

KPDES



KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM

PERMIT

PERMIT NO.: KY0031810

AI NO.: 2211

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

Pursuant to Authority in KRS 224,

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

is authorized to discharge from a facility located at

Shadow Wood Water Quality Treatment Center
5489 Forest Lake Drive
Prospect, Jefferson County, Kentucky

to receiving waters named

Outfall 001 discharges to Harrods Creek at latitude 38°19'49"N and longitude 85°37'45"W

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

This permit shall become effective on April 1, 2014.

This permit and the authorization to discharge shall expire at midnight, March 31, 2019.

February 19, 2014

Date Signed

A handwritten signature in black ink, appearing to read "Peter T. Goodmann", located above the signature line.

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

**DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky 40601**

THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS.

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1. EFFLUENT AND MONITORING REQUIREMENTS

1.1. Monitoring Locations

The following table lists the outfalls authorized by this permit, the latitude and longitude of each and the DOW assigned KPDES outfall number.

MONITORING LOCATIONS					
Number	Type	Latitude (N)	Longitude (W)	Receiving Waters	Description of Outfall
001	Discharge	38°19'49"	85°37'45"	Harrods 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 effluent limitations.

Effluent Characteristic	EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
	Loadings (lbs/day)		Concentrations (specify units)				Monitoring Frequency	Sample Type
	Monthly Average	Weekly Average	Minimum	Monthly Average	Weekly Average	Maximum		
Effluent Flow (Design 0.085 MGD)	Report	Report	N/A	N/A	N/A	N/A	Continuous	Continuous Recorder
pH (Standard Units)	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
CBOD ₅	7.09	10.64	N/A	10 mg/l	15 mg/l	N/A	1/Week	24-Hr Composite
TSS	21.3	31.9	N/A	30 mg/l	45 mg/l	N/A	1/Week	24-Hr Composite
Ammonia (as NH ₃ N)								
May 1 – October 31	1.42	2.13	N/A	2.0 mg/l	3.0 mg/l	N/A	1/Week	24-Hr Composite
November 1 – April 30	3.54	5.32	N/A	5.0 mg/l	7.5 mg/l	N/A	1/Week	24-Hr Composite
E. Coli (colonies/100 ml) ¹	N/A	N/A	N/A	130	240	N/A	1/Week	Grab
Dissolved Oxygen	N/A	N/A	7.0 mg/l	N/A	N/A	N/A	1/Week	Grab
Total Residual Chlorine	N/A	N/A	N/A	0.011 mg/l	0.019 mg/l	N/A	1/Week	Grab
Total Phosphorus (mg/l)	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite
Total Nitrogen (mg/l) ²	N/A	N/A	N/A	Report	Report	N/A	1/Week	24-Hr Composite

¹ The effluent limitations for *Escherichia Coli* are 30 day and 7 day Geometric Means.

² Total 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.

Samples and measurements taken in accordance with the requirements of specified Section 1.2 shall be representative of the volume and nature of the monitored discharge and shall be taken at nearest accessible point after final treatment, but prior to actual discharge to or mixing with the receiving waters or wastestreams from other outfalls.

SECTION 2

ADDITIONAL REQUIREMENTS

2. ADDITIONAL REQUIREMENTS

2.1. Schedule of Compliance

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

2.2. 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.

2.3. Sufficiently Sensitive Analytical Methods

Analytical methods utilized to demonstrate compliance with the effluent limitations established in this permit shall be sufficiently sensitive to detect pollutant levels at or below the required effluent limit. It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

2.4. Certified Laboratory Requirements

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by EEC certified general wastewater laboratories and EEC certified field-only laboratories. Compliance with this requirement shall commence on January 1, 2015 for analyses and tests performed by a general wastewater laboratory and January 1, 2016 for field-only wastewater laboratories.

2.5. Reporting of Monitoring Results

Monitoring results obtained during each monitoring period must be reported. The completed Discharge Monitoring Report (DMR) for each monitoring period must be submitted no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

2.5.1. Electronic Submittal

The completed DMR for each monitoring period must be entered into the Division of Water approved electronic system no later than midnight on the 28th day of the month following the monitoring period for which monitoring results were obtained. The use of mailed (hardcopy) DMRs has ceased and electronic DMR submittal shall begin with the initial DMR.

For information regarding electronic submittal of DMRs please visit the Division's website at <http://water.ky.gov/permitting/Pages/netDMRInformation.aspx> or contact the DMR Coordinator at (502) 564-3410.

2.6. 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.

This permit may be reopened to implement the findings of a reasonable potential analysis performed by the Division of Water.

This permit shall be reopened if Division of Water determines surface waters are aesthetically or otherwise degraded by substances that:

- (a) Settle to form objectionable deposits;
- (b) Float as debris, scum, oil, or other matter to form a nuisance;
- (c) Produce objectionable color, odor, taste, or turbidity;
- (d) Injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish, and other aquatic life;
- (e) Produce undesirable aquatic life or result in the dominance of nuisance species; or
- (f) Cause fish flesh tainting.

