mg/l	N/A	N/A	N/A	Report	Report	N/A	2/Month	Composite <sup>2</sup>		
<sup>1</sup> CBOD <sub>5</sub> – Carbonaceous Bioch	nemical Oxyger	n Demand, 5-c	ay								
<sup>2</sup> A sample composed of four of that the aggregate sample ref			-		-	-	nd no more than	twenty-four hou	rs and aggregated so		

TABLE 2.											
EFFLUENT LIMITATIONS									MONITORING REQUIREMENTS		
		Loadings	s (lbs/day)		Conce	entrations					
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type		
<sup>3</sup> Daily Maximum							•				
<sup>4</sup> E. Coli – Escherichia Coli Bacte	eria										
<sup>5</sup> Thirty (30) day Geometric Me	an										
<sup>6</sup> Seven (7) day Geometric Mea	Seven (7) day Geometric Mean										
<sup>7</sup> Total Nitrogen is the summat	ion of the ana	alytical results	for Total Nitrate	es, Total Nitrite	es and Total Kjelo	dahl Nitrogen					

#### 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

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#### 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 (I), 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. <u>Notice</u>

(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 technologybased 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 413 of 538

#### 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.

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### **SECTION 4**

### **MONITORING AND REPORTING REQUIREMENTS**

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 415 of 538

#### 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 28<sup>th</sup> 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: <u>http://water.ky.gov/permitting/Pages/netDMRInformation.aspx</u> or contact the DMR Coordinator at (502) 564-3410.

MATTHEW G. BEVIN GOVERNOR



CHARLES G. SNAVELY SECRETARY

#### **ENERGY AND ENVIRONMENT CABINET** DEPARTMENT FOR ENVIRONMENTAL PROTECTION

AARON B. KEATLEY COMMISSIONER

#### 300 Sower Boulevard Frankfort, Kentucky 40601

August 2, 2018

Ms. Lawren Just 72 Persimmon Ridge Drive Louisville, KY 40245

> Re: KPDES Final Permit Issuance KPDES No.: KY0090956 Persimmon Ridge Subdivision AI ID: 3955 Shelby County, Kentucky

Dear Ms. Just:

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

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

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

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

Sincerely,

for M. That

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

PTG: SJA: asw Enclosure



KentuckyUnbridledSpirit.com

An Equal Opportunity Employer M/F/D Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 417 of 538



### **KPDES No.:** KY0043150 AI No.: 3367 **River Bluff Inc** 13121 Creekview Road Prospect, Oldham County, Kentucky

Date: November 22, 2019

**Public Notice Information** 

Public Notice Start Date: September 4, 2019

Comment Due Date: October 3, 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 EEC.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:

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## **SECTION 1** FACILITY SYNOPSIS

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 420 of 538

#### 1. FACILITY SYNOPSIS

#### 1.1. Name and Address of Applicant

River Bluffs Inc 5501 West Highway 524 Westport, KY 40077

#### **1.2.** Facility Location

River Bluffs Inc 13121 Creekview Road Prospect, Oldham 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	0.071	0.066	Domestic (Sanitary)	Grinding, Activated Sludge, Disinfection (chlorine), Dechlorination	

#### 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 422 of 538
# 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.

	TABLE 2.			
Receiving Water Name	Use Designation	Antidegradation Category	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Unnamed Tributary of Pond Creek	WAH PCR SCR DWS	IW	0.0	0.0
This segment of the Unnamed Tributary of	of Pond Creek (mile point 0.0 to	0.5) is listed	as impaired	in the 2016

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

This segment of the Unnamed Tributary of Pond Creek (mile point 0.0 to 0.5) is listed as impaired in the 2016 303(d) List of Waters for Kentucky. Impaired uses are Warmwater Aquatic Habitat (Not Supporting). The pollutants of concern are chlorine, nutrients/eutrophication, and organic enrichment (sewage). The suspected sources are this facility/package plant or other permitted small discharges.

### 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	Louisville Water Co	38.348312°	85.637297°	4.1	10,600	45,300

# SECTION 3 OUTFALL 001

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 424 of 538

# 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	38.37645°	85.60515°	Unnamed Tributary of Pond Creek	Domestic Wastewater				

# 3.2. Reported Values

The following table summarizes the reported values for Outfall 001:

