

October 21, 2019

City of Denmark Attn: Dr. Gerald Wright 4768 Carolina Highway Denmark, SC 29042

Re:

Recent Distribution and Well Sampling Public Water System (PWS) #0510002

Bamberg County

Dear Dr. Wright,

On August 12 and 13, 2019, SC Department of Health and Environmental Control conducted sampling at the wells and at various points in the distribution system of the City of Denmark's PWS. Sampling parameters at each well included Total Residual Chlorine (TRC), Bromide, Volatile Organic Compounds (VOCs), Total Organic Carbon (TOC), Pesticides and Semi-volatile Compounds, Nitrate / Nitrite, Iron, Manganese, and Total Coliform/ E.Coli. Sampling parameters in the distribution system included Total Residual Chlorine, Total Coliform / E. Coli, Bromide, Iron, Manganese, and Disinfection Byproducts. The results from this sampling event are summarized in a chart below. The Department's findings and recommendations are as follows:

- All well samples for TRC, Bromide, VOCs, TOC, Pesticides and Semi-volatile Compounds, Nitrate / Nitrite, Iron, Manganese, and Total Coliform/ E.Coli were within the National and State Drinking Water Standards.
- 2. All distribution sites met the minimum requirement for TRC; however, three distribution sites had low TRC levels: 4998 Voorhees Rd, 4081 Carolina Hwy, and 18958 Heritage Hwy. Flushing in these areas is recommended to maintain acceptable TRC levels.
- 3. All distribution sites are within the National and State Drinking Water Standards. Ten of the distribution samples were absent for Total Coliform and E. Coli bacteria. One distribution sample, 1882 S Locust Street, tested positive for total coliform bacteria in the initial sampling, and the repeat sampling the following day. Subsequently, four additional samples were taken in this area. The four sample locations included the original location, a second tap at the same home, a tap upstream of the home, and a tap downstream of the home on Locust Street. All of these samples were absent for total coliform bacteria and E. Coli. Based on the TRC level of 0.64, the initial positive total coliform samples were likely false positives due to cross contamination of the sample or an issue with the sample tap.

4. All distribution samples for Bromide, Iron, Manganese, and Disinfection Byproducts (TTHMs and HAA5s) were within the National and State Drinking Water Standards.

The Department looks forward to working with the water system in the future to ensure that the residents of Denmark continue to receive the highest quality of drinking water. If you have any questions, or if I can be of any assistance, please contact me at the number or email below.

Sincerely,

Travis Fuss

Bureau of Environmental Health Service

Aiken Environmental Affairs Office

803-642-1637

fusstr@dhec.sc.gov

Location Mill St	TRC ¹ 0.49	TRC ¹ Coliform/E.Coli 0.49 Absent/Absent	Bromide <0.020	Iron ²	Manganese ³ THM ⁴ HAA ⁵ < ND ⁶ ND	THM ⁴	ND AAH
Wheat St	0.55	Absent/Absent	<0.020	0.055	<0.010	ND	
Voorhees Rd	0.12	Absent/Absent	<0.020	0.023	<0.010	0.00865	ND
Carrie St	0.57	Absent/Absent	<0.020	0.026	<0.010	ND	
Chestnut Ave	0.54	Absent/Absent	<0.020	0.022	<0.010	ND	
S Locust St	0.64	Present/Absent 08-13-19: Present/Absent 08-15-19: Absent/Absent	<0.020	<0.020	<0.010	N D	
Locust St	0.72	Absent/Absent	<0.020	0.044	<0.010	ND	
Spruce St	0.50	Absent/Absent	<0.020	0.029	<0.010	ND	
Wisteria	0.73	Absent/Absent	<0.020	0.037	<0.010	N D	
Carolina Hwy	0.09	Absent/Absent	<0.020	0.043	<0.010	ND	
Heritage Hwy	0.07	Absent/Absent	<0.020	<0.020	<0.010	0.00464	ND

- TRC is Total Residual Chlorine, the recommended TRC range is 0.20 mg/L to 2.0 mg/L.

- The Secondary Standard for Iron is 0.3 mg/L
 The Secondary Standard for Manganese is 0.05 mg/L.
 The Maximum Contaminant Level for THMs is 0.080 mg/L.
 The Maximum Contaminant Level for HAAs is 0.060 mg/L.
- "ND" indicates the sample was not detected or is less than the respective sample detection limits.
- The Maximum Contaminant Level for Nitrate is 10 mg/L. The Maximum Contaminant Level for Nitrite is 1 mg/L.

					Pest/	Nitrate/			Total
Location	TRC ¹	TRC ¹ Bromide VOC TOC Semi	700	700	Semi	Nitrite ⁷	lron ²	Manganese ³	on ² Manganese ³ Coliform/E.Coli
Voorhees Well	0.52	<0.020	ND	<1.0	ND	0.022	0.059	<0.010	Absent/Absent
Acacia Well	0.71	<0.020	ND	<1.0	ND	<0.020	0.17	0.010	Absent/Absent
W. Voorhees Well	0.55	<0.020	N D	1.1	ND	0.045	0.14	0.029	Absent/Absent

- 8. TRC is Total Residual Chlorine, the recommended TRC range is 0.20 mg/L to 2.0 mg/L.
 9. The Secondary Standard for Iron is 0.3 mg/L
 10. The Secondary Standard for Manganese is 0.05 mg/L.
 11. The Maximum Contaminant Level for THMs is 0.080 mg/L.
 12. The Maximum Contaminant Level for HAAs is 0.060 mg/L.
 13. "ND" indicates the sample was not detected or is less than the respective sample detection limits.
 14. The Maximum Contaminant Level for Nitrate is 10 mg/L. The Maximum Contaminant Level for Nitrite is 1 mg/L.