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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

10 SEP - 3 PH 3: 07

In re: Application for increase in water rates in || DOCKET NO. 100104-WU Franklin County by Water Management Services, Inc.

DATED: SEPTEMBER 3, 2010

COMMISSION CLERK

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Direct Testimony and

Exhibit CM-1 of Cliff McKeown have been served by U.S. Mail, on this 3rd day of September,

2010, to the following:

Lisa C. Scoles, Esquire Radey Thomas Yon Clark Post Office Box 10967 Tallahassee, FL 32302

Joseph A. McGlothlin Office of Public Counsel c/o The Florida Legislature 111 W. Madison Street, Room 812 Tallahassee, FL 32399-1400

Mr. Gene D. Brown Water Management Services, Inc. 250 John Knox Road, #4 Tallahassee, FL 32303-4234

RALPH R. JA SENIOR ATTORNEY

FLORIDA PUBLIC SERVICE COMMISSION Gerald L. Gunter Building 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850 Telephone: (850) 413-6234

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| 1 | DIRECT TESTIMONY OF CLIFF MCKEOWN |
|----|---|
| 2 | Q. Please state your name and business address. |
| 3 | A. My name is Cliff McKeown. My business address is: Department of Environmental |
| 4 | Protection, 630-3 Capital Circle NE, Tallahassee, Fl. 32308. |
| 5 | Q. By whom are you employed and in what capacity? |
| 6 | A. I am employed by the Florida Department of Environmental Protection (DEP), |
| 7 | Northwest District. I am the primary inspector of all Public Water Systems subject to the |
| 8 | Florida Safe Drinking Water Act, located East of the Apalachicola River and West of the |
| 9 | center of Jefferson County. |
| 10 | Q. How long have you worked in that position? |
| 11 | A. I have been employed by DEP for 36 years. In that time, I have worked in Florida's |
| 12 | wild-flowing Artesian well control program, in the domestic and industrial waste water |
| 13 | programs, as well as the storm water program. My primary responsibilities for the last 31 |
| 14 | years have been in the drinking water program. |
| 15 | Q. What are your duties in that position? |
| 16 | A. I inspect all public water supplies in my geographic area of responsibility and take |
| 17 | enforcement actions as required to ensure compliance with the safe drinking water act. |
| 18 | Q. Please summarize your educational background and professional experience. |
| 19 | A. I graduated high school in 1970 and thereafter attended community college for two |
| 20 | years. Also, as stated above, I have 36 years experience working in DEP. |
| 21 | Q. Have you ever filed or presented expert testimony before this Commission or any other |
| 22 | regulatory agency? |
| 23 | A. I testified in an earlier rate case for this utility in 1994 (see Docket No. 940109-WU), |
| 24 | and others including various DEP actions between 1975 and the present. Some of the other |
| 25 | DEP actions involved this very utility. |

| 1 | Q. What is the purpose of your testimony in this proceeding? |
|----|---|
| 2 | A. The purpose of my testimony is to present the DEP's position on the following five |
| 3 | points: |
| 4 | 1. The utility's compliance with DEP regulations for drinking water. |
| 5 | 2. The DEP's position on the customers of Water Management Services installing |
| 6 | private, shallow wells and the installation of backflow prevention devices at those |
| 7 | connections. |
| 8 | 3. Test results for total trihalomethanes for this utility. |
| 9 | 4. The condition of the utility's water storage tanks. |
| 10 | 5. Recalibration of the utility's flow meters at its wells. |
| 11 | Each position is addressed below: |
| 12 | 1. Utility's Compliance with DEP Regulations |
| 13 | The utility is currently in compliance with the applicable requirements of the Safe |
| 14 | Drinking Water Act, based on the last inspection of March 5, 2010, as shown in a cover letter |
| 15 | dated March 15, 2010, with an attached Compliance Inspection Form. The cover letter and |
| 16 | Compliance Inspection Form are attached as Exhibit CM-1. |
| 17 | 2. DEP's Position on Installation of Shallow Wells and Back-flow Preventers |
| 18 | Through Rule 62-555, Florida Administrative Code (F.A.C.), DEP requires all |
| 19 | community type water systems to establish and implement a routine cross connection control |
| 20 | program. The purpose of this program is to detect and protect against cross connections |
| 21 | occurring which may endanger that customer or other customers of the system. This may |
| 22 | occur through back-pressure or back siphonage, when an unproven source of water (such as a |
| 23 | shallow well) is introduced within the system. All cross connection control programs |
| 24 | recognize that any source of water that is not known to be potable is therefore non-potable and |
| 25 | prohibited from introduction to the system and its customers. |