			TABLE 5.				
				EF	FLUENT		
Reported Parameters	Units	Loading	s (lbs/day)		Con	centrations	
Reported Parameters	Onits	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum
Flow	MGD	0.071	0.120 <sup>1</sup>	N/A	N/A	N/A	N/A
рН	SU	N/A	N/A	7.0	N/A	N/A	7.3
CBOD <sub>5</sub> <sup>2</sup>	mg/l	2.894	5.078	N/A	5	8	N/A
Total Suspended Solids	mg/l	4.703	9.260	N/A	9	15	N/A
Ammonia (as mg/l NH <sub>3</sub> N)							
May 1 – October 31	mg/l	0.669	1.542	N/A	1.3	3.4 <sup>1</sup>	N/A
November 1 – April 30	mg/l	1.047	2.706	N/A	2.1	5.5 <sup>1</sup>	N/A
E. Coli <sup>3</sup>	#/100 ml	N/A	N/A	N/A	44	1443 <sup>5</sup>	N/A
Dissolved Oxygen	mg/l	N/A	N/A	8.4	N/A	N/A	N/A
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.008	0.0141	N/A
Total Phosphorus	mg/l	N/A	N/A	N/A	NR	NR	N/A
Total Nitrogen	mg/l	N/A	N/A	N/A	NR	NR	N/A
<sup>1</sup> Daily Maximum							
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Biochemical	Oxygen Demand, 5-	day					
<sup>3</sup> E. Coli – Escherichia Coli Bacteria							
<sup>4</sup> Thirty (30) day Geometric Mean							
<sup>5</sup> Seven (7) day Geometric Mean							

The above values are averages of DMR data from 08/31/13 to 06/30/19. NR = Not Reported. Due to an error, Total Phosphorus and Total Nitrogen requirements from the previous permit were not entered into ICIS.

# 3.3. Effluent Limitations and Monitoring Requirements

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

			TABL	E 6.			1	
EFFLUENT LIMITATIONS								
	Loadings	(lbs/day)		Conce	ntrations			
Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type
MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Month	Instantaneous
SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite <sup>3</sup>
mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite <sup>3</sup>
mg/l	N/A	N/A	N/A	4.0	6.0 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>
mg/l	N/A	N/A	N/A	10.0	15.0 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>
mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab
#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Month	Grab
mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Month	Grab
mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab
mical Oxyger	n Demand, 5-d	ау						
more equal of	or flow-propor	tional aliquots	collected over	a period of no le	ess than eight and	d no more than t	wenty-four hours	and aggregated s
cts the avera	ge water qual	ity of the efflue	nt during the c	ompositing or s	ample period			
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n								
1								
in l	MGD SU mg/l mg/l mg/l mg/l #/100 ml mg/l mg/l mg/l mg/l mg/l mg/l cts the avera ia n	Loadings     Units   Monthly Average     MGD   Report     SU   N/A     mg/l   N/A     more equal or flow-propor     cts the average water qual <td>Loadings (Ibs/day)UnitsMonthly AverageMaximum Weekly AverageMGDReportReport1SUN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amore equal or flow-proportional aliquots cts the average water quality of the efflue ian</td> <td>Loadings (lbs/day)UnitsMonthly AverageMaximum Weekly AverageMinimum MinimumMGDReportReport1N/ASUN/AN/A6.0mg/lN/AN/AN/Amg/lN/AN/AN/Amg/lN/AN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amore equal or flow-proportional aliquots collected over acts the average water quality of the effluent during the cian</td> 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  N/A     N/A     N/A     1/M     1/Month       mg/l     N/A     N/A     N/A     30     45     N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0<sup>1</sup>     N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0<sup>1</sup>     N/A     1/Month       mg/l     N/A     N/A     N/A     1/Month     1/Month     1/Month       mg/l     N/A</td></td></td>	Loadings (Ibs/day)UnitsMonthly AverageMaximum Weekly AverageMGDReportReport1SUN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amg/lN/AN/Amore equal or flow-proportional aliquots cts the average water quality of the efflue ian	Loadings (lbs/day)UnitsMonthly AverageMaximum Weekly AverageMinimum 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  N/A     N/A     N/A     1/M     1/Month       mg/l     N/A     N/A     N/A     30     45     N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0<sup>1</sup>     N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0<sup>1</sup>     N/A     1/Month       mg/l     N/A     N/A     N/A     1/Month     1/Month     1/Month       mg/l     N/A</td></td>	Loadings (lbs/day)ConcentrationsUnitsMonthly AverageMaximum Weekly AverageMonthly AverageMaximum Weekly AverageMGDReportReport1N/AN/AN/ASUN/AN/A6.0N/AN/AglN/AN/AN/AN/AN/Amg/lN/AN/AN/A3045mg/lN/AN/AN/A3045mg/lN/AN/AN/A10.015.01mg/lN/AN/AN/A10.015.01mg/lN/AN/AN/A13052406mg/lN/AN/AN/A10.0110.0191mg/lN/AN/AN/AReportReportmg/lN/AN/AN/AReportReportmg/lN/AN/AN/AReportReportmg/lN/AN/AN/AReportReportmg/lN/AN/AN/AReportReportmg/lN/AN/AN/AReportReportms/lN/AN/AN/AReportReportms/lN/AN/AN/AReportReportms/lN/AN/AN/AReportReportms/lN/AN/AN/AReportReportms/lN/AN/AN/AReportReportms/lN/AN/AN/AReportReport </td 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N/A     N/A     N/A     N/A     9.0     1/Month       mg/l     N/A     N/A     N/A     30     45     N/A     1/Month       mg/l     N/A     N/A     N/A     1/M     1/Month       mg/l     N/A     N/A     N/A     30     45     N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0<sup>1</sup>     N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0<sup>1</sup>     N/A     1/Month       mg/l     N/A     N/A     N/A     1/Month     1/Month     1/Month       mg/l     N/A</td>	ConcentrationsUnitsLoadings (lbs/day)ConcentrationsMonthly AverageMaximum Weekly AverageMaximum Weekly AverageMaximum Weekly 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    N/A     1/M     1/Month       mg/l     N/A     N/A     N/A     30     45     N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0 <sup>1</sup> N/A     1/Month       mg/l     N/A     N/A     N/A     10.0     15.0 <sup>1</sup> N/A     1/Month       mg/l     N/A     N/A     N/A     1/Month     1/Month     1/Month       mg/l     N/A

