



March 16, 2016

Honorable Herbert H. Hilliard Chairman
Tennessee Regulatory Authority
502 Deaderick Street
Nashville, TN 37243

RE: Petition to amend Certificate of Convenience and Necessity 16-00030

Dear Chairman Hilliard

Aqua Green Utility Inc. desires to expand its service area to include a portion of McNairy County in Tennessee known at the intersection of Highway 45 and Highway 57 for Loves Travel Stops & Country Store. The attached Petition is in support of our request. A tariff sheet and other documentation is included for your consideration.

Aqua Green Utility Inc. has the financial capabilities to provide wastewater service for the Loves Travel Stop & Country Store. Currently the financial surety provided by Aqua Green Utility Inc. is in the form of a letter of credit, rather than a bond. It should be noted that the amount is in excess of the minimum we are currently required to maintain. Also, an important consideration is that the letter of credit is fully backed by a certificate of deposit in which the utility collects interest, helping keep the rates down for our customers. Our escrow account is also in excess of the minimum amount required and we have not needed to use any money from our escrow account to date.

Aqua Green Utility Inc. has the technical expertise needed to operate the Loves Travel Stop & Country Store. I have obtained a State of Tennessee Grade 1 Wastewater Collection System Operator License and a State of Tennessee Biological/Natural Operator Treatment System Operator License. Through our affiliate company, we have designed and will construct a treatment plant that is the same type of operation as our Stonebridge plant. This plant has been so successful that it has been featured in a national magazine.

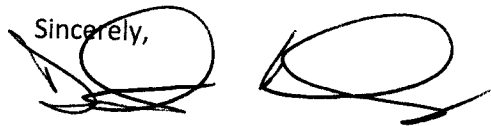
Aqua Green Utility Inc. has the managerial capability to operate the Loves Travel Stop & Country Store. The utility has successfully operated since July 2009 with no complaints from our customers. Our surety amounts have steadily increased. We have established a billing system in which each payment and envelope is scanned to eliminate mistakes as much as possible and verify payments if needed. Our treatment plants report problems to our technicians and report data to a central computer. If a plant does not report that information, an email is sent to our technicians. This type of management system

assures that even if a plant has a total failure, we will know and take appropriate action in a timely fashion.

There is a need for our service since there is no municipal sewage available in this area. An important note to consider is that in negotiations with the Love's people, they expressed they have no desire to be in the wastewater business, so they tend not to go to areas that are not on municipal sewage. Because of the utilities regulated by the Tennessee Regulatory Authority, like Aqua Green Utility Inc., the Love's company is more willing to invest in rural areas of the State of Tennessee.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to be 'Dart Kendall', written over a horizontal line.

Dart Kendall President
Aqua Green Utility Inc.



10601 North Pennsylvania
P. O. Box 26210
Oklahoma City, OK 73126

February, 25, 2015

RE: McNairy County, Tennessee

To Whom It May Concern,

We would request that Aqua Green Utility Inc. Provide Sewer service to our property generally located near the intersection of Highway 45 and Highway 57 in McNairy County, Tennessee.

Property described in Quick Claim Deed of Record in Deed Book 233, Page 355, less and except parcels in Deed Book 266, Page 776; Deed Book 230, Page 279; and in Deed Book 233, Page 354, all recordings in the Register's Office of McNairy County, Tennessee.

You may contact Steve Walters at 405-761-4400 or Steve.Walters@loves.com if you have questions.

Sincerely,

Steve Walters
Real Estate Project Manager

1. **BEFORE THE TENNESSE REGULATORY AUTHORITY**
2. **NASHVILLE, TENNESSEE**

3.
4. **March 16. 2016**
5.

6. **IN RE:**)
7.)
8. **PETITION OF AQUA GREEN UTILITY INC. TO AMEND**) **DOCKET NO: _____**
9. **ITS CERTIFICATE OF PUBLIC CONVENIENCE AND**)
10. **NECESSITY FOR THE SERVICE PART OF MCNAIRY**)
11. **COUNTY, TENNESSEE KNOWN AS LOVE'S TRAVEL STOP &**)
12. **COUNTRY STORE @ THE CORNER HWY 45 AND HWY 57.**)
13.
14.

15. **PRE-FILED DIRECT TESTIMONY OF DART KENDALL**
16.

17. **Q. State your name for the record and your position with the Petitioner, Aqua Green**
18. **Utility Inc.**
19. A. Dart Kendall. I am the president of the Aqua Green Utility Inc.
20. **Q. What is the business of Aqua Green Utility Inc.?**
21. A. To provide environmentally friendly and affordable wastewater service to communities
22. where wastewater service is not currently available.
23. **Q. When did the Company receive its first certificate from the Authority to operate a**
24. **sewer system in Tennessee?**
25. A. July 31, 2009
26. **Q. How many certificates has the Company received from the Authority to provide sewer**
27. **service in the State of Tennessee?**
28. A. Two, The Peninsula and Stonebridge Subdivisions
29. **Q. What services will Aqua Green Utility Inc. provide to The Loves Travel Stop &**
30. **Country Store?**
31. A. Aqua Green Utility will provide wastewater service: Including all
32. maintenance of the sewer treatment tanks. Maintaining the main lines, but excluding

33. the grease trap on Love's property. Maintaining and operating the treatment plant and
34. drip field. All operation and maintenance will be done in a manner as to meet all
35. requirements of the state operating permit.
36. Q. **Does Aqua Green Utility Inc. have the technical, managerial, and financial capability**
37. **to provide wastewater service to the Love's Travel Stop & Country Store?**
38. A. Yes, Aqua Green Utility Inc. staff and associates have all the necessary technical,
39. managerial, and financial capability to provide wastewater service to the Love's Travel
40. Stop & Country Store located at Hwy 45 and Hwy 57.
41. I additionally hold a BNS sewage treatment plant operators license and a sewage
42. collection system operators license issued by the State of Tennessee
43. Q. **Is there a stated public need for wastewater service in this area?**
44. A. Yes, we have been requested to provide wastewater service by Love's Travel Stops
45. & Country Stores. I have included a copy of a letter requesting that the service be
46. provided. I have contacted the other utilities in the area and they have no plans to
47. service this area.
48. Q. **Will Aqua Green Utility Inc. abide by all applicable Tennessee statues and TRA**
49. **rules governing wastewater utilities?**
50. A. Yes, Aqua Green Utility Inc. will abide by all applicable Tennessee statues and TRA
51. rules governing wastewater utilities.
52. Q. **How many customers will be served in this development?**
53. A. 1. Aqua Green Utility Inc. will service the Love's Travel Stop & Country Store.
54. Q. **Identify any complaints filed with any state regulatory agency involving Aqua**
55. **Green Utility Inc.**
56. A. There have never been any complaints filed against Aqua Green Utility Inc.
57. Q. **Discuss in detail the type of wastewater system Aqua Green Utility Inc. proposes for**
58. **construction, which will support the Love's Travel Stop & Country Store at Hwy 45**
59. **and 57 McNairy County, Tennessee.**
60. A. A fully automated trickle filter plant capable of supporting all potential needs at
61. Love's Travel Stop & Country Store. The plant features autonomous redundancy of
62. major components, as well as leak detection and isolation technology. This is a trickle
63. type system where sewage is pumped across media blocks for natural treatment.
64. Additional solar powered recirculation pumping has been requested for approval to

65. TDEC, providing true state of the art wastewater treatment. After treatment, the
66. water is disposed of through drip emitter tubing installed in the soil.
67. Q. **Provide a timeline for construction of the wastewater system.**
68. A. It is expected to take 60 to 90 days build days
69. **Does this conclude your pre-filed testimony?**
70. A. Yes.

71. I swear that the foregoing testimony is true and correct to the best of my knowledge
72. and belief.

73. 
74. _____
75. Dart Kendall

76. President

77. Aqua Green Utility Inc.

78. Subscribed and sworn to me this 16 day of March 2016

79.

80. Notary Public 

81.

82. County of Cobb

83.

84. My Commission Expires 12/20/2019

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the above and foregoing Pre-Filed Direct Testimony of Dart Kendall has been served upon the Tennessee Regulatory Authority, 502 Deaderick Street, Nashville, Tennessee 37243. By the method of Fed Ex.

On this 16 day of March 2016



Dart Kendall

M. Guleva
NOTARY PUBLIC
Cobb County, GEORGIA
My Comm. Expires
12/20/2019

STATE OF TENNESSEE

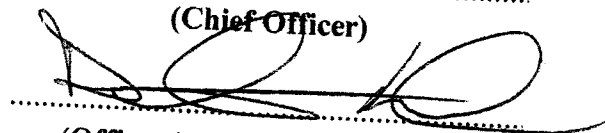
COUNTY OF .Jefferson

We the undersigned Dart Kendall
and Becky Kendall
of Aqua Green Utility Inc.

on our oath do severally say that the foregoing return has been prepared,
under our direction, from the original books, papers and records of said
utility; that we have carefully examined the same, and declare the same to be
a correct statement of the business and affairs of said utility for the period
covered by the return in respect to each and every matter and thing therein
set forth, to the best of our knowledge, information and belief.