Rule 62-555.360(2), F.A.C., requires all community type public water systems to 1 establish and implement routine cross connection control programs and further requires that 2 these programs be established in accordance with the American Water Works Association's 3 Manual of Practice No. 14 (MOP 14). MOP 14 states in section 5.2, page 55, "An approved 4 backflow-prevention assembly shall be installed at the service connection of the water 5 purveyor to any premises where there is an auxiliary water supply or system, even though 6 there is no connection between the auxiliary water supply and the public potable water 7 8 system." 9 The installation of irrigation or other wells which produce water that is not regularly

10 examined for bacteriological, chemical and radiological quality is considered non-potable.
11 Because the water utility is required to operate this cross connection control program, the
12 installation of non-potable wells increases the utility's work load. The utility's staff must
13 determine the need for a back-flow preventer device, ensure that one is properly installed, and
14 then these devices must be re-certified each year.

15

3. Test Results for Total Trihalomethanes (TTHMs)

During the years 2006, 2007, and 2008, the system exceeded the maximum 16 contaminant levels (MCLs) for TTHMs of 80.5 parts per million (ppm). The Department of 17 Health maintains a laboratory certification program. All public water supplies must use a lab 18 certified under this program. The Department of Health determined that improper procedures 19 were used in the handling and preservation of these samples and, as a result, DEP invalidated 20 21 past results. Therefore, the utility was required to take four additional samples starting on 22 August 17, 2009, and going through June 8, 2010. The levels for TTHMs in ppm for each of the last four tests are 41.6 (August 17, 2009), 23.8 (December 14, 2009), 29.9, March 15, 23 24 2010) and 40.6 (June 8, 2010). The highest level of MCL recorded during these four tests was 41.6, which is approximately 50% of the allowed TTHMs. Therefore, the test results for 25

1 TTHMs for this utility are now satisfactory. Based on this satisfactory four samples, the 2 utility is now back on the normal sampling period of once every year.

3

4. Condition of Utility's Water Storage Tanks

This utility's ground storage reservoir is constructed of concrete and includes two gravity type aerators mounted on its roof. The aerators are there to remove hydrogen sulfide gas, a gas fairly common to Florida's groundwaters. This gas is highly corrosive and aggressive to certain substances such as concrete.

8 As the water pumped from the wells on the mainland flows through the aerators the 9 water is separated into smaller and smaller volumes, thus exposing more of the water's surface 10 to the atmosphere. This process strips the gas from the water allowing much of the gas to be 11 dissipated into the atmosphere. Some of the gas however enters the ground storage reservoir, 12 and, in the presence of moisture, forms a corrosive substance that attacks concrete.

It is somewhat common to have corrosion that is so severe that chunks of concrete may be removed by hand from the internal portions of the water tank above the water line. Because damage to water storage tanks is common for many different reasons, DEP requires an inspection of each tank every five years to determine its structural and coating integrity. These inspections must be supervised by a Florida Licensed Professional Engineer. The utility conducted a tank inspection in January 2006 for its ground storage tank and in March 2009 for its elevated tank.

20

5. Recalibration of Utility's Flow Meters at its Wells.

The 2009 Sanitary Survey reported individual well meter accuracy results ranging from -1.0% to + 4.0% AWWA sets a accuracy standard of +/- 5%; therefore, recalibration is not required at this time.

24 Q. Does this conclude your testimony?

25 A. Yes, it does.

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Florida Department of Environmental Protection

Tallahassee Branch Office 630-3 Capital Circle Northeast Tallahassee, Florida 32301 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

March 15, 2010

<u>Sent via email</u> (water2nm@yahoo.com)

Ms. Nita Molsbee 250 John Knox Road Tallahassee, Florida 32303

Dear Ms. Molsbee:

An annual compliance inspection of St. George Island Water System (PWS ID No. 1190789) was completed on March 5, 2010, by Cliff McKeown, Engineering Specialist. Your assistance during the inspection was most helpful.