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

# 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 <sub>5</sub> (mg/l)	30	45						
TSS (mg/l)	30	45						

# 3.4.2. <u>Nutrients</u>

These effluent characteristics are generally associated with sanitary wastewaters and organic effluents. Since this plant treats domestic wastewater, these constituents are believed to be present but there is no data with which to perform a reasonable potential analysis. Monitoring requirements will be added so data can be collected towards a future analysis of whether or not the effluent can cause or contribute to a violation of the narrative water quality standard. As discussed in the DOW's General Procedures for Limitations Development, the applicable factors in 40 CFR 122.44(d) (1) and the designated uses established in 401 KAR 10:026 were considered in making this determination.

### 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. <u>Flow</u>

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. <u>CBOD</u><sub>5</sub>

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. <u>E. Coli</u>

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

# 3.5.6. <u>pH</u>

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. Total Phosphorus, and Total Nitrogen

The monitoring requirements for these parameters are consistent with the KPDES permit program requirements for establishing effluent limitations, standards, and permit conditions [401 KAR 5:065, Section 2(4) - 40 CFR 122.44(i)(1)(i)] and requirements for recording and reporting of monitoring results [401 KAR 5:050, Section 4 - 40 CFR 122.48].

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# SECTION 4 OTHER CONDITIONS

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 429 of 538

# 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



- NHD Flowline Features
- Sewer Lines



# AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

**PERMIT NO.: KY0043150** 

### **AGENCY INTEREST NO.: 3367**

#### Pursuant to Authority in KRS 224,

River Bluffs Inc 5501 West Highway 524 Westport, KY 40077

#### is authorized to discharge from a facility located at

River Bluffs Inc 13121 Creekview Road Prospect, Oldham County, Kentucky

#### to receiving waters named

Unnamed Tributary of Pond 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 22, 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 432 of 538 THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS:

#### 1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS......4 1.1. Effluent Limitations and Monitoring Requirements ......4 1.2. 1.3. STANDARD CONDITIONS......7 2. Duty to Comply ......7 2.1. 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 Permit Actions......7 2.6. 2.7. Duty to Provide Information ......7 2.8. 2.9. 3.1. 3.2. Other Permits......14 3.3. Continuation of Expiring Permit......14 3.4. 3.5. 3.6. Connection to Regional Sewer System ......14 3.7. 3.8. 4.1. 4.2. 4.3. 4.4.

# **SECTION 1**

# EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 434 of 538

# 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	38.37645°	85.60515°	Unnamed Tributary of Pond 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.										
	MONITORIN	MONITORING REQUIREMENTS								
		Loadings	(lbs/day)		Conce	entrations				
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type	
Flow	MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Month	Instantaneous	
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab	
CBOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite <sup>3</sup>	
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite <sup>3</sup>	
Ammonia (as mg/l NH₃N)										
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>	
November 1 – April 30	mg/l	N/A	N/A	N/A	10.0	15.0 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>	
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab	
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Month	Grab	
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Month	Grab	
Total Phosphorus	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab	
Total Nitrogen <sup>7</sup>	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Month	Grab	
<sup>1</sup> Daily Maximum										
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Bioch	nemical Oxygei	n Demand, 5-d	lay							

#### KPDES Permit KY0043150

TABLE 2.									
EFFLUENT LIMITATIONS								MONITORIN	G REQUIREMENTS
		Loadings	s (lbs/day)		Conce	entrations			
Effluent Characteristic	Maximum Maximum						Maximum	Frequency	Sample Type
<sup>3</sup> A sample composed of four o that the aggregate sample refl	•				•	-	d no more than t	wenty-four hours	and aggregated so
<sup>4</sup> E. Coli – Escherichia Coli Bacte	eria								
<sup>5</sup> Thirty (30) day Geometric Mean									
Seven (7) day Geometric Mean									
<sup>7</sup> Total Nitrogen is the summat	Fotal Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen								

# 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

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# 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.

