COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
DIVISION OF ENFORCEMENT
CASE NO. DOW 21-3-0211

IN RE: Bluegrass Water Utility Operating Company, LLC
Darlington Creek Homeowners Association, Inc.
500 Thomas More Parkway
Crestview Hills, KY 41017
AI No. 44397
Activity ID No. ERF20210001

AGREED ORDER

* * * * * * * * * * * *

WHEREAS, the parties to this Agreed Order, the Energy and Environment Cabinet (hereinafter "Cabinet") and Bluegrass Water Utility Operating Company, LLC (hereinafter "BWUOC") state:

STATEMENTS OF FACT

1. The Cabinet is charged with the statutory duty of enforcing KRS Chapter 224 and the regulations promulgated pursuant thereto.

2. BWUOC is an active Kentucky Limited Liability Company in good standing that owns and operates utilities and whose principal address, according to the Kentucky Secretary of State is 1650 Des Peres Road, Suite 303, St. Louis, Missouri 63131.

3. Darlington Creek Homeowners Association Wastewater Treatment Plant (hereinafter "Darlington Creek WWTP" or "facility"), is located at US 27 South & Highway 154, Alexandria, Kentucky 41001. The facility has a design capacity of 0.0495 million gallons per day and discharges to an unnamed tributary of Phillips Creek.

4. Darlington Creek WWTP is currently owned and operated by the Darlington Creek Homeowners Association, Inc. The facility's discharges are permitted under Kentucky Pollutant

Discharge Elimination Systems (hereinafter "KPDES") permit number KY0105325, issued by the Cabinet's Division of Water (hereinafter "DOW"). The facility's KPDES permit expires on June 30, 2024.

5. Darlington Creek Homeowners Association, Inc. is an active non-profit Kentucky corporation in good standing, according to the Kentucky Secretary of State.

6. BWUOC has indicated to the Cabinet that it plans to acquire the facility, provided it receives from the Kentucky Public Service Commission ("Commission") all approvals required to make the acquisition. If the Commission approves the acquisition, BWUOC plans to assume ownership and operation of the facility on or around January 15, 2022.

7. BWUOC has contracted with a third-party firm to produce an engineering memorandum detailing the status of and repairs needed at the facility (Exhibit A).

8. If it receives all required Commission approvals, BWUOC has indicated to the Cabinet that it plans to make substantial repairs and/or upgrades to the facility to address the deficiencies noted in Exhibit A.

NOW THEREFORE, in the interest of providing corrective actions to the facility, the parties hereby consent to the entry of this Agreed Order and agree as follows:

REMEDIAL MEASURES

9. BWUOC shall notify the Cabinet in writing that it has assumed ownership and operation within fifteen (15) days of acquiring the facility.

10. Within fifteen (15) days of assuming ownership and operation of the facility, BWUOC shall submit a "Change in Ownership Certification" to the Cabinet.

11. At all times, commencing with assuming ownership of the facility, BWUOC shall provide for proper operation and maintenance of the facility in accordance with 401 KAR 5:065

Section 2(1).

12. Following the initial ninety (90) days of its operation of the facility, BWUOC shall submit to the Cabinet for review and acceptance, a written Corrective Action Plan (hereinafter "CAP") to bring the facility into compliance with its KPDES permit and correct the deficiencies noted in Exhibit A. The CAP shall include, but not be limited to, an identification of actions BWUOC shall implement to ensure compliance that includes; proper operation and maintenance to its sewage treatment system, collection system, and disinfection unit. The CAP shall also include a list of all actions necessary to ensure the completion of upgrades to its facility including a list of completion dates for each action. Include in the CAP a final compliance date for completion of all remedial measures listed;

A. Upon review of the CAP, the Cabinet may, in whole or in part, (1) accept or (2) decline and provide comments to the BWUOC identifying the deficiencies. Upon receipt of Cabinet comments, the BWUOC shall have ninety (90) days to revise and resubmit the CAP for review and acceptance. Upon resubmittal, the Cabinet may, in whole or in part, (1) accept or (2) disapprove and provide comments to the BWUOC identifying the deficiencies. Upon such resubmittal, if the CAP is disapproved, the Cabinet may deem the BWUOC to be out of compliance with this Agreed Order for failure to timely submit the CAP. The parties to this Agreed Order may also agree in writing to further extend the period in which the BWUOC and the Cabinet accept a revised and resubmitted CAP.

B. The BWUOC may request an amendment of the accepted CAP by writing the Director of the Division of Enforcement at 300 Sower Blvd., Frankfort,

Kentucky 40601 and stating the reasons for the request. If granted, the amended CAP shall not affect any provision of this Agreed Order unless expressly provided in the amended CAP. This does not require an amendment request pursuant to paragraph 20 of this Agreed Order.