(Chief Officer)



(Officer in charge of accounts)

Dart Kendall

Subscribed and sworn to before me this 16
day of March 2016

Notary Public, cllsp Co
My commission will expire 12/20/2019

(Seal)

M. Guleva
NOTARY PUBLIC
Cobb County, GEORGIA
My Comm. Expires
12/20/2019

EASTVIEW WATER DEPARTMENT

199 Highway 57 West
Ramer, TN 38367
(731) 645-3428

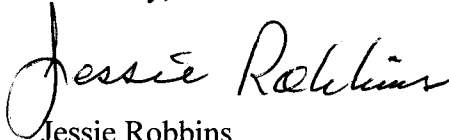
March 1, 2016

AquaGreen Utility Inc.
Dart Kendall, President
3350 Galts Road
Acworth, Georgia 30102

Mr. Kendall,

The Eastview Water Department provides water only to the Highway 45 & Highway 57 intersection. We do not provide wastewater service to any customers, nor will we be providing service within the next twelve months. In addition, there is no other local water/wastewater service within our service area.

Sincerely,

A handwritten signature in cursive script that reads "Jessie Robbins".

Jessie Robbins
Chairman
Eastview Water Department

EASTVIEW WATER DEPARTMENT

199 Highway 57 West

Ramer, TN 38367

(731) 645-3428

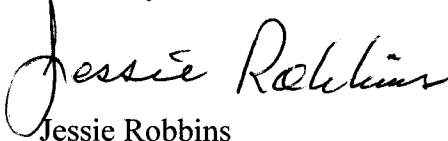
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Sincerely,

A handwritten signature in cursive script that reads "Jessie Robbins". The signature is written in black ink and is positioned above the printed name and title.

Jessie Robbins
Chairman
Eastview Water Department

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[illegible]

Name of Respondent Aqua Green Utilities, Inc.		This Report is: (1) <u>X</u> An Original (2) A Resubmission		Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
INCOME STATEMENT					
Account Name (a)	Ref Page (b)	Water (c)	Sewer (d)	Other (e)	Total (f)
Gross Revenue:					
Residential		-	22,316	-	22,316
Commercial		-	-	-	-
Industrial		-	-	-	-
Multi-Family		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Total Gross Revenue		-	22,316	-	22,316
Operation & Maint. Expense	W3/S3	-	16,778	-	16,778
Depreciation Expense	F-5	-	-	-	-
Amortization Expense		-	-	-	-
Other Expense (Please Specify)		-	-	-	-
Other Expense (Please Specify)		-	-	-	-
Taxes Other Than Income	F-7	-	801	-	801
Income Taxes	F-7	-	711	-	711
Total Operating Expenses		-	18,290	-	18,290
Net Operating Income		-	4,026	-	4,026
Other Income:					
Nonutility Income		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Total Other Income		-	-	-	-
Other Deductions:					
Misc. Nonutility Expenses		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Other (Please Specify)		-	-	-	-
Total Other Deductions		-	-	-	-
Net Income		-	4,026	-	4,026

Name of Respondent Aqua Green Utilities, Inc.		This Report is: (1) <u>X</u> An Original (2) <u> </u> A Resubmission	Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
COMPARATIVE BALANCE SHEET				
Account Name (a)		Ref Page (b)	Current Year (c)	Previous Year (d)
ASSETS				
Utility Plant in Service (101-105)	F5/W1/S1	0	0	
Accum. Depreciation and Amortization (108)	F5/W2/S2	0	0	
Net Utility Plant		0	0	
Cash		8,167	14,093	
Customer Accounts Receivable (141)		0	0	
Prepaid State Tax		0	800	
Other Assets Utility Investments		20,270	11,000	
Prepaid Federal Tax		932	301	
Other Assets (Please Specify)		0	0	
Total Assets		29,369	26,194	
LIABILITIES AND CAPITAL				
Common Stock Issued (201)	F-6	0	0	
Preferred Stock Issued (204)	F-6	0	0	
Other Paid-In Capital (211)		0	0	
Retained Earnings (215)	F-6	29,369	26,194	
Capital (Proprietary & Partnership-218)	F-6	0	0	
Total Capital		29,369	26,194	
Long-Term Debt (224)	F-6	0	0	
Accounts Payable (231)		0	0	
Notes Payable (232)		0	0	
Customer Deposits (235)		0	0	
Accrued Taxes (236)		0	0	
Other Liabilities (Please Specify)		0	0	
Other Liabilities (Please Specify)		0	0	
Other Liabilities (Please Specify)		0	0	
Other Liabilities (Please Specify)		0	0	
Other Liabilities (Please Specify)		0	0	
Advances for Construction		0	0	
Contributions In Aid Of Const.-Net (271-2)	F-8	0	0	
Total Liabilities		0	0	
Total Liabilities & Capital		29,369	26,194	

Name of Respondent Aqua Green Utilities, Inc.	This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
NET UTILITY PLANT			
Plant Accounts (101-107) Inclusive (a)	Water (c)	Sewer (d)	Other (e)
			Total (f)
Utility Plant in Service (101)	0	0	0
Construction Work in Progress (105)	0	0	0
Other (Please Specify)	0	0	0
Other (Please Specify)	0	0	0
Other (Please Specify)	0	0	0
Other (Please Specify)	0	0	0
Other (Please Specify)	0	0	0
Other (Please Specify)	0	0	0
Total Utility Plant	0	0	0
ACCUMULATED DEPRECIATION AND AMORTIZATION OF UTILITY PLANT			
Account 108 (a)	Water (c)	Sewer (d)	Other (e)
			Total (f)
Balance First of Year	0	0	0
Credits During Year:			
Accruals charged to Depreciation Account	0	0	0
Salvage	0	0	0
Other Credits (Please Specify):	0	0	0
Other Credits (Please Specify):	0	0	0
Other Credits (Please Specify):	0	0	0
Other Credits (Please Specify):	0	0	0
Total Credits	0	0	0
Debits During Year:			
Book/Historical Cost of Plant Retired	0	0	0
Cost of Removal	0	0	0
Other Debits (Please Specify):	0	0	0
Other Debits (Please Specify):	0	0	0
Other Debits (Please Specify):	0	0	0
Other Debits (Please Specify):	0	0	0
Total Debits	0	0	0
Balance End of Year	0	0	0

Name of Respondent Aqua Green Utilities, Inc.	This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
CAPITAL STOCK (201 - 204)			
	Common Stock	Preferred Stock	
(a)	(b)	(c)	
Par or stated value per share	-	-	
Shares Authorized	-	-	
Shares issued and outstanding	-	-	
Total par value of stock issued	-	-	
Dividends declared per share for year	0	0	
RETAINED EARNINGS (215)			
	Appropriated	Unappropriated	
(a)	(b)	(c)	
Balance first of year	-	26,194	
Changes during year NET INCOME/(NET LOSS)	-	3,175	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Balance end of year	0	29,369	
PROPRIETARY CAPITAL (218)			
	Proprietor	Partner	
(a)	(b)	(c)	
Balance first of year	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Changes during year (Please Specify)	-	-	
Balance end of year	0	0	
LONG-TERM DEBT (224)			
	Interest Rate	Year End Balance	
(a)	(b)	(c)	
Debt #1	0.00%	-	
Debt #2	0.00%	-	
Debt #3	0.00%	-	
Debt #4	0.00%	-	
Debt #5	0.00%	-	
Debt #6	0.00%	-	
Debt #7	0.00%	-	
Debt #8	0.00%	-	
Debt #9	0.00%	-	
Debt #10	0.00%	-	
Debt #11	0.00%	-	
Debt #12	0.00%	-	
Total Long-Term Debt		0	

[illegible]

Name of Respondent Aqua Green Utilities, Inc.		This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission		Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
CONTRIBUTIONS IN AID OF CONSTRUCTION (271)					
Description (a)		Water (b)	Sewer (c)	Total (d)	
Balance First of Year		-	-	-	
Add Credits During Year		-	-	-	
Less Charges During Year		-	-	-	
Balance End of Year		0	0	0	
Less Accumulated Amortization		-	-	-	
Net Contributions in Aid of Construction		0	0	0	
ADDITIONS TO CONTRIBUTIONS IN AID OF CONSTRUCTION DURING YEAR (CREDITS)					
Report below all developers or contractors agreements for which cash or property was received during the year (a)		Indicate "Cash" or "Property" (b)	Water (c)	Sewer (d)	
Contractor or Developer #1			-	-	
Contractor or Developer #2			-	-	
Contractor or Developer #3			-	-	
Contractor or Developer #4			-	-	
Contractor or Developer #5			-	-	
Contractor or Developer #6			-	-	
Contractor or Developer #7			-	-	
Contractor or Developer #8			-	-	
Contractor or Developer #9			-	-	
Contractor or Developer #10			-	-	
Contractor or Developer #11			-	-	
Contractor or Developer #12			-	-	
Contractor or Developer #13			-	-	
Contractor or Developer #14			-	-	
Contractor or Developer #15			-	-	
Contractor or Developer #16			-	-	
Contractor or Developer #17			-	-	
Contractor or Developer #18			-	-	
Contractor or Developer #19			-	-	
Contractor or Developer #20			-	-	
Contractor or Developer #21			-	-	
Contractor or Developer #22			-	-	
Contractor or Developer #23			-	-	
Contractor or Developer #24			-	-	
Contractor or Developer #25			-	-	
Contractor or Developer #26			-	-	
Contractor or Developer #27			-	-	
Contractor or Developer #28			-	-	
Contractor or Developer #29			-	-	
Contractor or Developer #30			-	-	
Total Credits During Year			0	0	