(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 (I), 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 technologybased 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 444 of 538

# 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**

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 446 of 538

# 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 28<sup>th</sup> 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: <u>https://eec.ky.gov/Environmental-Protection/Water/SubmitReport/Pages/NetDMR.aspx</u> or contact the DMR Coordinator at (502) 564-3410.



# KPDES No.: KY0083755 AI No.: 3070 Timberland Subdivision Timberland Drive Paducah, McCracken County, Kentucky

Date: December 19, 2019

**Public Notice Information** 

Public Notice Start Date: October 19, 2019

Comment Due Date: November 18, 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: <u>DOWPublicNotice@ky.gov</u> 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 <u>EEC.KORA@ky.gov</u>.

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:

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# **SECTION 1** FACILITY SYNOPSIS

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# 1. FACILITY SYNOPSIS

# 1.1. Name and Address of Applicant

Joann Estates Utilities Incorporated 6500 US Highway 60 W Paducah, KY 42001-9083

# **1.2.** Facility Location

Timberland Subdivision Timberland Drive Paducah, McCracken 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	0.0071	0.025	Domestic (Sanitary)	Activated Sludge, 1 Cell Lagoon, Disinfection (Chlorine), Dechlorination,

# 1.5. Permitting Action

This is a reissuance of a minor KPDES permit for an existing domestic wastewater treatment plant [SIC Code 4952]. Joann Estates Utilities Inc and the Energy and Environment Cabinet entered into Agreed Order DOW No. 130132 on February 10, 2014. The facility is not connected to the Paducah-McCracken County Joint Sewer Agency sewer system, thus the need for a KPDES permit remains.

# **SECTION 2** RECEIVING/INTAKE WATERS

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# 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.

	TABLE 2.			
Receiving Water Name	Use Designation	Antidegradation Category	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
West Fork Massac Creek	DWS WAH PCR SCR	HQ	0.0	1.5
West Fork Massac Creek is not listed as im	paired in the 2016 303(d) List o	f Waters for K	entucky.	

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

### 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	Cairo, IL	37.02112°	89.17889°	44.2	51,000	175,000

# SECTION 3 OUTFALL 001

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# 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	37.07917°	88.78111°	West Fork Massac Creek	Domestic Wastewater			

# 3.2. Reported Values

The following table summarizes the reported values for Outfall 001:

TABLE 5.										
	Units	EFFLUENT								
Reported Parameters		Loadings (lbs/day)								
		Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum			
Flow	MGD	0.0071	0.0071 <sup>1</sup>	N/A	N/A	N/A	N/A			
рН	SU	N/A	N/A	7.1	N/A	N/A	7.1			
CBOD <sub>5</sub> <sup>2</sup>	mg/l	0.05	0.05	N/A	0.7	0.7	N/A			
Total Suspended Solids	mg/l	0.37	0.37	N/A	6.3	6.3	N/A			
Ammonia (as mg/l NH <sub>3</sub> N)										
May 1 – October 31	mg/l	0.09	0.09	N/A	2.11	2.11 <sup>1</sup>	N/A			
November 1 – April 30	mg/l	0.13	0.13	N/A	1.86	1.86 <sup>1</sup>	N/A			
E. Coli <sup>3</sup>	#/100 ml	N/A	N/A	N/A	15 <sup>4</sup>	15 <sup>5</sup>	N/A			
Dissolved Oxygen	mg/l	N/A	N/A	7.3	N/A	N/A	N/A			
Total Residual Chlorine	mg/l	N/A	N/A	N/A	ND	ND <sup>1</sup>	N/A			
<sup>1</sup> Daily Maximum										
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Biochemical	Oxygen Demand, 5-	day								
<sup>3</sup> E. Coli – Escherichia Coli Bacteria										
<sup>4</sup> Thirty (30) day Geometric Mean										
<sup>5</sup> Seven (7) day Geometric Mean										

The above values are averages of 5-year DMR values from 11/30/14 to 08/31/19. ND=Non-detect.

# 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		
		Loadings (lbs/day)		Concentrations					
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type
Flow	MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Month	Instantaneous
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab
CBOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	10	15	N/A	1/Month	Composite <sup>3</sup>
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite <sup>3</sup>
Ammonia (as mg/l NH₃N)							•		
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>
November 1 – April 30	mg/l	N/A	N/A	N/A	9.0	13.5 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Month	Grab
<sup>1</sup> Daily Maximum									
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Bioch	nemical Oxyger	n Demand, 5-d	ау						
<sup>3</sup> A sample composed of four of that the aggregate sample ref	lects the avera				-	-	d no more than t	wenty-four hours	and aggregated so
<sup>4</sup> E. Coli – Escherichia Coli Bact									
<sup>5</sup> Thirty (30) day Geometric Me									
<sup>6</sup> Seven (7) day Geometric Mea	an								

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

# 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 <sub>5</sub> (mg/l)	30	45					
TSS (mg/l)	30	45					

# 3.4.2. Agreed Order

Issuance of this permit does not supersede any requirements of Agreed Order DOW No. 130132 executed February 10, 2014. The permittee is responsible to comply with the conditions of the Agreed Order and the requirements of this permit.

