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DOCKET NO.: 950495-WS - [Southern States Utilities, Inc. - Sugar Mill Water System, Deltona Lakes Water System, Enterprise Utilities Water System, Jungle Den Water System]

WITNESS: Direct Testimony of J. Lee Faircloth, Florida Department of Health and Rehabilitative Services, Appearing on Behalf of the Staff of the Florida Public Service Commission

DATE FILED: February 26, 1996

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FPSC-RECORDS/REPORTING

1 DIRECT TESTIMONY OF J. LEE FAIRCLOTH

2 Q. Please state your name and business address.

3 A. J. Lee Faircloth, Engineer IV, Volusia County Public Health Unit, 501  
4 S. Clyde Morris Boulevard, Daytona Beach, Florida 32114.

5 Q. Please state a brief description of your educational background and  
6 experience.

7 A. I have a B.S. in Environmental Science and an A.S. in Oceanographic  
8 Science from Florida Institute of Technology. I have worked the last 12 years  
9 in drinking water permitting and compliance with Department of Health and  
10 Rehabilitative Services.

11 Q. By whom are you presently employed?

12 A. I am employed by the Florida Department of Health and Rehabilitative  
13 Services (FDHRS).

14 Q. How long have you been employed with the FDHRS and in what capacity?

15 A. I have been employed for twelve years as an engineer with FDHRS  
16 reviewing permit applications and performing sanitary surveys/compliance  
17 inspections.

18 Q. What are your general responsibilities at the Department of Health and  
19 Rehabilitative Services?

20 A. I am the Drinking Water Program Supervisor.

21 Q. Are you familiar with the Southern States Utilities, Inc. water systems  
22 located in the Central District?

23 A. Yes.

24 Q. Were these systems inspected by you, or by FDHRS staff under your  
25 supervision?

1 A. They were inspected by subordinate staff (an environmental specialist).  
2 Sugar Mill Water System  
3 Q. Does the utility have a current construction permit from the Department  
4 of Environmental Protection (FDEP) for Sugar Mill Water System (Sugar Mill)?  
5 A. No. However, a corrosion control treatment application is pending  
6 additional information.  
7 Q. Are the utility's treatment facilities and distribution system  
8 sufficient to serve its present customers?  
9 A. Yes.  
10 Q. Does the utility maintain the required 20 psi minimum pressure  
11 throughout the distribution system?  
12 A. Yes.  
13 Q. Does the utility have an adequate auxiliary power source in the event  
14 of a power outage?  
15 A. Yes.  
16 Q. Are the utility's water wells for Sugar Mill located in compliance with  
17 Rule 62-555, Florida Administrative Code?  
18 A. Yes.  
19 Q. Does the utility have certified operators as required by Rule 61E12-41,  
20 Florida Administrative Code?  
21 A. Yes.  
22 Q. Has the utility established a cross-connection control program in  
23 accordance with Rule 62-555.360, Florida Administrative Code?  
24 A. Yes. A cross-connection control program was accepted April 15, 1992.  
25 Q. Is the overall maintenance of the treatment plant and distribution

1 facilities satisfactory?

2 A. No. Serious corrosion has been observed throughout the treatment plant.

3 Q. Does the water produced by the utility meet the State and Federal

4 maximum contaminant levels for primary and secondary water quality standards?

5 A. No. The trihalomethane concentration is above MCL. However, the system

6 serves less than 10,000 people, so this standard is not enforced. Lead levels

7 are above the action level also.

8 Q. Does the utility monitor the organic contaminants listed in Rule

9 62-550.410, Florida Administrative Code?

10 A. Yes.

11 Q. Do recent chemical analyses of raw and finished water, when compared to

12 regulations, suggest the need for additional treatment?

13 A. Yes. The reduction of halogen formation needs treatment modifications.

14 Also, corrosion control is needed to reduce lead concentrations, for which a

15 permit has been applied for but is presently incomplete.

16 Q. Does the utility maintain the required chlorine residual or its

17 equivalent throughout the distribution system?

18 A. Yes.

19 Q. Are the plant and distribution systems in compliance with all the other

20 provisions of Chapter 62, Florida Administrative Code, not previously

21 mentioned?

