

FLORIDA CITIES WATER COMPANY

August 31, 1995

Marshall W. Willis, Chief
Bureau of Economic Regulation
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: Docket No. 950387-SU, Application of Florida Cities Water Company, North Ft. Myers Division, Wastewater Operations, for increase in Wastewater Rates in Lee County, Florida

Dear Mr. Willis:

The following is in response to your August 21, 1995 letter to Wayne Schiefelbein of Gatlin, Woods & Carlson requesting additional information for the referenced filing. The responses are provided in the order the questions were given.

- 1) Other potential reuse customers have been considered. Florida Cities Water Company (FCWC) is presently negotiating with the City of Cape Coral (City) to develop an agreement under which FCWC would provide the City with reclaimed water and the City would furnish FCWC with a supplemental source of potable water. The City is adjacent to the North Fort Myers Service area on the west side. Other potential reuse customers have not been eliminated; however, should FCWC contract with the City, it would take all the reclaimed water that is available after Lochmoor has been served. Therefore, no additional customers could be served.
- 2) During a May 1995 meeting with FDEP staff, they indicated to FCWC that the City could utilize additional reclaimed water and asked if FCWC had contacted the City. The staff also indicated that FDEP would be agreeable to such an agreement and would be happy to assist FCWC in any way they could.
- 3) FCWC has met and corresponded with the City. The City's utility staff is presently preparing to present FCWC's proposal to the City Council. The City reuse program is relatively new, and historical reuse patterns have not been determined. The City is presently supplementing its reclaimed water system with canal water and has indicated they can accept up to an additional 5 to 6 MGD during dry weather.
- 4) FCWC has not contacted the Skyline Woods development concerning reclaimed water.

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- 5) Presently, the reuse main runs along Inlet Drive to Orange Grove Blvd and south to Birkdale Ave where it terminates at Lochmoor. No additional customers have been identified along the line. The availability of reclaimed water to other potential customers would be dependent upon negotiations with the City, since only a limited amount of reclaimed water would be available and the City is capable of using all FCWC can supply during dry weather periods. FCWC has notified the City that we could provide them with reclaimed water by 1996 if a reclaimed water main were in place.
- 6) The master plan does not identify any storage sites for the North system other than ponds maintained by the potential reuse customers. Unlined storage ponds such as golf course lakes would be acceptable as storage facilities per FAC 62-610.465. Reuse customers would be responsible for maintaining the storage ponds.
- 7) The January 1992 Capacity Analysis Report (CAR) was developed prior to the publication of the FDEP CAR Guidelines. Therefore, FCWC generated the CAR which we believed provided an adequate picture of the growth at Waterway Estates. Dry weather flows should not have been used. The FDEP Guidelines recommend the evaluation of annual average daily flow (AADF) for the past ten years of history of the plant.
- 8) The AADF for the beginning of the year in 1991 of 0.837 was utilized in lieu of the AADF at the end of the year. The projections were underestimated since they did not use the current flows for 1991, and a mathematical error was made in developing the projection line which should have been based on a 2.4% increase in flows as stated in the report. However, it should be recognized the FDEP required the expansion based on current flows. The plotted points prior to 1991 are actual annual average daily flows as of January for each year and the projections past that point should have been based on a 2.4% increase in flows per year. ERCs were not used in developing the projections.
- 9) The amount of infiltration/inflow (I/I) has continuously been well within the guidelines established by the Water Environment Federation. FCWC has an ongoing I/I reduction program which takes into account the aging collection system. This includes televising and grouting mains; lining manholes; and a manhole inspection program. The effects of the I/I reduction program are difficult to isolate; however, the review of the AADF since 1990 suggest the program has been very successful. Despite increasing growth, flows have been curtailed as shown by the following AADF data:

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1991 0.955 MGD
1992 0.847 MGD
1993 0.848 MGD
1994 0.942 MGD

