



**May 23, 2023**

Town of Ridgeville  
Attn: Mayor Clarence Hughes  
PO Box 56  
Ridgeville, SC 29472

**RE: Water System Sanitary Survey**  
Town of Ridgeville WS # 1810004  
Dorchester County

Honorable Mayor Hughes,

A sanitary survey of the above referenced potable water system was conducted on **April 25, 2023**. A sanitary survey is an evaluation of the components of a water system and record keeping requirements.

Attached for your reference is a copy of the form used while conducting the sanitary survey. Any deficiencies are noted by "I" for needs improvement or "U" for unsatisfactory.

**System Description**

The Town of Ridgeville is served potable water by two wells. Disinfection is provided by chlorine gas at both wells.

Well One, Railroad Ave located with the elevated tank, is a 12-inch diameter, 325-foot deep well with a 15.00 hp vertical turbine pump. Well One supplies water to a 75,000-gallon elevated tank and a 10,000-gallon pressure tank are located onsite.

Well Two, located behind the fire station, is an 8-inch diameter, 345-foot deep well with a 25.00 hp submersible pump that supplies water directly to distribution.

There are currently 251 active residential and 41 non-residential taps on the water system. The active residential meters serve a population of approximately 710 people. This is based on 2020 U.S. Census data, which provide a per capita average in Dorchester County of 2.83 persons per

household. The number of active residential taps multiplied by the per capita average provides that approximate service population.

### Survey Results

The following were either noted as deficiencies or are provided for information:

**Item #4      Wellhead Piping      "I"**

Neither well has a pre-treatment sample tap. Please have a sample tap installed prior to any treatment so that raw water samples may be taken by the Department.

The post-treatment sample tap at Well 1 is located on the chlorine injection bypass line. This could be contributing to the inconsistency in disinfection residual readings. Please have the post treatment tap relocated to the main well piping downstream of the chlorine injection system and upstream of the gate valve to isolate the well from the system.

**Item #6      Chemical Storage & Handling      "S"**

The department suggests purchasing scales for the chlorine cylinders to better monitor the amount of chlorine left in each cylinder. The Town is working to budget funds for this improvement.

**Item #7      Chemical Injection Points      "I"**

The Town of Ridgeville has plans to upgrade their chlorine injection points once budgeting and supplies allow. This needs to be a priority as the disinfection residuals have been inconsistent (see Item #12).

**Item #12      Disinfection Residual      "U"**

Since the last survey, chlorine residual has been checked daily by either Trident Labs staff or Dorchester County Water and Sewer staff. Records indicate inconsistencies in chlorine readings at Well 1, ranging from 0 parts per million (ppm) chlorine to over 8 ppm. Please prioritize upgrading chemical injection points and relocating samples taps to improve the accuracy of the systems disinfection residual samples. **Please submit monthly disinfection residual logs to Jason Stuck via email for the next 3 months.**

**Item # 13      Cross Connection Control      "I"**

There are fourteen (14) backflow devices on this water system. Records indicate 11 backflow devices were tested in January 2023. 3 devices did not have records of being tested in the last year. **Please provide Jason Stuck with the records for these devices.**

**Item # 14      Fire Flow      "I"**

There are twenty-three (23) fire hydrants on this water system. The hydrants are tested every 3 years by Holliday Utility Services. Hydrant testing was just completed on April 11, 2023. Records indicate that 7 hydrants failed to maintain adequate residual pressure of at least 20 psi in the system. These hydrants are 008, 009, 014, 015, 020, 021, and 030. **Please have these hydrants retested to ensure that the residual pressure of the system remains over 20 psi and provide Jason Stuck with these records.**

**Item # 15      Valve/Hydrant Maintenance      "I"**

**Valves:** There are 32 active valves in this water system that are supposed to be exercised annually. All valves are tagged and numbered and have detailed valve sheets for each valve. Records indicate that 11 out of 32 valves have been exercised for 2023 so far. Please ensure that this is completed annually as the system's valve program indicates.

**Hydrants:** There are 23 fire hydrants and 5 blow-off hydrants on the system. These are exercised annually. Records were available for review.

**Item # 16      Flushing Program      "S"**

Flushing is conducted at fire hydrants and blow-offs at least once a year and periodically as needed. Records are being maintained and a written program is in place.