22 A. Yes.

23 Q. Has Sugar Mill been the subject of any FDEP enforcement action within

24 the past two years?

25 A. No.

1 Deltona Lakes Water System

2 Q. Does the utility have a current construction permit from the FDEP for  
3 Deltona Lakes Water System (Deltona Lakes)?

4 A. Yes. It has a construction permit for auxiliary power generator  
5 modifications for water treatment plant, a new pressure tank, and a high  
6 service pump.

7 Q. Are the utility's treatment facilities and distribution system  
8 sufficient to serve its present customers?

9 A. Yes.

10 Q. Does the utility maintain the required 20 psi minimum pressure  
11 throughout the distribution system?

12 A. Yes.

13 Q. Does the utility have an adequate auxiliary power source in the event  
14 of a power outage?

15 A. No, but it is installing additional generators at the present time.

16 Q. Are the utility's water wells for Deltona Lakes located in compliance  
17 with Rule 62-555, Florida Administrative Code?

18 A. Yes.

19 Q. Does the utility have certified operators as required by Rule 61E12-41,  
20 Florida Administrative Code?

21 A. Yes.

22 Q. Has the utility established a cross-connection control program in  
23 accordance with Rule 62-555.360, Florida Administrative Code?

24 A. Yes its cross-connection control was confirmed by FDEP on March 29,  
25 1991, during a sanitary survey by P. Morrison.

1 | Q. Is the overall maintenance of the treatment plant and distribution  
2 | facilities satisfactory?

3 | A. No. The treatment plants lack consistent up-keep and cleanliness.

4 | Q. Does the water produced by the utility meet the State and Federal  
5 | maximum contaminant levels for primary and secondary water quality standards?

6 | A. No. The iron MCL is exceeded at plants # 3, 5 and 11. Phosphate  
7 | injection is used.

8 | Q. Does the utility monitor the organic contaminants listed in Rule  
9 | 62-550.410, Florida Administrative Code?

10 | A. Yes.

11 | Q. Do recent chemical analyses of raw and finished water, when compared to  
12 | regulations, suggest the need for additional treatment?

13 | A. Yes. Lead and copper monitoring suggest the need for additional  
14 | treatment (phosphate).

15 | Q. Does the utility maintain the required chlorine residual or its  
16 | equivalent throughout the distribution system?

17 | A. No. Some areas of the distribution system require routine flushing.  
18 | However, flushing is not performed as often as needed to prevent problems from  
19 | recurring. It is usually not done until complaints are received.

20 | Q. Are the plant and distribution systems in compliance with all the other  
21 | provisions of Chapter 62, Florida Administrative Code, not previously  
22 | mentioned?

23 | A. No. They have not reported many of the watermain breaks in the past.  
24 | See Exhibit JLF-1, which is a recent sanitary survey letter from Mark A.  
25 | Halverstadt to the utility, October 5, 1995.

1 Q. Has Deltona Lakes been the subject of any FDEP enforcement action within  
2 the past two years?

3 A. There has been no formal enforcement action.  
4 Enterprise Utilities Water System

5 Q. Does the utility have a current construction permit from the FDEP for  
6 Enterprise Utilities Water System (Enterprise Utilities)?

7 A. Yes. It has a construction permit for auxiliary power generator  
8 modifications for water treatment plant, a new pressure tank and a high  
9 service pump. It should be noted that this water system is part of the  
10 Deltona Lakes distribution system.

11 Q. Are the utility's treatment facilities and distribution system  
12 sufficient to serve its present customers?

13 A. Yes.

14 Q. Does the utility maintain the required 20 psi minimum pressure  
15 throughout the distribution system?

16 A. Yes.

17 Q. Does the utility have an adequate auxiliary power source in the event  
18 of a power outage?

19 A. No, but it is installing additional generators at the present time.

20 Q. Are the utility's water wells for Enterprise Utilities located in  
21 compliance with Rule 62-555, Florida Administrative Code?