# **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. <u>Flow</u>

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. <u>CBOD<sub>5</sub></u>

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. <u>Total Suspended Solids</u>

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. <u>E. Coli</u>

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

# 3.5.6. <u>pH</u>

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. <u>Total Residual Chlorine</u>

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

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### 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



### Legend

- Active
- Inactive
- DOW KPDES Outfalls
- Drinking\_Water\_Intakes
- DOW Permitted Water Withdrawals
- DOW River Mile Points
- NHD Flow line Features
- Sewer Lines



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

**PERMIT NO.: KY0083755** 

### AGENCY INTEREST NO.: 3070

### Pursuant to Authority in KRS 224,

Joann Estates Utilities Incorporated 6500 US Highway 60 W Paducah, KY 42001-9083

### is authorized to discharge from a facility located at

Timberland Subdivision Timberland Drive Paducah, McCracken County, Kentucky

#### to receiving waters named

West Fork Massac Creek

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

This permit shall become effective on February 1, 2020.

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

Jon M. TH

December 19, 2019

Date Signed

Carey Johnson, Acting 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:

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# **SECTION 1**

### EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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### 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	37.07917°	88.78111°	West Fork Massac 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									
		Loadings	; (lbs/day)		Conce	entrations			Sample Type	
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency		
Flow	MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Month	Instantaneous	
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Month	Grab	
CBOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	10	15	N/A	1/Month	Composite <sup>3</sup>	
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Month	Composite <sup>3</sup>	
Ammonia (as mg/l NH₃N)										
May 1 – October 31	mg/l	N/A	N/A	N/A	2.0	3.0 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>	
November 1 – April 30	mg/l	N/A	N/A	N/A	9.0	13.5 <sup>1</sup>	N/A	1/Month	Composite <sup>3</sup>	
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Month	Grab	
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Month	Grab	
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Month	Grab	
<sup>1</sup> Daily Maximum										
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Bioch	nemical Oxyger	n Demand, 5-d	lay							
<sup>3</sup> A sample composed of four of that the aggregate sample ref	lects the avera				-	-	d no more than t	wenty-four hours	and aggregated so	
<sup>4</sup> E. Coli – Escherichia Coli Bact	eria									

TABLE 2.										
EFFLUENT LIMITATIONS MONITORING REQUIREMENTS										
		Loadings (lbs/day)			Concentrations					
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type	
<sup>5</sup> Thirty (30) day Geometric Mean										
<sup>6</sup> 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

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### 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.

(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 (I), 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 technologybased 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 474 of 538

### 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.

### 3.9. Agreed Order

Issuance of this permit does not supersede any requirements of Agreed Order DOW No. 130132, executed February 10, 2014. The permittee is responsible to comply with the conditions of the Agreed Order and the requirements of this permit.

### **SECTION 4**

### **MONITORING AND REPORTING REQUIREMENTS**

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 477 of 538

### 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 28<sup>th</sup> 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: <u>https://eec.ky.gov/Environmental-Protection/Water/SubmitReport/Pages/NetDMR.aspx</u> or contact the DMR Coordinator at (502) 564-3410.



KPDES No.: KY0091600 Al No.: 479 Woodland Acres WWTP Lot 57 Hemlock Drive Shepherdsville, Bullitt County, Kentucky

Date: July 30, 2021

**Public Notice Information** 

Public Notice Start Date: May 20, 2021

Comment Due Date: June 19, 2021

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: <u>DOWPublicNotice@ky.gov</u> 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 <u>EEC.KORA@ky.gov</u>.

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:

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**SECTION 1** 

**FACILITY SYNOPSIS** 

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### 1. FACILITY SYNOPSIS

### 1.1. Name and Address of Applicant

Bluegrass Water Utility Operating Company 1650 Des Peres Road, Suite 303 Des Peres, MO 63131

### **1.2.** Facility Location

Woodland Acres WWTP Lot 57 Hemlock Drive Shepherdsville, Bullitt County, Kentucky

### 1.3. Description of Applicant's Operation

The applicant operates a domestic wastewater treatment plant serving a mobile home park consisting of 121 mobile homes.

### 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	0.0125	0.025	100% Domestic Wastewater	Equalization, Aeration, Settling, Aerobic Digestion, Rapid Sand Filter, Chlorination/Dechlorination

### 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

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### 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 for non-support of uses in Kentucky's most recently approved *Integrated Report to Congress on the Condition of Water Resources in Kentucky*. The 305 (b) List identifies stream segments that do not support their use designation. However, Outstanding State Resource Waters, Exceptional Waters, and waters found only as mercury or methylmercury impaired for fish consumption shall not be categorized as impaired *for antidegradation purposes*[401 KAR 10:030].

