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DOCKET NO.: 950495-WS - [Southern States Utilities, Inc. - Fisherman's Haven Wastewater System, Leilani Heights Wastewater System, Tropical Isles Wastewater System]

WITNESS: Direct Testimony of William J. Thiel, Florida Department of Environmental Protection, Appearing on Behalf of the Staff of the Florida Public Service Commission

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DIRECT TESTIMONY OF WILLIAM J. THIEL

1 |
2 | Q. Please state your name and business address.

3 | A. William J. Thiel, Florida Department of Environmental Protection, 1801
4 | SE Hillmoor Drive, Suite C-204, Port St. Lucie, Florida 34952.

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

7 | A. My education includes a B.S. degree in Environmental Science from the
8 | Florida Institute of Technology. My experience includes about 10 and a half
9 | years in the environmental regulatory field.

10 | Q. By whom are you presently employed?

11 | A. I am employed by the Florida Department of Environmental Protection
12 | (FDEP).

13 | Q. How long have you been employed with the FDEP and in what capacity?

14 | A. A total of approximately 10 and a half years, with about 6 and a half
15 | years doing domestic wastewater compliance and enforcement work, and about 4
16 | years working in the technical services group working on groundwater and
17 | surface water sampling investigations.

18 | Q. What are your general responsibilities at the FDEP?

19 | A. My responsibilities include compliance assurance and enforcement
20 | activities related to domestic wastewater facilities in the northern counties
21 | of the Southeast District.

22 | Q. Are you familiar with the Southern States Utilities, Inc. wastewater
23 | systems located in Southeast District?

24 | A. Yes, those systems in Martin and St. Lucie Counties.

25 | Q. Were these systems inspected by you, or by FDEP staff under your

1 supervision?

2 A. Yes, they were inspected by me.

3 Fisherman's Haven Wastewater System

4 Q. Does the utility have current operating or construction permits from the
5 Department of Environmental Protection for Fisherman's Haven Wastewater System
6 (Fisherman's Haven)?

7 A. Yes, Southern States Utilities currently holds a Temporary Operating
8 Permit for this facility.

9 Q. Please state the issuance dates and the expiration dates of the
10 operating or construction permits.

11 A. The permit, DT 43-236192 was issued September 16, 1994 and will expire
12 November 31, 1996.

13 Q. Are the plants in compliance with FDEP issued permits?

14 A. Yes. The compliance schedule of the permit required evaluation of the
15 plant by December 31, 1994, submittal of a construction permit application of
16 modifications or additions to the plant by March 31, 1995, obtaining the
17 permit by June 30, 1995, and completion of construction by March 31, 1996.
18 Since Chapter 62-620, which became effective shortly after the application was
19 submitted, eliminated the distinction between operation and construction
20 permits, modification of the current temporary operating permit will
21 incorporate the required construction elements. The modification to allow the
22 work to begin should be issued shortly, as the application has been determined
23 to be complete.

24 Q. Are the wastewater collection, treatment and disposal facilities
25 adequate to serve present customers based on permitted capacity?

1 A. Yes, following completion of the construction currently under review by
2 FDEP. The plant often is operating at approximately 50% of capacity, with the
3 highest three maximum contiguous months average daily flow being 72%, for the
4 period of December, 1994 through February, 1995. This facility experienced
5 some trouble following an extreme storm event which began about October, 17,
6 1995. During this event, the facility had 24 hour flows up to 1.2 times the
7 permitted capacity of the plant. The flows remained over the permitted
8 capacity for approximately six days following the event.

9 Q. Are the treatment and disposal facilities at Fisherman's Haven located
10 in accordance with Rule 62-600, Florida Administrative Code?

11 A. Yes, although the plant is located near a private potable well on the
12 adjoining property. As such, the permit requires a level of chlorination
13 above that of basic disinfection and quarterly sampling and analysis of a
14 monitoring well and the private potable well.

15 Q. Has the FDEP required the utility to take any action so as to minimize
16 possible adverse effects resulting from odors, noise, aerosol drift or
17 lighting?

18 A. Yes. An odor problem was identified in 1987, though it was resolved
19 through modifications to operations that same year. To my knowledge, there
20 are currently no odor problems. Aerosols and lighting have not caused any
21 problems.

22 Q. Do the pump stations and lift stations meet FDEP requirements with
23 respect to location, reliability and safety?

24 A. Yes. There is only one lift station, located within the facility site.

25 Q. Does the utility have certified operators as required by Rule 62-602,

1 | Florida Administrative Code?

2 | A. Yes.