22 A. Yes.

23 Q. Does the utility have certified operators as required by Rule 61E12-41,  
24 Florida Administrative Code?

25 A. Yes.

1 Q. Has the utility established a cross-connection control program in  
2 accordance with Rule 62-555.360, Florida Administrative Code?

3 A. Yes. A cross-connection control program was accepted April 15, 1992.

4 Q. Is the overall maintenance of the treatment plant and distribution  
5 facilities satisfactory?

6 A. No. The treatment plants lack consistent up-keep and cleanliness.

7 Q. Does the water produced by the utility meet the State and Federal  
8 maximum contaminant levels for primary and secondary water quality standards?

9 A. No. The iron MCL is exceeded at plants # 3, 5 and 11. Phosphate  
10 injection is used.

11 Q. Does the utility monitor the organic contaminants listed in Rule  
12 62-550.410, Florida Administrative Code?

13 A. Yes.

14 Q. Do recent chemical analyses of raw and finished water, when compared to  
15 regulations, suggest the need for additional treatment?

16 A. Yes. Lead and copper monitoring suggest the need for additional  
17 treatment (phosphate).

18 Q. Does the utility maintain the required chlorine residual or its  
19 equivalent throughout the distribution system?

20 A. No. Some areas require routine flushing. However, this is not done  
21 consistently. Flushing is done when complaints are received from consumers.

22 Q. Are the plant and distribution systems in compliance with all the other  
23 provisions of Chapter 62, Florida Administrative Code, not previously  
24 mentioned?

25 A. No. The utility has not reported many of the watermain breaks in the



1 | past. See the Deltona Lakes sanitary survey letter from Mark Halverstadt to  
2 | the utility dated October 5, 1995 (Exhibit JLF-1).

3 | Q. Has Enterprise Utilities been the subject of any FDEP action within the  
4 | past two years?

5 | A. There has been no formal enforcement action.

6 | 

Jungle Den Water System

7 | Q. Does the utility have a current construction permit from the FDEP for  
8 | Jungle Den Water System (Jungle Den)?

9 | A. No.

10 | Q. Are the utility's treatment facilities and distribution system  
11 | sufficient to serve its present customers?

12 | A. This is a consecutive system of Public Water System (PWS) #3350044.

13 | Q. Does the utility maintain the required 20 psi minimum pressure  
14 | throughout the distribution system?

15 | A. Yes.

16 | Q. Does the utility have an adequate auxiliary power source in the event  
17 | of a power outage?

18 | A. Yes.

19 | Q. Are the utility's water wells for Jungle Den located in compliance with  
20 | Rule 62-555, Florida Administrative Code?

21 | A. It purchases water from PWS #3350044 as a consecutive system. It does  
22 | not have wells.

23 | Q. Does the utility have certified operators as required by Rule 61E12-41,  
24 | Florida Administrative Code?

25 | A. Yes.

1 Q. Has the utility established a cross-connection control program in  
2 accordance with Rule 62-555.360, Florida Administrative Code?  
3 A. Yes. A cross-connection control program was confirmed on March 29,  
4 1991, on a sanitary survey.  
5 Q. Is the overall maintenance of the treatment plant and distribution  
6 facilities satisfactory?  
7 A. Yes.  
8 Q. Does the water produced by the utility meet the State and Federal  
9 maximum contaminant levels for primary and secondary water quality standards?  
10 A. Yes. Consecutive systems are not required to conduct chemical  
11 monitoring.  
12 Q. Does the utility monitor the organic contaminants listed in Rule  
13 62-550.410, Florida Administrative Code?  
14 A. No, it does not because it is a consecutive system of PWS #3350044.  
15 Q. Do recent chemical analyses of raw and finished water, when compared to  
16 regulations, suggest the need for additional treatment?  
17 A. No.  
18 Q. Does the utility maintain the required chlorine residual or its  
19 equivalent throughout the distribution system?  
20 A. Yes, but it is occasionally less than required.  
21 Q. Are the plant and distribution systems in compliance with all the other  
22 provisions of Chapter 62, Florida Administrative Code, not previously  
23 mentioned?  
24 A. Yes.  
25 Q. Has Jungle Den been the subject of any FDEP enforcement action within