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

	TABLE 2.	-		
Receiving Water Name	Use Designation	Antidegradation Category	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
Unnamed Tributary of Mud Run 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)
Ohio River	Evansville Water Utility, IN	37.957651°	87.574393°	185	12,900	60,900

## SECTION 3 OUTFALL 001

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### 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	38.007913°	85.731103°	Unnamed Tributary to Mud Run Creek	Domestic Wastewater							

### 3.2. Reported Values

The following table summarizes the reported values for Outfall 001:

			TABLE 5.							
		EFFLUENT								
Reported Parameters	Units	Loading	gs (lbs/day)	Concentrations						
Reported Parameters	Onits	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum			
Flow	MGD	0.0125	0.0125 <sup>1</sup>	N/A	N/A	N/A	N/A			
рН	SU	N/A	N/A	6.19	N/A	N/A	8.20			
CBOD <sub>5</sub> <sup>2</sup>	mg/l	12	12	N/A	15	15	N/A			
Total Suspended Solids	mg/l	16	16	N/A	15	15	N/A			
Nitrogen, Ammonia total [as N]										
May 1 – October 31	mg/l	11.2	11.2	N/A	11.2	11.2 <sup>1</sup>	N/A			
November 1 – April 30	mg/l	2.14	2.14	N/A	6.60	6.60 <sup>1</sup>	N/A			
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A			
E. coli <sup>3</sup>	#/100 ml	N/A	N/A	N/A	1375 <sup>4</sup>	1375 <sup>5</sup>	N/A			
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.1460	0.1460 <sup>1</sup>	N/A			
<sup>1</sup> Daily Maximum										
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Biochemical	Oxygen Demand, 5-	day								
<sup>3</sup> E. coli – <i>Escherichia coli</i> Bacteria										
<sup>4</sup> Thirty (30) day Geometric Mean										
⁵Seven (7) day Geometric Mean										

The above values are based upon 5-year DMR averages from 1/1/2016 to 3/31/2021.

### 3.3. Effluent Limitations and Monitoring Requirements

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

				TABL	E 6.				
	MONITORIN	MONITORING REQUIREMENTS							
		Loadings	; (lbs/day)		Conce	entrations			
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type
Flow	MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab
CBOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	10	15	N/A	1/Quarter	Composite <sup>3</sup>
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite <sup>3</sup>
Nitrogen, Ammonia total [as N]							•		
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 <sup>1</sup>	N/A	1/Quarter	Grab
November 1 – April 30	mg/l	N/A	N/A	N/A	10.0	15.0 <sup>1</sup>	N/A	1/Quarter	Grab
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Quarter	Grab
E. coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Quarter	Grab
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Quarter	Grab
<sup>1</sup> Daily Maximum				·			•	· · · · · · · · · · · · · · · · · · ·	
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Biochem	nical Oxyge	n Demand, 5-c	lay						
<sup>3</sup> A sample composed of four or m	nore equal	or flow-propo	rtional aliquots	collected over	a period of no l	ess than eight an	d no more than t	wenty-four hours	and aggregated so
that the aggregate sample reflect	ts the avera	age water qua	lity of the efflue	ent during the c	compositing or s	sample period			
<sup>4</sup> E. coli – <i>Escherichia coli</i> Bacteria									
<sup>5</sup> Thirty (30) day Geometric Mean									
<sup>6</sup> 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: <u>https://eec.ky.gov/Environmental-Protection/Forms%20Library/General%20Procedures%20for%20Limitations%20Development.pdf.</u>

### 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							
BOD₅ (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. <u>Flow</u>

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. <u>CBOD<sub>5</sub></u>

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. <u>E. coli</u>

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

### 3.5.6. <u>pH</u>

The limitations for this parameter are consistent with 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 490 of 538

### 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 3--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



### Legend

— 24K NHD Blueline Streams



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

**PERMIT NO.: KY0091600** 

### **AGENCY INTEREST NO.: 479**

### Pursuant to Authority in KRS 224,

Bluegrass Water Utility Operating Company 1650 Des Peres Road, Suite 303 Des Peres, MO 63131

### is authorized to discharge from a facility located at

Woodland Acres WWTP Lot 57 Hemlock Drive Shepherdsville, Bullitt County, Kentucky

#### to receiving waters named

Unnamed Tributary to Mud Run Creek

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

This permit shall become effective on October 1, 2021.

This permit and the authorization to discharge shall expire at midnight, September 30, 2026.

