CORRESPONDENCE
APR 24, 2017
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Collin Roehner

From:	Office of Commissioner Brown
Sent:	Monday, April 24, 2017 8:55 AM
To:	Commissioner Correspondence
Subject:	Docket No. 160101-WS - Application for Increase in Water and Wastewater Rates by Utilities Inc. of Florida - FW: Utilities, Inc. & the Summertree Subdivision, in New Port Richey, FL
Attachments:	U.S. Water Services Corp., re - Utilities, Inc.-Summertree, 4.21.17.pdf; Julie Brown, Chairman, FL PSC & Mary Yeargan, Director FL DEP, 4.21.17.pdf

Please place the attached in Docket Correspondence, Consumers and their Representatives, in Docket No. 160101-WS. Thank you.

From: Jack Mariano [mailto:jmariano@pascocountyfl.net]
Sent: Friday, April 21, 2017 5:24 PM
To: Office of Commissioner Brown; 'Mary Yeargan'
Cc: Rick Scott (rick.scott@eog.myflorida.com); Kim McDougal, Ph.D. (Kim.McDougal@eog.myflorida.com); Kevin Reilly (kevin.reilly@eog.myflorida.com); 'Wilton Simpson'; 'Richard Corcoran'; Mike Moore; Mike Wells; Ron Oakley; Kathryn Starkey; Michele Baker; Jeffrey Steinsnyder; 'Ann Ryan'; Eric Saylor (saylor.erik@leg.state.fl.us); Flip Mellinger; 'Patrick Flynn'; 'John Hoy'; Braulio Baez; Mark Futrell; 'Rachel Perrin Rogers'; Jared Ochs (Jared.Ochs@myfloridahouse.gov); Judy Parker (PARKER.JUDY@flsenate.gov); Doris Graumann
Subject: Utilities, Inc. & the Summertree Subdivision, in New Port Richey, FL

Dear Chairman Brown and Director Yeargan:

Please refer to the attached letters from Gary Deremer, President of U.S. Water Services Corp. and me regarding Utilities, Inc. and the poor water quality in the Summertree subdivision in New Port Richey, Florida.

Thank you for your time and attention.

Jack Mariano
Commissioner, District 5
Pasco County Board of County Commissioners
8731 Citizens Drive, Suite 150
New Port Richey, FL 34654
Tel 727-847-8100
Fax 727-847-8969

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PASCO COUNTY FLORIDA
OPEN SPACES. VIBRANT PLACES.

April 21, 2017

Julie I. Brown, Chairman, **via email**
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Mary Yeargan, Director, **via email**
Southwest District,
Florida Department of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, Fl. 33637

Dear Chairman Brown and Director Yeargan,

Pasco County citizens are being abused by Utilities Inc. (UI) and their poor business practices. I have just read Flip Mellinger's letter to both of you explaining that UI has failed to take appropriate and necessary actions to ensure a safe and reliable water supply to their customers. The County is providing them with water that meets the standards, the County has offered to assist them with correcting the issue within their distribution system, and the County continues to work with all involved to find a resolution to this long standing issue. Four months is enough! Our citizens deserve a more responsive solution.

I cannot understand why companies like this one are allowed to continue to operate within the State of Florida. Please take appropriate action now.

Sincerely,

Jack Mariano
County Commissioner
District 5

Copy to via email:
Kim McDougal, Ph.D., Chief of Staff to Governor Rick Scott
Kevin Reilly, Legislative Affairs Director, Office of the Governor
Senator Wilton Simpson
Representative Richard Corcoran
Pasco County Commissioners
Mike Moore, Chairman
Mike Wells, Vice Chairman
Ron Oakley
Kathryn Starkey

Michele Baker, Pasco County Administrator
Jeffrey Steinsnyder, Pasco County Attorney
Ann Marie Ryan, Summertree Water Task Force
Eric Sayler, Office of Public Counsel
Braulio Baez, PSC Executive Director
Mark Futrell, PSC Deputy Executive Director, Technical
Flip Mellinger, Assistant County Administrator, Utilities Services
Patrick Flynn, Utilities Inc.
John Hoy, Utilities Inc.

