

**IN THE TENNESSEE PUBLIC UTILITY COMMISSION
AT NASHVILLE, TENNESSEE**

IN RE:)	
)	
JOINT APPLICATION OF AQUA)	
UTILITIES COMPANY, LLC, AND)	DOCKET NO. 19-00062
LIMESTONE WATER UTILITY)	
OPERAITNG COMPANY FOR)	
AUTHORITY TO SELL OR TRANSFER)	
TITLE TO THE ASSETS, PROPERTY)	
AND REAL ESTATE OF A PUBLIC)	
UTILITY AND FOR A CERTIFICATE)	
OF CONVENIENCE AND NECESSITY)	

LIMESTONE'S SUPPLEMENTAL RESPONSE TO DATA REQUEST

To: Karen H. Stachowski (BPR No. 019607)
Assistant Attorney General
Vance L. Broemel (BPR No. 011421)
Senior Assistant Attorney General
Office of the Tennessee Attorney General
Financial Division, Consumer Advocate Unit
P.O. Box 20207
Nashville, Tennessee 37202-0207
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Email: vance.broemel@ag.tn.gov
Email: karen.stachowski@ag.tn.gov

I. General Objection

Whether or not separately set forth in response to each Request, Respondent makes the following General Objection to each and every Definition and Request in Consumer Advocate's Data Request.

1. Respondent objects generally to all Requests to the extent that any Request seeks information that is not proportional to the needs of this case or that is not relevant to proving one

or more of the parties' claims or defenses. Respondent objects on the grounds that said demands are overly broad, and would subject Respondent to undue annoyance, oppression, burden, and expense. Such information shall not be produced in response to the Request.

II. Responses

The Consumer Advocate sent a follow up question to 's Supplemental Responses to the Data Request.

The Consumer Advocate's follow up questions are as follows:

1. Limestone Water Response to DR#2. There was an typo in the question of 2-4 to Limestone Water. The Permit SOP-92082 authorizes a design capacity of 0.01481 MGD and not 0.1481 MGD. This typo would affect the calculations in your response. I apologize for this typo.

RESPONSE:

The analysis of the system, current flows, and capacity are provided in Exhibit 1. This analysis is correct. There are approximately 353 current wastewater connections (homes) identified in the system, but only about 10% of them have year-round occupancy. The TDEC monthly flow reports from 2019 are attached as Exhibit 2. This data shows that discharge from the lagoon to the spray irrigation field only occurred twice in 2019, in May and August. The remaining months didn't see enough influent flow to overcome evaporation from the lagoon or raise the lagoon level to the point that discharge was necessary to maintain proper freeboard. The total amount of discharge to the spray irrigation field was 123,000 gallons in May and 235,000 gallons in August. These volumes would average approximately 3,968 gpd in May and 7,581 gpd in August. Taking this data into account, the system has excess capacity in its current state. If in the future the number of connections increase or the type of occupancy changes to where influent flows are regularly near capacity of the facility as designed, Limestone will make improvements to the facility in order to increase the capacity of the

facility (see response to DR 2-4).”

Dated: March 27, 2020

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Tyler A. Cosby". The signature is written in a cursive, flowing style. It is positioned above a horizontal line that separates it from the printed text below.


Charles B. Welch, Jr., Esq.
Tyler A. Cosby, Esq.
Farris Bobango PLC
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Nashville, TN 37219
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cwelch@farris-law.com
tcosby@farris-law.com

*Attorneys for Joint Applicants Aqua Utilities
Company, Inc., and Limestone Water Utility
Operating Company, LLC*

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the forgoing has been served via either U.S. Mail, postage prepaid, or electronically to the following this 27th day of March, 2020.

Vance Bromel
Karen H. Stachowski
Consumer Protection and Advocate Division
Office of the Attorney General
P.O. Box 20207
Nashville, TN 37202


Tyler A. Cosby

Civil Engineering
Surveying & Mapping
Potable Water
Wastewater Treatment



Civil Site Design
Construction Support
Transportation
Wastewater Collection

Aqua Utilities (Wastewater) – No discharge (SOP-92082)
Engineering Memorandum
Date: February 6, 2020

Wastewater Treatment Facility Understanding

The Aqua Utilities wastewater treatment facility is located just south east of Nixon, TN on the northern end of Pickwick Lake. The plant services approximately 353 customers. However, approximately 10% of the customers are full time residents. The facility consists of a no-discharge system which includes an aerated lagoon with ultraviolet disinfection and 32 acres spray application field.

The facility has a current operating permit that became effective on March 12, 2019 and expires on March 1, 2023. The operating permit has a maximum discharge per month of 444,300 gallons which equates to an average daily of 14,810 gallons per day. This type of facility relies on both land application and evaporation to rid the system of wastewater. In reviewing of monitoring sheets and through conversations with the seller, the system only land applies a few times a year. In 2019, the system only discharged once in August. The area is anticipating more growth. The number of discharges will increase with growth but the facility currently appears to have excess capacity due to being predominately second homes.

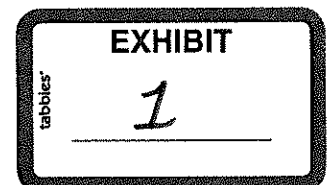
The land application system applies sewage over a 32 acre area. In review with the surveyor for this project, they noticed a number of cracked laterals in the field that will need to be repaired. Repairing these laterals will help apply the wastewater in a manner consistent with the design.

Understanding that the lagoon was built in the late 1980s and has never had sludge removed, I will recommend that upon acquisition the operator sludge judge the lagoon to determine sludge levels. If sludge levels are excessive, treatment capabilities as well as storage volume can be drastically reduced.