C. Upon Cabinet acceptance of all or any part of the CAP, the amended CAP or any accepted part thereof (provided that the accepted part is not dependent upon implementation of any part not yet accepted), shall be deemed incorporated into this Agreed Order as an enforceable requirement of this Agreed Order. This does not require an amendment request pursuant to paragraph 20 of this Agreed Order.

13. So long as BWUOC is in compliance with the terms and conditions of this Agreed Order, the Cabinet's Division of Enforcement agrees to hold any formal enforcement action for numeric permit parameter violations for the KPDES permit described in paragraph 4, in abeyance. However, in the event that such numeric permit parameter violation results in immediate and irreparable harm to human health or the environment, the Cabinet may issue an Abate and Alleviate Order or seek a temporary injunction from a court. Should BWUOC fail to comply with the terms and conditions of this Agreed Order or if conditions warrant immediate relief as specified above, the Cabinet may seek formal enforcement action that would have otherwise been held in abeyance.

14. By the final compliance date in the accepted CAP, BWUOC shall be in full compliance with its KPDES permit.

15. All submittals required by the terms of this Agreed Order shall be submitted to: Division of Enforcement, Attention: Director, 300 Sower Blvd., Frankfort, Kentucky, 40601.

MISCELLANEOUS PROVISIONS

16. This Agreed Order shall be of no force and effect unless BWUOC assumes ownership and operations of the Darlington Creek WWTP.

17. This Agreed Order addresses only the items described above. Other than the matters agreed to by entry of this Agreed Order, nothing contained herein shall be construed to waive or to limit any remedy or cause of action by the Cabinet based on statutes or regulations under its jurisdiction and BWUOC reserves its defenses thereto. The Cabinet expressly reserves its right at any time to issue administrative orders and to take any other action it deems necessary that is not inconsistent with this Agreed Order, including the right to order all necessary remedial measures, assess penalties for violations, or recover all response costs incurred, and BWUOC reserves its defenses thereto.

18. This Agreed Order shall not prevent the Cabinet from issuing, reissuing, renewing, modifying, revoking, suspending, denying, terminating, or reopening any permit to BWUOC. BWUOC reserves its defenses thereto, except that BWUOC shall not use this Agreed Order as a defense.

19. BWUOC waives its right to any hearing on the matters admitted herein. However, failure by BWUOC to comply strictly with any or all of the terms of this Agreed Order shall be grounds for the Cabinet to seek enforcement of this Agreed Order in Franklin Circuit Court and to pursue any other appropriate administrative or judicial action under KRS Chapter 224 and the regulations promulgated pursuant thereto.

20. The Agreed Order may not be amended except by a written order of the Cabinet's Secretary or her designee. BWUOC may request an amendment by writing the Director of the Division of Enforcement at 300 Sower Blvd., Frankfort, Kentucky 40601, and stating the reasons for the request. If granted, the amended Agreed Order shall not affect any provision of this Agreed

Order unless expressly provided in the amended Agreed Order.

21. The Cabinet does not, by its consent to the entry of this Agreed Order, warrant or aver in any manner that BWUOC's complete compliance with this Agreed Order will result in compliance with the provisions of KRS Chapter 224 and the regulations promulgated pursuant thereto. Notwithstanding the Cabinet's review and approval of any plans formulated pursuant to this Agreed Order, BWUOC shall remain solely responsible for compliance with the terms of KRS Chapter 224 and the regulations promulgated thereto, this Agreed Order, and any permit and compliance schedule requirements.

22. BWUOC shall give notice of this Agreed Order to any purchaser, lessee or successor in interest prior to the transfer of ownership and/or operation of any part of the facility occurring prior to termination of this Agreed Order, shall notify the Cabinet that such notice has been given, and shall follow all statutory requirements for a transfer.

23. This Agreed Order applies specifically and exclusively to the unique facilities referenced herein and is inapplicable to any other facility.

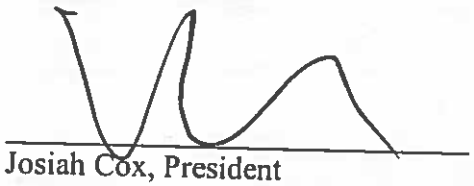
24. Compliance with this Agreed Order is not conditional on the receipt of any federal, state, or local funds.

25. This Agreed Order shall be of no force and effect unless and until it is entered by the Secretary or his designee as evidenced by his signature thereon. If this Agreed Order contains any date by which BWUOC is to take any action or cease any activity, and the Secretary enters the Agreed Order after that date, then BWUOC is nonetheless obligated to have taken the action or ceased the activity by the date contained in this Agreed Order.