U.S. Water®
Services Corporation

Water and Wastewater Utility Operations, Maintenance, Engineering, Management, Construction

April 21, 2017

Ann Marie Ryan
Summertree Water Alliance
Florida Consumer Water Alliance
11436 Windstar Ct
New Port Richey, FL 34654

Terry Copenhafer
12137 Loblolly Pine Dr
New Port Richey, FL 34654

Via: Email

Re: Summer Tree Water Quality/Sampling

Ms. Ryan & Ms. Copenhafer:

U.S. Water Services Corporation (USWSC) was hired by the Summer Tree HOA to provide assistance in determining cause or causes of low chlorine residuals and low pressure in the Summer Tree Subdivision. In addition, USWSC is to provide preliminary recommendations to improve water quality and pressure.

Background

The Summer Tree utility system is owned by Utilities Inc of Florida (UIF), a private entity. It is regulated by the Florida Public Service Commission and the Florida Department of Environmental Protection. Historically the system has experienced water quality issues relating to high iron concentration in one or more of the source water wells. A feasibility report prepared by UIF recommended decommissioning the water supply wells and interconnecting to Pasco County Utilities for the purchase of bulk water supply. The system was interconnected to the County on or about December 2016. The water treatment equipment was removed and the wells were plugged in accordance with Southwest Florida Water Management District. The new water supply is delivered through a single point of entry via an 8-inch pipe and valve assembly, constructed and owned by the county, located at the entrance to the subdivision. Since the county interconnection was initiated, the Summer Tree system has been experiencing low chlorine residuals. In an attempt to remedy low residuals, UIF has been and is currently performing significant flushing efforts at multiple locations. On April 18, 2017 USWSC observed flushing being performed through 2" hoses or pipes. At least two of the flushing points were operating in a continuous mode. Furthermore, the adjacent stormwater ponds were full at the time of USWSC inspection, indicating high flushing activities.

Findings

On April 18, 2017 US Water Services Corporation conducted field sampling of the Summer Tree water distribution system. The following instruments were used to obtain the data shown in Table 1:

- Hach pocket II colorimeter for chlorine
- Hach Pocket II colorimeter for monochloramine and free ammonia
- Oakton pHTestr 30 Waterproof pH Testr 30 Pocket Tester

Samples were taken at six locations throughout the distribution system and at the County interconnect. The results are show below.

SUMMERTREE TESTING 4/18/17
Testing Occurred 1:00 PM - 3:00 PM

	Total Chlorine Residual	Mono Chloramine	Free Ammonia	pH	Temp	PSI County side	PSI Summertree side
County Interconnect	2.1	2.02	0.13	8.16	27.5	63	48
County Interconnect 2nd	2.2	2.08	0.10	8.20		63	48
11451 Merganser Way (actively flushing)	0.2	0.00	0.00	7.83	27.8		42
11640 White Ash Drive (actively flushing)	0.4	0.34	0.07	7.83	27.6		44
11540 Aspenwood (actively flushing)	0.4	0.44	0.00	7.98	27.4		42
12123 Loblolly Pine Drive (actively flushing)	1.0	0.16	0.01	8.08	30.6		43
11213 Clear Oaks Circle	0.4	0.43	0.07	8.03	31.0		46
11838 Bayonet Lane	1.6	1.11	0.11	8.06	32.0		50

The results of the sampling show that the water is experiencing a significant decline in total chlorine residual. In four of the six samples the chlorine residual was measured to be below the regulatory limit of 0.6 ppm. The free ammonia levels were also measured to be below expected levels. Free ammonia and total chlorine residual levels rapidly declined between the County interconnect and most locations within the Summer Tree distribution system even with UIF's extraordinary effort to reduce water age through flushing. Based on our experience and sampling results, significant nitrification is occurring in the distribution system. Nitrification occurs when bacteria is present in a distribution system and utilize free and available ammonia as a food source. This promotes additional bacteriological growth and rapid depletion of chlorine

residuals during this process. In our opinion, based on the rate of depletion of both chlorine and ammonia within the Summer tree distribution system, flushing alone will be insufficient in restoring stable disinfectant residuals.