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

2.7. Outfall Signage

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

2.8. Discharge and Monitoring Point Accessibility

As previously stated in Section 3.9, the permittee shall allow authorized agency representatives to inspect the facility and collect samples to determine compliance. In order for such monitoring to be conducted either by the permittee or authorized agency personnel all monitoring and discharge points required by this permit shall be readily and safely accessible in all weather conditions.

2.9. Disposal of Non-Domestic Wastes

The pass through or non-treatment by the wastewater treatment plant of chemicals or compounds which may injure, be chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life is not desirable. Materials such as acids, caustics, herbicides, household chemicals or cleansers, insecticides, lawn chemicals, non-biodegradable products, paints, pesticides, pharmaceuticals, and petroleum based products may not be treatable by the wastewater treatment plant and should not be introduced and other environmentally sound methods for disposal should be utilized. The permittee should educate users of its system that introduction of such chemicals or compounds could result in an adverse environmental impact and provide the users with alternative disposal measures.

2.10. Certified Operators

Pursuant to 401 KAR 5:010, Section 1 a treatment plant with a design capacity of more than 50,000 gallons per day, but less than or equal to two (2) million gallons per day shall be under the primary responsibility of a certified operator holding an active Class II, III, or IV treatment certificate.

2.11. Connection to Regional Sewer System

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

SECTION 3
STANDARD CONDITIONS

3. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

3.1. Duty to Comply

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

3.2. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit.

3.3. Need to Halt or Reduce Activity Not a Defense

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

3.4. Duty to Mitigate

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

3.5. Proper Operation and Maintenance

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

3.6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

3.7. Property Rights

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

3.8. Duty to Provide Information

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

3.9. Inspection and Entry

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

- (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

3.10. Monitoring and Records

- (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 401 KAR 5:065 Section 2(10) [40 CFR 503]), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
- (3) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (4) Monitoring must be conducted according to test procedures approved under 401 KAR 5:065 Section 2(8) [40 CFR 136] unless another method is required under 401 KAR 5:065 Section 2(9) or (10) [40 CFR subchapters N or O].
- (5) KRS 224.99-010 provides that any person who knowingly violates KRS 224.70-110 or other enumerated statutes, or who knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall be guilty of a Class D felony and, upon conviction, shall be punished by a fine of not more than \$25,000, or by imprisonment for not more than one (1) year, or both. Each day upon which a violation occurs shall constitute a separate violation.

3.11. Signatory Requirement

- (1) All applications, reports, or information submitted to the Director shall be signed and certified pursuant to 401 KAR 5:060, Section 4 [40 CFR 122.22].
- (2) KRS 224.99-010 provides that any person who knowingly provides false information in any document filed or required to be maintained under KRS Chapter 224 shall be guilty of a Class D felony and upon conviction thereof, shall be punished by a fine not to exceed twenty-five thousand dollars (\$25,000), or by imprisonment, or by fine and imprisonment, for each separate violation. Each day upon which a violation occurs shall constitute a separate violation

3.12. Reporting Requirements

3.12.1. Planned Changes

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

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

3.12.2. Anticipated Noncompliance

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

3.12.3. Transfers

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

3.12.4. Monitoring Reports

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

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

3.12.5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

3.12.6. Twenty-four-Hour Reporting

- (i) 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.

(ii) 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.

(iii) The Director may waive the written report on a case-by-case basis for reports under paragraph (1)(6)(ii) of this section if the oral report has been received within twenty-four (24) hours.

3.12.7. Other Noncompliance

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

3.12.8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

3.13. Bypass

3.13.1. Definitions

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

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

3.13.2. Bypass Not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section 3.13.1.

3.13.3. Notice

(i) 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.

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

3.13.4. Prohibition of Bypass

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

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of

reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under Section 3.13.3.

(ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three (3) conditions listed above in Section 3.13.3.

3.14. Upset

3.14.1. Definition

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

3.14.2. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section 3.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

3.14.3. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (ii) The permitted facility was at the time being properly operated; and
- (iii) The permittee submitted notice of the upset as required in Section 3.12.6; and
- (iv) The permittee complied with any remedial measures required under Section 3.4.

3.14.4. Burden of Proof

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

SECTION 4

ABBREVIATIONS, ACRONYMS AND DEFINITIONS

4. ABBREVIATIONS, ACRONYMS AND DEFINITIONS

Abbreviation or Acronym	Full Phrase	Definition
MGD	Million Gallons Per Day	A measure of flow
cfs	cubic feet per second	A measure of flow
SU	Standard Units	A measure of pH
mg/l	milligrams per liter	A measure of pollutant concentration (1000 milligrams = 1 gram)
µg/l	micrograms per liter	A measure of pollutant concentration (1000 micrograms = 1 milligram)
°F	Degrees Fahrenheit	A measure of temperature
°C	Degrees Centigrade or Celsius	A measure of temperature
N/A	Not Applicable	
lbs/day	pounds per day	A measure of pollutant loading
Grab	Grab Sample	A sample taken from a wastestream on a one-time basis without consideration of the flow rate of the wastestream and without consideration of time.
24-Hr Composite	24-hour Composite Sample	Sample composed of discrete equal volume aliquots (100 ml minimum) collected every 15 minutes over a 24-hour period and aggregated by an automated sampling device. The aggregate sample will reflect the average water quality of the compositing or sample period.