**Item #17      Leak Detection and Repair      "S"**

The system tracks leaks and repairs using a work order system. Records were available for review.

**Item #18      Water Audit      "S"**

This system has continued to make progress in tracking water losses. The average water loss is approximately 15%.

**Item #24      Tank Maintenance      "S"**

The elevated tank was washed, cleaned out, and painted in March of 2023 by Southern Corrosion.

**Item # 31      Sample Siting Plan      “S”**

The system collects two (2) routine bacteriological samples each month. The samples are indicated on the system map and are rotated between six (6) routine sample sites.

**Item #39      Stand By Power      “S”**

The water system currently has a portable generator located at Well Two. A permanent generator is located at Well One.

**Item # 40      Certified Operator      “I”**

Records indicate that from approximately September 2022 to April 2023, this system did not provide the appropriately licensed Distribution or Treatment Operator. At the time of the survey, the system had contracted with Dorchester County Water and Sewer (DCWS) to provide a Treatment Operator beginning on April 10, 2023, however the system still did not have a Distribution Operator. As of the writing of this report, DCWS has been contracted by the system to provide both Treatment and Distribution Operator for the system which began on May 15, 2023. **If the system fails to meet either of these operator requirements for any reason, the Department should be notified immediately.**

**Treatment Operator:** The above referenced water system is considered a group II treatment facility that employs the use of gaseous chlorine for disinfection. A Level D grade treatment operator certified by South Carolina Labor, Licensing, and Regulation (LLR) is required for group II treatment facilities. Franklin Infinger with Dorchester County Water and Sewer (License # D-7777) is employed by the above referenced water system to perform routine checks.

**Distribution Operator:** A community (Type C) water system must have a certified distribution operator visit the facility on a regular basis. This system is considered a group III distribution system, which has a reliable production capacity of not greater than six hundred thousand gallons a day. A Level C grade distribution operator certified by South Carolina Labor, Licensing, and Regulation (LLR) is required for group III distribution systems. Franklin Infinger with Dorchester County Water and Sewer (License # C-3247) has been contracted by the Town of Ridgeville to provide this service.

**Special Note**

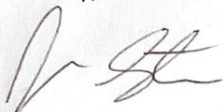
The South Carolina State Primary Drinking Water Regulations 61-58 requires: *“Copies of any written reports, summaries or communications relating to sanitary surveys or operational inspections of the public water supply conducted by the supplier of water, by a private consultant, or by any local, state, or federal agency, shall be kept for a period of not less than*

*ten (10) years after completion of the sanitary survey involved.*" Records for all water quality monitoring must be kept for a minimum of three (3) years.

The Department has issued an overall rating of **Needs Improvement** for this water system. Please address the deficiencies listed above as soon as possible. This system will be scheduled for it's next sanitary survey in 2024.

If you should have any questions, or if I can be of further assistance, please contact me at 843-953-0150.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jason Stuck', written over a light blue horizontal line.

Jason Stuck

SC DHEC Lowcountry Region  
Charleston-McMillan Office  
1362 McMillan Avenue, Suite 300  
Charleston, SC 29405

CC: Marty Chaney, Bureau of Water

**SCDHEC**  
**Bureau of Water**

**Public Water System Inventory Report Form**

Site Name: RIDGEVILLE TOWN OF  
 System Number: 1810004  
 Fax Number: (843)832-8016

(A)dd, (M)odify, (R)enum, (D)elete: M  
 Reason: SS  
 Today's Date: 4-25-23

**DW Mailing Address:**

Owner: RIDGEVILLE TOWN OF  
 Attn: MAYOR CLARENCE HUGHES  
 PO BOX 56  
 RIDGEVILLE, SC 29472

Owner Business Telephone: (843)871-7960  
 Owner Emergency Telephone: (843)560-3081

**Site Info Address:**

105 SCHOOL ST  
 RIDGEVILLE, SC 29472

\*Contact: FULMER KERRI  
 \*Phone: (843)873-3286  
 \*email: KMF.RIDGEVILLEWATER@GMAIL.COM  
 DW Mail Attention: KERRI FULMER  
 DW Contact Telephone: (843)560-3081