[illegible]

Name of Respondent		This Report is:		Date of Report	Year of Report			
Aqua Green Utilities, Inc.		(1) <input checked="" type="checkbox"/> An Original	(2) <input type="checkbox"/> A Resubmission	(Mo, Da, Yr)				
				3/4/16	40907			
ANALYSIS OF ACCUMULATED DEPRECIATION BY PRIMARY ACCOUNT - SEWER								
Account Number	Account	Average Service Life in Years	Average Salvage Value in Percent	Depreciation Rate Applied*	Accumulated Depreciation Balance Previous Year	Debits	Credits	Accumulated Depreciation Balance End of Year
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
354	Structures & Improvements	-	0.00%	0.00%	-	-	-	-
360	Collection Sewers - Force	-	0.00%	0.00%	-	-	-	-
361	Collection Sewers - Gravity	-	0.00%	0.00%	-	-	-	-
362	Special Collecting Structures	-	0.00%	0.00%	-	-	-	-
363	Services to Customers	-	0.00%	0.00%	-	-	-	-
364	Flow Measuring Devices	-	0.00%	0.00%	-	-	-	-
365	Flow Measuring Installations	-	0.00%	0.00%	-	-	-	-
370	Receiving Wells	-	0.00%	0.00%	-	-	-	-
371	Pumping Equipment	-	0.00%	0.00%	-	-	-	-
380	Treatment & Disposal Equipment	-	0.00%	0.00%	-	-	-	-
381	Plant Sewers	-	0.00%	0.00%	-	-	-	-
382	Outfall Sewer Lines	-	0.00%	0.00%	-	-	-	-
389	Other Plant & Miscellaneous Equipment	-	0.00%	0.00%	-	-	-	-
390	Office Furniture & Equipment	-	0.00%	0.00%	-	-	-	-
391	Transportation Equipment	-	0.00%	0.00%	-	-	-	-
392	Stores Equipment	-	0.00%	0.00%	-	-	-	-
393	Tools, Shop & Garage Equipment	-	0.00%	0.00%	-	-	-	-
394	Laboratory Equipment	-	0.00%	0.00%	-	-	-	-
395	Power Operated Equipment	-	0.00%	0.00%	-	-	-	-
396	Communication Equipment	-	0.00%	0.00%	-	-	-	-
397	Miscellaneous Equipment	-	0.00%	0.00%	-	-	-	-
398	Other Tangible Plant	-	0.00%	0.00%	-	-	-	-
Totals					0	0	0	0
*State basis used for percentages used in schedule.								

*State basis used for percentages used in schedule.

Name of Respondent Aqua Green Utilities, Inc.		This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission		Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
SEWER OPERATION & MAINTENANCE EXPENSE					N/A
Acct No.	Description (a)	Amount (b)			
701	Salaries & Wages - Employees	-			
703	Salaries & Wages - Officers, Directors & Stockholders	-			
704	Employee Pensions & Benefits	-			
710	Purchased Sewage Treatment	-			
711	Sludge Removal Expense	-			
715	Purchased Power	1,081			
716	Fuel for Power Production	-			
718	Chemicals	-			
720	Materials & Supplies	-			
730	Contractual Services	11,490			
740	Rents	-			
750	Transportation Expense	-			
755	Insurance Expense	-			
765	Regulatory Commission Expense	504			
770	Bad Debt Expense	-			
775	Miscellaneous Expenses	3,703			
Total Sewer Operation & Maintenance Expense		16,778			
SEWER CUSTOMERS					
Description (a)	Customers First of Year (b)	Additions (c)	Disconnections (d)	Customers End of Year (e)	
Metered Customers:					
5/8 Inch	-	-	-	-	
3/4 Inch	-	-	-	-	
1.0 Inch	-	-	-	-	
1.5 Inch	-	-	-	-	
2.0 Inch	-	-	-	-	
2.5 Inch	-	-	-	-	
3.0 Inch	-	-	-	-	
4.0 Inch	-	-	-	-	
6.0 Inch	-	-	-	-	
8.0 Inch	-	-	-	-	
Other (Please Specify)	-	-	-	-	
Other (Please Specify)	-	-	-	-	
Other (Please Specify)	-	-	-	-	
Unmetered Customers	-	-	-	-	
Total Customers	0	0	0	0	

Name of Respondent Aqua Green Utilities, Inc.	This Report is: (1) <u> X </u> An Original (2) <u> </u> A Resubmission		Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
PUMPING EQUIPMENT				
Description*** (a)	Lift Station #1 (b)	Lift Station #2 (c)	Lift Station #3 (d)	Lift Station #4 (e)
Make, Model, or Type of Pump				
Year Installed				
Rated Capacity (GPM)				
Size (HP)				
Power (Electric/Mechanical)				
Make, Model or Type of Motor				
SERVICE CONNECTIONS				
Description*** (a)	Service Connection #1 (b)	Service Connection #2 (c)	Service Connection #3 (d)	Service Connection #4 (e)
Size (Inches)				
Type (PVC, VCP, etc)				
Average Length (Feet)				
Connections-Beginning of Year	-	-	-	-
Connections-Added during Year	-	-	-	-
Connection-Retired during Year	-	-	-	-
Connections-End of Year	0	0	0	0
Number of Inactive Connections	-	-	-	-
COLLECTING MAINS, FORCE MAINS, & MANHOLES				
Description (a)	Collecting Mains (b)	Force Mains (c)	Manholes (d)	
Size (Inches)				
Type				
Length/Number-Beginning of Year	-	-	-	
Length/Number-Added During Year	-	-	-	
Length/Number-Retired During Year	-	-	-	
Length/Number-End of Year	0	0	0	

***If more space is needed to list equipment please attach additional sheets as necessary.

Name of Respondent Aqua Green Utilities, Inc.	This Report is: (1) <u> X </u> An Original (2) <u> </u> A Resubmission	Date of Report (Mo, Da, Yr) 3/4/16	Year of Report 40907
---	--	---	--------------------------------

TREATMENT PLANT

Description*** (a)	Treatment Facility #1 (b)	Treatment Facility #2 (c)	Treatment Facility #3 (d)	Treatment Facility #4 (e)
Manufacturer				
Type				
Steel or Concrete				
Total Capacity				
Average Daily Flow				
Effluent Disposal				
Total Gallons of Sewage Treated				

MASTER LIFT STATION PUMPS

Description*** (a)	Master Pump #1 (b)	Master Pump #2 (c)	Master Pump #3 (d)	Master Pump #4 (e)
Manufacturer				
Capacity (GPM)				
Size (HP)				
Power (Electric/Mechanical)				
Make, Model, or Type of Motor				

OTHER SEWER SYSTEM INFORMATION

Present Number of Equivalent Residential Customer's * being served	
Maximum Number of Equivalent Residential Customer's * that the system can efficiently serve	
Estimated Annual Increase in Equivalent Residential Customers *	
* Equivalent Residential Customers = (Total Gallons Treated / 365 Days) / 275 Gallons Per Day. Total Gallons Treated includes both sewage treated and purchased sewage treatment.	

State any plans and estimated completion dates for any enlargements of this system:

If the present systems do not meet environmental requirements, please submit the following:

- A. An evaluation of the present plant or plants in regard to meeting the requirements.
- B. Plans for funding and construction of the required upgrading.
- C. The date construction will begin.

What is the percent of the certificated area that have service connections installed?

Company Name:	Aqua Green Utilities, Inc.
Report Period:	12/31/2015
Report Date:	3/4/16

BALANCE SHEET:

	Amount for 1st Reference	Amount for 2nd Reference	Difference
1. Line 10 on F4, col. "C" agrees w/line 16 on F5, col. "F".	-	-	0
2. Line 10 on F4, col. "C" agrees w/lines 34, W1, col. "F" & 32, S1, col. "F".	-	-	0
3. Line 11 on F4, col. "C" agrees w/line 52 on F5, col. "F".	-	-	0
4. Line 11 on F4, col. "C" agrees w/lines 32, W2, col. I & 30, S2, col. I	-	-	0
5. Line 27 on F4, col. "C" agrees w/line 10 on F6, col. "B".	-	-	0
6. Line 28 on F4, col. "C" agrees w/line 10 on F6, col. "C".	-	-	0
7. Line 30 on F4, col. "C" agrees w/line 24 on F6, cols. "B" & "C".	29,369	29,369	0
8. Line 31 on F4, col. "C" agrees w/line 37 on F6, cols. "B" & "C".	-	-	0
9. Line 37 on F4, col. "C" agrees w/line 55 on F6, col. "C".	-	-	0
10. Line 41 on F4, col. "C" agrees w/line 32 on F7, col. "E".	-	-	0
11. Line 48 on F4, col. "C" agrees w/line 13 on F8, col. "D".	-	-	0
12. Line 8 on F8, col. "D" agrees w/line 55 on F8, cols. "C & D".	-	-	0

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83) Projection and
1 622-meter grid Universal Transverse Mercator, Zone 16
18 822-foot by 1 Tenonite Coordinate System of 1983

SCALE 1:24 000

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Tennessee Secretary of State

Tre Hargett

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Business Entity Detail

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Entity details cannot be edited. This detail reflects the current state of the filing in the system.

