FILE COPY

ST. GEORGE ISLAND UTILITY COMPANY, LTD.

DOCKET NO. [redacted]

DIRECT TESTIMONY OF CLIFF McKEOWN

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

ON BEHALF OF THE STAFF OF THE FLORIDA PUBLIC SERVICE COMMISSION

DIVISION OF WATER AND WASTEWATER

FILED: JUNE 8, 1994

DOCUMENT NUMBER-DATE
05665 JUN-8 94
FPSC-RECORDS/REPORTING

Q. Please state your name and business address.

A. Cliff McKeown, 2815 Remington Green Circle, Tallahassee, Florida.

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

A. I graduated High School in 1970 and have obtained various college credits over the following 10 - 12 years, generally following an engineering curriculum. In the last 23 years I have been employed by private enterprise and the State of Florida. I have been a crew chief responsible for the operation of a drilling rig engaged in soil sample collection, a laboratory technician and an inspector for two state agencies in various capacities, involved either with water quality or drinking water.

Q. By whom are you presently employed?

A. I am employed by the Florida Department of Environmental Protection (DEP).

Q. How long have you been employed with the Department of Environmental Protection and in what capacity?

A. 18 years. My job functions have varied over the 18 year period. They were, and are: water well contractor's program inspector, domestic and industrial waste water inspector, storm water inspector and drinking water inspector. I have been a drinking water inspector since September 1979. Specific duties have, and do, include: permitting, compliance and enforcement.

Q. What are your general responsibilities at the Department of Environmental Protection?

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A. Currently, I manage the drinking water, domestic waste water and industrial waste programs in a six county area. Franklin County is one of those six counties. These duties include compliance, enforcement and permitting responsibilities.

Q. Are you familiar with the St. George Island Utility Company, Ltd. water system in Franklin County?

A. Yes.

Q. Does the utility maintain the 20 psi minimum pressure throughout the distribution system as required by Section 17-555.350, Florida Administrative Code?

A. Not consistently. There are documented times and locations which show the utility has pressure related problems. These problems are particularly related to high water use times. For example, 16 psi was recorded near the state park entrance on May 24, 1992, and 11 psi was recorded in the same area on July 4, 1992. See EXH CM-1 which is attached. In fact, Baskerville-Donovan, an engineering consultant to the utility, presented a proposal to construct an altitude valve on the elevated storage tank to allow higher pressures to be maintained in the system. This system modification, along with others, has been permitted by DEP in Permit DS19-222055 (EXH CM-2). The utility has indicated they wish to extend the expiration date and modify the permit. The tentative modifications mentioned in Gene D. Brown's December 22, 1993 letter (EXH CM-3) included deleting the altitude valve and raising the elevated tank by approximately forty feet. In Mr. Brown's subsequent letter of April 21, 1994 to DEP (EXH CM-4) he states that raising the elevated tank is not practical, and that

the utility will proceed immediately with the construction of the altitude valve and high speed (service) pump, which were the improvements originally envisioned. The system modifications envisioned under Permit DS19-222055 have not been started. Until this construction project is completed, the pressure problems will remain the same.

Q. Would you please explain the utility's auxiliary power arrangement and address its adequacy?

A. Because the utility's water treatment plant is separated by several miles from its raw water source, it is necessary to have at least two auxiliary power units to provide a reliable emergency water supply. Originally the utility had an auxiliary generator with automatic start-up at the water treatment plant on the Island. Its purpose was to use the ground storage reservoir as an emergency source of water should a power outage occur. That auxiliary generator was never fully reliable. Also, a power outage occurring on a peak flow day would have emptied the ground storage reservoir in less than one day's time because no emergency power source was provided for the water wells on the mainland. When the elevated storage tank was installed, the volume of emergency water on the island increased; however, there was still no emergency power supply on the mainland. Recently, the utility replaced the unreliable generator located at the water plant (on the island), this generator is much more reliable. When well number 3 (on the mainland) was constructed and placed into service, an auxiliary generator with automatic start-up capability was included. The utility now has full emergency supply capability. Through the exercising program required by FAC Rule 17-555.320(6)(c), we will learn

over time if this set up is fully reliable.

Q. Are the utility's water wells in a location which complies with Section 17-555.312, Florida Administrative Code?

A. Yes.

Q. Does the utility have certified operators as required by Chapter 17-602, Florida Administrative Code?

A. Yes.

Q. Has the utility established a cross-connection control program in accordance with Section 17-555.360, Florida Administrative Code?

A. Essentially, yes. The last inspection identified one minor area of concern which was that all reports required to be generated by the Partial Final Judgment (PFJ) were not being sent to us. We should note that cross-connection control programs are difficult to manage, especially with a person who does not spend 100% of their time on this program. We expect minor oversights to occur, but will continue to judge the program by its overall effectiveness and whether or not these oversights are quickly discovered and corrected. I anticipate reviewing this program very closely for a few years into the future.

Q. Is it typical procedure for you to review cross-connection control documentation?

A. No. But because the utility did not aggressively pursue this program (originally required by the Consent Order), I feel it is necessary to do this to make sure the program is continuously carried out properly.

Q. Is the overall maintenance of the wells, treatment plant, distribution facilities satisfactory and are leak detection programs a part

of the daily service maintenance?

A. Well maintenance is generally good. I do have a concern for Well No. 2 brought about by the presence of a light gray to white clay like material often found in the system's aerator. I believe this material is associated with the lime rock within the Floridan aquifer breaking down and being pumped to the aerator. My concerns are that pump damage or well failure could occur at a critical time causing a water shortage on the island. A careful watch will have to be kept on Well No. 2 to warn of possible failures.

The treatment plant in the time since Mr. Hank Garrett has been the lead certified operator has been very well maintained. I hope this situation will continue.

To properly maintain a distribution system, an accurate set of record drawings is a must. The PFJ required the record drawings to be submitted to DEP by September 1, 1992. They were received (as a final version) on August 24, 1993, nearly one year over due. A review of the plans was made between August and October 1993 resulting in a letter listing thirteen deficiencies being sent to Mr. Brown on October 27, 1993 (EXH CM-5). An on-site inspection was then made on November 19, 1993 to verify that all valves were properly marked. Several valves were found that had not been marked as required by Paragraph 16 in the PFJ. Mr. Brown was notified of this on December 7, 1993 (EXH CM-6). His reply to DEP's Sanitary Survey Report also transmitted on December 7 stated that the system map was received by DEP on August 31, 1992, when in fact that was a <u>preliminary</u> map submitted by the engineering firm of Baskerville-Donovan on that date.

(See EXH CM-7 for DEP's August 24, 1993 Sanitary Survey Report and EXH CM-8 for Mr. Brown's December 23, 1993 reply letter.) These plans were submitted for review to determine if they met the intent of the PFJ. On September 10, 1993 Mr. Brown was informed that additional effort was required (EXH CM-9) by copy of a letter to James Waddell, P.E., an engineer with Baskerville-Donovan. Mr. Brown's reply letter (EXH CM-8) goes on to say that he is negotiating with his engineering firm to correct the deficiencies in the map and that a forthcoming settlement agreement will resolve the deficiencies. Mr. Brown submitted his settlement proposal (EXH CM-10) on January 13, 1994, and was informed by Richard Windsor's January 21, 1994 letter (EXH CM-11) that the settlement was unacceptable. The facts are that we do not have an acceptable set of record drawings for this water system. This is an important tool that should be given to Mr. Garrett to enable him to maintain the water distribution system.

Leak detection programs are an enormously important segment of distribution system maintenance, if leaks can be readily found and if the cost of detecting and repairing leaks are optimal. One rule of thumb states that reducing water loss caused by leaks to less than 10% is often not cost effective. This, however, is more properly determined in terms of local conditions, such as water availability and ease of locating the leaks. One very important tool used in leak detection programs is an accurate set of record drawings. These allow technicians to set up listening devices quickly at proper locations and determine if leaks occur. The Florida Rural Water Association has been assisting this utility, one of its members, for some time in an effort to locate and repair leaks. This

program should be an ongoing one in one form or another, since water in this area is in short supply.

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

A. Primary drinking water standards are being met or exceeded by the water system. The water system recently completed customer tap sampling for lead, a primary contaminant, and copper, a secondary contaminant, as required by FAC Rule 17-551. Of the twenty samples collected, eleven exceeded the action level for copper. Action levels are those levels that when exceeded, require additional actions on the part of the purveyor of water. The eleven samples ranged from 1.56 mg/l to 3.68 mg/l. The action level is 1.3 mg/l, based on the 20th percentile sample as in this case the third highest sample result. Elevated copper levels in drinking water have been shown to be connected to stomach and intestinal distress, anemia as well as liver and kidney damage. The next actions this utility must take is to collect and analyze water quality parameters that relate to the water's ability to leach copper from piping and other plumbing fixtures. Additional lead and copper samples will be taken from the wells. By June 30, 1994 the utility must have prepared a corrosion control study that will detail proposed corrective actions for Department approval.

Periodically, turbidity levels in the ground storage reservoir exceed the MCL. Also, Well No. 3 exceeded the MCL for color.

Hydrogen sulfide (H_2S) is a problem in the water produced by this system and is discussed more thoroughly on the following page and pages 12

through 13.

Q. Does the utility monitor the organic contaminants listed in Section 17-550.410, Florida Administrative Code?

A. For a system the size of St. George Island, monitoring must begin in 1994.

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

A. Raw water in this area of the state must be treated to remove H_2S, a dissolved gas that imparts a rotten egg taste and odor to water. The utility monitors H_2S content in several locations each month. Their consultant, Baskerville-Donovan, has prepared a final report; however, this report did not consider all the H_2S data supplied by the utility. Instead, this report was based on one set of data. Due to this, and other reasons, the report was rejected by DEP. (EXH CM-12).

As discussed previously, the finished water produced by this facility is contributing to copper being leached into the water supplied to some consumers. It is possible that additional treatment to adjust the water's aggressiveness could become necessary in order to reduce the level of copper leaching.

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

A. Currently yes. With the installation and continued operation of the chlorine booster station and increased water main flushing, the last two inspections have readily shown free chlorine residuals to be available.

Q. Are the wells, plant and distribution systems in compliance with all

the other provisions of Chapter 17, Florida Administrative Code, not previously mentioned?

A. No. From time to time some areas of non-compliance appear. For example, during the August 1993 inspection, two new deficient areas were identified. One area was with regard to the leaks in the ground storage reservoir and the other area was the needed cleaning of the aerator. The ground storage reservoir leaks have not been cited before, but since the leaks continue, a citation was provided, in part to encourage corrections before the tank continues to deteriorate. The aerator has been cited before. Other areas of non-compliance are failure to obtain a permit before modifying the aerator and failure to increase supply to support system demand.

Q. Has this water system been the subject of any Department of Environmental Protection enforcement action within the past two years?

A. Yes.

Q. If the answer is yes, explain the details, recommended actions, and whether the utility is currently complying with this schedule.

A. The department, on April 30, 1992 after a previous request to the court to enforce a consent order between the utility and the department, received relief in the form of a partial final judgment (EXH CM-13). This document outlined what actions the utility must take to conform with the court's orders. The PFJ was based to a great degree on the consent order but did include some other items not previously contained in the consent order. As true for the consent order, the utility has not complied with due dates or technical content contained in the PFJ in all cases. One

example was with the cross connection control program. Many devices were not tested, notification of test due dates was often improper and follow-up activities were not completed on time. The utility, in response to recommendations made by the department, has corrected most of these deficiencies. Another example is the system map required by the PFJ; the utility was to deliver a current and up-to-date system map. The map was received one year late and was not as specified. The map was not current; in fact, it was accurate only to August 31, 1992. Also, materials of the mains were not shown, as well as other problems. The H_2S report submitted by the utility was unacceptable. The third well was not completed on time and in fact was 18 months overdue.

Q. On what date did well number 3 come on line, and what caused the delay such that DEP had not released well number 3 for on-line service prior to that time?

A. Well number three was cleared for service on February 25, 1994 (EXH CM-14). It was delayed due to the utility submitting incomplete test results which are required during the normal clearance process. Also, the initial test results for color exceeded the maximum contaminant level and therefore required confirmation samples to be run. Due to the consumptive use permit issued by the Northwest Florida Water Management District (NWFWMD), the maximum withdrawal rate was set for 700,000 gallons on any one day. This figure roughly equates to 490 gpm to the island. In view of the NWFWMD's intent to limit aquifer withdrawal to approximately 490 gpm, we felt it appropriate to request an operating scheme for these three wells. This scheme would explain which well or wells would take the lead

or lag operating positions. These requests were provided to the utility in our September 9, 1993 letter (EXH CM-15).

Q. What is the status of the utility's report on the system's aerator?

A. As previously stated, the H_2S report mandated by the PFJ was unacceptable as submitted by the utility. By September 30, 1992 a new aerator was to be designed, installed, constructed and operational. After a suitable period allowed for monitoring H_2S, a report was to be prepared by the utility describing the need, if any, for additional or different treatment. This report was due to DEP by July 1, 1992. The report was received August 25, 1993, over one year late. DEP's review of the report shows it is not acceptable for the following reasons:

1. The H_2S data submitted since last year was not presented along with suitable supporting materials necessary for the department staff to fully interpret these results. The utility was informed of the additional information needed on November 18, 1993.

2. The utility presented its final report based upon a single sampling event, which is insufficient evidence to support their position that no additional treatment is needed. We feel that a report of this nature should be based upon data collected over a fairly long period of time.

3. The report used tests for Total Sulfide, Dissolved Sulfide and Unionized Sulfide and improperly used Total Sulfides in the percent removal formula. The values for Dissolved and Unionized Sulfides should have been used. Using the proper forms of Sulfides yields a lower percentage removed than the 90% required by the PFJ.

Mr. Brown has stated that he is negotiating with his consulting firm to revise and complete the aerator report and that the actions necessary will be described in a comprehensive settlement. As previously stated, by letter dated January 13, 1994, Mr. Brown transmitted this proposed settlement agreement to the Department. In paragraphs 7 and 9 of that document, Mr. Brown states that if Baskerville-Donovan, Inc. is given 39 water connections, they will complete the aerator report, and if necessary, file a permit application to improve or replace the aerator. As stated earlier, DEP has rejected the proposed settlement agreement. Mr. Brown has had over five months in which to complete this report since the initial rejection. In an effort to use the data collected since entry of the PFJ, DEP requested certain information from Mr. Brown which should be extractable from the utility's testing laboratory. This information is associated with normal quality assurance procedures. DEP requested this information and volunteered to interpret the data. Mr. Brown has failed to produce this data, and continues to use the same laboratory to provide the H_2S analyses. If this information cannot be provided, all past H_2S tests and future ones will be without value.

Q. Does DEP have a position regarding the continued existence and growth of the number of private wells on St. George Island?

A. Yes.

Q. Please explain DEP's position.

A. Construction of individual water wells on the island should be prohibited because they offer a potential for contamination to groundwater on the island. The contamination could come from three causes:

1. Poor construction techniques could open an annular space along side the well casings that would allow bacterial and viral contaminants to enter both the surficial and Floridan aquifer.

2. These avenues could already exist due to the lack of semi-impermeable layers or lack of sufficient thickness in these layers.