**System Characteristics**

System Type . . . . . C	Inact Code . . . . .	Service Area . . . . . R1	Season On (mo/day) . . . . . 01/01
Owner Type . . . . . LOCAL	Inact Date (mo/yr) . . . . .	Counties Served:	Season Off (mo/day) . . . . . 12/31
	Begin Date (mo/yr) . . . . . 06/1977	18	

**Statistical Information**

**Source Use Information:**

Percent Surface Water . . . . . 0  
 Percent Ground Water . . . . . 100  
 Percent Purchased Surface Water . . . . . 0  
 Percent Purchased Ground Water . . . . . 0

Total must equal 100%

Number of Surface Water Sources . . . . . 0  
 Number of Ground Water Sources . . . . . 2  
 Purchased Surface Water Sources . . . . . 0  
 Number of Permanent SW Sources . . . . . 0  
 Number of Emergency SW Sources . . . . . 0  
 Number of Permanent GW Sources . . . . . 2  
 Number of Emergency GW Sources . . . . . 0

**Service Population:**

Population . . . . . 806 710  
 Secondary Population . . . . . 0

**Number of Service Connections:**

Residential . . . . .	232	}	Total . . . . . <u>273</u>
Non Residential . . . . .	41		
Maximum Allowable . . . . .	345		
Permitted . . . . .	0		}

251  
292

**Production (MGD):**

Average . . . . . 0.0741  
 Maximum Day . . . . . .111141

**Capacity:**

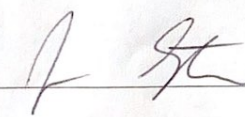
Total . . . . . .396  
 Emergency . . . . . 0.0000

**Storage:**

Elevated (MG) . . . . . 0.075  
 Ground (MG) . . . . . 0.000  
 Pressure (TG) . . . . . 10.000

**Comments**

\* Add/change contact name, address, phone and email info here. This information can be found in EFIS/Permits/Relations/type DW Contact.

Signature: 

**SCDHEC**  
**Bureau of Water**

**Public Water System Sanitary Survey Report**  
**Ground Water Systems**

Site name: RIDGEVILLE TOWN OF

System number: 1810004

Last Survey: 04/15/2021

Survey Date: 4, 25, 23

Type Inspection/Visit GW ROUTINE

Operator/Ow ner present? Y

Overall Rating S I

**Source:**

- 1. \*Protection from Contam S
- 2. Quantity S
- 3. Security S
- 4. Wellhead Piping S I

**Water Treatment:**

- 5. \*Chemical Feed S
- 6. Chemical Storage & Hand S
- 7. Chemical Injection Points S I
- 8. Filtration S
- 9. Equipment Maintenance S

**Distribution:**

- 10. \*Water Quality S
- 11. Adequate Pressure S
- 12. Disinfectant Residual S U
- 13. Cross Connection Control S I
- 14. Fire Flow S I
- 15. Valve/Hydrant Maintenance S I
- 16. Flushing Program S
- 17. Leak Detection and Repair S
- 18. Water Audit S
- 19. System Map S

**Storage:**

- 20. \*Protection from Contam S
- 21. Capacity S
- 22. Security S
- 23. Appurtenances S
- 24. Maintenance S

**Pumps, Pump Facilities & Controls:**

- 25. \* Reliable Capacity S
- 26. Operation & Control S
- 27. Pumps S
- 28. Flow Measuring Device S

**Monitoring, Reporting & Data Verification:**

- 29. \*Monitoring/Record Keeping S
- 30. Testing Equipment S
- 31. Sample Siting Plan S

**System Management & Operation:**

- 32. \*Corrections from Previous Survey S
- 33. Emergency Plan S
- 34. Plant Security S
- 35. Facility Maintenance S
- 36. Supplies/Spare Parts Inv S
- 37. Waste Disposal S
- 38. Procedures Manual S
- 39. Stand-by Power S
- 40. Is system presently under order? N
- If Yes, is system complying w /order? N

**Operator Certification:**

- 41. \*Certified Operator S I
- 42. Staffing S
- 43. System Group (I - V) II
- 44. Treatment Operator Grade A. I  
B. I  
C. I  
D. I  
T. I

- 45. Dist. Group (I - V) III
- 46. Distribution Operator Grade A. I  
B. I  
C. I  
D. I  
T. I  
G. I

**Other Requirements:**

- 47. Drought Response Plan Y
- 48. Source Water Protection Plan N
- 49. Are all services metered? Y
- Percent metered 100

- 50. Field Tests (Location or address) N

Chlorine	
pH	
Pressure	
Flow	
Other (Specify)	
Other Result	

- 51. Samples Taken

Bacteriological	
Inorganic	
Organic	
Radiological	
Other	

- 52. Follow up scheduled? N
- Date scheduled

\*Items with an asterisk are significant deficiency items.  
 This form represents neither a final approval of the water system, nor an approval to operate the system.