3 | Q. Is the overall maintenance of the treatment, collection, and disposal
4 | facilities satisfactory?

5 | A. Overall, yes, although some maintenance items requiring attention were
6 | identified during inspection. These include repair or replacement of the
7 | ventilator fan in the chlorine cylinder enclosure, securing the loose filter
8 | dosing pump float switch electrical box to remove a possible safety hazard,
9 | repair of the portion of the blower manifold serving the surge tank which had
10 | been broken off and temporarily capped, and sealing a seam between the filter
11 | dosing tank and lid which was allowing significant leakage of effluent to the
12 | ground. Additionally, the filters were still not in operation following their
13 | bypassing due to the storm of October 17, 1995.

14 | Q. Does the facility meet the effluent disposal requirements of Rules
15 | 62-600 and 62-610, Florida Administrative Code?

16 | A. Yes. As evidenced by the self-monitoring data submitted monthly to the
17 | Department, as well as the Department's last sampling of the facility on May
18 | 24, 1995, the facility is meeting required effluent limits.

19 | Q. Are the collection, treatment and disposal facilities in compliance with
20 | all the other provisions of Chapter 62, Florida Administrative Code, not
21 | previously mentioned?

22 | A. Yes, to the best of my knowledge.

23 | Q. Has Fisherman's Haven wastewater system been the subject of any
24 | Department of Environmental Protection enforcement action within the past two
25 | years?

1 A. No.

2 Leilani Heights Wastewater System

3 Q. Does the utility have current operating or construction permits from the
4 FDEP for the Leilani Heights Wastewater System (Leilani Heights)?

5 A. Yes.

6 Q. Please state the issuance dates and the expiration dates of the
7 operating or construction permits.

8 A. The facility is operating under DO 43-194646. This permit will expire
9 October 14, 1996.

10 Q. Are the plants in compliance with FDEP issued permits?

11 A. With the exception of problems associated with the recent storm which
12 are detailed below, yes. The monthly self-monitoring data submitted to the
13 Department, and the Department's most recent sampling of the facility on
14 January 4, 1995 indicate compliance with required effluent limits.

15 Q. Are the wastewater collection, treatment and disposal facilities
16 adequate to serve present customers based on permitted capacity?

17 A. Yes. Generally, the facility is currently operating at approximately
18 80 to 85% of permitted capacity. The inspection followed an extreme storm
19 event which began about October 17, 19895. During this event, the facility
20 was hydraulically overloaded with 24-hour flows over two times the permitted
21 capacity of the plant on October 18th and over the permitted capacity for many
22 days following. Groundwater infiltration was observed in the wet well of lift
23 station number three, and the sewage entering from the gravity main appeared
24 very diluted at the time of this inspection. This was the only station
25 inspected. Apparently due to the utility's concern over possible rainfall

1 | related high flows and the potential for associated treatment problems,
2 | Southern States Utilities contracted for a study, titled Phase One Surge Study
3 | for Leilani Heights, completed in June, 1995 by Boyd Environmental
4 | Engineering, Inc., of Maitland Florida. The study results state that a
5 | combination of plant improvements and collection system repairs will be
6 | required to address all of the surge related deficiencies.

7 | Collection system problems previously reported by residents have been
8 | attributable to maintenance, such as blockages, which were corrected.

9 | Q. Are the treatment and disposal facilities at Leilani Heights located in
10 | accordance with Rule 62-600, Florida Administrative Code?

11 | A. Yes, to my knowledge.

12 | Q. Has the FDEP required the utility to take any action so as to minimize
13 | possible adverse effects resulting from odors, noise, aerosol drift or
14 | lighting?

15 | A. Yes. Southern States Utilities entered into a Consent Order with the
16 | Department in the mid 1980's to resolve such problems. An engineering
17 | evaluation was made by the utility, and vegetative screening, chemical
18 | addition, and other measures were instituted to minimize odors. Currently,
19 | odors do not appear to be a problem. Aerosols and lighting have not caused
20 | any problems.

21 | Q. Do the pump stations and lift stations meet FDEP requirements with
22 | respect to location, reliability and safety?

23 | A. No. Conversation with representatives of Southern States Utilities,
24 | Wayne Vowell, Chuck Bliss, and Tim Vanasdale revealed that the utility has
25 | identified the lift stations as being deficient with regard to current

1 | reliability requirements of Department rules. Upgrades to all the lift
2 | stations, including controls and alarms, installation of generator
3 | receptacles, bypass pumping provisions, etc. are reportedly to be completed
4 | within the current fiscal year.

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

7 | A. Yes.