The system currently has no remote monitoring system. While the system has minimal discharge, monitoring could be installed to monitor loss of power to the aerator, UV failure, water levels of the lagoon, and record flow readings on a new magnetic flow meter.

While the operating permit does have testing requirements for the discharged wastewater, this system does not show up in the EPA's Echo website for evaluation. Therefore, we are assuming there are currently no issues on the discharged wastewater.

Improvements: Repair spray field laterals. Investigate fencing and repair as needed. Sludge judge lagoon and determine extent of sludge levels for removal. Flow monitor and install a Mission remote monitoring system.



Wastewater Collection System Understanding

The wastewater collection system consists of a gravity system with 41 lift stations. The lift stations appear to be in reasonable shape but do need to be cleaned out. Keeping stations clean will reduce the numbers of failures in the future that might be caused from excessive rags and grease.

Gravity collection systems typically have inflow and infiltration (I and I) issues. Smoke testing should be completed to provide a better understanding of system issues. This will also help with mapping the system for survey and GIS purposes. Flow monitoring of the influent or lift station run times can also provide good information on I and I issues. This data was not provided by the owner to evaluate if there is an issue.

The 41 lift stations should have a Mission monitoring system installed to reduce the number of sanitary sewer overflows from the stations. Understanding that the lift stations mostly pump from station to station, a single failure can receive a lot of wastewater flow in a short period that immediate notification is needed.

Improvements Required: Perform smoke testing, evaluate system and create GIS mapping for future maintenance needs. Install a Mission remote monitoring system on each lift station.



Lift Station

Civil Engineering
Surveying & Mapping
Potable Water
Wastewater Treatment

21 DESIGN

Civil Site Design
Construction Support
Transportation
Wastewater Collection



Wastewater Lagoon

Tennessee Department of Environment & Conservation
Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of January 20 19
 Facility Aqua Utilities, Inc. County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	of						
15							
16	Jan 2019						
17							
18							
19							
20							
21	Discharge						
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

EXHIBIT
2

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Garnie Hunter Date 2/10/19
 Analyses Performed by Outside Laboratory _____

**Tennessee Department of Environment & Conservation
Division of Water Resources**

Monthly Report for the operation of a land application wastewater treatment system

For the month of Feb

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	of						
15							
16	Feb 2019						
17							
18							
19	NO Discharge						
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator

Date

3/10/19

Analyses Performed by Outside Laboratory

LANNI O. ALLEN

Tennessee Department of Environment & Conservation
Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of March

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	of						
15	March 2019						
16							
17	discharge						
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Lannie Hulton

Date 4/11/19

Analyses Performed by Outside Laboratory _____

Laboratory Used _____

Tennessee Department of Environment & Conservation
Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of April

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	OF						
15							
16	Discharge						
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Larrie Beeton

Date 5/12/19

Tennessee Department of Environment & Conservation

Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of May

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	of						
15	May						
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27	123,000 gal						
28		22	7240		< 0.2	21.6	
29							
30							
31							
Permit Limit		45	1000		10	Report	
No. of Violations		0	1		0	0	

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Jamie Hunter

Date 6/10/19

Analyses Performed by Outside Laboratory yes

Tennessee Department of Environment & Conservation

Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of JUNE

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	OF						
15							
16	JUNE						
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

NO DISCHARGE

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator

[Handwritten Signature]

Date

07/09/2019

Analyses Performed by Outside Laboratory

Tennessee Department of Environment & Conservation

Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of July

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	of						
15	July						
16							
17							
18	discharge						
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator James G. Huber

Date 8/8/19

Analyses Performed by Outside Laboratory _____

**Tennessee Department of Environment & Conservation
Division of Water Resources**

Monthly Report for the operation of a land application wastewater treatment system

For the month of August

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8	Flow						
9							
10	FOR						
11							
12	month						
13							
14	of						
15							
16	August						
17	2019						
18							
19							
20							
21							
22							
23							
24							
25							
26							
27		14	410		< 0.2	18.4	
28	235,000 gal						
29							
30							
31							
Permit Limit		45	1,000		10	Report	
No. of Violations		0	0		0	0	

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Gannie Hutton

Date 9/8/19

Analyses Performed by Outside Laboratory

Tennessee Department of Environment & Conservation
Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of September

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

**Flow for the
Month of: September**

Gallons: 0

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Garnett Hutton

Date 10/13/19

Analyses Performed by Outside Laboratory _____

Tennessee Department of Environment & Conservation
Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of October

20 19

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

**Flow for the
month of:**

Gallons:

no Discharge

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Lamie J. Hutton

Date 11/10/19

Tennessee Department of Environment & Conservation
Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system
 For the month of November 2019

Facility Aqua Utilities, Inc.

County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

**Flow for the
 Month of: November 2019**

Gallons:

no Discharge

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Samuel Hutton

Date 12/8/19

Tennessee Department of Environment & Conservation

Division of Water Resources

Monthly Report for the operation of a land application wastewater treatment system

For the month of December 20 19

Facility Aqua Utilities, Inc. County Hardin

Date	Daily Flow/ Pumping Vol.	BOD5	Fecal	Chlorine	Nitrates	Ammonia	TSS
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
Permit Limit							
No. of Violations							

Flow for the
month of:

Gallons: ~~0~~
no Discharge

I certify that the submitted information is accurate and complete. I further certify that all sampling was performed in accordance with approved procedures and all analyses were performed in accordance with 40 CFR part 136. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature of Certified Operator Samuel Hutton Date 1/12/2020