Return to the [Business Information Search](#).

000589191: For-profit Corporation - Domestic

[Printer Friendly Version](#)

Name: AQUA GREEN UTILITY, INC.

Status: Active

Formed in: TENNESSEE

Fiscal Year Close: December

Term of Duration: Perpetual

Principal Office: 3350 GALTS RD
ACWORTH, GA 30102-1132 USA

Mailing Address: 3350 GALTS RD
ACWORTH, GA 30102-1132 USA

AR Exempt: No

Shares of Stock: 1,000

Initial Filing Date: 10/24/2008

Delayed Effective Date:

AR Due Date: 04/01/2017

Inactive Date:

Obligated Member Entity: No

[Assumed Names](#)

[History](#)

[Registered Agent](#)

Name

Status

Expires

No Assumed Names Found...

Division of Business Services
312 Rosa L. Parks Avenue, Snodgrass
Tower, 6th Floor
Nashville, TN 37243
615-741-2286

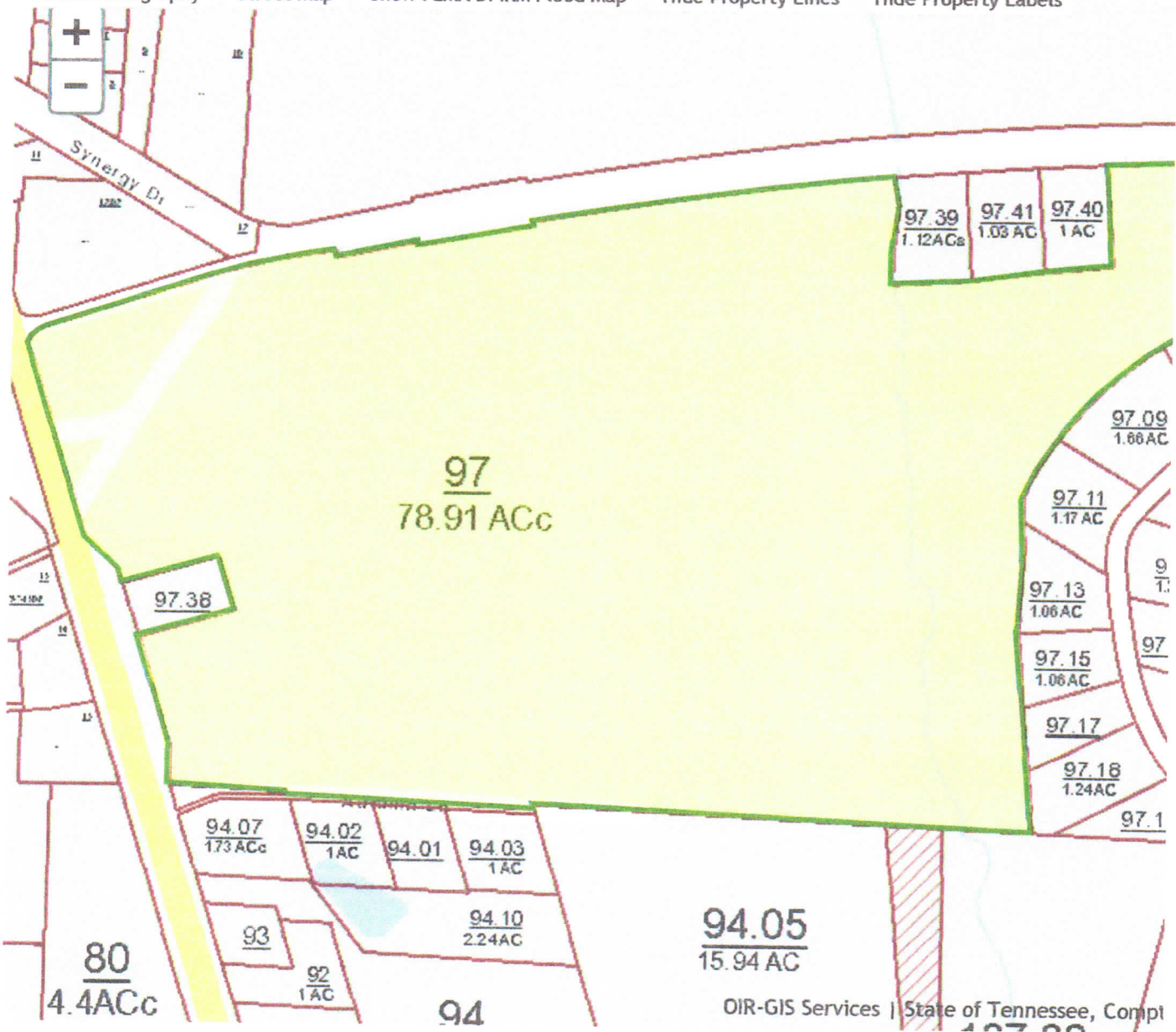
[Email](#) | [Directions](#) | [Hours and Holidays](#) | [Methods
of Payment](#)

Business Filings and Information (615) 741-2286 | TNSOS.CORPINFO@tn.gov
Certified Copies and Certificate of Existence (615) 741-6488 | TNSOS.CERT@tn.gov
Motor Vehicle Temporary Liens (615) 741-0529 | TNSOS.MVTL@tn.gov
Uniform Commercial Code (UCC) (615) 741-3276 | TNSOS.UCC@tn.gov
Workers' Compensation Exemption Registrations (615) 741-0526 | TNSOS.WCER@tn.gov
Apostilles & Authentications (615) 741-0536 | TNSOS.ATS@tn.gov
Summons (615) 741-1799 | TNSOS.ATS@tn.gov
Trademarks (615) 741-0531 | TNSOS.ATS@tn.gov



Tennessee Property

Aerial Photography Street Map Show FEMA DFIRM Flood Map Hide Property Lines Hide Property Labels





AquaGreen Utility Inc.

Estimated minimum monthly cost to operate the McNairy County Love's

Monthly electric bill	\$162.00
Annual permit and renewal cost	
Annual permit \$350.00	\$29.17
5 year renewal application cost \$750.00	\$12.50
Cost of water testing required by TDEC. \$350.00 per qtr	\$116.67
Internet cost per month, plant communication	\$10.00
Operator visits and other labor	\$120.00
Billing cost	\$1.00
Other regulatory cost average business license, etc.	\$10.00
Expected property tax, monthly	\$17.00
Expected corporate tax, monthly	\$6.64
Total	\$484.98
Minimum billing amount, minimum 90,000 gallons @ \$5.75	\$517.50
<i>Profit</i>	<i>\$32.52</i>

Sincerely,

Dart Kendall
President
AquaGreen Utility Inc.
865-908-0432

WASTEWATER UTILITY SERVICE

SECTION 4

COMERICAL RATE SHEET

RATE CLASS 2

Fixed Film Treatment, Drip Dispersal

Total

\$5.75 per 1000 Gal

Escrow*

\$1.37 per 1000 Gal

Fees: Non-Payment: 5% of total bill amount
Disconnection: \$40
Reconnection: \$50
Returned Check (NSF Fee): \$25
Minimum Fee: 90,000 Gallons or \$517.50 month

*Escrow amount is included in the total: \$1.37 for non scheduled service, pump and control replacement.

Issued: March, 2 2016
Issued by: Dart Kendall
President

Effective:



RONNIE BROOKS
MAYOR
McNAIRY COUNTY, TENNESSEE

DATE: March 16, 2016

TO: AquaGreen Utility Inc., Dart Kendall President

FROM: *RSB* Ronnie Brooks McNairy County Mayor

RE: Utilities Love's Truck Stop, Eastview, TN

This memo is to verify that McNairy County will not be providing wastewater service to the corner of Highway 45 and Highway 57, Eastview, TN in the next 12 months.

EASTVIEW WATER DEPARTMENT

199 Highway 57 West

Ramer, TN 38367

(731) 645-3428

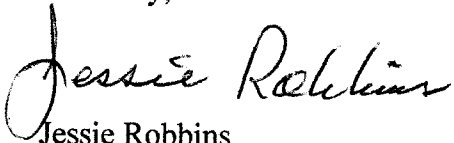
March 1, 2016

AquaGreen Utility Inc.
Dart Kendall, President
3350 Galts Road
Acworth, Georgia 30102

Mr. Kendall,

The Eastview Water Department provides water only to the Highway 45 & Highway 57 intersection. We do not provide wastewater service to any customers, nor will we be providing service within the next twelve months. In addition, there is no other local water/wastewater service within our service area.

Sincerely,

A handwritten signature in cursive script that reads "Jessie Robbins".