8 | Q. Is the overall maintenance of the treatment, collection, and disposal
9 | facilities satisfactory?

10 | A. Yes, overall. The previously mentioned flows associated with the storm
11 | event caused considerable problems at the facility. At the time of the
12 | inspection, the filters were still not in operation. They had been taken out
13 | of service to prevent their becoming overloaded with solids which were passing
14 | through the clarifier, especially since backwashing of the filters would have
15 | been impossible with the surge tanks full. There is no separate mudwell for
16 | holding a backwash water at this facility. Also, all of the percolation ponds
17 | were full. The lead operator, Tim Vanasdale had reported that the ponds were
18 | full and overflowing at one low spot on the berms following the storm. This
19 | was the first time that I have known of the facility exceeding its usable
20 | disposal capacity. Minimizing any inflow or infiltration into the system
21 | would lessen the chance for a similar situation in the future. A minor item
22 | that was also observed was the poor condition of the maintenance shed. The
23 | roof or perhaps the entire structure is in need of replacement to allow a
24 | location for storage of parts and supplies for all three of the facilities in
25 | the area.

1 Q. Does the facility meet the effluent disposal requirements of Rules
2 62-600 and 62-610, Florida Administrative Code?

3 A. Yes. As evidenced by the self-monitoring data submitted to the
4 Department, the facility is meeting required effluent limits.

5 Q. Are the collection, treatment and disposal facilities in compliance with
6 all the other provisions of Chapter 62, Florida Administrative Code, not
7 previously mentioned?

8 A. Yes, to my knowledge.

9 Q. Has Leilani Heights wastewater system been the subject of any FDEP
10 enforcement action within the past two years?

11 A. No.

12 Tropical Isles Wastewater System

13 Q. Does the utility have current operating or construction permits from the
14 FDEP for the Tropical Isles Wastewater System (Tropical Isles)?

15 A. Yes. The facility is operating under a valid permit as outlined below.

16 Q. Please state the issuance dates and the expiration dates of the
17 operating or construction permits.

18 A. Southern States Utilities operating permit, number DO 56-167082, for
19 this facility had an issuance date of November 30, 1989 and an expiration date
20 of November 30, 1994. A timely application to renew the permit was submitted,
21 which had the effect of administratively continuing the expired permit until
22 the issuance of the renewal.

23 Q. Is the plant in compliance with FDEP issued permits?

24 A. Yes, to the best of my knowledge.

25 Q. Are the wastewater collection, treatment and disposal facilities

1 | adequate to serve present customers based on permitted capacity?

2 | A. Yes. The highest reported three maximum months average daily flow was
3 | approximately 68% of the permitted capacity of the facility.

4 | Q. Are the treatment and disposal facilities located in accordance with
5 | Rule 62-600, Florida Administrative Code?

6 | A. Yes, to my knowledge.

7 | Q. Has the FDEP required the utility to take any action so as to minimize
8 | possible adverse effects resulting from odors, noise, aerosol drift or
9 | lighting?

10 | A. Yes. Odor was a sporadic problem at this facility during a period from
11 | about 1991 to 1994. The utility has taken various action to eliminate odors,
12 | most recently covering the surge tank with a permanent cover. Odor does not
13 | appear to be a problem any longer. Also, complaints of excessive noise have
14 | now been addressed by the utility by the installation of a blower/motor
15 | enclosure and sound insulation. The noise problem also appears to have been
16 | abated. Aerosols and lighting have not caused any problems.

17 | Q. Do the pump stations and lift stations for Tropical Isles meet FDEP
18 | requirements with respect to location, reliability and safety?

19 | A. Yes, to my knowledge.

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

22 | A. Yes.

23 | Q. Is the overall maintenance of the treatment, collection, and disposal
24 | facilities satisfactory?

25 | A. Yes, to my knowledge.

1 | Q. Does the facility meet the effluent disposal requirements of Rules
2 | 62-600 and 62-610, Florida Administrative Code?
3 | A. Yes. As evidenced by the self-monitoring data submitted monthly to the
4 | Department, as well as the Department's last sampling of the facility on
5 | October 20, 1994, the facility is meeting required effluent limits.
6 | Q. Are the collection, treatment and disposal facilities in compliance with
7 | all the other provisions of Chapter 62, Florida Administrative Code, not
8 | previously mentioned?
9 | A. Yes, to the best of my knowledge.
10 | Q. Has Tropical Isles wastewater system been the subject of any FDEP
11 | enforcement action within the past two years?
12 | A. No.
13 | Q. Do you have anything further to add?
14 | A. No, I do not.
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