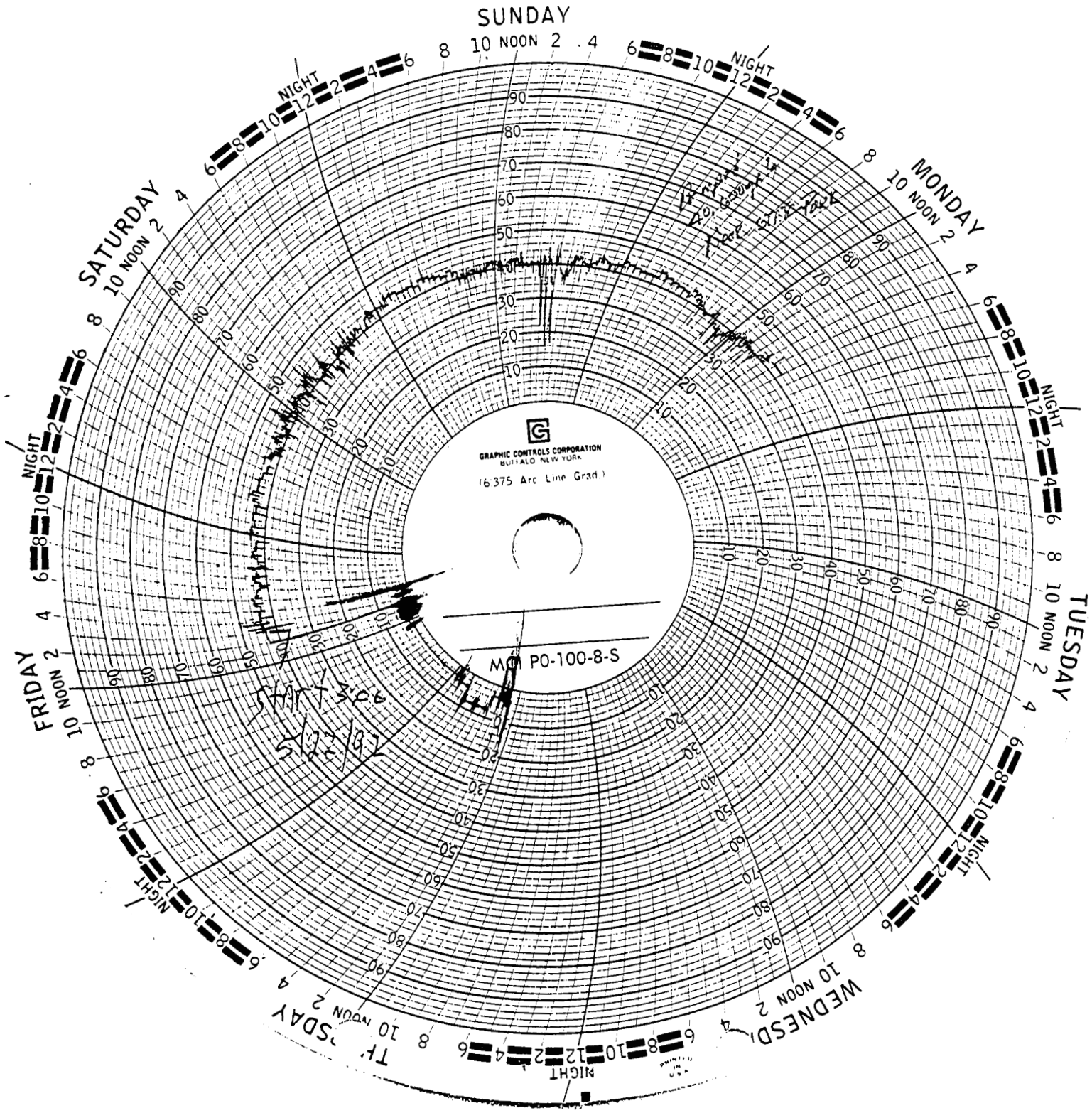
3. For every well drilled an increased opportunity exists for another cross connection to occur.

Most of the residences on the island use onsite sewage disposal systems to treat the sewage generated there. The drain fields dispose poorly treated effluent to shallow ground water. This effluent, after traveling through many feet of sand, may have its bacterial composition reduced, however, a sand filtration process is not considered especially effective in removing viral matter. This condition holds true more so for the shallow water supply system than for the deeper Floridan Aquifer. In the case of the deeper water, consideration must be given to drawing more highly mineralized water from deeper layers in the aquifer upward and increasing salt water intrusion in this area. Further consideration must also be given to creating artificial avenues for pollutants to travel from one area to another (vertical). See EXH CM-16 for various correspondence on this subject.

Q. Do you have anything further to add?

A. No.

Docket No. 940109-WU
Florida Public Service Commission
CM-1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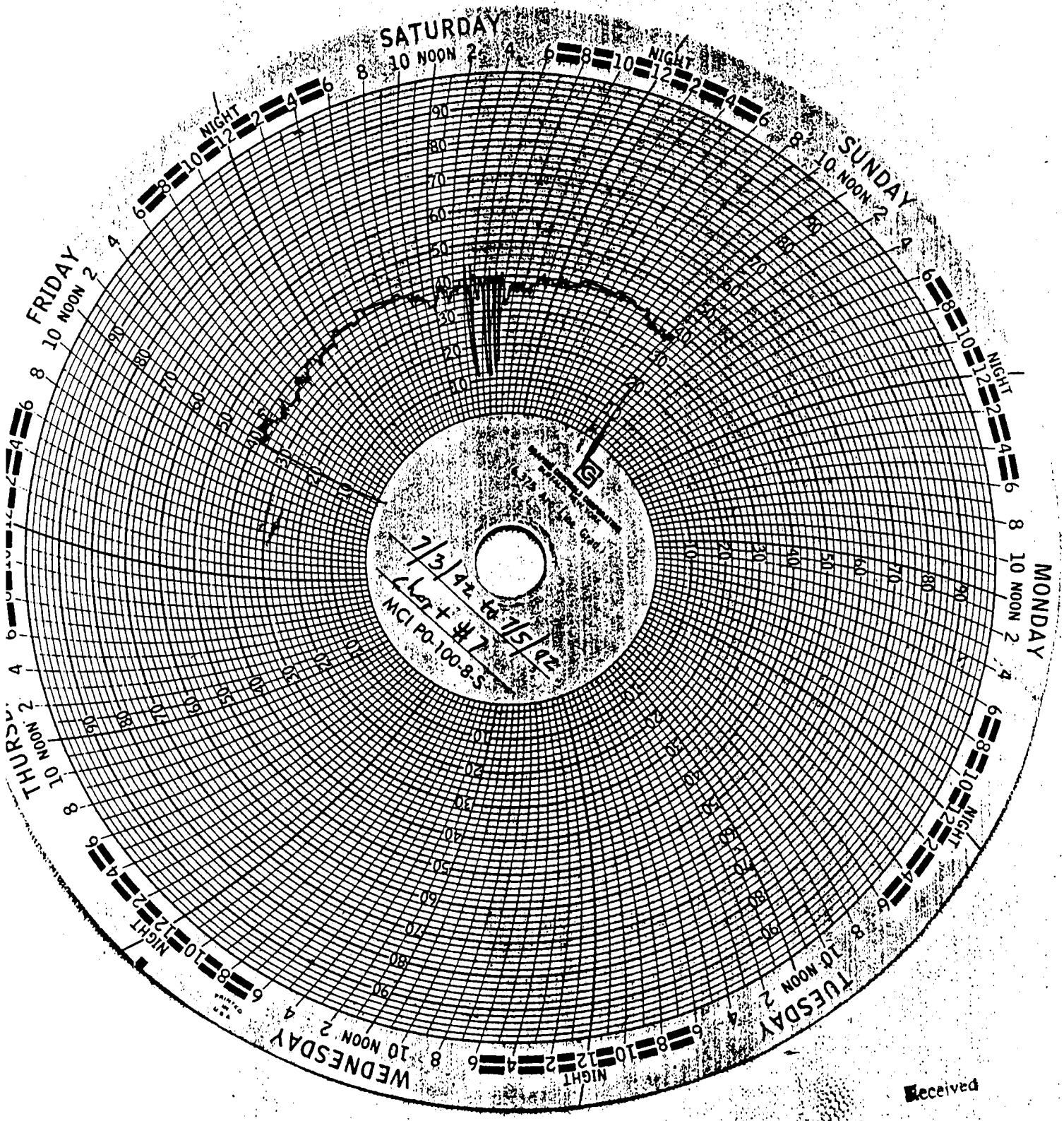

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Docket No. 940109-WU
Florida Public Service Commission
CM-2

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL

In the matter of an
Application for Permit
By:
Gene D. Brown
President of General Partners
St. George Island Utility Co.
3848 Killenar Court
Tallahassee, Florida 32308
_____/

DER File No. 222055
Franklin County

Enclosed is Permit Number DS19-222055 to construct improvements/modifications to the St. George Island Utility Company, Inc., issued pursuant to Section 403.861, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee 32399-2400, within 14 days of receipt of this Permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes, and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Pensacola, Florida.

State of Florida Department
of Environmental Regulation

BOBBY A. COOLEY
District Director

160 Governmental Center
Pensacola, Florida 32501-5794
(904) 436-8300

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on January 27, 1993 to the listed persons.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to §120.52(9), Florida Statutes, with the designated Department clerk, receipt of which is hereby acknowledged.

Vickie A. Tanton — Clerk

January 27, 1993 — Date

Attach: Permit

Copies furnished to:
James F. Waddell, P.E.
Bob Crouch, P.E., Public Service Commission
Cliff McKeown, Tallahassee Branch Office
Franklin County Public Health Unit

Florida Department of Environmental Regulation

Northwest District • 160 Governmental Center • Pensacola, Florida 32501-5794

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:

Gene D. Brown

I.D. Number: 1190789
Permit/Certification Number: DS19-222055
Date of Issue: JAN 2 6 1993

Expiration Date: January 1, 1994
County: Franklin
Latitude/Longitude: 29°39'45"N/84°51'57"W
Section/Township/Range: 29/9S/6W
Project: Water System Improvements/ Modifications

This permit is issued under the provisions of Section 403.861, Florida Statutes, and Florida Administrative Code Rules 17-4, 17-550, 17-555, 17-560 and 17-602. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown of the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To construct improvements/modifications to the St. George Island Utility Company, Inc. to include 1) back pressure sustaining/altitude valve for supply line to the existing elevated water storage tank with bypass; 2) a second high service pump, with capacity similar to the existing 50 hp pump; and 3) instrumentation, controls and flow measurement equipment to facilitate operation of the proposed improvements.

All construction shall be in accordance with the plans and specifications prepared and submitted by James F. Waddell, P.E.

PERMITTEE:

Gene D. Brown

I.D. Number: 1190789
Permit/Certification Number: DS19-222055
Date of Issue: JAN 2 6 1993
Expiration Date: January 1, 1994

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "permit conditions" and are binding and enforceable pursuant to the authority of Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

PERMITTEE:

Gene D. Brown

I.D. Number: 1190789
Permit/Certification Number: DS19-222055
Date of Issue: JAN 2 6 1993

Expiration Date: January 1, 1994

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of this permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and,

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. A description of and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

PERMITTEE:

Gene D. Brown

I.D. Number: 1190789
Permit/Certification Number: DS19-222055
Date of Issue: JAN 2 6 1993

Expiration Date: January 1, 1994

GENERAL CONDITIONS:

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by this permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurement;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

PERMITTEE:

Gene D. Brown

I.D. Number: 1190789
Permit/Certification Number: DS19-222055
Date of Issue: JAN 2 6 1993
Expiration Date: January 1, 1994

GENERAL CONDITIONS:

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

15. Water supply facilities, including mains, shall be installed, cleaned, disinfected, and bacteriologically cleared for service in accordance with the latest applicable AWWA standards and Department rules and regulations.

16. A request to clear the system for operation shall be submitted to the Department for approval within 30 days of completion of construction, testing and disinfection.

This approval will be granted upon:

A. Receipt of certification by a registered professional engineer as to construction in accordance with the approved plans and specifications and compliance with Part V of Florida Administrative Code Chapter 17-555. The certification of completion shall be made on DER Form 17-555.910(9) - Request for Letter of Release to Place Water Supply System into Service.

B. Receipt of two satisfactory bacteriological analyses, and compliance with distribution system bacteriological sampling on the main system.

C. Satisfactory Department inspection of construction and the project by Cliff McKeown. The permittee shall contact Mr. McKeown at (904)488-3704 to arrange for the inspection.

D. Receipt of the analysis required in Specific Condition 15. Note: The improvements/modifications shall not be placed into continuous operation beyond the time frame allowed in Specific Condition 23.

17. All P.V.C. pipe used in the distribution system shall bear the N.S.F. logo and shall meet all ANSI/AWWA C900-89 (or latest edition) standards for 4"-12" diameter pipe or otherwise approved.

PERMITTEE:

Gene D. Brown

I.D. Number: 1190789
Permit/Certification Number: DS19-222055
Date of Issue: JAN 2 6 1993
Expiration Date: January 1, 1994

SPECIFIC CONDITIONS:

18. The Department shall be notified and prior approval shall be obtained of any changes or revisions made during construction.

19. Permittee shall ensure that engineer provides contractor with instructions and field sketches detailing locations where concrete encased potable water pipe is required.

20. Permittee shall ensure that engineer provides location and detail of thrust and anchor blocks on potable water distribution system.

21. Permittee shall use necessary erosion control measures during and after construction and shall remove all construction debris prior to project completion. In addition, all surfaces disturbed by construction shall be recontoured to final grades prior to project completion. It is noted that the permit does not constitute the Department's review or approval of the stormwater aspects of the project.

22. Permittee will instruct the contractor to remove all surplus material and completely restore to good conditions, all surfaces disturbed, destroyed or removed by the contractor, or his agent, on account of construction. Before final inspection is made, all surfaces disturbed on account of this construction shall be leveled up and all surplus material and rubbish incident to the construction must be removed and disposed of and streets, ditches, sidewalks, crossings, railroad, grass plots and other property affected by the construction shall be left in good and acceptable condition.

23. Permittee shall instruct the engineer of record to submit request for system clearance to the Department within 30 days of completion of construction and testing and disinfection of the system covered by this permit.

24. Permittee shall ensure that paints and protective coatings to be used on this project which will come into contact with potable water shall be approved by EPA or another entity approved by the Department before use in public water supplies as specified in Florida Administrative Code Rule 17-555.320(3). Questions as to whether a particular paint or protective coating is on the latest official listing of acceptable drinking water additives can be directed to the District Potable Water Engineer at (904) 436-8380. It will be necessary to provide the product name and company name when inquiring.

PERMITTEE:

Gene D. Brown

I.D. Number: 1190789
Permit/Certification Number: DS19-222055
Date of Issue: JAN 2 6 1993
Expiration Date: January 1, 1994

SPECIFIC CONDITIONS:

25. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 436-8300, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 488-1320. For routine business, telephone (904) 436-8380 during normal working hours.

Expiration date:

January 1, 1994

Issued this 26th day of January, 1993.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

BOBBY A. COOLEY
District Director

Docket No. 940109-WU
Florida Public Service Commission
CM-3

St. George Island
3848 Killea
Tallahassee, Fl
(904) 668-0440 • (

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To McKeown	From John Kintz
Co.	Co.
Dept.	Phone #
Fax #	Fax #

File
St George Water Plant Modifications
Franklin Pcola

December 22, 1993

Cliff after you have reviewed this, I'd appreciate any comments by E-Mail that you might have
01-04-93

Mr. J. A. Kintz, P.E.
Department of Environmental Protection
Northwest District
160 Governmental Center
Pensacola, FL 32501-5794

DS19-242938

Re: Permit No. DS19-222055 TX

Dear Mr. Kintz:

Thank you for your letter of December 7, 1993 regarding the above-referenced permit.