Jessie Robbins
Chairman
Eastview Water Department

**AQUA GREEN UTILITY
ESCROW SUMMARY**

Month	Number # of Customers Billed	Escrow Rate	Escrow Collected	Cummulative Balance Required	Escrow Deposited	Cummulative Escrow Deposited
Jan-09		10.13	0	\$0.00		\$300.00
Feb-09		10.13	0	\$0.00		\$300.00
Mar-09		10.13	0	\$0.00		\$300.00
Apr-09		10.13	0	\$0.00		\$300.00
May-09		10.13	0	\$0.00		\$300.00
Jun-09		10.13	0	\$0.00	0.05	\$300.05
Jul-09		10.13	0	\$0.00	300.00	\$600.05
Aug-09		10.13	0	\$0.00		\$600.05
Sep-09		10.13	0	\$0.00		\$600.05
Oct-09		10.13	0	\$0.00		\$600.05
Nov-09		10.13	0	\$0.00		\$600.05
Dec-09		10.13	243.12	\$243.12		\$600.05
Jan-10	2	10.13	20.26	\$263.38		\$600.05
Feb-10	2	10.13	20.26	\$283.64		\$600.05
Mar-10	2	10.13	20.26	\$303.90		\$600.05
Apr-10	2	10.13	20.26	\$324.16		\$600.05
May-10	2	10.13	20.26	\$344.42		\$600.05
Jun-10	2	10.13	20.26	\$364.68		\$600.05
Jul-10	2	10.13	20.26	\$384.94		\$600.05
Aug-10	2	10.13	20.26	\$405.20		\$600.05
Sep-10	2	10.13	20.26	\$425.46		\$600.05
Oct-10	2	10.13	20.26	\$445.72		\$600.05
Nov-10	2	10.13	20.26	\$465.98		\$600.05
Dec-10	2	10.13	20.26	\$486.24	0.07	\$600.12
Jan-11	2	10.13	20.26	\$506.50		\$600.12
Feb-11	2	10.13	20.26	\$526.76		\$600.12
Mar-11	2	10.13	20.26	\$547.02		\$600.12
Apr-11	2	10.13	20.26	\$567.28		\$600.12
May-11	2	10.13	20.26	\$587.54	500.00	\$1,100.12
Jun-11	2	10.13	20.26	\$607.80	0.15	\$1,100.27
Jul-11	2	10.13	20.26	\$628.06		\$1,100.27
Aug-11	2	10.13	20.26	\$648.32		\$1,100.27
Sep-11	2	10.13	20.26	\$668.58		\$1,100.27
Oct-11	2	10.13	20.26	\$688.84	0.11	\$1,100.38
Nov-11	2	10.13	20.26	\$709.10		\$1,100.38
Dec-11	2	10.13	20.26	\$729.36	0.11	\$1,100.49
Jan-12	2	10.13	20.26	\$749.62		\$1,100.49
Feb-12	2	10.13	20.26	\$769.88		\$1,100.49
Mar-12	2	10.13	20.26	\$790.14		\$1,100.49
Apr-12	2	10.13	20.26	\$810.40		\$1,100.49
May-12	2	10.13	20.26	\$830.66		\$1,100.49
Jun-12	2	10.13	20.26	\$850.92		\$1,100.49
Jul-12	8	10.13	81.04	\$931.96		\$1,100.49
Aug-12	8	10.13	81.04	\$1,013.00		\$1,100.49
Sep-12	8	10.13	81.04	\$1,094.04		\$1,100.49
Oct-12	8	10.13	81.04	\$1,175.08	0.34	\$1,100.83
Nov-12	8	10.13	81.04	\$1,256.12	1500.00	\$2,600.83
Dec-12	8	10.13	81.04	\$1,337.16	0.13	\$2,600.96
Jan-13	8	10.13	81.04	\$1,418.20		\$2,600.96
Feb-13	8	10.13	81.04	\$1,499.24		\$2,600.96
Mar-13	8	10.13	81.04	\$1,580.28		\$2,600.96
Apr-13	8	10.13	81.04	\$1,661.32		\$2,600.96
May-13	8	10.13	81.04	\$1,742.36		\$2,600.96
Jun-13	8	10.13	81.04	\$1,823.40		\$2,600.96
Jul-13	8	10.13	81.04	\$1,904.44		\$2,600.96
Aug-13	8	10.13	81.04	\$1,985.48		\$2,600.96
Sep-13	8	10.13	81.04	\$2,066.52		\$2,600.96
Oct-13	8	10.13	81.04	\$2,147.56	1000.00	\$3,600.96
Nov-13	8	10.13	81.04	\$2,228.60		\$3,600.96
Dec-13	8	10.13	81.04	\$2,309.64	0.23	\$3,601.19
Jan-14	8	10.13	81.04	\$2,390.68		\$3,601.19
Feb-14	8	10.13	81.04	\$2,471.72		\$3,601.19
Mar-14	8	10.13	81.04	\$2,552.76	1500.17	\$5,101.36
Apr-14	8	10.13	81.04	\$2,633.80	0.06	\$5,101.42
May-14	8	10.13	81.04	\$2,714.84		\$5,101.42
Jun-14	8	10.13	81.04	\$2,795.88	0.08	\$5,101.50
Jul-14	8	10.13	81.04	\$2,876.92		\$5,101.50
Aug-14	9	10.13	91.17	\$2,968.09		\$5,101.50
Sep-14	9	10.13	91.17	\$3,059.26		\$5,101.50
Oct-14	9	10.13	91.17	\$3,150.43		\$5,101.50
Nov-14	9	10.13	91.17	\$3,241.60		\$5,101.50
Dec-14	9	10.13	91.17	\$3,332.77	0.13	\$5,101.63
Jan-15	9	10.13	91.17	\$3,423.94	0.13	\$5,101.76
Feb-15	9	10.13	91.17	\$3,515.11		\$5,101.76
Mar-15	9	10.13	91.17	\$3,606.28		\$5,101.76
Apr-15	9	10.13	91.17	\$3,697.45	0.13	\$5,101.89
May-15	9	10.13	91.17	\$3,788.62		\$5,101.89
Jun-15	9	10.13	91.17	\$3,879.79		\$5,101.89
Jul-15	9	10.13	91.17	\$3,970.96	0.13	\$5,102.02
Aug-15	9	10.13	91.17	\$4,062.13		\$5,102.02
Sep-15	9	10.13	91.17	\$4,153.30	0.13	\$5,102.15
Oct-15	9	10.13	91.17	\$4,244.47		\$5,102.15
Nov-15	9	10.13	91.17	\$4,335.64		\$5,102.15
Dec-15	9	10.13	91.17	\$4,426.81	0.13	\$5,102.28
Jan-15	9	10.13	91.17	\$4,517.98		
Feb-15	9	10.13	91.17	\$4,609.15		
Mar-15	9	10.13	91.17	\$4,700.32		
Apr-15	0	10.13	0	\$4,700.32		
May-15	0	10.13	0	\$4,700.32		
Jun-15	0	10.13	0	\$4,700.32		
Jul-15	0	10.13	0	\$4,700.32		
Aug-15		10.13	0	\$4,700.32		
Sep-15		10.13	0	\$4,700.32		
Oct-15		10.13	0	\$4,700.32		
Nov-15		10.13	0	\$4,700.32		
Dec-15		10.13	0	\$4,700.32		

TOWN OF EASTVIEW

Ramer, Tennessee 38367

March 1, 2016

AquaGreen Utility Inc.
Dart Kendall, President
3350 Galts Road
Acworth, Georgia 30102

Mr. Kendall,

The Town of Eastview provides water only through the Eastview Water Department to the Highway 45 & Highway 57 intersection. We do not provide wastewater service to any customers, nor will we be providing service within the next twelve months. In addition, there is no other local water/wastewater service within our service area.

Sincerely,

A handwritten signature in cursive script that reads "Jessie Robbins".