1 | the past two years?  
2 | A. No.  
3 | Q. Do you have anything further to add?  
4 | A. No, I do not.  
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STATE OF FLORIDA  
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

CERTIFIED Z 309 921 259

October 5, 1995

Southern States Utilities/Deltona  
Attn.: Mr. Daniel DeBaca, Chief Operator and  
Mr. William M. Schrader, Lead Operator  
255 Enterprise Road  
Deltona, Fl 32725

**Southern States Utilities/Deltona**  
**PWS ID NUMBER: 3640287**  
**Volusia County CWS**

Dear Mr.'s DeBaca and Schrader,

This letter confirms my visit to the Deltona community public water system on December 29-30, 1994 in the presence of Dan DeBaca-Chief Operator, Bill Schrader-Lead Operator, and Ray Van Loon of HRS for the purpose of conducting a sanitary survey. The completed sanitary survey is enclosed for your reference and records.

Deficiencies were noted during the survey and were also determined from records on file in this office. On page six of the enclosed sanitary survey, deficiencies are listed with reference to the pertinent section of the Florida Administrative Code.

The following is a description of each noted deficiency:

1. There is no working chlorine gas alarm to indicate loss of gas pressure or chlorine residual at the following locations: Plant #3, Plant 5-wells #6 and #27, Plant #8, and Plant #12.
2. There are hole(s) in the wall(s) of the chlorine rooms potentially venting chlorine gas to the pump rooms in the following locations: Plant #1-well #1, Plant #4-well #4, Plant #5-well #6, and Plant #10-well #20, and Plant #11-well #21.
3. The required vents for floor level chlorine room ventilation are missing at the following locations: Plant #28-well #15, Plant #9-well #19, Plant #10-well #20, and Plant #15-well #29.
4. Warning signs with emergency phone numbers are required at each chlorine storage site, and are missing or badly faded at the following locations: Plant #2-well #3, Plant #3-well #25, Plant #5-well #6, Plant #16-well #33, and Plant #28-well #15.
5. There were two unsecured gas chlorine cylinders at Plant #3-well #25, a potential safety/fire hazard.

VOLUSIA COUNTY PUBLIC HEALTH UNIT  
P.O. BOX 9190 • 501 S. CLYDE MORRIS BLVD.  
DAYTONA BEACH, FL 32120-9190

LAWTON CHILES, GOVERNOR

Page 2  
SS94-81

There was not adequate lighting in the chlorine rooms at the following locations: Plant #4-well #4, Plant #10-well #20, Plant #11-well #21, and Plant #14-well #24 because of burned out light bulbs. The light switch at Plant #9-well #19 was broken and should be replaced.

6. There are openings to the following wells that pose potential contamination hazards:
  - Air/vacuum release valve drain openings need screening at wells nos.: 1, 16; 20, 21, 24, and 32 (each of the last three also should be turned down), and nos. 28 and 34.
  - Cover the vents at wells #24 and #25.
  - Cap the blow-off valve on well #1.
  - The air line level check openings need the proper plug seals at wells nos. 16, 22, 28, and 32.
  
7. The following facility repairs and maintenance are required:
  - Repair the door vent to well room for Plant #15-well #28.
  - Secure/repair or improve the fencing at Plants nos.: 6, 7, 14, and 15, to limit access and keep out potential vandals.
  - Outside Plant #7, remove the heavily-rusted southside liquid petroleum gas tank that is no longer in use.
  - Repair or replace the hinges in the master meter pit at Plant #7.
  - Repair, cover, or remove the exposed electrical wires in the master meter pit at the following locations: Plant #7, the uncovered electrical box near well #12 inside Plant #7, the exposed wires in Plant #16 near well #33 that were used for a chart recorder, the open conduit connector cover at Plant #9-well #19 for the remote reading meter, the exposed wires for the chlorine booster pump at Plant #7-well #12 and the exposed wires at Plant #1-well #2, Plant #12-wells #22 and #32.
  - Window repairs are required at Plant #6-well #27, and Plant #8-wells #15 and #17.
  - Diesel containment structures were flooded leading to extreme corrosion and loss of containment volume at Plant #3-well #28, Plant #11-well #21, Plant #12-well #22, high service pump buildings at Plant #8 and Plant #12, Plant #13-well #23, and Plant #15-well #28.
  