TERMINATION

26. This Agreed Order shall terminate upon BWUOC's completion of all requirements described in this Agreed Order. BWUOC may submit written notice to the Cabinet when it believes all requirements have been performed. The Cabinet shall notify BWUOC in writing whether it concurs that all requirements of this Agreed Order have been completed. The Cabinet reserves its right to enforce this Agreed Order, and BWUOC reserves its right to file a petition for hearing pursuant to KRS 224.10-420(2) contesting the Cabinet's determination.

AGREED TO BY:



Josiah Cox, President
Bluegrass Water Utility Operating Company, LLC

3/10/2022
Date

APPROVAL RECOMMENDED BY:

Natalie P. Bruner

Natalie Bruner, Director
Division of Enforcement

03.17.2022
Date

Elizabeth U. Natter

Elizabeth U. Natter, Executive Director
Office of Legal Services

4/4/2022
Date

ORDER

Wherefore, the foregoing Agreed Order is entered as the final Order of the Energy and Environment Cabinet this 5th day of April, 2022.

ENERGY AND ENVIRONMENT CABINET

John S. Lyons, Deputy Secretary
Authorized Designee, Rebecca W. Goodman, Secretary
Energy & Environment Cabinet

CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing **AGREED ORDER** was mailed, postage prepaid, to the following this 5th day of April, 2022.

Bluegrass Water Utility Operating Company, LLC
Attn: Jacob Freeman
1650 Des Peres Road, Suite 303
St. Louis, MO 63131

And ~~mailed, messenger to~~: Electronically mailed to:

Natalie Bruner, Director
Division of Enforcement
300 Sower Blvd.
Frankfort, Kentucky 40601

Elizabeth U. Natter, Executive Director
Office of General Counsel
Energy and Environment Cabinet
300 Sower Blvd.
Frankfort, Kentucky 40601

Dana Lowe
DOCKET COORDINATOR

Distribution:
DOW-email

Exhibit A

21 DESIGN

Darlington Creek Homeowners Association, Inc. – Darlington Creek WWTP KY0105325
Alexandria, Kentucky
Engineering Memorandum
Date: September 15, 2021

Introduction

The Darlington Creek wastewater treatment facility is located in Alexandria, Kentucky along US Highway 27 near Kentucky Route 154. This facility currently services 90 residences within the Darlington Creek Subdivision and has a design capacity of 49,500 gallons per day. However, the facility sees an average flow of approximately 15,500 gallons per day according to the operating permit. The plant operates under Kentucky Pollutant Discharge Elimination System Permit No. KY0105325.

Existing Flows and Loadings and Projections

The permitted design flow rate is based on the subdivision being fully built out and 100% inhabited. Presently, there are only about 90 connections built, which correlates to an average daily flow between approximately 18,000-25,000 gpd. The subdivision is platted for a total of 120 houses, meaning average daily flows within the 24,000-33,000 gpd range should be expected when the subdivision is complete.

Permit Limitations and Historical Compliance Performance

A summary of the permit limits is described below:

- CBOD5 – 15/22.5 mg/L (Monthly Average/Max. Weekly Average)
- TSS – 30/45 mg/L
- NH3-N – 4.0/6.0 mg/L (May 1 - Oct 31) (Monthly Average/Daily Maximum)
- NH3-N – 10.0/15.0 mg/L (Nov 1 - April 30)
- E. Coli – 130/240 col/100 mL (Thirty-day Geometric Mean/Seven-day Geometric Mean)
- Total Residual Chlorine – 0.011/0.019 mg/L (Monthly Average/Daily Maximum)
- pH - Between 6 and 9 Standard pH units

According to the EPA Facility Report, DMR Reports have not been filed for the plant since 2019, but there are no visible instances of any effluent exceedances.

DESIGN 21

Wastewater Treatment Facility Existing Conditions

The facility includes the following features:

- The facility is an extended aeration activated sludge plant that utilizes two separate treatment trains, an anaerobic digester, chlorine disinfection, dechlorination, and tertiary filtration.
- 2 x 8,000 Gal. Aeration tanks, 1 x 3,600 Gal. Aeration/Influent Mixing Tank with a bar screen for pre-treatment (RAS & Scum Lines are conveyed from each clarifier into this tank via air-lifts.)
- 2 x 156 S.F. Clarifiers with 1 RAS & 1 Scum return airlift each.
- A PureStream ES Tertiary Filter located in the blower building on the southern edge of the site is used to remove TSS prior to effluent discharge.
- The plant is equipped with 2 x Dual Lobe URAI 33 Positive Displacement Blowers with 5 hp motors. There are 16 diffusers in each aeration tank, and air headers are 2.5".
- The existing facility has 3 phase, 240 x 480 V primary service and a 120/240 V step down transformer.
- There is a manual transfer switch installed on site, as well as a Kohler backup generator.