The utility would like to request an extension to complete work under this permit to and including June 30, 1994. The reason for this requested extension is that we plan to ask for a modification of the permit to delete the altitude valve and to achieve the desired water pressure of 65 psi at the plant by raising the existing elevated storage tank by approximately 40 feet. The feasibility of this is now being analyzed by the utility's engineers as well as the engineers for Eagle Tank Company of Jacksonville, which has given us a preliminary price for the work. The only remaining question is whether the foundation of the existing tank will have to be beefed up to support the increased wind load.

If you see any problems with this idea, please let me know immediately so that we can discuss the matter before proceeding further with our engineering analysis. Our basic thought is that it makes more sense on a long term basis to achieve the desired increased pressure by increasing the elevation of the existing tank at this time before the second tank is built on the west end of the Island, rather than getting involved in complicated altitude valve and other appurtenances that have a higher potential for malfunction. Based upon all of our discussions with various engineers and other utility experts, Hank Garrett and I both believe this is the better approach for the utility company.

Received
JAN 4 1994
DER, Tallahassee
Branch Office

The utility has almost completed an agreement with Ben Johnson under which he will contribute land and build a 200,000-300,000 gallon elevated storage facility near Nicks Hole in the Plantation on the west end of the Island. This new tank, as well as our existing tank, will be designed (or redesigned) to achieve 65 psi at the base of each of the tanks. This will be a design standard that we will try to achieve on an ongoing basis for our customers on the Island.

I am also drafting a comprehensive settlement proposal which I expect to present to Richard Windsor and you within the next couple of weeks. This will address all of the issues remaining in our pending litigation, including the question of capacity and the need for additional analysis regarding the aerator, system analysis, mapping, etc. I will send you a copy of this draft at the time it is sent to Mr. Windsor, so that we can begin a dialogue to resolve the remaining issues regarding St. George Island Utility Company.

Enclosed is our check for $50 pursuant to the requirements of FAC Rule 17-4.050(4)(0)3. Please let me know if there is anything additional that you need to process this modification request.

Sincerely,

Gene D. Brown

GDB:smc
cc: Hank Garrett

Received
JAN 4 1994
DEP, Tallahassee
Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-4

St. George Island Utility Co., Ltd.
3848 Killearn Court
Tallahassee, Florida 32308
(904) 668-0440 • (904) 927-2648

RECEIVED
APR 25 1994
Northwest Florida
DEP

April 21, 1994

Mr. Alan W. Johnson, P.E.
Program Administrator Water Facilities
Department of Environmental Protection
Northwest District
160 Governmental Center
Pensacola, FL 32501-5794

Dear Mr. Johnson:

This is in response to your letter of February 13, 1994 regarding the St. George Island water system.

After carefully reviewing your letter and the attached memorandum from Mr. Kintz dated February 17, 1994, I retained a new engineer, Mr. Les Thomas, P.E., to thoroughly analyze the St. George Island water system, with particular emphasis on the question of increased water supply capabilities from the mainland to the Island. I selected a new engineer who has not worked for this utility previously because I need an objective engineering opinion from someone who is not otherwise committed to the conclusions set forth in the Baskerville-Donovan engineering report. As you know, that report concluded that the existing supply capacity of the system was adequate through the year 2002. Obviously, this is contrary to the conclusion which has now been reached by your department. Since I am not an engineer, it is very difficult for me to reconcile or understand such a total divergence of professional, engineering opinion by and among competent engineers viewing the same set of facts.

Preliminarily, Mr. Thomas has advised me that there are several steps that the utility can and should take to increase the water supply capacity from the mainland to the Island. We have already made arrangements to parallel a long stretch of 6" pipe on the mainland with 8" pipe. This will improve the hydraulics of the supply system on the mainland. We are also considering several other improvements to the system that will increase the water supply to the Island. As soon as Mr. Thomas completes his engineering analysis, we will advise you of the specific steps we intend to take to increase the supply, and we will request appropriate permits to complete this work. However, based upon everything that I know about our system, it is not

Received
APR 28 1994

likely that these improvements will include the immediate construction of a new parallel 8" supply line across the bridge to the Island, but rather may include hydraulic improvements to the supply line system such as the paralleling of the existing 6" line with a new 8" line as described above.

Regarding our legal capacity to supply more water to the Island, the utility recently filed an application with the Northwest Florida Water Management District to increase our withdrawal capacity under our existing consumptive use permit. When we met with the staff of the district at the time the application was filed, they indicated that they recognize the fact that our demand is steadily increasing above the annual average withdrawal rate allowed by the existing permit, and that this was acceptable to them while we were completing our application to modify our permit to bring it in line with the actual water needs of the Island. We will keep you advised regarding our progress in modifying our existing consumptive use permit.

In your letter, you asked me to inform your office as to the allocation of our remaining available connections. Under our PSC approved tariff, the utility cannot pick and choose among various potential customers. Accordingly, we are committing to new connections on a first come-first serve basis, so that capacity is allocated to those customers in the order that they meet the conditions of our tariff, including the execution of a water user's agreement and the payment of all applicable connection fees. Attached is a copy of the utility's CIAC list from the date of the last CIAC list submitted to your department through the end of last month. Please note that three of the Coastal Development connections are transfers as indicated by a "T" and that all 20 of the Mahr connections are "dry system permits" that cannot be connected until and unless we complete the plant improvements pursuant to your Permit No. DS19-222055, as discussed below. We will continue to keep your office advised on a monthly basis as to any and all commitments made by this utility regarding water service on St. George Island.

As noted above, Mr. Les Thomas, our new engineer, is currently performing a complete analysis and reanalysis of the St. George Island water system. This analysis will include a complete, detailed ERC study so that we will know precisely what our actual water use demands are for each customer in our system. Mr. Thomas is also carefully analyzing all of the supply issues raised by your letter and by Mr. Kintz' various memoranda. Mr. Thomas' analysis will include very definitive recommendations regarding specific improvements that need to be made to our water system to increase and improve its capacity and reliability. Based on my preliminary discussions with Mr. Thomas, I believe

Received
APR 28 1994

his report will make recommendations regarding certain hydraulic improvements that can be made regarding the supply system to the Island, as well as other improvements to increase the pressure and reliability of the treatment and distribution system on the Island. Until Mr. Thomas' engineering analysis is completed, which should be within the next 30 to 60 days, the utility will continue to provide water service in accord with all of the applicable PSC and DEP statutes, rules and regulations, as well as the orders of the Franklin County Circuit Court.

In some of my recent correspondence to Mr. Kintz, I indicated that we were strongly considering the possibility of raising our existing elevated tank in lieu of the altitude valve as a means of increasing water pressure on the Island. However, because of the load limitation on the bridge and other considerations, we have determined that raising the elevated tank is not practical. The cost would exceed $100,000, which cannot be justified at this time. Accordingly, we are proceeding immediately with the construction of the altitude valve and high speed pump pursuant to permit no. DS19-222055 issued by your department. We appreciate your cooperation in extending the expiration date of this permit, and we are confident that the work can and will be completed before the extended expiration date of June 30, 1994. By that date, we will have determined what additional improvements and modifications are needed in the immediate future, and we will then prepare and file the appropriate applications for the necessary permits from your department.

Please feel free to call me if you have any questions or if we need to discuss any of these issues further.

Sincerely,

Gene D. Brown

GDB:smc
cc: Les Thomas, P.E.

Received
APR 28 1994
DEM, Tallahassee
Branch Office

St. George Island Utility Company

CIAC Listing
For the Period: September 1, 1993 through March 31, 1994

Cust #	Date	Name	Service Address	WET	DRY
1145	93-09-01	1 Rodrigue	10 Sea Palm	1	
1154	93-09-01	1 Atkinson	3/8/1E	1	
1155	93-09-01	1 Atkinson	4/8/1E	1	
1147	93-09-01	1 Atkinson	2/8/1E	1	
1146	93-09-01	1 Atkinson	1/8/1E	1	
1144	93-09-01	1 Rodrigue	12 Sea Palm	1	
1148	93-09-09	1 Noel	20 Pebble Beach	1	
1149	93-09-13	1 Kist III	8 Dunes of St. George	1	
1150	93-09-24	1 Bailey	37 Sea Palm	1	
1152	93-09-28	1 Bence	16 Indian Bay	1	
1151	93-09-28	1 Kurtz	33 Turtle Beach	1	
1153	93-09-29	1 Isenberg	54 Turtle Beach	1	
1156	93-10-18	1 Rowe	22 Turtle Beach	1	
1157	93-10-18	1 Sherman	3/Tract 25	1	
1158	93-10-29	1 Palmer	4/71/5	1	
1159	93-11-05	1 Fish	3/20/1E	1	
1160	93-11-19	1 Mitsak	10/17/1E	1	
1161	93-12-08	1 Callahan	1/L/2	1	
1162	93-12-08	1 Lardent	2/Tract 33	1	
1163	93-12-15	1 Stevenson	3/A/3	1	
1164	93-12-15	1 Jeppson	3 Oyster Bay	1	
1165	93-12-29	1 Berliners	33 Dolphin	1	
1166	93-12-31	1 Watts	4 Oyster Bay	1	
1167	93-12-15	1 Tupper	17/76/5	1	
1168	93-12-01	1 Noel	1/Tract 5	1	
1169	94-01-13	1 Tucker	1/Tract 26	1	
1170	94-01-20	1 O'Connell	18 Sea Pine	1	
1171	94-01-20	1 Gulf Coast Realty	14-16/8/1E	1	
1172	94-01-24	1 Lewellyn	17/10/1E	1	
1173	94-01-24	1 Lewellyn	18/10/1E	1	
1174	94-01-24	1 Lewellyn	19/10/1E	1	
1175	94-01-24	1 Lewellyn	26/10/1E	1	
1176	94-01-24	1 Lewellyn	27/10/1E	1	
1177	94-01-24	1 Lewellyn	28/10/1E	1	
1178	94-01-24	1 Lewellyn	29/10/1E	1	
1179	94-01-24	1 Lewellyn	30/10/1E	1	
1180	94-01-24	1 Lewellyn	31/10/1E	1	
1181	94-01-24	1 Lewellyn	32/10/1E	1	
1182	94-01-24	1 Lewellyn	33/10/1E	1	
1183	94-01-24	1 Lewellyn	34/10/1E	1	
1184	94-01-24	1 Lewellyn	35/10/1E	1	
1185	94-01-24	1 Lewellyn	36/10/1E	1	
1186	94-02-01	1 Ward	6/F/3	1	
1187	94-02-09	1 Smith	4/Tract 4	1	
1188	94-02-14	1 Daffin	5/6/2	1	
1189	94-03-01	1 Noel	4/11/1E	1	
1190	94-03-07	1 Noel	8A Sea Dune Village	1	
1082	94-03-07	T Coastal Dev	A St. George Island Resort Village	T	
1191	94-03-07	1 Coastal Dev	B St. George Island Resort Village	1	
1083	94-03-07	T Coastal Dev	C St. George Island Resort Village	T	

Received
MAR 28 1994
DER, Tallahassee
Branch Office

St. George Island Utility Company
- CIAC Listing
For the Period: September 1, 1993 through March 31, 1994

Cust #	Date	Name	Service Address	WET	DRY
1191	94-03-07	1 Coastal Dev	D St. George Island Resort Village	1	
1077	94-03-07	T Coastal Dev	E St. George Island Resort Village	T	
1193	94-03-07	1 Coastal Dev	F St. George Island Resort Village	1	
1194	94-03-07	1 Coastal Dev	G St. George Island Resort Village	1	
1195	94-03-07	1 Coastal Dev	H St. George Island Resort Village	1	
1196	94-03-07	1 Coastal Dev	I St. George Island Resort Village	1	
1197	94-03-09	1 Garlick	1 Oyster Bay Village	1	
1198	94-03-21	1 Suber	15 Bay Palm	1	
1199	94-03-23	1 Ulrich	10/N/2	1	
1200	94-03-25	1 Topliss	11 Plantation Beach	1	
1201	94-04-04	1 Barrett	21 HERON BAY	1	
1202	94-04-05	1 Plumblee	7 Plantation	1	
1208	94-04-06	1 DJ Enterprises	6 Heron Bay	1	
1209	94-04-06	1 Mahr Dev.	1 Casa Del Mar, Phase I		1
1210	94-04-06	1 Mahr Dev.	2 Casa Del Mar, Phase I		1
1211	94-04-06	1 Mahr Dev.	3 Casa Del Mar, Phase I		1
1212	94-04-06	1 Mahr Dev.	4 Casa Del Mar, Phase I		1
1213	94-04-06	1 Mahr Dev.	5 Casa Del Mar, Phase I		1
1214	94-04-06	1 Mahr Dev.	6 Casa Del Mar, Phase I		1
1215	94-04-06	1 Mahr Dev.	7 Casa Del Mar, Phase I		1
1216	94-04-06	1 Mahr Dev.	8 Casa Del Mar, Phase I		1
1217	94-04-06	1 Mahr Dev.	9 Casa Del Mar, Phase I		1
1218	94-04-06	1 Mahr Dev.	10 Casa Del Mar, Phase I		1
1219	94-04-06	1 Mahr Dev.	11 Casa Del Mar, Phase I		1
1220	94-04-06	1 Mahr Dev.	12 Casa Del Mar, Phase I		1
1221	94-04-06	1 Mahr Dev.	13 Casa Del Mar, Phase I		1
1222	94-04-06	1 Mahr Dev.	14 Casa Del Mar, Phase I		1
1223	94-04-06	1 Mahr Dev.	16 Casa Del Mar, Phase I		1
1224	94-04-06	1 Mahr Dev.	17 Casa Del Mar, Phase I		1
1225	94-04-06	1 Mahr Dev.	18 Casa Del Mar, Phase I		1
1226	94-04-06	1 Mahr Dev.	19 Casa Del Mar, Phase I		1
1227	94-04-06	1 Mahr Dev.	20 Casa Del Mar, Phase I		1
1228	94-04-06	1 Mahr	21 Casa Del Mar, Phase I		1
		80		60	20

Received
APR 28 1994
DEP, Tallahassee

Docket No. 940109-WU
Florida Public Service Commission
CM-5

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

OCT 2 7 1993

Mr. Gene Brown, President
St. George Island Utilities Company, Ltd.
3836 Killearn Court
Tallahassee, Florida 32308

Dear Mr. Brown:

This is in regard to the St. George Island Utility Company, Ltd. and the requirements of the Partial Final Judgment (PFJ).

The PFJ requires that the water system submit a system map. The due date for this map was September 1, 1992. We received the map on August 24, 1993 and have since then completed our review of the system map prepared by Baskerville-Donovan Inc. Our review shows that some changes need to be made. The areas in need of correction are shown below:

1. Note five on the cover sheet states that the accounts shown are accurate only up to August 31, 1992. We must have a more up-to-date version, preferably September 30, 1993.

2. It is to be noted that there are 815 metered accounts shown throughout the plans. The Service Connection Report for August 1992 showed 973 metered accounts. Accordingly, either the connection report or the system map is inaccurate. It is recommended that the metered accounts up through September 30, 1993 be used.

3. Throughout the plans no valves are shown where fire hydrants and flush stands connect to the mains. Is this an omission or does it reflect the actual conditions as they exist in the field?

4. On Sheet 4 of 10 parallel mains are shown on Dove Lane, The two inch main is not located with respect to the center line.

5. Sheet 4 of 10 at Dogwood Court, Camellia Court and Bayberry Lane have mains along their southern portions that are not located left or right of the center line.

6. Sheet 5 of 10 at Acacia and Azalea Drives along their southern ends have a six inch main that is not located left or right of the center line.

Received
NOV 1 1993
DEP, Tallahassee
Branch Office

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7. Sheet 5 of 10 has a two inch main along West Gorrie Drive that is not located left or right of the center line.

8. On Sheet 6 of 10 a two inch main along West Pine Avenue, West of Fourth Street is not located left or right of the center line.

9. On Sheet 6 of 10 a six and two inch main along West Gorrie Drive West of Third Street is not located left or right of the center line.

10. Sheet 7 of 10 shows a water main along East Pine Avenue that is not connected to the rest of the water mains.

11. Sheet 8 of 10 shows two metered service connections without a water main in the area to provide service to them.

12. Throughout the plans, mains are shown to reduce in diameter without showing the location of the reducing fitting.

13. Throughout the plans the material of the mains is not shown.

It is requested that your engineer correct the the noted deficiencies and return the corrected plans to us within 30 days.

If you have any questions, please contact Cliff McKeown at (904) 488-3704 or me at (904) 436-8300, ext. 136.

Sincerely,

J. A. Kintz, P.E.
Drinking Water Section Supervisor

JAK:cm
cc: Kiran V. Kulkarni, P.E.
James Waddell, P.E.
Mary LaBatt, Black Hawk Engineering Group
Richard Windsor, Esq., DEP Tallahassee
Bob Crouch, P.E., Public Water Service Commission
Karen Amaya, Engineer, Public Service Commission
Troy Rendell, Public Service Commission
Cliff McKeown, Tallahassee Branch Office ✓
Jim Morris, Environmental Health Director, Franklin County
Wayne GleasmanSt. George Island Homeowners Assoc.
Allan Pierce, Franklin County Planning Director
Rick Herndon, Florida Rural Water Assoc.
Bill Peebles, Andrew Jackson Bank
Rob Wright, Northwest Florida Water Management District
Mike Donovan, Apalachee Regional Planning Council

Received
NOV 1 1993
DEP, Tallahassee
Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-6

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

DEC 7 1993

Mr. Gene D. Brown, President
St. George Island Utilities Co., Ltd.
3836 Killearn Court
Tallahassee, Florida 32308

Dear Mr. Brown:

On November 19, Mr. Cliff McKeown inspected the water system serving St. George Island. Ms. Karen Amaya and Mr. Lee Munroe represented the Public Service Commission. Mr. Hank Garrett represented the utility.

A comparison between the system map, required by the Partial Final Judgment, and visible appurtenances to the water distribution system was made. We were able to verify all of the valve locations checked. However, we found that not all valves were properly marked as required by paragraph 6 in the Partial Final Judgment. Specific deficiencies regarding the system map were outlined in my October 27 letter.

It is requested that you notify me by return mail of the actions you are taking to correct both the deficient areas regarding the system map and the unmarked valves.

If you have any questions, please contact Cliff McKeown at (904) 488-3704.

Sincerely,

J. A. Kintz, P.E.
Potable Water Section Supervisor

JAK/cmc

Received
DEC 10 1993
DEP Tallahassee
Branch Office

Printed on recycled paper.

cc: Kiran V. Kulkarni, P.E.
James Waddell, P.E.
Mary LaBatt, Black Hawk Engineering Group
Richard Windsor, Esq., DEP Tallahassee
Bob Crouch, P.E., Public Service Commission
Karen Amaya, Public Service Commission
Troy Rendell, Public Service Commission
Cliff McKeown, Tallahassee Branch Office
Jim Morris, Environmental Health Director, Franklin County
Wayne Gleasman, St. George Island Homeowners Association
Allan Pierce, Franklin County Planning Director
Bill Peebles, Andrew Jackson Bank
Rick Herndon, Florida Rural Water Association
Richard Deadman, DEP Tallahassee
Rob Wright, Northwest Florida Water Management
Mike Donovan, Apalachee Regional Planning Council
Helen Townsend Spohrer, Resort Realty of St. George Island, Inc.
John Tobin

Received
DEC 10 1985
DER, Tallahassee
Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-7

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

DEC 7 1993

Mr. Gene Brown
General Partner
St. George Island Utility Company, Ltd.
3836 Killearn Court
Tallahassee, Florida 32308

Dear Mr. Brown:

This is in regard to the inspection of the St. George Island Utility Company, Ltd. that was performed by Cliff McKeown on August 24. Page six of the report that was forwarded in my November 30 letter was not signed. Accordingly, the enclosed report is provided.

Messrs. Allan Johnson and John Kintz also represented the Department. Mr. Hank Garrett's and your assistance during the inspection was most helpful.

A number of deficiencies were identified during the inspection and are included in Attachment No. 2 of the inspection report. These deficiencies include some items from the Consent Order and some new items. I should receive your written description of the actions you will take to correct these items with projected completion dates within 15 days of receipt of this letter.

If you have any questions, please call Cliff McKeown at (904) 488-3704 or me at (904) 436-8300, Ext. 166.

Sincerely,

J. A. Kintz, P.E.
Potable Water Section Supervisor

JAK:jkb
Enclosure

Received
DEC 10 1993
DEP, Tallahassee
Branch Office

Printed on recycled paper.

cc: Kiran V. Kulkarni, P.E.
James Waddell, P.E.
Mary LaBatt, Black Hawk Engineering Group
Richard Windsor, Esq., DEP Tallahassee
Bob Crouch, P.E., Public Service Commission
Karen Amaya, Public Service Commission
Troy Rendell, Public Service Commission
Cliff McKeown, Tallahassee Branch Office ✓
Jim Morris, Environmental Health Director, Franklin County
Wayne Gleasman, St. George Island Homeowners Association
Allan Pierce, Franklin County Planning Director
Bill Peebles, Andrew Jackson Bank
Rick Herndon, Florida Rural Water Association
Richard Deadman, DEP Tallahassee
Rob Wright, Northwest Florida Water Management
Mike Donovan, Apalachee Regional Planning Council
Helen Townsend Spohrer, Resort Realty of St. George Island, Inc.
John Tobin

Received
DEC 10 1993
DEP, Tallahassee
Branch Office

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SANITARY SURVEY REPORT

Plant Name: St. George Island Utilities Company, Ltd. | County: Franklin | PWS ID: 1190789
Plant Address: Gulf Beach Drive | Zip Code: | Plant Phone: 927-2648
Owner Name: Gene D. Brown, General Partner | Owner Phone: 668-0440
Owner Address: St. George Island Utilities Co., Ltd. 3836 Killearn Court, Tallahassee, Florida | Zip Code: 32308
Date of this inspection: 8-24-93 | Date of last inspection: 4-7-92 | Person contacted: Hank Garrett
Certified operators and cert. nos.: Hank Garrett C 7102

Population served: 3570 | Service connections: 1 | Percent metered: 90% | Design capacity: 2
Design storage capacity: 3 | Average output: 239,000 gpd | Maximum hour: No Recorder | Maximum day: 533,000 gpd
Approval no. and date: Various Permits | Type meter and capy.: 4

Service area characteristics: (check all that apply) ____COMMUNITY/___NON-COM

X Airport	___Institution	X Recreation area	X Subdivision
X Bathing area	___Interstate carrier	X Residential	___Trailer park
X Campground	___Lodge	___Rest area	___Visitor center
___Company town	X Marina	X Restuarant	___Other_____
___Indian Res	X Motel	___School	

Emergency water source: 5 | Emergency power source:
Type of standby: | Capacity of standby:

Sources of Raw Water:
- X Ground* — How many wells? 3
- ___Surface** — Identify source:
- ___Purchased*** — Identify supply system:

Treatment in use at this plant: (check all that apply)

X Aeration	___E.D.	___Iron Removal	___pH adjustment
X Chlorination	___Filtration	___Lime Softening	___T&O control
___Chlor.-pre	___Filt. hi-rate	___Recarbonation	___Settling
___Chlor.-post	___Fluoridation	___Reverse Osmosis	___Zeolite Soft.
___Coagulation	___Other--specify		

What, if any, additional treatment is needed?
For control of what deficiencies?

* Use page 2 (Ground)
** Use page 2 (Surface)
***Page 2 not required

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Sanitary Survey (Groundwater)
Page Two Well #1 = 29↓77'07"/84↓52'58"
Well #2 = 29↓44'13"/84↓53'12"
Well #3 = 29↓43'46"/84↓53'12"

PWS ID: 1190789

Well Number*	1	2	3				
Year Drilled	1975	1985	1993				
Depth Drilled	263'	300'	311'				
Length Outside Casing	170'	190'	185'				
Diameter Outside Casing	8"	8"	12"				
Material Outside Casing	Steel	Steel	Steel				
Depth to static water level	3'	9'	0'				
Normal suction lift	60'	38'	62'				
Normal yield GPM	250(6)	290(6)	480(6)				
Test yield GPM	263	250	750(7)				
Type of grout	Neat Cement	Neat Cement	Neat Cement				
Drilling method	Rotary	Cable	Rotary				
Type of strainer	Stain. Steel	--	Galv. Cone				
Depth to top of strainer	63'	38'	115'				
Protection from surface water	Yes	Yes	Yes				
Is inundation of well possible	Yes	Yes	Yes				
Salt intrusion noted in past	No	--	No				
Has the well ever been contaminated	No	--	No				
Pump manufacturer name	Peerless	Fairbanks Morse	Peerless				
Model number	T1-15209		10L86STG				
Capacity - GPM	250	250	500				
Check valve present in line	Yes	Yes	Yes				
Date of last servicing							
Maintenance schedule day/mo							

Comments

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anitary Survey
age Three B
ackup

PWS ID: 1190789

LANT EQUIPMENT - CHLORINATOR

ual ystem Yes
vidence f leaks No
ir-pack or espirator adequate
esidual at lant
Backup machine operative Yes
Reserve supply
Residual at remote tap
Make of chlorinator W & T
Gas or hypo used Gas
Condition of equipment
Amonia smells fresh Yes
Comments on chlorination
Capacity lb./24 hr 50
Chlorine feed rate
Automatic switchover Yes
More capacity needed Soon

ERATOR

loodworms resent
Type of aerator
Condition of aerator
Tray area or weir length
Adequate for Fe, H2S control
Condition of screens

OAGULATION

lanket isible
Chemical used
Flocutation good or poor
Purpose
Settling good?
Carryover

IME SOFTENING

ny auxiliary hemicals used
lature and abun- lance of floc
s settling ood
ny filter ementation
Quicklime or hydrated
Excessive carryover
Effluent stability
Name of unit
Points of application(in unit)
Appearance of sludge blanket
Turbidity in clearwell
Recarbonation type
Size and type
Secondary precipitation
Sludge recirculation used

LUORIDATION

orrosion oted
plit sample greement
Chemical used
Gelling or plugging
Sufficient analyses
Strength if acid
Feeder make and model
Feeder condition
Is dilution used(acid)

TABILIZATION

Stability index of effluent
Is pH control practiced
Chemical(s) used

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Sanitary Survey
Page Three C
Chlorine Booster

PWS ID: 1190789

PLANT EQUIPMENT - CHLORINATOR

Make of chlorinator Inaugua
Capacity lb./24 hr 20 gpd
Dual system
Backup machine operative
Gas or hypo used Hypo
Chlorine feed rate 20
Evidence of leaks
Reserve supply
Condition of equipment
Automatic switchover
Air-pack or respirator adequate
Amonia smells fresh
More capacity needed
Residual at plant
Residual at remote tap 0.8 mg/l
Comments on chlorination

AERATOR
Type of aerator
Tray area or weir length
Condition of screens
Bloodworms present
Condition of aerator
Adequate for Fe, H2S control

COAGULATION
Chemical used
Purpose
Blanket visible
Flocutation good or poor
Settling good?
Carryover

LIME SOFTENING
Quicklime or hydrated
Name of unit
Size and type
Any auxiliary chemicals used
Points of application(in unit)
Nature and abundance of floc
Appearance of sludge blanket
Is settling good
Excessive carryover
Turbidity in clearwell
Secondary precipitation
any filter cementation
Effluent stability
Recarbonation type
Sludge recirculation used

FLUORIDATION
Chemical used
Strength if acid
Is dilution used(acid)
Corrosion noted
Gelling or plugging
Feeder make and model
Split sample agreement
Sufficient analyses
Feeder condition

STABILIZATION
Stability index of effluent
Is pH control practiced
Chemical(s) used

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PWS ID 1190789

FILTERS & FILTRATION

Type of filters_____
Size and number_____
Length of filter runs_____
Can you see filter media_____ Is it clean after backwash_____
Are mudballs visible_____ Is there air-binding_____
What is the normal filter rate_____
What is the usual backwash rate_____
Capacity of filters_____
Are filters overloaded_____
Loss in head ga. present_____ At what head loss is bw done_____
Cracks and channelling_____
Has cementation ever occurred_____ Where in relation to filtration is stabilization done_____
If high rate, what is turbidity at interface_____
Range of turbidity in effluent_____
Can you observe algae in filters_____
Distance from top of media to trough overflow_____

REVERSE OSMOSIS Make and type of units_____ Pressure required_____
Auxiliary chemicals used_____
Proportion of waste to product streams_____
Quality of effluent_____
Stabilization_____
Booster pump_____ Type of Pre-treatment_____
Type of membranes_____

ZEOLITE SOFTENING Unit mfg. & model_____ Resin capy._____
Disinfection of beds_____ Grade of salt for regen._____ Stability of effluent_____ Resin prevented fm escaping_____

****

In the space below, give a rough sketch of the flow diagram of the plant, showing all important parts of the plant (not to scale):

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PWS ID: 1190789

HIGH SERVICE

Pump No	1	2					
Manufacturer's name	--Peerless--						
Pump type and motor HP	Cent. 20hp	Cent. 50hp					
Model number	TI-16063	403194					
Date installed	1975	1979					
Capacity (GPM)	250 gpm	650 gpm					
Maintenance schedule	Daily	Daily					
Date last serviced	--As Required--						

Comments: _____

****

STORAGE FACILITIES: (1)ground; ( )hydropneumatic; (2)elevated; ( )clearwell

Tank No.	1	2					
Capacity (GALS.)	292,000	150,000					
Material	Con-crete	Steel					
Gravity drain capacity	10 hrs.	Unknown					
Bypass capacity	100%	100%					
Covered/screened openings	Yes	Yes					
Date of last cleaning	1/93	1/12/93					
Pressure guage	--	N/A					
Sight glass	--	N/A					
On/Off pressure (PSI)		N/A					
Hgt. to bottem of el. tank (FT.)	--	82.5'					
Hgt. to max water level(FT.)	11'	114.5'					

Comments: Some leaks noted in side walls of ground storage reservoir.

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Dept., Tallahassee

PWS ID 1190789

DISTRIBUTION SYSTEM

Material of mains PVC
System looped Partially
Operation pressure 40-75 PSI
Max. pipe diam. 8"
Min. pipe diam. 2"
No. of dead ends 107
How often flushed Monthly
No. of fire hydrants 71
Know cross-connections with private supplies None
Blowoff lines below grade None
Routine cross-connection control program In progress

PLANT LABORATORY CAPABILITY

	X ph	X Chlorine: type		___Color
___Bacteriological	___Iron	___Turbidity	___Alkalinity	___Hardness
___Chlorides	___Stability	___Jar tests	___Fluorides	___Complete
___Radiological	___Marble tests	___Organics	___Inorganics	

Person in charge of laboratory, and credentials: _____

COMPLIANCE MONITORING System is in full compliance with which requirements?

		Inorganic	Organic	
___Bacteriological	___Turbidity	___Chemical	___Chemical	___THM
___Radiologicals	___Secondaries	___Other:		

Violations of sampling requirements: _____

Violations of maximum contaminant levels: _____

The following deficiencies are noted with recommended corrective action: (If none, write "none" in this space).

DEFICIENCY	REGULATION PERTAINING	RECOMMENDED ACTION
See Attachment No. 2		

Inspector's signature for Cliff McKeown Date: 12-06-93

Tittle Engineer Approved by _____ Date: 12-06-93

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DEC 10 1993
DE... Tallahassee

ATTACHMENT NUMBER 1

St. George Island Water System
Sanitary Survey - Footnotes

1. From the July, 1993 Service Connection report:

   904 Service connections used water during June 1993.
   1,020 Service connections have water meters installed.
   1,137 Is the number of connections the water system has committed to serving.

2. Design capacity for this system is anticipated to be 0.72 MGD or 500 gpm in the near future. Currently, the design capacity has not been established, however, it is near 0.61 MGD.

3. Gross storage capacity is 442,000 gals., effective storage capacity is 400,000 gals.

4. Main Plant - 1.0 BG Totalizer
   Well #1 - 1.0 BG Totalizer
   Well #2 - 100 MG Totalizer
   Well #3 - 1.0 BG Totalizer

5. The emergency water source consists of 2-250gpm wells which when pumping at the same time will provide 500gpm to the aerator. A new diesel 60KW generator with automatic start up, is provided at well #3. Well #3 has a rated capacity of 500gpm and will supply this amount while operating under auxiliary power. A Kohler 125KW auxiliary generator with automatic startup is stationed at the water plant on the Island. This generator will operate a 650gpm high service pump and a chlorinator simultaneously. Therefore, when well #3 is placed on line 100% of the current maximum day flow will be provided.

6. Measured on 8/24/93 with wells #1 and #2 pumping.

7. Measured 2/8/93.

8. See report on H_2S prepared by Baskerville Donovan, Inc. The Department's review shows this report to be inconclusive.

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ATTACHMENT NO. 2

St. George Island Water System
Deficiencies

1. The water system has developed and implemented a cross connection control program. The previous inspection (March 11, 1993) noted several major areas for improvement. These areas are either corrected or are in the process of being corrected. One area still needs some improvement. The Partial Final Judgement requires copies of all data sheets, correspondence, test results, shut off orders and any other materials pertaining to the cross connection control program to be submitted to the Department within 5 working days of the date they are generated. It may not be possible to meet the 5 day deadline on a routine basis. However, every attempt should be made to have these submitted as soon after as possible. Several items including control data sheets, work orders and test reports had not been submitted. DEP staff and the water system staff have been working together to correct this problem. Regardless it should be noted that the final responsibility rests with the utility to make sure these materials are submitted.

2. The system map required by the Partial Final Judgement was submitted on August 24, 1993. Numerous deficiencies were identified in that submittal and transmitted to the utility in a separate letter. Those deficiencies must be corrected and an accurate up-to-date map submitted.

3. The Report on Hydrogen Sulfide Removal required by the Partial Final Judgement has been reviewed. The conclusions presented in that report are not adequately documented and cannot at this time be substantiated. A separate letter will provide our specific comments on the substance of the report and will provide a request for some specific additional information to allow for better interpretation of the data. The requests must be met and the report finalized.

4. Well No. 3 is not on line as required by the Partial Final Judgement. The March 11 inspection pointed out that certain assurances and certifications must be made prior to placing well No. 3 into service. The certification/approval to use process is not complete. The information needed to complete the well and place it into service was provided in a separate letter. These items must be quickly completed.

5. A permit was issued to construct certain plant modifications. These modifications are needed to improve pressure problems within the distribution system on peak demand days. No work has started on this project. Additionally, the permit will expire on January 1, 1994. These plant modifications must be completed and placed into service prior to the 1994 vacation season.

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SEP 10 1993
DEP Tallahassee
Branch Office

6. A sampling plan was required by the Partial Final Judgement. An acceptable plan was finally generated on September 11, 1992. The March 11, 1993 inspection pointed out that some major changes had occurred in sampling requirements and recommended submitting a new sampling plan. This plan has not been received.

7. The water system has reached its capacity, Rule 17-555.350(1), Florida Administrative Code (FAC), based on current usage and commitments. Immediately after placing well No. 3 into service design, permitting and construction activities must be started to create additional capacity.

8. No bacteriological test results were received for May 1993, Rule 17-550.518(2), FAC. If these results are available, submit them now. If they are not, review the sampling plan and make necessary modifications to make sure no more samples are missed.

9. The aerator was modified without first receiving a construction permit, Rule 17-555.520(1), FAC. If the existing aerator will not remove 90% of the influent hydrogen sulfide, a suitable design must be submitted, approved for construction and built.

10. The Aerator needs to be cleaned, Rule 17-555.350(1), FAC. Clean the aerator now and institute a regular and routine cleaning program.

11. Leaks are becoming more and more apparent in the sides of the Ground Storage Reservoir, Rule 17-555.350(1), FAC. Seek a suitable NSF approved sealant. Submit a description of this sealant to the Department for approval prior to its application. This must be scheduled as soon as possible so that drawing down the reservoir does not interfere with peak water usage periods.

Received
DEC 20 1993
DEP, Tallahassee
Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-8

St. George Island Utility Co., Ltd.
3848 Killearn Court
Tallahassee, Florida 32308
(904) 668-0440 • (904) 927-2648

December 23, 1993

RECEIVED

DEC 27 1993

Northwest Florida
DEP

Mr. J. A. Kintz, P.E.
Department of Environmental
Protection
Northwest District
160 Governmental Center
Pensacola, FL 32501-5794

Dear Mr. Kintz:

This will acknowledge receipt of your letter dated December 7, 1993 regarding the last water company inspection on August 24, 1993. The following is a response to the 11 items set forth on attachment 2.

1. Cross Connection Control Program. The cross connection control program is working smoothly. We will endeavor to make sure that Mr. McKeown is promptly provided copies of all data sheets, correspondence, test results, shut-off orders and other materials pertaining to the cross connection control program. We will submit these materials as rapidly as possible; however, as a practical matter, it is almost impossible to deliver them to Mr. McKeown within five (5) days.

2. System Map. The system map as required by the partial final judgment was submitted to your department on August 31, 1992. The map submitted on August 24, 1993 was an updated revised map. The utility is negotiating with its engineers, Baskerville-Donovan, regarding the corrections that need to be made regarding the map. This will be covered in a comprehensive settlement agreement that is now being prepared for submission to DEP within the next 2-3 weeks. This settlement agreement will involve payment to Baskerville-Donovan and the completion and/or correction of all of the engineering deficiencies noted by your correspondence, including deficiencies in the map prepared by Baskerville-Donovan.

3. Hydrogen Sulfide Removal. As noted above, we are negotiating with our engineers, Baskerville-Donovan, regarding a number of items, including the need to revise, supplement and finalize the hydrogen sulfide report. This work will be included as part of the comprehensive settlement agreement to be presented to DEP soon. This proposed agreement will provide a means of paying Baskerville-Donovan for all of the work they have performed to date, and to pay for all additional work required by DEP on a fixed cost basis.

Received

JAN 5 1994

DEP, Tallahassee

4. Well No. 3. Well number 3 has been completed and is ready to be placed into service. All of the required information has been compiled and it meets all the requirement for certification. However, our engineers, Baskerville-Donovan, have refused to certify the well until and unless the utility pays them for substantial engineering services in addition to those connected with the third well. We are now negotiating with Baskerville-Donovan regarding this matter, and hope to have an agreement worked out within the next couple of weeks which will allow them to submit the necessary material to you for immediate certification of the well.

5. Plant Modifications. As noted in a separate letter, the utility is asking for an extension of time to complete the plant modifications necessary to provide additional pressure throughout the system. We plan to request modification of the permit to allow the elevated tank to be raised, in lieu of the altitude valve. We believe this is a more practical, efficient and satisfactory approach to the problem. We are making plans to have this work done prior to the 1994 vacation season, and our specific proposal on this will be included in the settlement agreement now being prepared for submission for you within the next 2-3 weeks.

6. Sampling Plan. It is my understanding that Hank Garrett has been working with your department regarding a revised sampling plan to comply with the recent changes in your requirements. If this final plan has not yet been submitted to you by Mr. Garrett, it will be within the next week to ten days.

7. Water System Capacity. Through an agreement with Ben Johnson, developer of a major project near Nicks Hole on St. George Island, the utility has undertaken a preliminary engineering analysis regarding increased supply to the Island, as well as the feasibility of a new 200,000 to 300,000 gallon elevated tank on Mr. Johnson's project in the Plantation. A comprehensive developer's agreement with Mr. Johnson will be completed and submitted to the PSC for approval at the same time the above-referenced settlement agreement is submitted to you for review and comment. Also, the settlement agreement to be submitted to Mr. Windsor and you will be very specific regarding the utility's capacity and its plans to meet all future water needs on St. George Island.

8. May 1993 Bacteriological Test Results. The bacteriological tests were routinely performed during May 1993 as required by Rule 17-550.518(2), FAC. However, the test results were lost by our lab through no fault of the utility. The utility has published a notice in the local newspaper regarding

JAN 5 1994
DEP, Tallahassee

this matter, and we hope that we do not have any more problems with our lab. If we do, we will make arrangements to find an alternate testing source.

9. Aerator Modification. The utility and its engineers remain convinced that the existing aerator is removing at least 90% of the influent hydrogen sulfide. Accordingly, we believe that the construction of a new aerator would be a waste of the utility's money. This matter will be addressed in more detail in a revised report to be prepared by Baskerville-Donovan. If we cannot reach agreement for Baskerville-Donovan to correct its report, we will begin immediate negotiations with another engineering firm to complete a report that is acceptable to DEP.

10. Aerator Cleaning. The utility regularly and routinely cleans the aerator. However, the residuals build up on a daily basis, and the utility will continue to implement its cleaning program. In this regard, the utility recently requested bids from various contractors to construct an expanded screening area around the aerator which will make cleaning of the aerator much easier.

11. Leaks in Ground Storage Reservoir. Throughout the last several weeks, Hank Garrett and I have been meeting with Mr. Tim McDaniel and other personnel from the Eagle Tank Company in Jacksonville regarding the need for a long term cleaning, painting and maintenance program for both the elevated tank and the ground storage reservoir. As soon as we reach a final resolution regarding the raising of the elevated tank, we plan to enter into a long-term contract with Eagle Tank which will include provisions to clean, caulk and seal the ground storage reservoir with an NSF approved sealant in accordance with DEP's rules and regulations. All of this will be covered in the comprehensive settlement which will be submitted to Richard Windsor and you within the next 2-3 weeks.

We believe that the utility has made substantial progress in correcting all deficiencies regarding the operation of the system. We are now concentrating on long range planning to handle the pressure and capacity issues. We appreciate your helpful cooperation in working through these problems, and I hope that we can reach an agreement regarding all pending issues by the end of next month.

Sincerely,

Gene D. Brown

GDB:smc
cc: Hank Garrett

Received
JAN 5 1994
DEP, Tallahassee
Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-9

Florida Department of Environmental Regulation
Northwest District • 160 Governmental Center • Pensacola, Florida 32501-5794
Lawton Chiles, Governor
Carol M. Browner, Secretary

SEP 10 1992

Mr. James Waddell, P.E.
2804 Remington Green Circle
Tallahassee, Florida 32308

Dear Mr. Waddell:

This is to confirm the content of your telephone contact with Cliff McKeown on September 2, in which the St. George Island water system plans were discussed.

Two items should be included in the plans to make them acceptable and in compliance withe the stipulated partial final judgment. They are:

1. Place a symbol on each lot on which a service exists. This symbol should reflect the conditions as they exist on or after August 31, 1992.

2. A distance right or left of the road or easement's centerline should be placed alongside each main.

Also as discussed it is not necessary to number the valves in the field. It will be necessary to mark the pavement with a valve symbol (blue paint) adjacent to the valve including a number for the distance off the pavement where necessary.

If you have any questions please contact Cliff McKeown at 488-3704.

Sincerely,

J. A. Kintz, P.E.
Potable Water Section
Supervisor

JAK/cmd
cc: Cliff McKeown
Gene Brown

Received
SEP 11 1992
DEP, Tallahassee
Branch Office

Recycled Paper

Docket No. 940109-WU
Florida Public Service Commission
CM-10

Law Offices of
GENE D. BROWN

3848 KILLEARN COURT
TALLAHASSEE, FLORIDA 32308

TELEPHONE (904) 668-6103
TELECOPIER (904) 668-0441

January 13, 1994
PRIORITY MAIL

RECEIVED
JAN 14 1994
Northwest Florida
DEP

Mr. Richard L. Windsor
Assistant General Counsel
Florida Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: State of Florida Department of Environmental Protection vs. Gene D. Brown, et al
Franklin County Circuit Court, Case No. 90-335

Dear Mr. Windsor:

Enclosed is a proposed stipulation for entry of final judgment which I am presenting for consideration by your client and you. The St. George Island Utility Company needs to resolve this litigation, because the utility cannot obtain firm financial commitments from the various parties who are willing to provide funds to improve the utility system as long at the litigation is pending. I am sending a copy of the proposed stipulation to Mr. Kintz for his review. I believe it addresses all of the issues that are still pending. The primary remaining issue is that of system capacity.

Although we have been working well with Mr. Kintz regarding connections, we still have not been able to agree on a specific number. However, as shown by the analysis presented by Mr. George Mahr to Mr. Kintz on November 30, 1993, it appears that the DEP calculations have double counted the original Andrew Jackson presold connections which were purchased by Mr. Mahr. Assuming this to be true, the utility has a remaining capacity of at least 67 additional connections before the pending improvements are completed and placed in service.

Accordingly, the proposed stipulation provides that a maximum of 67 residential connections may be placed in service prior to completion of the improvements, and that the remaining 97 connections may be placed in service only after the improvements are completed. The breakdown is as follows:

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DEP, Tallahassee
Branch Office

	Pre-improvements	Post-improvements	Total
General Public	25	Subject to Analysis	25
Ken Gordon		43	43
Baskerville-Donovan	14	25	39
Sailfish	10	17	27
Ben Johnson	18	12	30
	67	97	164

As of the end of December, we had 1165 committed service connections, 1040 connections with meters installed, and 820 connections actually using water. According to the Baskerville-Donovan engineering report filed with the Court, the utility can properly serve 1421 connections when the improvements are completed and placed in service.

The enclosed proposed stipulation provides that we will update the engineering analysis after the improvements are completed and placed in service, so that DEP can analyze the capacity of the system at that time. Under the proposal, we cannot exceed the number of connections allowed by the updated engineering analysis, and the Court retains jurisdiction of this issue if the utility and DEP cannot agree on the proper number after revision of the engineering analysis.

Please review the enclosed proposal with your client and let me hear from you as soon as possible. As you can see from this proposed stipulation, almost $100,000 is being placed in escrow by Ken Gordon, the developer of the "Sunset Beach" project on the east end of St. George Island. However, these funds cannot be used for the benefit of the utility company until these capacity issues are resolved, and until Mr. Gordon and the other third parties are comfortable that this pending litigation is settled so that the uncertainty may be removed from this matter.

Please let me hear from you.

Sincerely,

Gene D. Brown

GDB:smc
Enclosure
cc: Mr. J. A. Kintz (priority mail)

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JAN 14 1994
Northwest Florida
DEP

Received
FEB 23 1994
DER, Tallahassee
Branch Office

IN THE CIRCUIT COURT
SECOND JUDICIAL CIRCUIT
FRANKLIN COUNTY, FLORIDA

CASE NO. 90-335

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, f/k/a, STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION,

Plaintiff,

vs.

GENE D. BROWN, D/B/A SAINT GEORGE ISLAND UTILITIES COMPANY, and SAINT GEORGE ISLAND UTILITIES COMPANY, LTD., a Florida corporation,

Defendants.
_____/

STIPULATION FOR ENTRY OF FINAL JUDGMENT

IT IS HEREBY stipulated and agreed by plaintiff and defendants that a final judgment may be entered on the complaint by the State of Florida Department of Environmental Protection (DEP) based upon this stipulation between the parties to this action:

BACKGROUND

1. On April 30, 1992, the Court entered a partial final judgment in this cause. This judgment included a stipulation between the parties that required certain improvements to be made to the St. George Island water system, as well as certain other items that needed to be completed in connection with the water system. Most of these improvements and related items have been completed, but some items set forth in the stipulation still need

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DEP, Tallahassee

to be completed.

2. The parties agree that improvements need to be made in the St. George Island water system to increase its capacity. However, the parties have not agreed as to the current capacity of the system or the specific improvements that need to be made to increase the capacity of the system.

3. Various third parties are willing to assist the utility in making the necessary improvements to increase the reliability and capacity of the St. George Island water system if, but only if, such third parties can be assured that definitive levels of capacity are available for their use and benefit. These third parties are not willing to provide the necessary funds to improve the reliability and capacity of the system unless this case is resolved so that the inherent uncertainty surrounding the litigation may be avoided.

4. To resolve this matter for the benefit of both the parties to this litigation and other third parties who have a vested interest in the reliability and capacity of the St. George Island water system, the parties have agreed to the entry of a final judgment in this cause requiring the utility to perform as set forth below.

INJUNCTIVE RELIEF

5. The utility will accept the sum of $98,137.15 from developer Ken Gordon for 43 residential connections, to be used at the "Sunset Beach" project on St. George Island. These funds will be placed in escrow to be used solely for improvements to

Received
FEB 28 1994
DEP

the St. George Island water system as permitted by DEP on January 27, 1993, or such alternate improvements as DEP may subsequently permit. Such alternate improvements may include raising the utility's elevated tank in lieu of the altitude valve previously permitted for construction by DEP. Any permit issued by DEP for the "Sunset Beach" water system will be subject to completion of the above-referenced improvements.

6. The utility will accept $62,098.11 from Sailfish Enterprises, Inc. for 27 residential connections to be used exclusively to pay the remaining balance due to Rowe Drilling Company for construction of the utility's third well. These connections may be used at any location on St. George Island in accord with the terms and conditions of a separate agreement between the utility and Sailfish. Ten (10) of these connections may be used immediately. The remaining connections may be used only after the improvements described in paragraph 5 above are completed and placed into service.

7. The utility will transfer the right to thirty-nine (39) residential connections to Baskerville-Donovan, Inc. as payment for $90,959.70 in engineering fees due from the utility to Baskerville-Donovan. Fourteen (14) of these connections may be used immediately. The remaining connections may be used only after the improvements described in paragraph 5 above are completed and placed into service. These connections may be used at any location on St. George Island in accordance with the terms and conditions of a separate agreement between the utility and

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FEB 23 1994
DER, Tallahassee

Baskerville-Donovan. This transfer will include a requirement that Baskerville-Donovan immediately certify the utility's third well so that it may be placed into service upon final approval by DEP, and that Baskerville-Donovan revise and complete the aerator report and mapping as described in paragraphs 9 and 10 below.

8. The utility will enter into a developer's agreement with Ben Johnson, as developer of Resort Village on St. George Island. This agreement will assure that a 200,000 to 300,000 gallon storage facility and related pumping facilities will be constructed for the utility's use and benefit in St. George's Plantation on St. George Island on or before January 1, 1997. The agreement will further assure that the utility will complete a comprehensive engineering study regarding alternatives for increasing the water supply to St. George Island. This study shall be completed on or before January 1, 1995. The Ben Johnson agreement will allow a maximum of eighteen (18) residential connections to be used by Ben Johnson immediately, and twelve (12) connections to be used by Ben Johnson when the improvements described in paragraph 5 above are completed and placed in service. Any other connections allowed under the agreement with Ben Johnson may be placed in service only after the new storage facility and related improvements are completed.

9. Within sixty (60) days from the date of this stipulation, the utility will revise the aerator report previously submitted to DEP in accord with the letter from J.A. Kintz, P.E. of DEP dated November 18, 1993. If the revised

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engineering report recommends improvement or replacement of the existing aerator, the utility will undertake such improvements or replacement by filing a permit application with DEP within sixty (60) days after completion of such report. If the revised engineering report does not recommend additional improvements or replacement of the existing aerator, and if DEP disagrees with the report, the Court shall maintain continuing jurisdiction over the parties to resolve this matter if they cannot otherwise agree. The utility shall continue with the bi-monthly sampling for hydrogen sulfide as required by the prior stipulation between the parties until the parties mutually agree to revise or terminate such testing requirement, or until further order of the Court which shall maintain continuing jurisdiction regarding such testing requirement.

10. Within sixty (60) days from the date of this stipulation, the utility will update and revise the system map previously submitted to DEP in accord with the letter from DEP dated October 27, 1993. The revised map shall be submitted to DEP immediately upon its completion. The Court shall maintain continuing jurisdiction over the parties to assure that such mapping revisions are timely completed.

11. The utility shall continue to cooperate with DEP to assure that all reasonable directives of DEP regarding the St. George Island water system are promptly followed. The Court will maintain continuing jurisdiction over the parties in this matter to resolve any issues that the parties are not able to resolve

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between themselves.

12. Between now and the time that the improvements or alternate improvements referred to in paragraph 5 above are completed, the utility may commit to serve a maximum of twenty-five (25) additional residential connections on St. George Island; provided, however, that such connections shall be reserved for customers who actually need service for a specific service location that is being placed into service. The utility will not commit any of the twenty-five (25) additional connections to customers who do not need immediate service. This provision regarding capacity may be amended by mutual agreement of the parties without additional order of the court.

13. Within sixty (60) days after completion of the improvements described in paragraph 5 above, the utility will revise and update the engineering analysis regarding capacity of the system previously submitted to DEP and filed with the Court. The utility may continue to serve additional customers in accord with the revised engineering analysis, subject to the right of DEP to question or contest the analysis and capacity of the system as set forth below. If the parties disagree as to the conclusions reached in the revised engineering analysis, or if DEP otherwise determines that the St. George Island water system has reached capacity, the Court shall retain jurisdiction to resolve any and all questions regarding capacity of the system upon motion by either party.

14. This settlement agreement will be filed in the above-

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styled cause together with a joint motion for entry of a final judgment requiring the parties to comply with the conditions of this stipulation. The final judgment will contain a reservation of jurisdiction clause to assure that the Court does maintain continuing jurisdiction to insure that the provisions of this agreement are followed, and to further insure that the Court remains available to resolve any and all issues regarding the St. George Island water system which cannot be otherwise resolved between the parties to this stipulation.

FOR DEFENDANTS:

ST. GEORGE ISLAND UTILITY COMPANY, LTD.

By: _____
Gene D. Brown

FOR PLAINTIFF:

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: _____

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Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-11

Florida Department of
Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

21 January 1994

Mr. Gene D. Brown
3848 Killearn Court
Tallahassee, Fl 32308

Dear Mr. Brown:

Thank you for your letter of January 13, 1994.

The proposed stipulation contemplating entry of a final judgment is not acceptable. As you briefly state in the proposed stipulation language, the defendants in this litigation (yourself in particular) have not performed the obligations devolving upon them under the previous partial judgment.

We suggest a meeting at which Mr. Kintz of this Department can receive from you verbally your proposals, properly place them against the factual background and history of this long-enduring enforcement proceeding, and ask appropriate questions.

One aspect of your letter may suggest a helpful tool for future resolution of this litigation. If the firm financial commitments your letter describes can be properly escrowed from the outset and all disbursements strictly conditioned upon performance events, the Department might look more favorably on your requests for more time in which to perform the improvements to the public water system which are already in default.

Very truly yours,

Richard L. Windsor
Assistant General Counsel

cc: John Kintz
Cliff McKeown

Dept. Tallahassee
Branch Office
JAN 25 1994
Received

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Docket No. 940109-WU
Florida Public Service Commission
CM-12

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

RECEIVED
NOV 24 1993
Florida Public Service Commission
Division of Water and Wastewater

NOV 18 1993

Mr. Gene Brown, President
St. George Island Utilities Co., Ltd.
3836 Killearn Court
Tallahassee, Florida 32308

Dear Mr. Brown:

We have received and reviewed the FINAL REPORT ON REMOVAL OF HYDROGEN SULFIDE AT TREATMENT PLANT by Baskerville-Donovan Inc. prepared and submitted to us on August 24 at the time of the Sanitary Survey of the W/S as required by the Partial Final Judgment. We disagree with the report's conclusion that existing treatment for hydrogen sulfide removal is adequate.

Essentially the Department has two groups of hydrogen sulfide data to review. The first, which you submit monthly in accordance with the Partial Final Judgment does not lead us to conclude that 90 percent removal is occurring. Additionally, our review of this data (from The Water Spigot laboratory) suggests that you need to submit some additional information to enable us to fully interpret these test results, specifically:

- How was the laboratory's method detection limit determined?

- What is the practical quantitative limit?

- Provide data that shows the test results to be within the linear working range of the test method and equipment used.

- What is the relative standard deviation, and how was it generated?

- What is the percent accuracy for the tests?

The second group of data was provided to us in your engineer's H_2S removal report (from Savannah Labs). This data also does not support the conclusion that 90 percent removal is obtained for the following reasons:

- The calculation for percent removal of H_2S uses 3.9 mg/l sulfide as the influent value. The figure 1.8 mg/l should be used since the value for what we assume to be total sulfide contains other constituents that are not of importance in this exercise. The value for dissolved

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sulfide is the most appropriate figure to use. Using 1.8 mg/l and 0.4 mg/l in the percent removal formula yields a percent removal of only 78%.

- The report uses one set of samples to demonstrate that 90% removal of hydrogen sulfide is actually occurring. The data for the calculation was all collected on March 11, 1993. We consider one sampling event to be inadequate documentation.

Considering the above, this report does not fulfill the requirements of the Partial Final Judgment. Accordingly, you must still complete this requirement by first submitting a report acceptable to us and secondly by complying with the any recommendations contained in that report.

If you have any questions please contact Cliff McKeown at (904) 488-3704 or me at (904) 444-8300, extension 136.

Sincerely

J. A. Kintz, P.E.
Potable Water Section Supervisor

JAK/cm
cc: Kiran V. Kulkarni, P.E.
James Waddell, P.E.
Mary LaBatt, Black Hawk Engineering Group
Richard Windsor, Esq., DEP, Tallahassee
Bob Crouch, P.E., Public Service Commission
Karen Amaya, Public Service Commission
Troy Rendell, Public Service Commission
Cliff McKeown, Tallahassee Branch Office
Jim Morris, Environmental Health Director, Franklin County
Wayne Gleasman, St. George Island Homeowners Association
Allan Pierce, Franklin County Planning Director
Bill Peebles, Andrew Jackson Bank
Rick Herndon, Florida Rural Water Association
Richard Deadman, DEP, Tallahassee
Rob Wright, Northwest Florida Water Management

Docket No. 940109-WU
Florida Public Service Commission
CM-13

IN THE CIRCUIT COURT
SECOND JUDICIAL CIRCUIT
FRANKLIN COUNTY, FLORIDA

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION,

Plaintiff,

v. Case No: 90-335

GENE D. BROWN, d/b/a SAINT
GEORGE ISLAND UTILITIES
COMPANY, and SAINT GEORGE
ISLAND UTILITIES COMPANY, LTD.,
a Florida Corporation,
Defendants.
_____/

PARTIAL FINAL JUDGMENT

THIS MATTER having come on to be heard upon the Stipulation for Entry of Partial Judgment of the parties hereto, and the Court having reviewed the pleadings, the Stipulation, and being otherwise advised in the premises, it is HEREBY ORDERED, ADJUDGED AND DECREED that:

1. The aforesaid stipulation, a copy of which is attached hereto, is APPROVED and made a part of this Partial Final Judgment, and the parties are ordered to comply therewith.

2. The Plaintiff, STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, shall have and recover of the

Defendants, Gene D. Brown and SAINT GEORGE ISLAND UTILITIES COMPANY, LTD., the sum of $4,425.00 (four thousand four hundred and twenty-five dollars), together with interest at the statutory rate until paid, as reimbursement for the Department's costs and expenses incurred to date in this case, for which let execution issue forthwith.

3. The Court retains jurisdiction to enforce the terms of this Partial Final Judgment upon petition of any of the parties, and to rule on any issues not resolved herein.

DONE AND ORDERED this 30th day of April, 1992 in Chambers, Apalachicola, Franklin County, Florida.

Circuit Judge

Copies furnished to:

Richard L. Windsor, Esq.

Thomas Pelham, Esq.

Gene D. Brown, Esq.

IN THE CIRCUIT COURT
SECOND JUDICIAL CIRCUIT
FRANKLIN COUNTY, FLORIDA.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Plaintiff,

vs. Case No. 90-335

GENE D. BROWN, d/b/a SAINT
GEORGE ISLAND UTILITIES
COMPANY, and SAINT GEORGE
ISLAND UTILITIES COMPANY, LTD.,
a Florida Corporation

Defendants.
_____/

STIPULATION FOR ENTRY OF PARTIAL FINAL JUDGMENT

IT IS HEREBY stipulated and agreed by Plaintiff and Defendants that for purposes of trial the issues relating to imposition of civil penalties may be bifurcated and determined at a subsequent hearing, and that a partial judgment may be entered granting other relief sought in the complaint of the State of Florida Department of Environmental Regulation (DER), and particularly the following factual findings and injunctive relief:

FACTS

1. During the pendency of the Consent Order, OGC No. 88-1100 (hereinafter "C. O."), some progress has been made

by Defendants toward resolving the issue of an adequate cross connection control program; completion of the work already begun and certain improvements to the program will benefit the public and users of the potable water system.

2. Defendants have done some work on the water system's aerator during the pendency of the C. O.; the required goal of removal of 90% of hydrogen sulfide from the water has not yet been met.

3. Proper operation of the water system requires that a third well (not yet in existence) be completed and put into service. A second permit application for the new well was submitted to the Department in early 1992. Until the new well is completed and properly placed into service, no new connections to the system beyond the number previously agreed upon by the Defendants and the Department would be appropriate.

4. Improvements to the design and operation of the chlorination system must be made in order that the Department is assured of 100% reliability of the chlorination system and that chlorination levels are maintained at safe and adequate levels throughout the community public water system at all times.

INJUNCTIVE RELIEF

5. The Defendants shall review and improve the cross connection control program . Items required are:

a. A data sheet shall be completed by Defendants; it shall include in each instance the customer billing name, street address, control device type, serial number, installation date, and initial and subsequent test dates, service meter number, meter book page number and customer telephone number. This data compilation shall be provided to the Department and a copy provided to the court on or before June 1, 1992.

b. All presently untested control devices shall be tested on or before July 1, 1992 and the test results provided to the Department and this court.

c. All devices shall be re-tested 12 months following installation.

d. All data sheets, correspondence, test results, shut off orders and any other materials pertaining to the cross connection control program shall be submitted to the Department within 5 working days of the date such materials are generated, and filed individually. This requirement shall begin on the date of the partial judgment.

e. Each service connection with a device installed and with an initial satisfactory test shall be tested again 12 months after installation. These customers shall be notified 30 days before the end of 12 months by mail by Defendants using a format acceptable to DER. Any customer that does not provide a passing test to the water system and to DER shall be allowed 5 days to repair or replace the device and provide a passing test to the water system and to DER or service shall be discontinued until a passing test is received.

f. The Defendants shall comply fully with the water system's cross connection control program according to the policy statement previously submitted to and accepted by the Department. The court shall retain jurisdiction to make such modifications or further orders as may become necessary in this matter concerning important public health issues.

6. The Defendants shall cause the system's backup chlorinator to be connected to the water system at all times and operable in all regards. The regular and the backup chlorinator shall be interchangeable, and both shall have automatic cylinder switching devices and two chlorine gas cylinders connected to each chlorinator at all times.

Each chlorine cylinder shall be mounted on an accurate weighing scale, weighed daily, and the weight recorded on an Operation and Maintenance Log. Both chlorinators shall additionally be equipped with a loss of chlorine alarm that is both visual and audible. A chlorine leak detector shall be installed in the chlorine room. All equipment shall at all times be kept in good working order. In the event of downtime exceeding 30 days Defendants shall immediately obtain a backup device. Defendants shall adequately secure the chlorination room.

7. The Operation and Maintenance Log for the water system shall be modified to include each information heading area contained in paragraph 11 of the C.O. A Maintenance Log shall be kept up to date on each major water plant component including but not limited to each well, each water storage area, each chlorinator, each high service pump and the auxiliary generator. Copies of these logs shall be submitted to the Department on the 5th of each month following the month for which the report is made.

8. Defendants shall assure that the chlorine booster station is locked at all times. This station shall be

inspected daily and a separate Operation and Maintenance Log maintained on it. A loss of electrical power warning light shall be placed at the booster station and at the main water plant along with a clearly legible sign stating "POWER OFF-LOSS OF DISINFECTION CAPABILITY-PLEASE CONTACT OPERATOR AT 927-2648". These signs must have letters at least 3" high in colors contrasting the sign's background color. This station shall be continuously operated so that an adequate chlorine residual is maintained at the west end of the water distribution system.

9. Defendants shall cause the auxiliary power unit to be repaired so that the automatic startup switch and generator has 100% reliability. The automatic startup switches' electrical components shall be installed in a NEMA weather proof housing. Bars, screens or louvers shall be placed on the generator shed so that unauthorized entry will not occur. The generator will be operated under load for a least one hour each week. The operating sequence shall be started when main power to the water plant is shut off. The generator shall then start and operate the largest high service pump and one chlorinator. Any downtime exceeding 30 days shall result in purchase of and stocking of spares.

10. By July 1, 1992, Defendants shall retain an engineer registered in Florida to evaluate the existing aerator and raw water quality with respect to Hydrogen Sulfide Content. The existing aerator will be evaluated using accepted engineering practices. By August 1, 1992 a recommendation regarding repair, replacement, modification or additional treatment shall be developed and submitted to DER in the form of a complete construction permit application. Within 60 days following issuance of the permit Defendants shall complete construction and return the completed aerator to service. Beginning June 1, 1992, Defendants shall cause to be tested (at a Department of Health and Rehabilitative Services Certified Drinking Water Laboratory) samples for Hydrogen Sulfide collected from the following locations:

1) Each well - from the raw water tap after the well has been operated for 15 minutes;
2) The water treatment plant prior to aeration (may not be sampled in the aerator);
3) The water plant after aeration, but before chlorination;
4) The water plant after chlorination;
5) Entrance to the plantation;
6) West end of the distribution system;

7) Last tap before the chlorine booster station

8) First tap after the chlorine booster station

9) Mid point between the water plant and State Park entrance.

The sampling and testing for Hydrogen Sulfide shall be done every 2 weeks year round. Chain of Custody Sheets shall be completed on each sample point. Sample points shall not be changed without written permission from the Department. Defendant may apply for a modification to the sampling protocol, from biweekly to monthly upon a showing of a good cause.

11. By September 1, 1992, Defendants shall complete Well Number three. GAB+Eng.

12. Defendants shall retain an engineer registered in Florida to evaluate the water system. The engineer shall develop a Certified Engineering Report along with supporting documentation in the form of system maps, calculations, records of conversations with consumers and operator, computer generated reports and other normal documentation describing the condition of this water system and its ability to properly and adequately serve additional customers. Information submitted shall include a system wide hydraulic analysis using methodology commonly accepted GAB+Eng.

by the engineering community. It shall include flow conditions when the St. George Island State Park at the eastern end of the water system is at maximum occupancy and is refilling the park's water storage tanks. Also flows shall be estimated for future growth at the Bob Sikes Cut using the maximum allowable population density based on the most dense zoning criteria available for Franklin County. This hydraulic analysis of the water system shall consider the extreme flow conditions above resulting from a peak flow period. This report shall be finalized after Well Number 3 has been operational for at least 6 months. Data collection may begin before this period.

13. A Monthly Report shall hereafter be generated by Defendants and submitted to DER showing the total number of connections, number of connections with meters installed and number of connections that used water during the previous billing cycle. This report shall be submitted so as to be received by DER on the 5th of every month beginning in May 1, 1992. Defendants shall deliver meter books to DER for examination upon request, within 3 calendar days of a request for same.

14. Defendants shall remit $4,425 to the DER by cashier's check immediately in payment of costs and

expenses incurred in investigation and resolution of this matter.

15. Defendants shall establish an escrow account for construction of Well Number 3 and improvements to the water system. Among the authorized signatures essential to the withdrawal of funds from said account shall be the Department's Northwest District Director of District Management or his designee. The amount of the account shall be no less than $75,000. This account shall be opened in a bank within the city limits of Tallahassee, Florida and shall be titled St. George Island Utilities Co. Ltd. Water System Improvement Account. This account will be in place by May 1, 1992.

16. Defendants shall retain an engineer registered in Florida to develop a current and up to date water distribution system map. This map shall include main sizes, materials, locations, locations of services, fire hydrants, flush stands and other appurtenances. Valves and hydrants shall be numbered. Water main sections shall have a separate identification system, so as to clearly identify each section of main from a valve or hydrant. This map will be complete and submitted to DER by September 1, 1992.

By October 1, 1992, each system valve shall be marked in the field by a clearly identifiable manner. Copies of the system plans shall be delivered to; DER (2 copies), PSC, local building officials, local utilities including but not limited to cable TV, electrical and telephone companies, fire department and Plantation Homeowners Association.

17. Defendants shall develop and implement a written sampling plan establishing a procedure for all samples required by DER. The plan shall identify each water quality parameter separately, its sampling frequency, person to collect the sample, laboratory to test the sample and date the next sample is due. This sampling plan is to be submitted to DER before May 15, 1992.

18. Defendants shall construct a chain link fence with a locked gate around the water treatment plant. The fence shall be 6 feet high with an angled barbed wire top. Construction shall be complete by July 1, 1992.

19. Defendants shall increase elevated storage capacity as follows:

a. Within 60 days of the need being identified by the Department preliminary design will be finished and submitted to DER;

b. Within the 90 days following such notification funding will be available and obtained;

c. Within the following 30 days design will be finalized and a permit application submitted to the Department. Should the application be incomplete, the applicant will furnish the requested information within 30 days of the request. If the additional information is deemed by the Department to be insufficient, inadequate or not submitted, then no more connections shall be made to the water system. This includes connections that do not have a service meter installed at the time. Defendant will then within 30 days submit a statement to the Department regarding completing the application and providing a date certain when the requested information will be submitted;

d. Within 90 days following issuance of a construction permit, construction will be completed. The second elevated water storage tank will be placed in operation only after the Department receives the engineer of record certification of completion of construction and the Department has issued approval to Defendants to place the second elevated water storage tank into service.

e. Failure to comply with the above provisions will result in the number of service connections remaining at a total of 911 equivalent residential connections.

20. The court shall retain jurisdiction to grant such further relief, or to modify this partial judgment, as may be necessitated by environmental or public health exigencies.

21. This stipulation shall not be deemed an admission by any party regarding the determination of penalties, the amount and necessity of which shall be determined at a subsequent hearing.

FOR DEFENDANTS:

subject to stipulation on Ct. record regarding personal liability of Gene D. Brown

GENE D. BROWN
3836 Killearn Court
Tallahassee, FL 32308

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, Plaintiff

By:

RICHARD L. WINDSOR
Assistant General Counsel
2600 Blair Stone Road
Tallahassee, FL
32399-2400

Docket No. 940109-WU
Florida Public Service Commission
CM-14

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

FEB 2 5 1994

Mr. Gene Brown, President
St. George Island Utilities Co., Ltd.
3836 Killearn Court
Tallahassee, Florida 32308

RE: Franklin County (PW)
St. George Island Utilities Well #3
PWS ID NO. 1190789

Dear Mr. Brown:

This is in response to James Waddell, P.E. of Baskerville-Donovan, Inc. February 11 letter requesting approval to place the St. George Island Utilities Company, Ltd. Well #3 in service.

We have reviewed the August 10, 1993 Request For Letter Of Release To Place Water Supply System Into Service submitted on your behalf by Mr. Ted C. Biddy, P.E. of Baskerville-Donovan, Inc. We have also reviewed follow-up submittals made on August 19 and September 3, 1993 and February 11, 1994. This acknowledges that Well #3, auxiliary generating unit and other necessary valves, fittings and appurtenances have been completed in accordance with the plans and related materials permitted by the Department in Permit No. WC39-211976 issued June 8, 1992.

Based on this certification, subsequent additional information, satisfactory bacteriological and chemical results, we are approving these facilities for service. Your continued cooperation in our water supply program is appreciated.

With the addition of Well #3, the design of the system is rated at 500 gallons per minute (720,000 gallons per day). However, the Northwest Florida Water Management District Consumptive Use Permit (Application No. SO4322, Standard Water Use Permit No. S830074) states --- "This permit authorizes the permittee to make a combined average annual withdrawal of 203,184 gallons of water per day with a maximum total combined withdrawal rate not to exceed 700,000 gallons during a single day". As stated in my February 17 memo to Allan W. Johnson, P.E. (enclosed in Mr. Johnson's February 17 letter to you), it is the Departments position that 1346 ERCs (residential and commercial customer connections) are the MAXIMUM ALLOWABLE number of connections/ERCs, before additional (above and beyond Well #3) raw water supply capability to the Island is constructed and is in service.

Received
FEB 28 1994
DEP, Tallahassee
Branch Office

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If you have any questions, please contact Cliff McKeown at 488-3704 or me at (904) 444-8300.

Sincerely

J. A. Kintz, P.E.
Potable Water Section Supervisor

JAK/cm/cgc
cc: Kiran V. Kulkarni, P.E.
James Waddell, P.E.
Mary LaBatt, Black Hawk Engineering Group
John Ingle, Esq., DEP Tallahassee
Bob Crouch, P.E., Public Service Commission
Karen Amaya, Public Service Commission
Troy Rendell, Public Service Commission
Cliff McKeown, Tallahassee Branch Office
Jim Morris, Environmental Health Director, Franklin County
Wayne Gleasman, St. George Island Homeowners Association
Allan Pierce, Franklin County Planning Director
Bill Peebles, Andrew Jackson Bank
Rick Herndon, Florida Rural Water Association
Richard Deadman, DEP Tallahassee
Rob Wright, Northwest Florida Water Management
Mike Donovan, Apalachee Regional Planning Council
Mike McDaniel, Department of Community Affairs
Helen Townsend Spohrer, Resort Realty of St. George Island, Inc.
John Tobin
George Mahr, Mahr Development Corporation of Florida
Ken Gordon, Phoenix Harbor Enterprises, Inc.
Roy L. Talley, Sr., Covington Properties, Ltd.
Morris Palmer, Coastal Development Consultants, Inc.
Ben Johnson, Coastal Development Consultants, Inc.
Clayton E. Anderson, P.E.
David W. Hutchenson, P.E., P.L.S.
Gary Volenec, P.E.
Lamar Rowe, Rowe Drilling Company

Received
FEB 28 1994
DER, Tallahassee
Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-15

GPL

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

September 9, 1993

File well #3

Mr. Gene Brown, President
St. George Island Utilities Co., Ltd.
3836 Killearn Court
Tallahassee, Florida 32308

Dear Mr. Brown:

We have reviewed the Request For Letter Of Release To Place Water Supply System Into Service submitted on your behalf by Mr. Ted C. Biddy, P.E. of Baskerville-Donovan, Inc. We have also reviewed follow-up submittals made on August 19, and September 3, 1993. This letter is to advise you that additional information is needed to support your request to place well #3 into service. The additional information needed is:

1. The following contaminants required to be monitored by Florida Administrative Code (FAC) Rule 17-550 were not submitted. Antimony, Asbestos, Beryllium, Cyanide, Nickel, Nitrite, Total Nitrite and Nitrate, Thallium, Butachlor, Carbaryl, 3-Hydroxy Carbofuran, Methomyl, Metribuzin Propa Chlor, Atrazine, Carbofuran, Chlordane, Dibromochloropropane, Heptachlor, Pentachlorophenol, Dalapon, Di(2-ethylhexyl) adipate, Dinoseb, Diquat, Endothall, Glyphosate, Hexachlorobenzene, Oxamyl, Benzo(a)pyrene, Picloram Simazine and Aluminum.

2. Color was measured at 20 color units, the maximum contaminant level established by FAC Rule 17-550.320(1) is 15 color units. At least 3 samples collected at one week intervals should be submitted as confirmation samples.

3. During the August 24, inspection of well #3 there was some discussion of potential operating sequences. Please provide a description of the operating sequence to be used. For example will well #3 always be used alone as a production well with wells 1 and 2 acting as standby?

The above information must be submitted and approved before well #3 may be placed into use.

Received
SEP 15 1993
Dist. Tallahassee
Branch Office

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If you have any questions, please contact Cliff McKeown at 488-3704 or me at (904) 436-8300.

Sincerely

J. A. Kintz, P.E.
Potable Water Section Supervisor

JAK/cm/cgc
cc: Kiran V. Kulkarni, P.E.
James Waddell, P.E.
Mary LaBatt, Black Hawk Engineering Group
Richard Windsor, Esq., DER Tallahassee
Bob Crouch, P.E., Public Water Service Commission
Cliff McKeown, Tallahassee Branch Office
Jim Morris, Environmental Health Director, Franklin County
Thomas Royal, St. George Island Homeowners Association
Allan Pierce, Franklin County Planning Director
Bill Peebles, Andrew Jackson Bank
Rick Herndon, Florida Rural Water Association

Received
SEP 15 1993
DER, Tallahassee
Branch Office

Docket No. 940109-WU
Florida Public Service Commission
CM-16

Northwest Florida
Water Management District

Route 1, Box 3100, Havana, Florida 32333
(On U.S. Highway 90, 10 miles west of Tallahassee)

(904) 539-5999

Walter D. Dover
Executive Director

July 10, 1990

RECEIVED
3834
JUL 11 1990
APALACHEE REGIONAL
PLANNING COUNCIL

Mr. James T. Snyder
Development of Regional Impact Section
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399

Dear Mr. Snyder:

RE: St. George Island Plantation Development of Regional Impact Proposed Changes

The following comments are provided in regard to the proposed changes:

The ground water resources beneath St. George Island consist of the Surficial Aquifer, the Intermediate System and the Floridan Aquifer. The only freshwater under the island occurs in a thin lense within the Surficial Aquifer. Separating the Surficial Aquifer from the underlying Floridan Aquifer is the Intermediate System which is, essentially, a confining unit. Any water-bearing zones within the Intermediate are salty. The Floridan Aquifer consists chiefly of limestone and is a prolific aquifer throughout much of Florida. However, under the island a test well indicates that at 250 feet below the land surface the aquifer contains chloride concentrations in excess of 800 milligrams per liter and is not readily available as a source of water without treatment. Thus, St. George Island has a very limited freshwater availability.

The only source of recharge to the freshwater in the Surficial Aquifer is by rainfall on the island. The highest water table levels occur under the main dune ridge which correlates to the highest elevations on the island. The fresnwater lense is at its thickest under this main dune ridge and rapidly thins towards the edges of the island. For example, the freshwater thickness along the dune ridge is about 30 feet and the thickness decreases to about 10 feet near the edges.

Development of the freshwater from the Surficial Aquifer on St. George Island as proposed by the changes to the 1977 Development Order may result in saltwater encroachment. Additionally, pumpage withdrawals

CLIFFORD BARNHART, Chairman - Pensacola
L.E. McMULLIAN, JR., Vice Chairman - Bascom
ANDRE' DYAR, Sec./Treas. - Panama City
KENNETH HOFFMAN, Tallahassee
RALPH A. PETERSON, Pensacola
PHYLLIS J. REPPEN, Panama City
CHARLES W. ROBERTS, Hosford
LLOYD E. WEEKS, Laurel Hill
JOHN M. CREEL, JR., Jay

could cause a decline in the water-table. Water level declines will affect vegetation on the island and may ultimately impact dune stabilization and fauna.

To better understand the hydrologic changes brought about by freshwater development from the Surficial Aquifer, a model developed by IFAS at the University of Florida, was utilized to determine irrigation requirements for a turf type landscape considering soil types and rainfall conditions unique to the island. According to the model, a maximum irrigation of 6.4 inches per month would be required 8 out of 10 years. In other words, one acre requires about 174,000 gallons of water during a peak irrigation month.

James Snyder (DCA) estimates that there are about 800 lots in the development which could be irrigated. Therefore, 800 landscape irrigation wells could potentially tap the Surficial Aquifer freshwater lense and this does not include any landscape irrigation related to commercial properties. It is unclear how many acres the 800 lots represent, however, the development encompasses about 1200 acres.

The following section briefly summarizes the assessment conducted by the District. Pumping scenarios for various amounts were evaluated and the water level declines associated with the pumping rates were calculated. Based on data collected during an assessment in the early 1970's, the aquifer properties were characterized as follows: (1) transmissivity = 500ft^2/day and (2) storativity = 0.147 (dimensionless).

It was assumed that all wells were located along the main dune ridge area (the thickness freshwater segment). In reality, this would not be feasible, however, for the sake of assessing the impact the locations at the ridge represent the ideal conditions. Well locations toward either edge of the island would result in a reduction of availability because of the thinner freshwater thickness. It is further assumed, again for ideal conditions to prevail, that prior to peak pumpage, the Surficial Aquifer was full to a maximum level. The useable length of the main dune ridge was estimated to be 20,000 feet. The pumpage period equals 30 days and it is further assumed that no significant rainfall occurred during the period.

If 180 wells (one well per acre/180 irrigated acres) were spaced along this ridge and pumped 30 days, the Surficial Aquifer water level would decline about 13 feet. If 450 wells (one well per acre/450 irrigated acres) were installed along the ridge and pumped 30 days, the water level would decline more than 30 feet. With the 30 feet decline, significant saltwater encroachment would occur and thereby, deplete the freshwater lense along the 20,000 foot length of the island. It should be noted that all of these simulations were based on an initial condition whereby the aquifer was full. Drought periods will result in

further declines and will accelerate encroachment. As additional pumping periods increase, water level declines will be greater. Based on these simulations, it is obvious that the resource has a finite availability. Relatively short pumping periods and pump discharges of less than 5 gallons per minute, under ideal conditions, can cause a severe impact on the freshwater resource.

As a comparison to the above simulations, an independent assessment produced in 1972 by H. J. Woodard for McCulloch Properties, Inc. is reviewed. According to Woodard's evaluation approximately 10,000 gallons per day could be removed per 1,000 feet of useable island length if the wells were spaced along the main dune ridge and the aquifer was at a full condition. This availability was qualified since it was questionable as to the number of days this amount would be continuously available without significant rainfall.

If during a maximum irrigation period, 174,000 gallons per month is required for one acre, the 10,000 gallons per day equals about 6 million gallons per month for the 20,000 foot length of island. Therefore, about 35 acres could be irrigated.

Considering the input data for the 10,000 gal/day availability too conservative, Woodard used a hypothetical analysis, and determined that a production of 50,000 gal/day for a 50 day period may be feasible. Thus, based on maximum irrigation requirements, approximately 175 acres could be irrigated. However, since 46 conservative days is the minimum length of time without significant rainfall and that 100 days were not uncommon, Woodard again qualified the 50,000 gal/day availability. The qualification stated that a 50,000 gal/day withdrawal from the Surficial Aquifer would be marginal if there was about 30 rainless days. It should be noted that the aquifer was considered full prior to the 30 rainless days. Woodard further stated that a 20,000 gal/day withdrawal could probably be maintained for 46 days. "However, it is extremely doubtful that any withdrawal could be maintained three out of the past five years." In other words, the aquifer is highly rainfall dependent, the longer the dry period the lower the availability is from the aquifer. Woodard concluded that the Surficial Aquifer was not a practical source for ground water.

To emphasize his concern for withdrawals from the aquifer, he went onto state that if construction water supply wells were utilized, very restrictive conditions should be implemented. These conditions included that all wells should be located immediately adjacent to the main dune ridge and that the wells should be less than 30 feet in depth, minimum well spacing should be 500 feet and any one well should be pumped intermittently at less than 20 gal/min.

From the most recent assessment and the work completed in the

early 1970's, there are strong indications that the freshwater resource can be impacted by relatively small withdrawal rates. The utility serving the island recognizes that non-consumptive uses can stress a distribution system and as the distribution system can be stressed by these uses, so can the island's Surficial Aquifer. Given the fact that 30 days of pumping during a peak irrigation demand by an excessive number of users could render the aquifer useless, it is reasonable to conclude that the Surficial Aquifer on St. George Island will not support withdrawals without causing saltwater encroachment and, ultimately, the loss of freshwater beneath the island. This loss may in turn impact existing vegetation, fauna and the stabilization of the dunes on the island.

Another potential threat to the freshwater on the island is the construction practice of using saltwater to jet building pilings. This practice will cause saltwater contaminations to the freshwater lense. With the large number of planned dwellings, a large volume of saltwater could be induced into the aquifer. This type of contamination could take many years to recover from and has the same impact as saltwater encroachment.

It should also be noted that besides the Surficial Aquifer, the Floridan Aquifer is a limited resource in this area. The Floridan Aquifer is a non-potable aquifer beneath the island. For this reason, the wells which supply water to the island are located on the mainland and drinking water is piped to the island.

The Floridan Aquifer in the East Point vicinity has an estimated availability of about 5 million gallons per day. This limitation is due to the aquifer's poor water yielding characteristics and the close proximity of saltwater offshore within the aquifer.

The saltwater-freshwater interface lies in St. George Sound between Cat Point and St. George Island. Excess withdrawals from the Floridan Aquifer will result in a landward migration of the interface and a potential saltwater encroachment on the mainland. These limitations need to be considered by all water supply systems in the Eastpoint vicinity.

It is the District's recommendation that changes to the 1977 Development Order pertaining to allowing freshwater wells on the island for non-consumptive uses be denied. Due to the limited nature of the fresh ground water on the island, any sustained development of the resource will have a high potential to cause saltwater intrusion.

Irrigation should not be promoted on the island. Instead, a xeriscape type landscaping should be encouraged. This would provide protection to the freshwater within the Surficial Aquifer and relieve

stresses to the utility caused by non-consumptive uses. And "the utility could truly better serve the drinking water needs of the Island residents."

If you have any questions regarding this matter, please call.

Sincerely,

Jeffry R. Wagner

Jeffry R. Wagner, P.G., Chief
Ground Water Bureau

JW:da
CC: Mike Donovan, ARPC
Fern Recio
Pat Blackshear

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ◎ 2600 Blair Stone Road ◎ Tallahassee, Florida 32399-2400
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

July 31, 1990

Mr. Alan Pierce
Franklin County Planning
Franklin County Courthouse
Post Office Box 340
Apalachicola, Florida 32320

Dear Mr. Pierce:

In regard to the proposed amendment to the St. George Island Plantation DRI, we would like to add our comments to those provided by the ARPC & NWFWMD.

First, the public water system serving the majority of the island is having some economic difficulties. Allowing numerous private wells of any type would increase the hardship. The utility must have the income generated from water sales to meet current and future commitments. This utility has entered into a Consent Order with the Department which requires considerable expenditures. Since water sales are the only means of producing the needed revenue, the funds generated by the sale of water to all consumers on the island is an economic necessity.

Second, as a part of the Consent Order the utility has agreed to develop and implement a cross connection control program. These programs are designed to protect the water system and its users from contamination through prohibiting interconnection between the public potable water system and any other sources of non-potable water. Currently, the water system is beginning this program on the island. One of the main areas targeted is service connections that also have wells. We feel that construction of more wells in the area served by the utility would unnecessarily complicate the already complex and time consuming job underway. These wells would undoubtly become interconnected with the public water system through household plumbing and other methods. This would pose a serious risk to public health, because the water most likely obtained in these wells would have considerable amounts of bacteriological contaminants present.

In summary, the utility must have both sanitary and economic protection provided to continue to supply potable water to the area.

If you have any questions please contact Cliff McKeown at (904) 488-3704.

Sincerely,

G. P. Neubauer
Branch Office Manager

GPN/cmd
cc: Jim Snyder

Florida Department of Environmental Regulation

Northwest District Branch Office • 2600 Blair Stone Rd. • Tallahassee, FL 32301-2400 • 904-488-3704

Bob Martinez, Governor | Dale Twachtmann, Secretary | John Shearer, Assistant Secretary

September 19, 1990

Mr. J. Thomas Beck, Chief
Bureau of State Planning
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399

Dear Mr. Beck:

My letter of July 31 to Mr. Alan Pierce (enclosed) pointed out Staff's concern regarding individual wells on St. George Island. In the second paragraph our concern with the Utilities conduct of the cross connection control program was explained. To re-emphsize the problems that individual wells would cause, consider the following:

Cross connections may occur through inter connection of a well's piping through the internal plumbing arrangement within a structure. These shallow wells would quickly become contaminated with septic tank effluent as well as salt water. The Utility would then be subject to contamination brought about by siphonage and back pressure. Cross connections have long been known as a major danger to a public water supply. Most often only cross connections with industrial facilities are considered newsworthy. This is unfortunate in that it tends to down play the potential for contamination from a residential connection.

The frequent water outages on St. George Island further increase the potential for cross connections to contaminate the Island's water supply. Any time the Utility loses water pressure a home owner will turn on his irrigation well and connect it to his home with a garden hose. The irrigation well under positive pressure will discharge directly into the water system. It is reasonably safe to state that the water from any individual well on the Island would be contaminated with bacterial agents. Contamination of this sort occurs in two ways. The first is by the well while pumping exerting an influence of nearby ground water. These individual wells, completed within the surficial aquifer, would have more influence at a greater distance at lower pumping rates than wells finished at greater depths in the Floridan Aquifer. Septic tank effluent would be drawn into these wells at rates that increase with pumpage.

The second method of contamination comes when wells are left untended and unused for long periods. Contaminants enter the wells through poorly sealed well casings and open annular spaces. Recontamination, or rapid uncontrolled bacterial growth rates, may also occur. Then under the same conditions as above the home owner cross connects the well with the public water system.

At this time the Utility has an active cross connection control program however approximately 100 private wells have been identified in an audit conducted by the system. Each site with an individual well must be protected by installation of a reduced pressure type back flow preventor. A reduced pressure device must be tested at least annually. This is a tremendous drain on the Utilities resources. Installation of more private wells would stretch these, already strained, resources to the limit.

One reason for allowing installation of non potable wells on the Island would be to offset the high water demands placed on the Utility during certain times of the year. This reason is no longer valid because construction on a 150,000 gal. elevated storage tank is nearly complete, and the Department has received an application to construct a third well, ground storage reservoir and high service pump on the mainland. When complete, these new appurtenances will provide at least a 500 gpm supply to the Island. The peak demand over the last 3 years was 380 gpm. Therefore the Utility will be able to meet an increase in demand if spread over a long period of time.

As for financial support, it is important to remember that this water system is not a non-profit organization. Therefore funds for improvements can only be obtained by conventional financing and by using profits. This is also the first rate increase ever attempted for this Utility. The Utility is presently expanding its production capabilities, a very expensive undertaking, and should be protected from loss of revenue that would be caused by large scale irrigation. Using the 174,000 gal/day/ac and 35 acres in Jeffery Wagner's July 10, letter approximately 6 million gals. of water per month would be necessary to irrigate the 35 acres. This 6 million gals. per month equates to $10,000 per month lost revenue (gross). This amount can make a difference in the Utility's ability to operate, maintain and expand the water system.

In summary non potable irrigation wells if allowed on the Island will pose a serious health and economic threat to an existing and struggling water system.

If you have any questions please contact Cliff McKeown at (904) 488-3704.

Sincerely,

G. P. Neubauer
Branch Office Manager

GPN/cmd
Enclosure

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for interim and permanent rate increase in Franklin County by ST. GEORGE ISLAND UTILITY COMPANY, LTD.	DOCKET NO. 940109-WU FILED: June 8, 1994

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Prefiled Direct Testimony of Cliff McKeown filed in this proceeding on behalf of the Staff of the Florida Public Service Commission on this date, with attached exhibits, has been furnished to the following by U.S. Mail, this 8th day of June, 1994.

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