

January 9, 2019

Town 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 December 5, 2018, SC Department of Health and Environmental Control conducted sampling at the wells and at various points in the distribution system of the Town of Denmark's PWS. Sampling parameters at each well included Total Residual Chlorine (TRC), Nitrate / Nitrite, Total Organic Carbon (TOC), Volatile Organic Compounds (VOCs), Pesticides, and Semi-volatile Organic Compounds (SVOCs). Sampling parameters in the distribution system included Total Residual Chlorine, Total Coliform / E. Coli bacteria, Disinfection Byproducts, and Iron and Manganese. Attached is a chart summarizing all of the results for this sampling event. Findings and recommendations are below:

- All distribution samples were absent of bacteria.
- 2. All wells and distribution samples had acceptable TRC results, with the exception of two low readings. The readings at 4998 Voorhees Road and 18958 Heritage Highway were < 0.05 mg/L. Due to the low residuals at these addresses, flushing at or near these locations needs to be conducted to improve the chlorine content of the water in this part of the system.
- 3. All well samples for Nitrate / Nitrite, TOC, VOCs, Pesticides, and SVOCs were below the Maximum Contaminant Level (MCL) set by the Environmental Protection Agency (EPA) where applicable.
- 4. All distribution samples for Disinfection Byproducts were below the MCL.
- 5. All distribution samples for iron and manganese were within the Secondary Standards set by the EPA, with the exception of one location. The iron and manganese results at 4081 Carolina Highway were above the EPA's Secondary Standard. Due to the high results at this address, flushing at or near this location needs to be conducted to clear the line and address color

concerns in this part of the system. This flushing should be unidirectional and high velocity flushing.

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

Aiken Environmental Affairs Office

803-642-1637

fusstr@dhec.sc.gov

			Well Sampling		
Well	TRC ¹ (mg/L)	Nitrate/Nitrite ² (mg/L)	TOC (mg/L)	VOCs	Pesticides/Semi-Volatiles
Voorhees	0.53	0.025	<1.0	ND3	ON
Acacia	0.63	<0.020	<1.0	ND	Di (2-ethylhexyl) phthalate ⁴ : 0.0012 mg/L
W.Voorhees	0.65	0.059	<1.0	QN	ND

- The recommended TRC range is 0.20 mg/L to 2.0 mg/L.
 The MCL for Nitrate is 10 mg/L and the MCL for Nitrite is 1 mg/L.
 "ND" indicates the sample was not detected or is less than the respective sample detection limits.
 The MCL for Di (2-ethylhexyl) phthalate MCL is 0.006 mg/L.

				Distrib	Distribution Sampling	mpling	
	TRC	lron ²	Manganese³	Total			
Address	(mg/L)	(mg/L)	(mg/L)	Coliform	E.Coli	HAAs ⁴ (mg/L)	THMs ⁵ (mg/L)
Spruce	0.63	0.24	0.04	A	A	QN	QN
Carolina Carolina	0.55	6.4	0.42	4	4	QN	ND
1 Mill	0.63	0.053	<0.010	٧	٧	QN	QN
Wheat	0.52	0.1	<0.010	A	Α	ND	QN
4998 Voorhees	<0.050	0.029	0.039	A	Y	QN	Chloroform: 0.00128 Bromodichloromethane: 0.00116 Dibromochloromethane: 0.00179 Bromoform: ND
Carrie	0.5	0.027	<0.010	∢	∢	QN	QN
Locust	0.62	0.14	0.021	4	4	QN	QN
Chestnut	0.54	<0.020	<0.010	A	Α	QN	QN
Locust	0.49	<0.020	<0.010	٧	٧	QN	QN
Wisteria	0.65	0.085	0.013	А	А	Monobromoacetic acid: 0.00130	QN
Heritage	<0.050	<0.020	<0.010	۷	٧	QN	QN

1. The recommended TRC range is 0.20 mg/L to 2.0 mg/L. 2. The Secondary Standard for its it is it.

The Secondary Standard for iron is 0.3 mg/L. The Secondary Standard for Manganese is 0.05mg/L.

The MCL for HAAs is 0.060 mg/L. The MCL for THMs is 0.080 mg/L.

In a Present / Absent sample, "A" indicates absent. 6,43,6,6

"ND" indicates the sample was not detected or is less than the respective sample detection limits.