- 10) The actual amount of I/I can not be determined without an extensive engineering study; however, the AADF in 1992 was over 100,000 GPD less than 1991.
- 11) The FDEP directed the plant expansion by letter of November 9, 1992 to FCWC which stipulated that a construction permit application be submitted by April 1, 1993 (see enclosed copy). The 1998 expansion date was based on the flow projections shown on attachment 6 of the CAR. As discussed in our response to question 8 above, an error was made in these projections. The plant is presently being expanded to 1.25 MGD based upon the current growth projections, potential reductions in infiltration/inflow, limitations on surface water discharges and reuse opportunities, the fact that expanding capacity in a 0.25 increment was practical from an engineering standpoint and sensitivity to avoid excess treatment capacity. As reuse alternatives become more available and as additional customers come on line, the plant can then be expanded to its build out capacity of 1.50 MGD. The FDEP has indicated all additional flows over 1.00 MGD with the exception of wet weather flows must be disposed of by reuse. Based upon a ten year linear regression of flow data, as recommended in the FDEP CAR Guidelines, the next phase of the expansion will be required about the year 2000.
- 12) The 495 day time frame estimated in the CAR was based on no structural changes to the plant being necessary to expand the capacity and all the additional flow being discharged to surface water. During the preliminary design report phase, it was determined that reuse would be required and that modifications to the sludge stabilization system were necessary. The three year time frame is based upon our actual experience in expanding the plant. The actual permitting, design and construction took much longer than anticipated with approximately 6 months for preliminary design, 9 months for final design and 10 months for construction as well as time for bidding, evaluating proposals and permitting.
- 13) An update to the CAR has not been required by the FDEP since FCWC is currently expanding the plant. An update will be provided with the next permit renewal.

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Should you have any questions concerning any of these responses, please contact me.

Sincerely,



Julie L. Karleskint, P.E.
Operations Manager

Enclosure

CC: B. Bayo, Div. Of Records and Reporting, FPSC
R. Dick
K. Gatlin
R. Jaeger, Esq., Div. Of Legal Services, FPSC
R. Ytterberg

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Florida Department of Environmental Regulation

South District • 2295 Victoria Avenue, Suite 364 • Fort Myers, Florida 33901

Lawton Chiles, Governor

Carol M. Browner, Secretary

November 9, 1992

Mr. Johnnie Overton
Florida Cities Water Company
4837 Swift Road, Suite 100
Sarasota, Florida 34231

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GENERAL OFFICE

Re: Lee County - DW
Waterway Estates WWTP

Dear Mr. Overton:

As a follow up to your meeting with the Department Staff on November 6, 1992, the following action items shall be implemented:

1. Florida Cities Water Company will submit a request for "a mixing zone" for Waterway Estates WWTP. The request will include current toxicity tests results along with a narrative on justification for a "mixing zone" for Waterway Estates WWTP.
2. Florida Cities Water Company shall submit applications for construction/expansion of the Waterway Estates WWTP along with an application for renewal of the current operations permit which expires June 1, 1993. These applications will be submitted sixty days prior to June 1, 1993.
3. Final documentation for satisfactory completion of the Capacity Analysis Report shall be submitted to the Department prior to submission of permit applications on April 1, 1993. Included in the documentation submitted, FCWC will address analysis and corrective measures pertaining to infiltration at Waterway Estates WWTP.
4. Florida Cities Water Company shall submit the Reuse Feasibility Study prior or during submission of the permit applications for construction/expansion and operation of the Waterway Estates WWTP.

Continued . . .

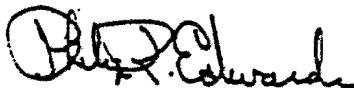
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5. The construction permit application for the above referenced facility will include contract agreements for Reuse Sites, provide documentation pertaining to high level disinfection requirements pursuant to 17-610 and appropriate documentation pertaining to wet weather discharge if storage for non-application days is not provided.
6. On site storage at the Reuse Sites will be investigated by Florida Cities Water Company for Waterway Estates WWTP.
7. An Agricultural Use Plan shall be submitted to the Department at the time of Operation Permit renewal (April 1993).
8. Florida Cities Water Company shall submit a report on fluctuations in TSS influent limits and the impact on design criteria for expansion of the Waterway Estates WWTP currently underway.

If you have any questions pertaining to these matters, please contact Jim Grob at (813) 332-6975.

Sincerely,



Philip R. Edwards
Director of
District Management

PRE/JVG/klm

cc: Paul H. Bradtmiller
Julie Karleskint
Roger Ytterberg

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