USWSC also measured system pressures at multiple locations within the distribution system and at the County interconnect. The results are shown in the table above. Overall pressure readings, although above the regulatory limit of 20 psi, were observed to be lower than typical ranges that we encounter in Florida. At the County interconnect the pressure was measured on the County side of the meter assembly and on the Summer Tree side. These readings show a pressure loss of 15 psi through the meter assembly. This may be attributed to the type of backflow prevention device used at the County meter assembly.

US Water Recommendations:

1. **Initiate Free Chlorine Burn:**
   - Install a temporary chlorine feed system at the County interconnection. This requires an automated flow pacing chlorination feed system; modifying existing county flow meter or installing an additional flow meter equipped with 4 – 20 milli-amp signal capable of flow pacing; liquid chlorine storage tank and containment; representative sample taps to measure free chlorine residual and security fencing
   - Injection of chlorine upstream of the County meter to maximize chemical mixing through the existing piping
   - Ensure the effectiveness of the free chlorine burn. Perform initial heterotrophic plate count (HPCs) bacteriological sampling to establish baseline and conduct weekly HPC's until such time there is a substantial reduction in microbial density.
   - Coordinate all activities with the Florida Department of Environmental Protection, including any necessary permits and public notice requirements

2. **Flushing:**
   - Iron sediment has potentially accumulated in the distribution system based on high concentrations from the previous source water. Iron sediment can provide a media for bacterial growth as well as reduce the disinfectant residuals. Iron sediment can only be removed through high velocity flushing (over 5 feet per second). This may require concurrent flushing of multiple fire hydrants at flow rates exceeding 1,700 gpm based on pipe diameters.

   - The flushing should begin close to the county interconnect and continue outwards to the extremities of the distribution system

3. **Perform routine field testing to include:**
   - Monochlormaine
   - Free ammonia

4. **Develop Future Chlorine Burn/Flushing Plan:**
   - The plan should include routine chlorine burn and flushing. USWSC recommends an initial schedule of every 6 months.
   - Distribution system monitoring and sampling should include additional water quality sampling such as pH, alkalinity, HPC, nitrate, etc. to be utilized as part of the chlorine burn plan. This data should be used to determine when a burn is needed and during the burn to determine when the system can be returned to chloramine disinfection.

5. **Install Permanent Chlorine Feed System:**
   - The permanent system should include online chemical analyzers to continuously monitor free & total ammonia, total chlorine and monochloramine
   - The system should be designed to allow the addition of chlorine at any time. This will include free chlorine burns and standard operation to combine free available ammonia to increase residuals.
   - By combining the free ammonia, the chloramine residual will increase and the amount of available free ammonia will decrease resulting in lower levels of nitrification
   - This will require engineering and FDEP Permitting.

6. **Increase Incoming Water Pressure**
   - County to Investigate pressure loss across the meter assembly.
   - Consider removal of RPZ backflow devices or replacement with double check valve assemblies to reduce pressure loss.

7. **Operator Training:**
   - Provide supplemental operator training to gain a full understanding of chloramine disinfection.
   - The distribution system should be sampled regularly to maintain adequate disinfection. The training must address the use of field instruments that measure chlorine, free ammonia, and monochloramine.

Thank you for the opportunity to provide our services to the Summer Tree HOA. Please feel free to call if you have any questions or would like to discuss any of the items listed above in greater detail.

Sincerely:

Gary Deremer, President
U.S. Water Services Corporation
Water Plant Operator Certification Class A #5894
Water Distribution System Level 1 #15999

Brad Labella, P.E.
US Water Services Corporation
FL P.E. #56015