8. Plant #7 is in need of interior cleaning to improve safety.
  
9. Tank, piping and equipment repairs are required at the following locations:
  - At Plant #7 the ground storage tank air vent had missing screening, resulting in numerous small insects floating in the tank. Please furnish a ground storage tank cleaning schedule. The Department recommends that the air vents on the ground storage tanks be checked periodically for screening.
  - The larger high service pump in Plant #12 has a leaking knife valve.
  - The sanitary seal of Plant #1-well #2 is damaged and should be replaced or repaired.
  - Plant #7-well #14 has a leaking air and vacuum release valve, and a meter that is difficult to read.

Page 3  
SS94-81

- There is a leaking line to the chlorine booster pump at Plant #3-well #25 and extreme corrosion on the small pipe before the check valve.
  - Safety cages around connected linkages of manual auxiliary generators were not installed at all locations. This could be a serious safety problem under operating conditions.
  - There is a muffler from an auxiliary generator venting its exhaust directly into a chlorination outdoor facility area; a potential safety/fire problem at Plant #7.
10. The auxiliary generators are not being run a minimum of four continuous hours per month under load.
  11. There is no written auxiliary power plan in our records. Please provide this Department with one, and an assessment of the adequacy of current emergency power equipment by a professional engineer.
  12. There are cross connections which need immediate correction:
    - Air/vacuum release valve and bearing packing combined drain piping for the vertical turbines for wells #33 and #35. An air gap of two pipe diameters is required between the pipe outlet and the ground.
    - Threaded raw sampling taps and/or hose bibbs without vacuum breakers at wells nos. 2, 6, 16, 19, 21, 22, 24, 28, Plant #8 high service pump #2, and at the eyewash station at the chlorine facility for Plant #12.
    - Remove the fire hose connected to Plant 12.
  13. There is no written valve maintenance program. Please provide this Department with one, and give data on who will be responsible and how many full-time people are assigned to carry it out.
  14. There is no record of a fire hydrant maintenance program in our files. Please provide the Department with one and give data on how many full-time equivalent people are or have been assigned to it. This may be combined with the valve maintenance program.
  15. There is no written backflow preventer testing program in our records. Please provide one and include data on: how many full-time equivalent people are assigned to it, who is responsible, how records are maintained, and an inventory by number and type.
  16. There were areas of the distribution system found to be less than 0.2 mg/l free available chlorine. A series of complaints in the records also indicates that this is a recurring problem. Develop a specific verifiable written program of flushing and residual maintenance to ensure compliance with the rules and forward a copy to this Department.
  17. There is an iron level of 1.2 mg/l in well #25, which is in excess of the 1.0 mg/l level acceptably treatable by phosphate sequestration. Please inform this Department as to the approximate time table for completion of the permitted modifications designed to correct this problem.

Page 4  
SS94-81

Furthermore, please inform the Department of any updates to the cross connection control program, and who is assigned the responsibility of ensuring that it is carried out.

**You are required to correct the above deficiencies for the subject system and to provide a written statement to this Department no later than December 5, 1995 certifying that all listed deficiencies have been corrected, or listing specific reasonable dates for completion. If any items need further explanation, please contact this Department immediately.**

Please provide the information, where available, for items marked unknown ("unk") on the sanitary survey report. When such unknown information is not readily available, please note this as "NA".

The following reference materials: Chapters 62-550, 62-551, 62-555, 62-560, and 62-699 of the Florida Administrative Codes, (FAC), are available for a fee upon telephone request to Mrs. Kristine Sheets at (904) 947-3436.

If you have any questions concerning this letter, please feel free to contact this writer at (904) 947-3421.

Sincerely,

Mark A. Halverstadt  
Environmental Specialist II  
Environmental Health Engineering

MAH/mah  
Enclosures

cc: L. Faircloth  
R. Van Loon  
PWS File (ss94-81.doc)