Date Signed: July 30, 2021

Jaan M. 12

Carey M. Johnson, 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. Effluent Limitations and Monitoring Requirements ......4 1.2. 1.3. Standard Effluent Requirements ......5 STANDARD CONDITIONS......7 2. Duty to Comply ......7 2.1. 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 Permit Actions......7 2.6. 2.7. Duty to Provide Information ......7 2.8. 2.9. 3.1. 3.2. Other Permits......14 3.3. Continuation of Expiring Permit......14 3.4. 3.5. 3.6. Connection to Regional Sewer System ......14 3.7. 3.8. 4.1. 4.2. 4.3. 4.4.
### **SECTION 1**

### EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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#### 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	38.007913°	85.731103°	Unnamed Tributary to Mud Run 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:

				TABL	E 2.					
EFFLUENT LIMITATIONS									MONITORING REQUIREMENTS	
		Loadings	(lbs/day)		Conce	entrations				
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type	
Flow	MGD	Report	Report <sup>1</sup>	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous	
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab	
CBOD <sub>5</sub> <sup>2</sup>	mg/l	N/A	N/A	N/A	10	15	N/A	1/Quarter	Composite <sup>3</sup>	
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite <sup>3</sup>	
Nitrogen, Ammonia total [as N]										
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 <sup>1</sup>	N/A	1/Quarter	Grab	
November 1 – April 30	mg/l	N/A	N/A	N/A	10.0	15.0 <sup>1</sup>	N/A	1/Quarter	Grab	
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Quarter	Grab	
E. coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	<b>1</b> 30⁵	240 <sup>6</sup>	N/A	1/Quarter	Grab	
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>1</sup>	N/A	1/Quarter	Grab	
<sup>1</sup> Daily Maximum							•			
<sup>2</sup> CBOD <sub>5</sub> – Carbonaceous Biochem	ical Oxygei	n Demand, 5-d	ау							
<sup>3</sup> A sample composed of four or m that the aggregate sample reflect						-	d no more than t	wenty-four hours	and aggregated so	

				TABI	.E 2.			-	
EFFLUENT LIMITATIONS							MONITORING REQUIREMENTS		
		Loadings	; (lbs/day)		Concer	ntrations			
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type
<sup>4</sup> E. coli – <i>Escherichia coli</i> Bacteria	3							•	
<sup>5</sup> Thirty (30) day Geometric Mean									
<sup>5</sup> 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.

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## **SECTION 2** STANDARD CONDITIONS

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 498 of 538

#### 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.

(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 (I), 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 technologybased 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 505 of 538

#### 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**

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 507 of 538

#### 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 28<sup>th</sup> 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: <u>https://eec.ky.gov/Environmental-Protection/Water/SubmitReport/Pages/NetDMR.aspx</u> or contact the DMR Coordinator at (502) 564-3410.



### KPDES No.: KY0092843 Al No.: 675 Yung Farm Estates Eight Mile Road Camp Springs, Campbell County, Kentucky

Date: August 13, 2018

**Public Notice Information** 

Public Notice Start Date: April 5, 2018

Comment Due Date: May 5, 2018

General information concerning the public notice process may be obtained on the Division of Water's Public Notice Webpage at the following address: <u>http://water.ky.gov/Pages/PublicNotices.aspx</u>.

#### 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: <u>DOWPublicNotice@ky.gov</u> 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 <u>EEC.KORA@ky.gov</u>.

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:

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## **SECTION 1** FACILITY SYNOPSIS

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#### 1. FACILITY SYNOPSIS

#### 1.1. Name and Address of Applicant

Yung Farm Estates 5600 Cutters Trace Melbourne, KY 41059

#### 1.2. Facility Location

Yung Farm Estates Eight Mile Road Camp Springs, Campbell 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 flow, wastewater types collected, and treatment type for each outfall:

		TABLE 1.	
Outfall No.	Average Flow (MGD)	Wastewater Types Collected	Treatment Type
001	0.001	Domestic Sanitary	Screening, sedimentation, plain aeration, post aeration, disinfection (chlorine)

The Design Flow of the Facility is 0.084 MGD. The Average Annual Flow of the Facility is 0.001 MGD.

#### 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

Case No. 2022-00432 Bluegrass Water's Response to OAG 1-33 Exhibit OAG 1-33 Page 513 of 538

#### 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.

	TABLE 2.			
Receiving Water Name	Use Designation	Antidegradation Category	7Q10 Low Flow (cfs)	Harmonic Mean Flow (cfs)
UT to Four Mile Creek	WAH PCR SCR DWS	HQ	0.0	0.0
This segment of the receiving stream meets all its designated uses.				