The purpose of this inspection was to evaluate the capability of the water system to continually produce safe drinking water. Public water systems in this state are regulated by the Department under the Florida Safe Drinking Water Act as promulgated by Florida Administrative Code Chapters 62-550, 555 and 560. The Department determines compliance with these regulations.

No major deficiencies were identified during the inspection. My congratulations to you and your staff on the condition of this system. Please note the section titled Outstanding Permits we would appreciate a written response within 15 days advising us of the status of these permits. Please address the response to me.

If you have any questions regarding the report and/or deficiencies, please contact Cliff McKeown at 850/488-3704 or e-mail (cliff.mckeown@dep.state.fl.us.)

Sincerely,

Marlan Castellanon

Marlane Castellanos Branch Manager

MC:cm Enclosures *Compliance Inspection Report*

cc: Franklin County Department of Health (jason_flowersi@doh.state.fl.us) Scott Grubbs, (Scott.Grubbs@dep.state.fl.us) Angela Chelette, NWFWMD (Angela.Chelette@nwfwmd.state.fl.us) Cliff McKeown (cliff.mckeown@dep.state.fl.us)

> "More Protection, Less Process" www.dep.state.fl.us

Docket No. 100104-WU Exhibit CM-1 (Page 2 of 3)

| Complia | nce Inspection Fo | orm | | | | | | | | | | F | Page 2 | |
|---|---|--------|----------|--------|----------|----------------|------------------------------------|--|---------------------------|-------------------------------|-----------|---------------|-------------------|--|
| Nater system: | ST. GEORGE ISLAN | | ILIT | IES | | | Sy | stem P | WS#:_1190789 | Date | of inspe | ction: | /5/2010 | |
| | S: 250 JOHN KNOX ROAD - SUITE #4 | | | | | | City | TALL | AHASSEE | | State _1 | FL Ž | ip32303 | |
| System phone: | 850/668-0440 | | | | | | | | | Cell: 85 | 0/697-2 | 836 | | |
| Fax number: | 850/927-3395 | | | | | | | Emai | ; water2nm@yahc | o.com | | | | |
| | | | | | | | | Linda | | | er title: | | | |
| Owner name: | GENE BROWN | | | | | | Citer | TTAT T | AUACCEE | OWN | | FL Z | 7in 32303 | |
| Owner address: | 250 JOHN KNOX ROAD - SUITE #4 | | | | | | City: | | AHASSEE | | _ | | up <u></u> | |
| Owner phone: | 850-668-0440 | | | | | <u> </u> | | | | Cell: 85 | 0/519-7 | 685 | | |
| Fax number: | | | | | | | | Emai | l: gdb5@comcast | | | | | |
| Operator require | d? Yes No (If "No", Operator sections not applicable) | | | | | pplicable) | | | Operator na | ime: MS | | | | |
| Operator Email | • | | | | | | | | 850/927-2648 | | Fax: | 850/927- | 50/927-3395 | |
| ····· | | S=5 | Satisfa | actory | U=Uns | atisfactory ~= | Not Applic | able * | =See comment below | | | | | |
| Well Number | | 1 | 2 | 3 | 4 | | | NO | Water system map | compliar | t? | Ye | s CAD | |
| Well head seale | d? (Pad/conduit/openings) | s | s | s | S | | | BUTI | Flushing of dead en | nds comp | liant? | Yes | daily | |
| Well casing 12" | above grade? | s | s | s | S | | | ISTRI | Valve maintenance | complia | nt? | | Yes | |
| Casing vent con | | S | S | S | S | | Chlorine residual > 0.2 mg/L | | | Yes | | | | |
| | Check valve compliant? | | | s | S | | 2 Number of high service pumps? | | | | | 3 | | |
| | (Smooth/12" high/pre-check) | S | S | S | S | | High service pumps functional? | | | | | Yes | | |
| Flow measurabl | | s | S | S | s | | | | CCC devices teste | d annuall | y? | | Yes | |
