



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
Division of Water Resources  
JACKSON ENVIRONMENTAL FIELD OFFICE

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May 23, 2023

Mr. Ben Thornton, Superintendent of Utilities  
Brownsville Utility Department  
P.O. Box 424  
Brownsville, TN 38012

**Re: Sanitary Survey  
Brownsville UD  
PWSID #TN0000080  
Haywood County**

Dear Mr. Thornton:

On May 16, 2023, James Roberts, and Connor Wood with the Division of Water Resources (DWR) completed a Sanitary Survey on the Brownsville Utility District's water system. The survey consisted of a records review to document the operational performance of the water system, including the source water and distribution systems. The survey covered the period from April 7, 2021, to May 16, 2023. The Division appreciates the assistance provided during the survey by Mr. Josh Poole, Certified Water Plant Operator, and Mr. Jackson Pettigrew, Water System Intern. I would like to thank Mr. Poole and Mr. Pettigrew for their courtesy, willingness to work with the Division, and timely responses provided to Division requests. In accordance with the Sanitary Survey Manual, the Brownsville Water System earned 599 points out of a possible 599 total points for a numerical score of one hundred percent **100%**. This rating retains the Brownsville Water System in the State's "**Approved**" category.

As a reminder, in addition to calculating a sanitary survey rating score for each survey period, the State of Tennessee is also required to calculate and track an Enforcement Targeting Tool (ETT) score for each month for each Tennessee regulated water system. The ETT score is based upon an EPA calculation procedure. Unlike a deficiency point deduction for a violation that occurs during a survey period, the calculated ETT score accumulates monthly and highlights violations that continue unaddressed. When a violation becomes classified as addressed, the water system's calculated ETT score is reduced. For this survey period, the current ETT score for the Brownsville Utility District has been reported as 0. This information is presented as a reminder because when a water system reaches a confirmed score of 11, the State is required to take formal enforcement action which generally has financial penalties included.

Your water system has not yet reached a confirmed score of 11 and is only being informed about its current ETT score.

With the current situation regarding the Coronavirus (Covid-19) pandemic and health crisis, this sanitary survey was somewhat modified, out of an abundance of caution and to adhere to the safety guidelines prescribed by the Department. Most records, reports and pertinent information were reviewed and obtained electronically and by phone. Once on site, your water system was observed and inspected during normal operations and appeared to be functioning properly as designed.

During this Sanitary Survey, the most recent inspection by Mid-South Tank Consultants were reviewed. A visual inspection was also conducted by DWR staff during the survey with all information being listed below:

<b>Inspector</b>	<b>Tank Name</b>	<b>Date Inspected</b>	<b>Findings</b>
Mid-South Tank Consultants	Church Street Tank 500,000 gallons	2021	Good Working Order -Disinfected -Washed Out
Mid-South Tank Consultants	Hwy 76 Tank 500,000 gallons	2021	Good Working Order -Disinfected -Washed Out
Mid-South Tank Consultants	Industrial Park Tank 100,000 gallons	2022	Good Working Order -Disinfected -Washed Out
Mid-South Tank Consultants	King Street Tank 500,000 gallons	2021	Good Working Order -Disinfected -Washed Out
Mid-South Tank Consultants	Air Filter Tank 500,000 gallons	2020	Good Working Order -Disinfected -Washed Out
Mid-South Tank Consultants	Dupree Plant Clearwell 536,000	2022	Good Working Order -Disinfected -Washed Out
Mid-South Tank Consultants	Powell Street Plant Clearwell 318,000	2021	Good Working Order -Disinfected -Washed Out

**General comments, recommendations and requests** are listed for your information as follows:

1. Based on your systems population size of 12,900, your water system is required to submit ten (10) bacteriological samples per month for analysis. However, if your systems population increases by just one (1), your system will be required to submit fifteen (15) samples per month for analysis. It is the recommendation of the Division that your system collect fifteen (15) samples per month if not already doing so. Your system is also required to collect one (1) sample per year for each water plant for nitrate analysis.