Jessie Robbins
Mayor
Town of Eastview

State of Tennessee
Department of Environment and Conservation



Water and Wastewater Operator Certification Board
Issues This

Certificate of Competency
as Testimony That

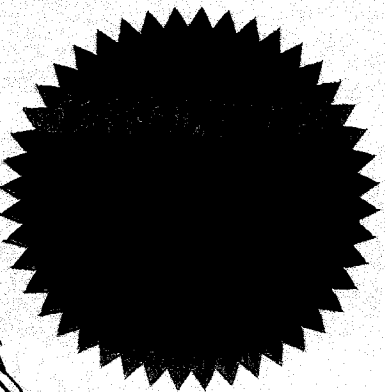
Dart A. Kendall

has satisfactorily fulfilled the requirements set forth by the

Water and Wastewater Operator Certification Board
and is therefore, by these presents, entitled to recognition as a

Biological/Natural Operator

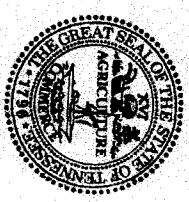
In Witness Whereof, we have subscribed our names and affixed our Seal



Attest
Karl A. White
Board Secretary

Certificate No. ***** Dated May 07, 2009
Recommended *Gene Lingo*
Approved *Jim H. Stokemissioner*
Board Chair

State of Tennessee
Department of Environment and Conservation



Water and Wastewater Operator Certification Board
Issues This

Certificate of Competency
as Testimony That

Dart A. Kendall

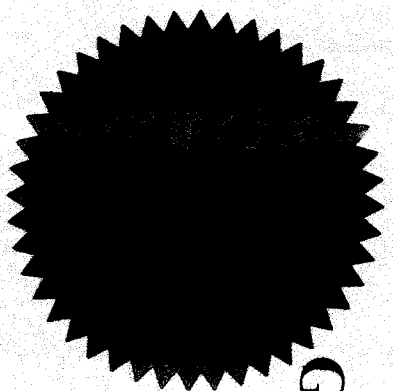
has satisfactorily fulfilled the requirements set forth by the

Water and Wastewater Operator Certification Board
and is therefore, by these presents, entitled to recognition as a

Grade I Wastewater Collection System Operator

In Witness Whereof, we have subscribed our names and affixed our Seal

Certificate No. 3546 Dated 5/5/2011



Attest

Sharon H. Smith
Board Secretary

Recommended

Sharon H. Smith
Board Chairman

Approved

Robert H. Smith
Commissioner.

Higher Levels

A STEP system with trickling biofilter serves a high-end lakefront subdivision on a site with substantial change in elevation

By Scottie Dayton

A developer wanted to build 108 weekend lake homes in an exclusive subdivision in Dandridge, Tenn. Dart Kendall, owner of Advanced Septic in Acworth, Ga., won the bid to design and install the private wastewater treatment plant.

Kendall worked with Bob Faulhaber, P.E., of Faulhaber Engineering and Sustainability in Cookeville, Tenn., to resolve site challenges. "The elevation rose 200 feet from one end of the subdivision to the drip fields, and some homes were a mile away from them," says Kendall.

The autonomous-redundant solution involved septic tank effluent pumping (STEP) systems, a trickling biofilter, high-pressure drip dosing, and programmable logic controllers (PLCs). The installation took four months.

Site conditions

Soils are moderate angular blocky structure with 0.24 gallons per square foot per day loading rate. The steep and rocky site borders Douglas Lake at the foot of Great Smoky Mountains National Park.

System components

Kendall and Faulhaber designed the system to handle 26,460 gpd. Major components are:

- 1,000-gallon dual-compartment one-piece precast septic tank with Polylok effluent filter and two Polylok risers. Concrete tanks from Hommel Concrete, Newport, Tenn.
- 1,000-gallon single-compartment one-piece precast pump tank with 1/2 hp Myers high-head effluent pump
- 240 CF-1900 AccuPac Cross Flow trickling filter blocks from Brentwood Industries
- 35,000-gallon concrete dosing tank with duplex 1.5 hp Goulds sewage pumps, duplex Myers 1/2 hp high-head effluent pumps, and duplex 1.5 hp Myers filtered effluent (drip) pumps
- 1.5 hp high-pressure Goulds booster pump
- Three 2-inch disc filters from Arkal Filtration Systems

(continued)



At the left, the 35,000-gallon poured-in-place circular dosing tank; at the right, the treatment tank with shrubs planted around it. (Photos courtesy of Dart Kendall)

SYSTEM PROFILE

Location:	Dandridge, Tenn.
Facility served:	108-home exclusive subdivision
System designers:	Dart Kendall, Advanced Septic, Acworth, Ga.; Bob Faulhaber, P.E., Faulhaber Engineering and Sustainability, Cookeville, Tenn.
Installer:	Dart Kendall, Advanced Septic
Site conditions:	Moderate angular blocky structure with 0.24 gallons per square foot per day loading rate
Type of system:	High-pressure dosed
Hydraulic capacity:	26,460 gpd



ABOVE: Dart Kendall stacks the media blocks (Brentwood Industries) four high in the treatment tank, leaving 12 inches of clearance at the top. **RIGHT:** Cliff Kendall buries drip tubing 9 inches deep using a Caterpillar 226 skid-steer loader with Bradco trencher (Paladin Construction Group).

- Three elevated tanks from ChemTank holding a combined 20,000 gallons
- 40,000 feet of Geoflow drip tubing with 10 Rain Bird 2-inch solenoid valves
- Flowmeter from SeaMetrics
- DirectLOGIC 205 PLC system from Koyo Electronics Industries Co. (AutomationDirect)



floor drain and gravity flows to the dosing tank. When the system is at capacity, the sewage recirculating pumps will run every five minutes. An effluent pump sends water to the 3.5-acre drip field via a 3-inch PVC pipe sized to reduce friction loss.

Because the field is 100 feet of head above the plant, the booster pump in the control room cycles with the effluent pump to supply enough pressure. All the pumps run daily for a minute to prevent corrosion. Solid-state relays switch them on and off.

The drip field has 10 zones with 20 lines of tubing 200 feet long and 2.5 feet apart. Each emitter delivers one gallon per hour. Solenoid valves with pressure-regulators control the zones. Pressures average 20 psi, but reach 180 psi going to the highest points.

Dose sizes vary depending on soil absorption rates. The computer reads the flowmeter to check for blown tubes or leaks. When they occur, the computer turns off the zone, bypasses it, and sends Kendall a text message.

Two 12-volt backup batteries run the plant during power outages, ensuring that the elevated tanks feed the sprayers. If the power is out for more than a day, Kendall brings a generator.

Installation

Subcontractors installing STEP systems as homes are built follow a specification booklet written by Kendall. Another subcontractor installed the force main.

Kendall's crew cleared trees before digging 50-foot-diameter, 11-foot-deep holes for the 35,000-gallon circular underground tanks and control room. A Caterpillar excavator with rock teeth on the bucket enabled the operator to flake out shale, which he struck at 3 feet below the surface.

"We made the circular tank forms," says Kendall. "They're a little more difficult to pour, but the structure is much stronger than square tanks. We needed that strength with all the rock in the soil." The 40-foot-diameter, 9-foot-deep tanks have 8-inch-thick walls of 4,000 psi fiber mesh concrete with steel rebar.

(continued)

"The elevation rose 200 feet from one end of the subdivision to the drip fields, and some homes were a mile away from them."

Dart Kendall

System operation

Effluent from the STEP pump tanks enters a 1.25- to 4-inch PVC Schedule 40 force main discharging to the dosing tank. At 10,000 gallons, the alternating high-head effluent pumps send 2,000 gallons to the elevated tanks 70 feet higher than the treatment plant. Hydrostatic pressure then feeds water through disc filters in the control room to eight mister sprayers totaling 3 gpm in eight risers on the treatment tank.

"Running the misters continually feeds the microorganisms and produces much cleaner effluent for less energy," says Kendall. "Digestion is so thorough that there is very little biomass, which sloughs off, drains to the dosing tank, and is pumped out eventually. Our BOD levels are less than 2 mg/L."

The spray system also has 16 mid-size sprayers totaling 30 gpm that activate as needed, and eight sprayers delivering a combined 300 gpm to dispense shock loads. The latter run only with the plant at capacity.

The 2- by 2- by 4-foot media blocks, stacked four deep inside the treatment tank and surrounding a hollow center column, sit on adjustable bases with cut-to-length stanchions that make sure the blocks clear the ceiling by 12 inches. Two 1/3 hp fans in the tank pull 30,000 cfm of air down through the blocks and exhaust it out the column. Intake and exhaust pipes have carbon scrubbers to prevent odors during power failures.

Each block has 48 square feet of surface area per cubic foot. After trickling through the media, effluent drips out the bottom of the stacks to the

Kendall hauled each media block through a hatch in the treatment tank lid and down a ladder. Beginning at the center column and working out, he placed the bottom layer cantilevered across and at right angles to the 8-inch-wide AccuPier supports on 24-inch centers. He set additional layers at 90 degrees to the one below. "The pattern maximizes mixing and distribution, while increasing strength and stability," he says.

After workers laid piping for the sprayers on top of the tank and hung the spray heads in the risers, they covered the structure with 18 inches of insulating wood chips made from the cleared trees. A second team cleared a place in a wooded hollow and set the three elevated tanks.

The crew targeted softwoods when clearing some trees from the drip field. "We prefer installing drip fields in woods because hardwood trees uptake 22 mg/L of total nitrogen, and the highest we've seen from this system is 3 mg/L," says Kendall.

Workers used a custom-built 16-inch disc-cutting saw that fit between tightly spaced trees to install drip tubing 9 inches deep on slopes with up to 60 percent grade. A 6.5 hp chain saw engine powered the saw. They buried pressure mains from the plant to the drip field using a tracked Caterpillar 226 skid-steer loader with Bradco trencher (Paladin Construction Group).

For additional stability, Kendall's son, Cliff, mounting dual wheels on the downhill side of the LM42 Vermeer walk-beside vibratory plow with 50 hp turbo diesel. "Even then, we still occasionally chained the skid-steer or backhoe to the plow to prevent it from rolling down the hill," says Kendall. Installing a zone took four to five days.

Workers fenced the drip field and posted warning signs. They also landscaped the area around the underground complex.