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

#### 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	Greater Cincinnati Water	39.067273°	84.436144°	7	10,600	45,300

### SECTION 3 OUTFALL 001

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#### 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	39.016761°	84.364193°	UT to Four Mile Creek	Domestic Wastewater

#### 3.2. Reported Values

The following table summarizes the reported values for Outfall 001:

			TABLE 5.							
		EFFLUENT								
Reported Parameters	Units	Loading	gs (lbs/day)							
Reported Farameters	Onits	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum			
Flow	MGD	0.001	0.001	N/A	N/A	N/A	N/A			
рН	SU	N/A	N/A	7.1	N/A	N/A	8.8			
CBOD <sub>5</sub> <sup>1</sup>	mg/l	N/A	N/A	N/A	6.46	6.46	N/A			
Total Suspended Solids	mg/l	N/A	N/A	N/A	6.20	6.20	N/A			
Ammonia (as mg/l NH₃N)										
May 1 – October 31	mg/l	N/A	N/A	N/A	1.14	1.14 <sup>2</sup>	N/A			
November 1 – April 30	mg/l	N/A	N/A	N/A	2.18	2.18 <sup>2</sup>	N/A			
E. Coli <sup>3</sup>	#/100 ml	N/A	N/A	N/A	13.8 <sup>4</sup>	13.8 <sup>5</sup>	N/A			
Dissolved Oxygen	mg/l	N/A	N/A	7.1	N/A	N/A	N/A			
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.0103	0.0103 <sup>2</sup>	N/A			
<sup>1</sup> CBOD <sub>5</sub> – Carbonaceous Biochemical (	Oxygen Demand, 5-	day								
<sup>2</sup> Daily Maximum										
<sup>3</sup> E. Coli – Escherichia Coli Bacteria										
<sup>4</sup> Thirty (30) day Geometric Mean										
<sup>5</sup> Seven (7) day Geometric Mean										

The above values are based off of 5-year DMR averages from 03/31/13 to 12/31/17.

#### 3.3. Effluent Limitations and Monitoring Requirements

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

				TABL	E 6.			-		
EFFLUENT LIMITATIONS									MONITORING REQUIREMENTS	
		Loadings	(lbs/day)		Conce	entrations				
Effluent Characteristic	Units	Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum	Frequency	Sample Type	
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	1/Quarter	Instantaneous	
рН	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Quarter	Grab	
CBOD <sub>5</sub> <sup>1</sup>	mg/l	N/A	N/A	N/A	25	37.5	N/A	1/Quarter	Composite <sup>2</sup>	
Total Suspended Solids	mg/l	N/A	N/A	N/A	30	45	N/A	1/Quarter	Composite <sup>2</sup>	
Ammonia (as mg/l NH <sub>3</sub> N)							•			
May 1 – October 31	mg/l	N/A	N/A	N/A	4.0	6.0 <sup>3</sup>	N/A	1/Quarter	Composite <sup>2</sup>	
November 1 – April 30	mg/l	N/A	N/A	N/A	10.0	15.0 <sup>3</sup>	N/A	1/Quarter	Composite <sup>2</sup>	
Dissolved Oxygen	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Quarter	Grab	
E. Coli <sup>4</sup>	#/100 ml	N/A	N/A	N/A	130 <sup>5</sup>	240 <sup>6</sup>	N/A	1/Quarter	Grab	
Total Residual Chlorine	mg/l	N/A	N/A	N/A	0.011	0.019 <sup>3</sup>	N/A	1/Quarter	Grab	
<sup>1</sup> CBOD <sub>5</sub> – Carbonaceous Bioch	emical Oxygei	n Demand, 5-d	ау				•			
<sup>2</sup> A sample composed of four o that the aggregate sample refl			-			-	d no more than t	wenty-four hours	and aggregated so	
<sup>3</sup> Daily Maximum										
<sup>4</sup> E. Coli – Escherichia Coli Bacte	eria									
<sup>5</sup> Thirty (30) day Geometric Me	an									
<sup>6</sup> Seven (7) day Geometric Mea	n									

#### 3.4. Pertinent Factors

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

http://dep.ky.gov/formslibrary/Documents/General%20Procedures%20for%20Limitations%20Developm ent.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				
BOD₅ (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. <u>Flow</u>

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 5:070, Section 3 – 40 CFR 122.48].

#### 3.5.2. <u>CBOD</u><sub>5</sub>

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 2]. 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. <u>Total Suspended Solids</u>

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 2]. 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. <u>E. Coli</u>

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

#### 3.5.6. <u>pH</u>

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

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#### 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 2 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 3].

#### 4.6. Connection to Regional Sewer System

In accordance with 401 KAR 5:005, 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





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

**PERMIT NO.: KY0092843** 

#### **AGENCY INTEREST NO.: 675**

#### Pursuant to Authority in KRS 224,

Yung Farm Estates 5600 Cutters Trace Melbourne, KY 41059

#### is authorized to discharge from a facility located at

Yung Farm Estates Eight Mile Road Camp Springs, Campbell County, Kentucky

#### to receiving waters named

UT to Four Mile Creek

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

This permit shall become effective on October 1, 2018.

This permit and the authorization to discharge shall expire at midnight, September 30, 2023.

August 13, 2018

~ M-

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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# **SECTION 1**

### EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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