Mr. Ben Thornton

May 23, 2023

Page 3

2. The water system's sampling schedule shows the following: your water system will need to collect thirty (30) samples for Lead and Copper between 06/01/2023 and 09/30/2023, Radionuclides at the Powell St Plant and the Dupree St Plant before 12/31/2023, and Volatile Organics at the Powell St Plant and the Dupree St Plant before 12/31/2023. If more information about the schedule for this sampling period is needed, it can be found at Drinking Water Watch (<https://dataviewers.tdec.tn.gov/DWW/>).
3. Mr. Josh Poole has been tasked with performing the daily process control laboratory tests prescribed in your *Drinking Water Monitoring Program*. Mr. Poole performs these tests in accordance with the current edition of *Standard Methods for The Examination of Water and Wastewater* and is approved for the performance of these tests.
4. All observations/findings that were inspected during this sanitary survey are also referenced in the attached rating form.

Conclusion: This office appreciates the courtesy shown to members of our staff during this sanitary survey. As always, our staff is available to assist you with any questions you may have. For any specific concerns or questions regarding this letter and sanitary survey report, you can contact me directly at (731)202-1160.

Sincerely,



**James Roberts**, Environmental Scientist 3  
Jackson Environmental Field Office  
Division of Water Resources

Copy: Bill Rawls, Mayor, P.O. Box 424, Brownsville, TN 38012  
Mr. Josh Poole, P.O. Box 424, Brownsville, TN 38012  
DWR - Nashville  
DWR - JEFO, Waterlog

# Sanitary Survey Rating

**PWSID:** TN0000080

**Water System Name:** Browsville Utility Department

**Survey Date:** 16-May-23

**System Category (Points):** 421  
488  
599

421 - Consecutive Systems/Distribution Only  
488 - Treatment Systems/Wholesalers  
599 - Both Treatment and Distribution

## 1. System Management and Operation (94)

	Requirement	Points Range	Deduction	Comments
A.	Record Keeping 0400-45-01-.20	(0)	Narrative	OK
B.	Construction Projects 0400-45-01-.05, 0400-45-01-.17	(1-5)	0	OK
C.	Submission of Monthly Operations Reports 0400-45-01-.17	(0)	Narrative	OK
D.	Reporting Requirements 0400-45-01-18	(4-30)	0	OK
E.	Public Notification 0400-45-01-.19	(3-10)	0	OK
F.	Facility Maintenance Fee	(0)	Narrative	OK
G.	Enforcement - TCA §68-221-701 et seq	(4-10)	0	OK
H.	Emergency Operations Plan 0400-45-01-.17	(3)	0	OK
Deficiency Subtotal			0	

## 2. Operator Compliance (23)

	Requirement	Points Range	Deduction	Comments
A.	Certified Operator – Plant and Distribution System 0400-45-01-.17(1) and 0400-49-01-04	(3-15)	0	OK
Deficiency Subtotal			0	

## 3. Source (25)

	Requirement	Points Range	Deduction	Comments
A.	Source Adequacy 0400-45-01-.02, .05, .16, .17(13) and .34(3)	(3-5)	0	OK
B.	Intake 0400-45-01-.05, .17	(2)	0	N/A
C.	Wellhead/Springbox Construction 0400-45-01-.05(12), 16 and 17(3) and (16)	(2)	0	OK
D.	Source Protection Plans 0400-45-01-.34	(1-2)	0	OK
Deficiency Subtotal			0	

#### 4. Treatment (153)

	Requirement	Points Range	Deduction	Comments
A.	Aerator 0400-45-01-.05, .17	(2)	0	OK
B.	Chemicals / Chemical Feeders 0400-45-01-.05 (8) and .17,36	(2)	0	OK
C.	Mixing 0400-45-01-.02, .05, .17	(2)	0	OK
D.	Flocculation 0400-45-01-.02, .05, .17	(2)	0	OK
E.	Sedimentation 0400-45-01-.02, .05, .17	(2)	0	N/A
F.	Filtration / Alternative Technology 0400-45-01-.17(12) and (27)	(2-30)	0	N/A
G.	Re-Wash / Filter-to-Waste 0400-45-01-.17(35)	(2)	0	N/A
H.	Turbidimeters / Calibration 0400-45-01-.05(11), .17, .31, .39	(2-4)	0	N/A
I.	Disinfection/Calibration 0400-45-01-.02, .17, .31, .36	(2-30)	0	OK
J.	Disinfection Contact Time 0400-45-01-.02, .17,31	(2-4)	0	OK
K.	Master Meter 0400-45-01.17(2) and (3)	(1-2)	0	OK
L.	Maintenance of Equipment, Buildings and Grounds 0400-45-01-.02, .17(3), (17) and (19)	(1)	0	OK
M.	Laboratory Facilities 0400-45-01-.02, .14, .17(3)	(1-3)	0	OK
N.	Safety 0400-45-01-.02	(2)	0	OK
O.	Sludge Handling/Backwash Handling 0400-45-01-.05	(2)	0	N/A
P.	Sanitary Conditions 0400-45-01-.17(17)	(2)	0	OK
Q.	Fluoridation Techniques 0400-45-01-.06, .12, .17	(2)	0	OK
R.	Design Capacity 0400-45-01-.05(10)	(2-4)	0	OK
S.	Filter Backwash Recycling 0400-45-01-.31(9)	(1)	0	N/A
<b>Deficiency Subtotal</b>			<b>0</b>	