Maintenance

Kendall's Aqua Green Utility, a Tennessee wastewater utility, owns and



Cliff Kendall (right) and Barry Little install Geoflow drip tubing using a modified LM42 Vermeer walk-beside vibratory plow with 50 hp turbo diesel. The plow has dual wheels on the downhill side.

operates the system. To eliminate human error and reduce maintenance calls, he built PLC control panels and had software written for them. The autonomous system notifies Kendall via text messages if mechanical devices fail, enabling him to send a replacement with the technician on weekly visits. "From an operational standpoint, this saves a tremendous amount of money," says Kendall.

Until the replacement arrives, the computer turns on the redundant component. If technicians forget to turn on the pumps after servicing them, the computer activates them in eight hours. When pressure differential switches on the disc filters indicate they are clogging, the computer turns on the drip pump to backflush them. "We put excessive time into designing efficiency," says Kendall. □

MORE INFO:

**Arkal Filtration
Systems PEP Filters**
704/662-3133
www.arkal-filters.com

AutomationDirect
800/633-0405
www.automationdirect.com

Brentwood Industries
610/236-1100
www.brentwoodprocess.com

Geoflow, Inc.
800/828-3388
www.geoflow.com

Goulds Water Technology
866/325-4210
www.completewatersystems.com/brands/goulds

Myers
262/728-5551
www.femyers.com

**Polylok/Zabel
Environmental**
877/765-9565
www.polylok.com
(See ad page 44)

Rain Bird
877/727-8772
www.rainbird.com

SeaMetrics Inc
800/975-8153
www.seametrics.com



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102
(615) 532-0625

APPLICATION FOR A STATE OPERATION PERMIT (SOP)

Type of application: ☒ New Permit ☐ Permit Reissuance ☐ Permit Modification

Permittee Identification: (Name of city, town, industry, corporation, individual, etc., applying, according to the provisions of Tennessee Code Annotated Section 69-3-108 and Regulations of the Tennessee Water Quality Control Board.)	
Permittee Name (applicant):	Aqua Green Utility Inc
Permittee Address:	3350 Balts Rd Acworth GA 30102

Official Contact:	Dart Kendall			Title or Position:	President				
Mailing Address:	3350 Balts Rd			City:	Acworth	State:	GA	Zip:	30102
Phone number(s):	865-908-0432			E-mail:	dart@aquagreenutility.com				

Optional Contact:	Title or Position:		
Address:	City:	State:	Zip:
Phone number(s):	E-mail:		

Application Certification (must be signed in accordance with the requirements of Rule 0400-40-05-.05)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury

Name and title; print or type	Signature	Date
Dart Kendall President		3/1/2016

Permit Number: SOP- _____

Facility Identification:		Existing Permit No.	
Facility Name: McNairy Loves		County: McNairy	
Facility Address or Location: IN OVER OF 6838 - 6854 TENNESSEE 5 East View Tennessee 38367 Plant Location Behind Dollar General		Latitude: 35° 04' 32.76" N	
		Longitude: 88° 32' 37.42" W	
Name and distance to nearest receiving waters: 1150' Brushy Branch - Due East - 1150'			
If any other State or Federal Water/Wastewater Permits have been obtained for this site. List their permit numbers: NA			
Name of company or governmental entity that will operate the permitted system: Aqua Green Utility			
Operator address: 3350 Colts Rd Acworth GA 30002			
Has the owner/operator filed for a Certificate of Convenience & Necessity (CCN), or an amended CCN, with the Tennessee Regulatory Authority (TRA) (may be required for collection systems and land application treatment systems)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
If the applicant listed above does not yet own the facility/site or if the applicant will not be the operator, explain how and when the ownership will be transferred or describe the contractual arrangement and renewal terms of the contract for operations. Land ownership will be transferred to Aqua Green Utility when construction starts			
Complete the following information explaining the entity type, number of design units, and daily design wastewater flow:			
Entity Type	Number of Design Units		Flow (gpd)
<input type="checkbox"/> City, town or county	No. of connections:		
<input type="checkbox"/> Subdivision	No. of homes:	Avg. No. bedrooms per home:	
<input type="checkbox"/> School	No. of students:	Size of cafeteria(s): No. of showers:	
<input type="checkbox"/> Apartment	No. of units:	No. units with Washer/Dryer hookups: No. units without W/D hookups:	
<input checked="" type="checkbox"/> Commercial Business	No. of employees: 5-10	Type of business: Truck Stop	6,000
<input type="checkbox"/> Industry	No. of employees:	Product(s) manufactured:	
<input type="checkbox"/> Resort	No. of units:		
<input type="checkbox"/> Camp	No. of hookups:		
<input type="checkbox"/> RV Park	No. of hookups:	No. of dump stations:	
<input type="checkbox"/> Car Wash	No. of bays:		
<input type="checkbox"/> Other			
Describe the type and frequency of activities that result in wastewater generation. 24 Hour Truck Stop operation - current flow average 4000 GPD IN similar sized Loves Truck Stop			

Permit Number: SOP-_____

Engineering Report (required for collection systems and/or land application treatment systems):		<input type="checkbox"/> N/A
<input type="checkbox"/> Prepared in accordance with Rule 0400-40-05-.03 and Section 1.2 of the State of Tennessee Design Criteria for Sewage Works (see <u>website</u> for more information)		
<input checked="" type="checkbox"/> Attached, or <input type="checkbox"/> Previously submitted and entitled:		Approved? <input type="checkbox"/> Yes. Date: <input type="checkbox"/> No Approved? <input type="checkbox"/> Yes. Date: <input type="checkbox"/> No
Operation and Maintenance Inspection Schedule Submitted:		<input type="checkbox"/> N/A
Wastewater Collection System:		
System type (i.e., gravity, low pressure, vacuum, combination, etc.): <u>Gravity</u>		
System Description: <u>Gravity from LOVES to treatment tank then pumped to Drip field</u>		
Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.): <u>EQUIPMENT MONITORED by BATTERY BACKED UP PLC that REPORT PROBLEMS OVER INTERNET</u>		
In the event of a system failure describe means of operator notification: <u>TEXT & EMAIL</u>		
List the emergency contact(s) (name/phone): <u>DART Kendall 865-908-0432 404-557-3170</u>		
For low-pressure systems, who is responsible for maintenance of STEP/STEG tanks and pumps or grinder pumps (list all contact information)? <u>All maintenance by Aqua green utility</u>		
Approximate length of sewer (excluding private service lateral): <u>100</u>		
Number/hp of lift stations:	<u>1</u> <u>—</u>	Number/hp of lift pumps: <u>1</u> <u>—</u>
Number/volume of low pressure and or grinder pump tanks	<u>2</u> <u>1</u> <u>4,300 - 18,000</u>	
Number/volume septic tanks		
Attach a schematic of the collection system. <input checked="" type="checkbox"/> Attached		
If this is a satellite sewer and you are tying in to another sewer system complete the following section, listing tie-in points to the sewer system and their location (attach additional sheets as necessary): <u>N/A</u>		
<u>Tie-in Point</u>	<u>Latitude (xx.xxxx°)</u>	<u>Longitude (xx.xxxx°)</u>

Permit Number: SOP-_____

Land Application Treatment System:		<input type="checkbox"/> N/A
Type of Land Application Treatment System: <input checked="" type="checkbox"/> Drip <input type="checkbox"/> Spray <input type="checkbox"/> Other, explain:		
Type of treatment facility preceding land application (recirculating media filters, lagoons, other, etc.): Slow Rate Trickle Filter		
Attach a treatment schematic. <input checked="" type="checkbox"/> Attached		
Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.): Tanks hold additional 6000 gallons - PLC on Battery Backup. Repairs as needed.		
For New or Modified Projects:		
Name of Developer for the project: STEVE WALTERS		
Developer address and phone number: 405 761 4400		
For land application, list:	Proposed acreage involved:	1.73 available
	Inches/week gpd/sq.ft loading rate to be applied:	@ .2 30,000 NEEDED
Is wastewater disinfection proposed?		
<input type="checkbox"/> Yes	Describe land application area access:	
<input checked="" type="checkbox"/> No	Describe how access to the land application area will be restricted: FENCE	
Attach required additional Engineering Report Information (see website for more information)		
<input checked="" type="checkbox"/> Topographic map (1:24,000 scale presented at a six inch by six inch minimum size) showing the location of the project including quadrangle(s) name(s) GPS coordinates, and latitude and longitude in decimal degrees should also be included.		
<input checked="" type="checkbox"/> Scaled layout of facility showing the following: lots, buildings, etc. being served, the wastewater collection system routes, the pretreatment system location, the proposed land application area(s), roads, property boundaries, and sensitive areas such as streams, lakes, springs, wells, wellhead protection areas, sinkholes and wetlands.		
<input checked="" type="checkbox"/> Soils information for the proposed land disposal area in the form of a Water Resources Soils Map per Chapter 16 and 17 State of Tennessee Design Criteria for Sewage Works. The soils information should include soil depth (borings to a minimum of 4 feet or refusal) and soil profile description for each soil mapped.		
<input checked="" type="checkbox"/> Topographic map of the area where the wastewater is to be land applied with no greater than ten foot contours presented at a minimum size of 24 inches by 24 inches.		
<input checked="" type="checkbox"/> Describe alternative application methods based on the following priority rating: (1) connection to a municipal/public sewer system, (2) connection to a conventional subsurface disposal system as regulated by the Division of Water Resources, and/or (3) land application.		