Functionality of the Existing System

The functionality of the existing plant is similar to other extended aeration activated sludge systems…

- According to the operator, the aeration tanks are 10' deep and based on the average flow of 15,500 gpd on the permit, the plant has more than enough aeration capacity at its current state. However, if flow starts to exceed 30,000 gpd on a regular basis as the subdivision continues to grow, the plant may need to be upsized. Flow monitoring needs to be performed to determine average, max daily, and peak hourly flows.
- Currently no remote monitoring is in place at the site. This makes it difficult for the operators to know when the facility is failing. Operational monitoring should be completed to monitor the quality of effluent, which should then be compared to the operating permit.
- The existing extended aeration package plant tank and grating are in need of major repair.
- The contact time for disinfection appears to be limited, but according to the operators, but there does not seem to be issues with fecal coliform effluent.
- At the maximum 10-State Standards surface overflow rate of 1,000 gpd/sf, the clarifiers can handle peak flows up to about 312,000 gpd. The peak daily flow and peak hourly flows to the plant are not expected to exceed this flow rate, so the clarifiers are adequately sized for use in an extended aeration application in terms of its surface area.
- According to the operators, the clarifiers are only 10' deep. Because 10-State Standards require 12' deep clarifiers following extended aeration activated sludge processes, these clarifiers will not be acceptable according to standards. Note that a variance will be required for acceptance of the secondary clarifier due to the 10' hydraulic depths.
- There is ductweed growth on the surface of one of the clarifiers that needs to be removed that could cause effluent TSS issues if the filter is not online.
- The air headers are sized at 2.5", which is not adequate for the amount of SCFM necessary for this plant. These 2.5" headers will need to be replaced with 3" headers.
- The existing operators regularly perform settleability and DO tests in the existing plant for process control, and the results are generally suitable for good performance in extended aeration plants.

Wastewater Treatment Facility Recommended Improvements

- While we do believe the plant is adequately sized to meet effluent limits with the current flow levels, it would be possible to increase capacity in the future by converting the existing extended aeration plant into an IFAS (Integrated Fixed Film Activated Sludge) system. o This improvement would be expected to minimize solids carry over into the clarifier during peak flow events relative to existing conditions by reducing sludge production.
- This improvement would increase nitrification capabilities and process stability.

- Flow data needs to be acquired to determine if certain upgrades will be necessary, such as increasing aeration capacity/converting to IFAS, or increasing volume of the chlorine contact tank to meet minimum disinfection contact time standards.

The existing extended aeration package plant tank is developing rust and is in need of major repair, sandblasting, and coal tar coating for corrosion protection.

- There is dense forest located at the southern edge of the plant which could cause issues, as leaves or sticks could potentially clog wastewater process piping and back up sewage. We recommend clearing all trees within 20 feet of the fence surrounding the plant and the blower/filter building.
- The gate used to enter the site and the fence are showing signs of aging and are in need of repair.
- There is a hoist installed above the influent mixing tank that is left over from when they previously had a mixing pump installed there. They have since substituted the mixing pump for diffusers, and the hoist no longer serves a purpose and should be removed from the site.

Wastewater Collection System Understanding

The collection system consists entirely of gravity sewer. There were no collection system maps available, according to the operators.

Wastewater Collection System Recommended Improvements

- GIS shapefiles should be developed for future maintenance. System mapping at the fingertips of the operators will enhance the level of service and timing of responses to emergency and customer issues.
- Install flow monitoring, perform smoke testing, perform video inspection at selected locations, evaluate systems and create GIS based maintenance priority list to help understand and reduce the effects of I and I on the system.

Total Project Cost Estimate

DARLINGTON WASTEWATER PLANT - NARUC

Item	NARUC Category	EXPENSES	FIXED ASSETS	TOTAL
Install Mission Monitoring (Plant)	Sewer - General Plant	$0	$15,000	$15,000
Tank Repair (Sandblasting, Welding, Leak Repair, Coal Tar Coating)	Sewer - General Plant	$0	$50,000	$50,000
Tree Removal	Sewer - General Plant	$0	$20,000	$20,000
Gate and Fence Repair	Sewer - General Plant	$0	$20,000	$20,000
Replace Air Headers	Sewer - Treatment and Disposal	$0	$30,000	$30,000
Wastewater Process Piping Maintenance	Sewer - Treatment and Disposal	$0	$30,000	$30,000
Install Effluent Flow Meter	Sewer - Treatment and Disposal	$0	$15,000	$15,000
TOTAL		$0	$180,000	$180,000