**SCDHEC**  
**Bureau of Water**

**Public Water System Sanitary Survey Report**  
**Ground Water Systems**

Site name: RIDGEVILLE TOWN OF

System number: 1810004

Last Survey: 04/15/2021

Survey Date: 4, 25, 23

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Comments

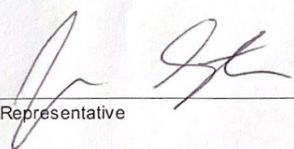
/I

/I

/I  
/I  
/I  
/I

/I

/I



DHEC Representative

System Representative

Title





**SCDHEC**  
**Bureau of Water**

**Public Water System Source/Plant Inventory Report**

Site Name: RIDGEVILLE TOWN OF  
System Number: 1810004  
Source ID: G18168

(A)dd, (M)odify, (R)enum, (D)elete:  M  
Reason: SS  
Today's Date: 4-25-23

**General Information**

Location . . . . . BEHIND FIRE STATION  
Source Name . . . . . WELL TWO - Behind fire station  
Receiving Plant . . . . . PLANT #2  
Plant ID . . . . . B18002

Availability Code . . . . . P  
Latitude . . . . . 33.09912750  
Longitude . . . . . - 80.31169530  
Source Code . . . . . G

**Ground Water Source Information**

Well Characteristics

Depth (ft) . . . . . 345  
Type . . . . . 3  
Casing Diameter (in) . . . . . 8  
Casing Type . . . . . S  
Under the Direct Influence of SW? . . . . . N

Well Pump Characteristics


Horsepower . . . . . 25.00  
Type . . . . . S  
Design Yield (gpm) . . . . . 230.00  
Test Yield (gpm) . . . . . 350.00  
Avg. Daily Production (TGD) . . . . . 2.00  
Regulated Capacity (TGD) . . . . . 336.00

**Treatment Codes**

N9970

**Comments**

Signature: \_\_\_\_\_



**SCDHEC**  
**Bureau of Water**

**Public Water System Source/Plant Inventory Report**

Site Name: RIDGEVILLE TOWN OF  
System Number: 1810004  
Source ID: B18001

(Add) (Modify) (Renew) (Delete)   
Reason: SS  
Today's Date: 4-25-23

**Plant Source Information**

Plant Name ..... PLANT #1  
Plant Phone .....  
Plant Type ..... B  
Available Code ... P

Average Production (MGD) .... 3.0000  
Total Capacity (MGD) ..... 0.2640  
Emergency Capacity (MGD) ... 0.0000

**Geographical Address**

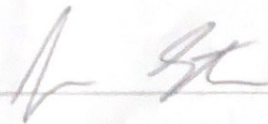
RAILROAD AVE @ ELEVATED TANK

**Treatment Codes**

D4010

**Comments**

Signature: \_\_\_\_\_



**SCDHEC**  
**Bureau of Water**

**Public Water System Source/Plant Inventory Report**

Site Name: RIDGEVILLE TOWN OF  
System Number: 1810004  
Source ID: B18002

(A)dd, (M)odify, (R)enum, (D)elete:  M  
Reason: SS  
Today's Date: 4-23-25

**Plant Source Information**

Plant Name . . . . . PLANT #2  
Plant Phone . . . . .  
Plant Type . . . . . B  
Available Code . . . . . P

Average Production (MGD) . . . . . 2.0000  
Total Capacity (MGD). . . . . 0.3360  
Emergency Capacity (MGD) . . . . . 0.0000

**Geographical Address**  
BEHIND FIRE STATION

**Treatment Codes**

D4010

**Comments**

Signature: \_\_\_\_\_