Permit Number: SOP-_____

<p>For Drip Dispersal Systems Only: Unless otherwise determined by the Department, sewage treatment effluent wells, i.e. large capacity treatment/drip dispersal systems after approval of the SOP Application, will be issued an UIC tracking number and will be authorized as Permit by Rule per UIC Rule 0400-45-06-.14(2) and upon issue of a State Operating Permit and Sewage System Construction Approval by the Department.</p> <p>Describe the following:</p> <p>The area of review (AOR) for each Drip Dispersal System shall, unless otherwise specified by the Department, consist of the area lying within a one mile radius or an area defined by using calculations under 0400-45-06-.09 of the Drip Dispersal System site or facility, and shall include, but not be limited to general surface geographic features, general subsurface geology, and general demographic and cultural features within the area. Attach to this part of the application a general characterization of the AOR, including the following: (This can be in narrative form)</p> <p><input type="checkbox"/> A general description of all past and present groundwater uses as well as the general groundwater flow direction and general water quality.</p> <p><input type="checkbox"/> A general description of the population and cultural development within the AOR (i.e. agricultural, commercial, residential or mixed)</p> <p><input type="checkbox"/> Nature of injected fluid to include physical, chemical, biological or radiological characteristics.</p> <p><input checked="" type="checkbox"/> If groundwater is used for drinking water within the area of review, then identify and locate on a topographic map all groundwater withdrawal points within the AOR, which supply public or private drinking water systems. Or supply map showing general location of publicly supplied water for the area (this can be obtained from the water provider)</p> <p><input type="checkbox"/> If the proposed system is located within a wellhead protection area or source water protection area designated by Rule 0400-45-01-.34, show the boundary of the protection area on the facility site plan.</p> <p><input checked="" type="checkbox"/> Description of system, Volume of injected fluid in gallons per day based upon design flow, including any monitoring wells</p> <p><input type="checkbox"/> Nature and type of system, including installed dimensions of wells and construction materials</p>	<input type="checkbox"/> N/A
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<p>Pump and Haul:</p> <p>Reason system cannot be served by public sewer:</p> <p>Distance to the nearest manhole where public sewer service is available:</p> <p>When sewer service will be available:</p> <p>Volume of holding tank: _____ gal.</p> <p>Tennessee licensed septage hauler (attach copy of agreement):</p> <p>Facility accepting the septage (attach copy of acceptance letter):</p> <p>Latitude and Longitude (in decimal degrees) of approved manhole for discharge of septage:</p> <p>Describe methods to prevent and respond to any bypass of treatment or discharges (i.e., power failures, equipment failures, heavy rains, etc.):</p>	<input checked="" type="checkbox"/> N/A
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Permit Number: SOP-_____

Holding Ponds (for non-domestic wastewater only):		<input checked="" type="checkbox"/> N/A
Pond use: <input type="checkbox"/> Recirculation <input type="checkbox"/> Sedimentation <input type="checkbox"/> Cooling <input type="checkbox"/> Other (describe):		
Describe pond use and operation:		
If the pond(s) are existing pond(s), what was the previous use?		
Have you prepared a plan to dispose of rainfall in excess of evaporation? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If so, describe disposal plan:		
Is the pond ever dewatered? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If so, describe the purpose for dewatering and procedures for disposal of wastewater and/or sludge:		
Is(are) the pond(s) covered? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Volume of pond(s):	gal.	Dimensions:
Is the pond lined (Note if this is a new pond system it must be lined for SOP coverage. Otherwise, you must apply for an Underground Injection Control permit.)? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Describe the liner material (if soil liner is used give the compaction specifications):		
Is there an emergency overflow structure? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If so, provide a design drawing of structure.		
Are monitoring wells or lysimeters installed near or around the pond(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If so, provide location information and describe monitoring protocols (attach additional sheets as necessary):		

Mobile Wash Operations:		<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Individual Operator <input type="checkbox"/> Fleet Operation Operator		
Indicate the type of equipment, vehicle, or structure to be washed during normal operations (check all that apply):		
<input type="checkbox"/> Cars	<input type="checkbox"/> Parking Lot(s):	sq. ft.
<input type="checkbox"/> Trucks	<input type="checkbox"/> Windows:	sq. ft.
<input type="checkbox"/> Trailers (Interior washing of dump-trailers, or tanks, is prohibited.)	<input type="checkbox"/> Structures (describe):	
<input type="checkbox"/> Other (describe):		
Wash operations take place at (check all that apply):		
<input type="checkbox"/> Car sales lot(s)	<input type="checkbox"/> Public parking lot(s)	
<input type="checkbox"/> Private industry lot(s)	<input type="checkbox"/> Private property(ies)	
<input type="checkbox"/> County(ies), list:	<input type="checkbox"/> Statewide	
Wash equipment description:		
<input type="checkbox"/> Truck mounted	<input type="checkbox"/> Trailer mounted	
<input type="checkbox"/> Rinse tank size(s) (gal.):	<input type="checkbox"/> Mixed tanks size(s) (gal.):	
<input type="checkbox"/> Collection tank size(s) (gal.):	Number of tanks per vehicle:	
Pressure washer:	psi (rated)	gpm (rated)
<input type="checkbox"/> gas powered	<input type="checkbox"/> electric	
Vacuum system manufacturer/model:	Vacuum system capacity:	inches Hg
Describe any other method or system used to contain and collect wastewater:		
List the public sewer system where you are permitted or have written permission to discharge waste wash water (include a copy of the permit or permission letter):		
Are chemicals pre-mixed, prior to arriving at wash location? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Describe all soaps, detergents, or other chemicals used in the wash operation (attach additional sheets as necessary):		
Chemical name:	Manufacturer:	Primary CAS No. or Product No.

APPLICATION FOR A STATE OPERATION PERMIT (SOP) INSTRUCTIONS

Purpose of this form A completed SOP application must be submitted to obtain SOP coverage. This permit is required to operate a sewage, industrial waste or other waste collection and/or treatment system that does not have a point source discharge to any surface or subsurface waters. This form must be submitted at least 180 days before starting any new activity, before an existing permit expires, or when renewing a permit.

Complete the form Type or print clearly, using black or blue ink; not markers or pencil. Answer each item or enter "N/A," for not applicable. If you need additional space, attach a separate piece of paper to the SOP application. Applicants may be required to submit engineering reports, plans and specifications. Contact the division for the applicable items, or visit the Division of Water Resources world wide web site at: <http://www.tennessee.gov/environment/water/> for more information. **The application will be considered incomplete without supplying all of the required information, Engineering Reports, and an original signature.**

Permittee Identification/Facility Identification Describe and locate the project, use the legal or official name of the facility or site. Provide the latitude and longitude (expressed in decimal degrees) of the center of the site, which can be located on USGS quadrangle maps. The quadrangle maps can be obtained at 1-800-USA-MAPS, or at the Census Bureau world wide web site: <http://www.census.gov/cgi-bin/gazetteer>. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. If business is mobile give the owner of operations' home, or business office address, and list all current areas of operation by city and county.

Wastewater Collection System These types of systems require engineering reports, refer to the website (<http://www.tennessee.gov/environment/water/>) for more information.

Land Application Treatment System These types of systems require engineering reports, refer to the website (<http://www.tennessee.gov/environment/water/>) for more information. Public access to the treatment area must be restricted, if disinfection is not part of the treatment. Applicants completing this section of the application must also complete the Wastewater Collection System section.

Pump and Haul These types of systems may require engineering reports, refer to the website (<http://www.tennessee.gov/environment/water/>) for more information.

Holding Ponds Given that annual rainfall onto open ponds exceeds annual evaporation (in Tennessee), the permittee must develop a written plan (to be retained on site and be available to the division upon request) that addresses how excess rainfall will be disposed of in compliance with the no discharge requirement of this permit. Treatment ponds are not to be used for stormwater treatment or storage. All new and existing point source industrial stormwater discharges associated with industrial activity require coverage under the Tennessee industrial stormwater multi-sector general permit TMSF, refer to the website (<http://www.tn.gov/environment/permits/stmrh2o.shtml>) for more information. Describe the system for re-routing surface runoff away from ponds in the rainfall disposal plan.

Mobile Wash Operations Indicate whether the operation is run by an individual or a corporation with a fleet of vehicles equipped to wash and collect waste waters. If a corporation, indicate the home office as the "Official Contact". Indicate if operations take place at specific sites and list those counties that apply. Note that this permit covers operations for all of Tennessee. Operations indicated as "statewide" generally apply as a fleet type operation and each office location shall be individually permitted. Equipment may be truck or trailer-mounted, or both, indicate all that applies. Soaps, detergents, and other chemicals used should be non-toxic and biodegradable. All "chemically enhanced" (soaps, detergents, and other chemicals) waste-wash

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