| Security measu | | S | S | S | s | | | NEV. | Flow meter accura | cy check | ed? | | Yes | |
| O & M manual o | | S | S | S | s | | | NAGE | Emergency Prepa | redness F | lan? | | Yes | |
| | pliant (no organics/acid/sun) | S | S | s | S | | | MA | In use permits hav | e clearan | ce? | | Yes | |
| Spare chlorinat | | s | s | S | s | | | OR | Operator visits cor | npliant? | | | Yes | |
| | alarm compliant? | S | S | S | S | | | | Plant checked 5 til | ant checked 5 times per week? | | Yes | | |
| Treated sample | tap provided? | S | S | S | S | | | | MORs submittal co | ts submittal compliant? | | Yes | | |
| Security measu | asures compliant? | | s | s | S | | | FC | LLOW-UP TO LAST IN | SPECTION | OR SURVI | EY | | |
| CI solution N | ution NSF approved? | | S | S | S | | | La | st inspection fully c | ompliant? | Yes | No (s | ee below) | |
| V | compliant?(covered/etc) | s | s | S | S | | Number of deficiencies last cited? | | | | N/A | | | |
| Safety: (Gloves | Safety: (Gloves/Apron/Eyewash/eic) | | s | S | S | | | Were any of the deficiencies "repeat"? | | | | N/A | | |
| CI room con | CI room compliant?(separate/ventilation) | | s | s | s | | | Response from system submitted? | | | | N/A | | |
| | Coolee complicat? | | S | S | s | | | | ve deficiencies bee | | | | | |
| Auto switchover provided? | | | s | s | s | | | | ONITORING SCHEDULI | | | · - ·· | | |
| | Gloves/Ammonia/Panic HW) | S S | s | s | S | | | | | | | • • | | |
| | | | Y | | | | · | CI | IBMICAL | ANALY | SIS DA | | NEXT DU | |
| U LA Sachar | | | - 1 K. | | | | | 1 | trate/Nitrite organics | 8-09 9-08 | | | 2010 2011 | |
| | · | | - | | | | | Se | condaries | 9-08 | | | 2011 | |
| | | | | | | | | | DCs ads | 9-08 9-08 | | | 2011 see below | |
| Tank Number | | 1 | 2 | | ÷5. | | | S | DCs | 9-08/w | aiver | | 2011 | |
| Inspections compliant? (annual/5yr) Overflow/Vents compliant? (elevated) Pressure relief valve provided? (hydro | | s | | | | | OCs sbestos | 7-97 waiver | | susp 2011 | | | | |
| | | s | S S X | | | | _ _ | TTHM/HAA5(qtrs) | | 8,12-09 | | 3-10 | | |
| | valve provided? (hydro | | . | | 14 miles | | | Pt | o/Cu (tri) | 2008 | | | 2011 | |
| Security measu | res compliant? | S | S | | | | | | | | | | | |
| | Plant Cl (mg/L) | s | | | | r3 | | | Distribution CI (mg/L) | / nH | | State Pau | k=2.5 | |
| ELD SAMPLING RES | SULIS | | 1 | 1 | | Plant= | 3.5 | | Distribution Or (mg/L) | r pri | | West End | l=0.7 | |

COMA

- '

NO MAJOR DEFICIENCIES NOTED

Outstanding Permits

Our records indicate that the enclosed list of permits have not been cleared by this office. Please submit a status report for the permits listed with your response to this report.

The 'status' would fall into one of the following categories, A, B, C, D, or E:

A) not startedB) started, but not completedC) completed, but not in useD) completed, and in useE) project abandoned (will not be built)

| PROJECTNAME | PERMITNO | EXPIRES | OWNER NAME | STATUS |
|------------------------------|---------------------|----------|-------------------|--------|
| Resort Village | 0244255-002DSGP/01 | 04/06/10 | Mr. Morris Palmer | |
| St. George Island State Park | 0076016-001-DSGP/01 | 07/23/11 | Mr. Eric Kiefer | |

Action Title ENGINEER SPECIALIST DATE: March 15, 2010 INSPECTOR'S SIGNATURE CLIFF MCKEOWN

Mailane Castellano TITLE BRANCH MANAGER DATE: March 15, 2010 REVIEWED BY MARLANE CASTELLANOS