### 5. Monitoring, Data Verification and Compliance (175)

	Requirement	Points Range	Deduction	Comments
A.	Laboratory-Process Monitoring (excluding Turbidity and Chlorine Residual) 0400-45-01-17(3)	(2-4)	0	OK
B.	Bacteriological Monitoring	(3-6)	0	OK
C.	Bacteriological Compliance 0400-45-01-.06	(4-7)	0	OK
D.	Turbidity Monitoring	(2-3)	0	OK
E.	Turbidity Compliance	(4-7)	0	OK
F.	Chlorine Residual Monitoring 0400-45-01-.17,31,36, 40	(2-3)	0	OK
G.	Primary Chemicals Monitoring	(2-3)	0	OK
H.	Primary Chemicals Compliance	(4)	0	OK
I.	Lead and Copper Monitoring 0400-45-01-.33	(2-3)	0	OK
J.	Lead and Copper Action Level 0400-45-01-.33	(3-5)	0	N/A
K.	Disinfection/Disinfection By-Products and Precursors Monitoring 0400-45-01-.36, .37, .38	(2-3)	0	OK
L.	Disinfection/Disinfection By-Products and Precursors Compliance 0400-45-01-.06, .36	(2-30)	0	OK
M.	Secondary Chemicals 0400-45-01-.12	(2)	0	OK
N.	Secondary Chemicals Compliance 0400-45-01-.12	(3)	0	OK
O.	Cryptosporidium Monitoring 0400-45-01-.39	(0)	Narrative	N/A
Deficiency Subtotal			0	

### 6. Finished Water Storage (25)

	Requirement	Points Range	Deduction	Comments
A.	Adequate Storage 0400-45-01-.17(14)	(3-15)	0	OK
B.	Inspection and Maintenance of Reservoirs, Tanks and Clearwell 0400-45-01-.17(16), (17), (33) and (34)	(1-10)	0	OK
Deficiency Subtotal			0	

**7. Pumps, Pump Facilities and Controls (18)**

	Requirement	Points Range	Deduction	Comments
A.	Pump Facilities 0400-45-01-.17(9) and (13)	(1-4)	0	OK
B	Maintenance of Pumping Equipment 0400-45 - 01-.17(13)	(1-3)	0	OK
Deficiency Subtotal			0	

**8. Distribution System and Cross Connection Controls (86)**

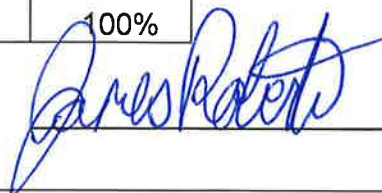
	Requirement	Points Range	Deduction	Comments
A.	Notification, Inspection, Disinfection and Sample Collection of New or Existing Facilities 0400-45-01-.17(8), (19)	(3-5)	0	ok
B	Flushing Program / Blow Offs 0400-45-01-.17(10) and (23)	(3-4)	0	OK
C.	Fire Hydrants 0400-45-01-.17(18)	(0)	Narrative	ok
D.	Adequate Pressure 0400-45-01-.17(9)	(5)	0	OK
E.	Map of Distribution System 0400-45-01-.17(15)	(3)	0	ok
F.	Approved Cross Connection Policy or Ordinance and Plan 0400-45-01-.17(6)	(4)	0	OK
G.	Working Cross Connection Program 0400- 45-01-.17(6)	(3-9)	0	OK
H.	Percent Estimated Water Loss( real loss/water produced)	(0)	Narrative	ok
Deficiency Subtotal			0	

**Rating**

- 95% - 100% Approved
- 90% - 94% Provisionally Approved
- 0% - 89 % Unsatisfactory

Total Deficiency Points	0
Overall Rating	599
	100%

Inspectors Signature



Additional Comments/Explanation: