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April 18, 2023

Via Electronic Filing

Florida Public Service Commission
Office of Commission Clerk
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 20230033-SU - Application for transfer of wastewater facilities of TKCB, Inc. and Wastewater Certificate No. 562-S to CSWR-Florida Utility Operating Company, LLC, in Brevard County

Dear Commission Clerk:

As a supplement to CSWR-Florida Utility Operating Company's transfer application, attached please find a redacted copy of Exhibit H – "Sun Lakes Estates Wastewater System Facility Report" - the engineering analysis of the TKCB wastewater system. This report is being filed in a redacted form due to the confidential nature of certain portions of the report. A Request for Confidential Classification as to Exhibit H will be separately hand delivered to the Office of Commission Clerk.

Sincerely,

/s/ Thomas A. Crabb

Thomas A. Crabb
Susan F. Clark
Attorneys for Applicant
CSWR-Florida Utility Operating Company, LLC

cc: Thad Terry (taterry1971@yahoo.com)

EXHIBIT H

Sun Lakes Estates Wastewater System Facility Report
(Application Exhibit H)

Docket No. 20230033-SU - Application for transfer of wastewater facilities of TKCB, Inc. and Wastewater Certificate No. 562-S to CSWR-Florida Utility Operating Company, LLC, in Brevard County

consor



Sun Lakes Estates Wastewater System Facility Report

CSWR Central States Water Resources

Central States Water Resources

March 2023

Sun Lakes Estates Wastewater System Facility Report

Central States Water Resources

March 2023



Consor

888 SW 5th Avenue
Suite 1170
Portland, OR 97204

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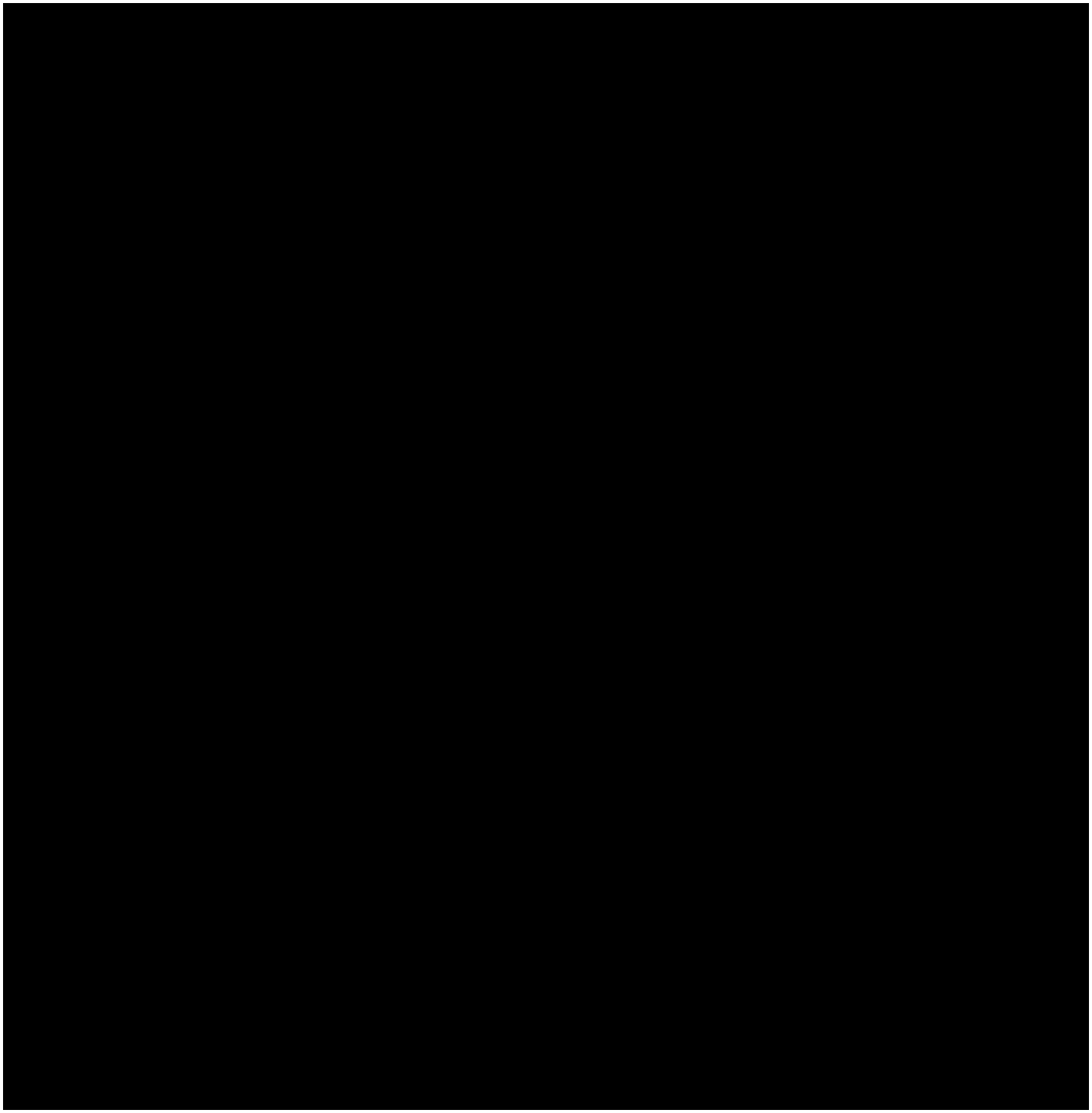
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Executive Summary



Section 1

Introduction

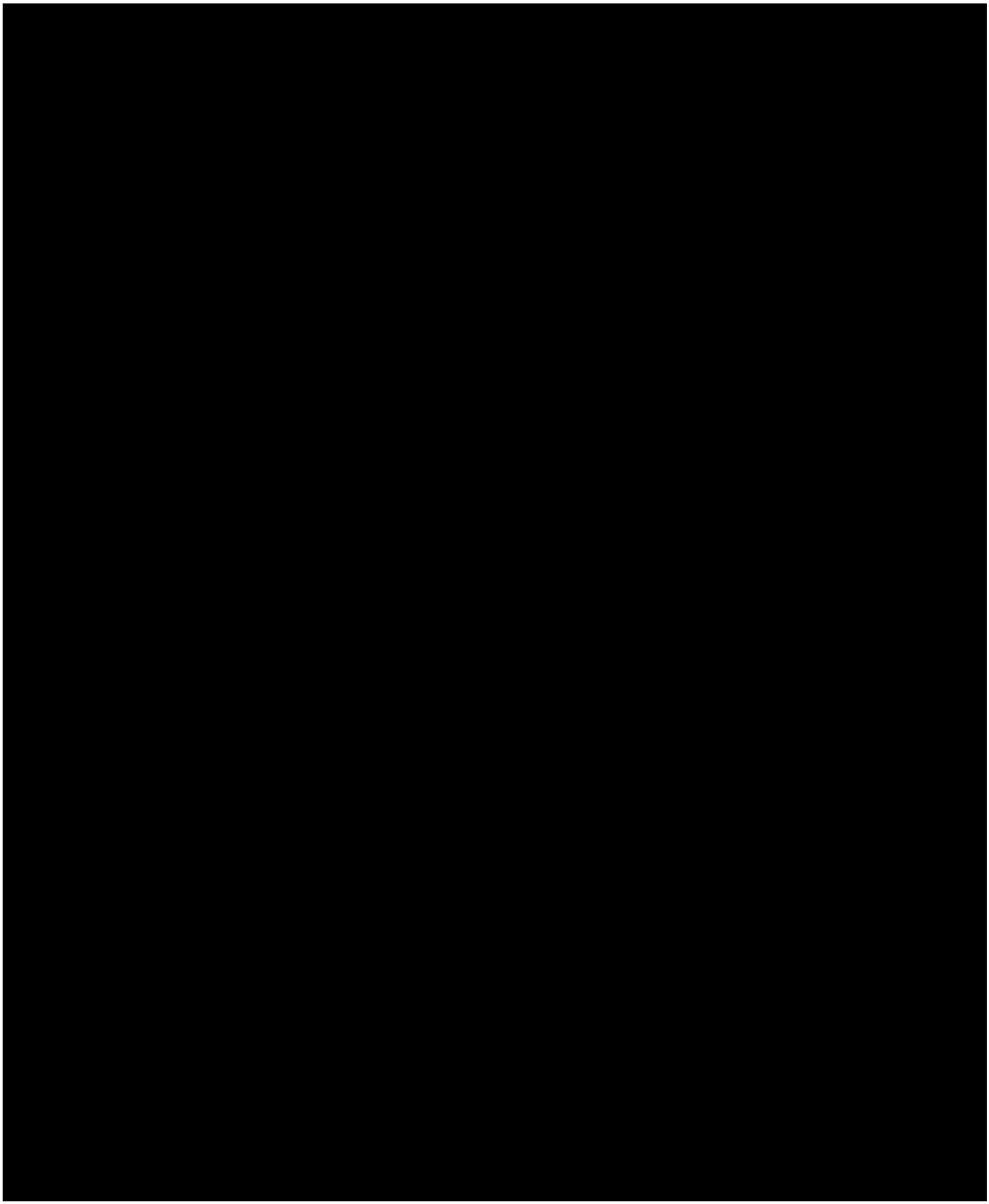


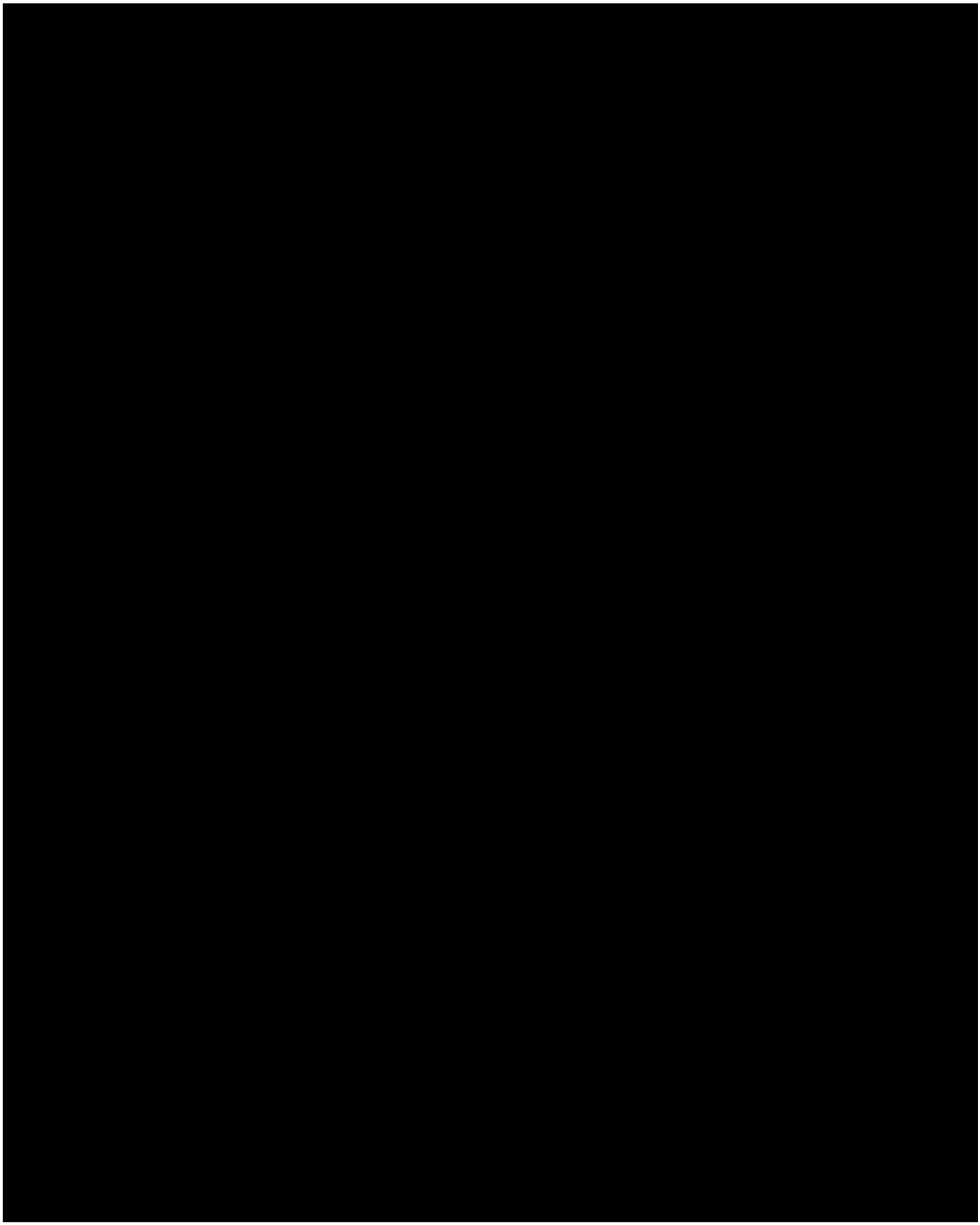
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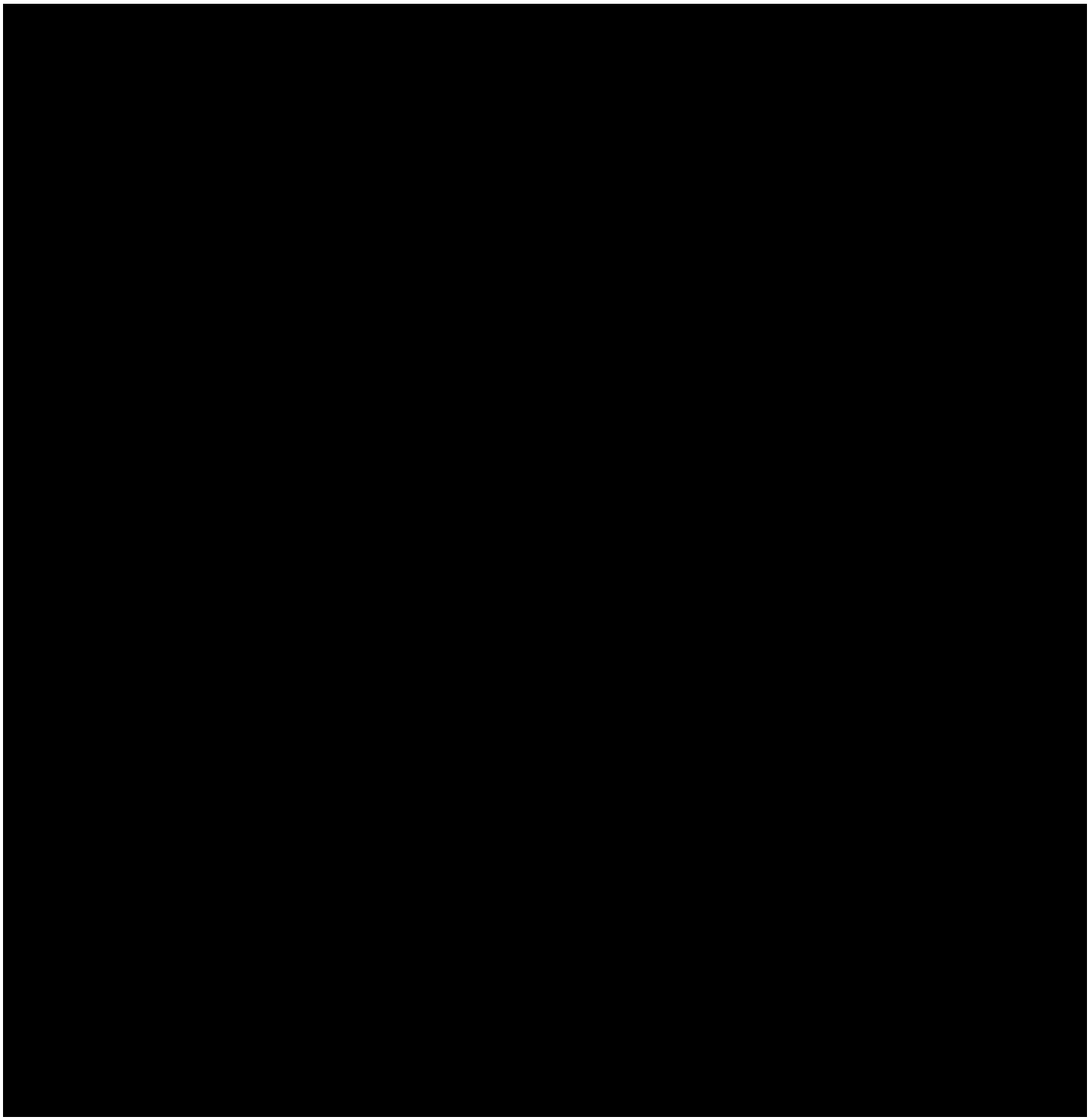
Section 2

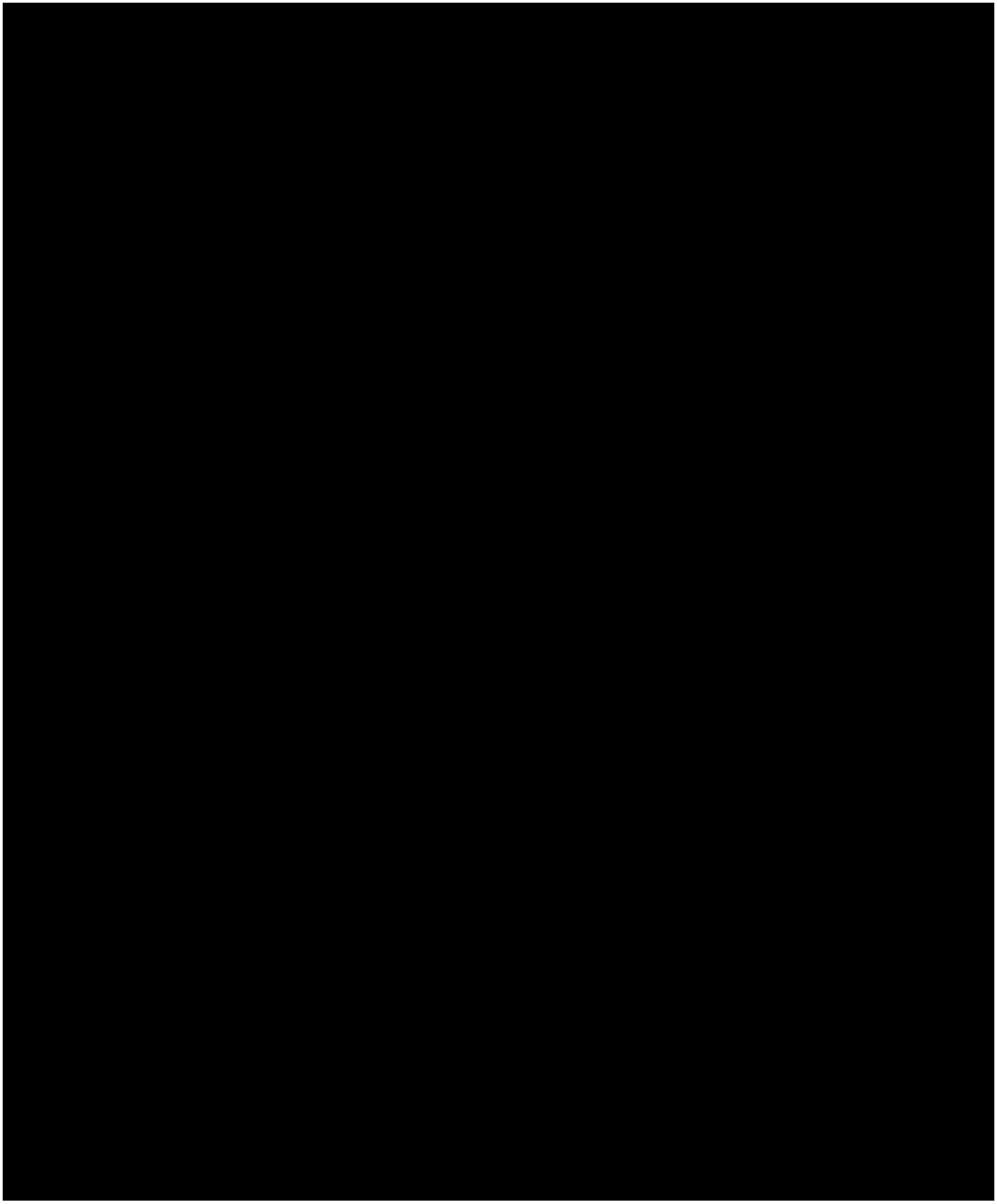
Wastewater Treatment Facility

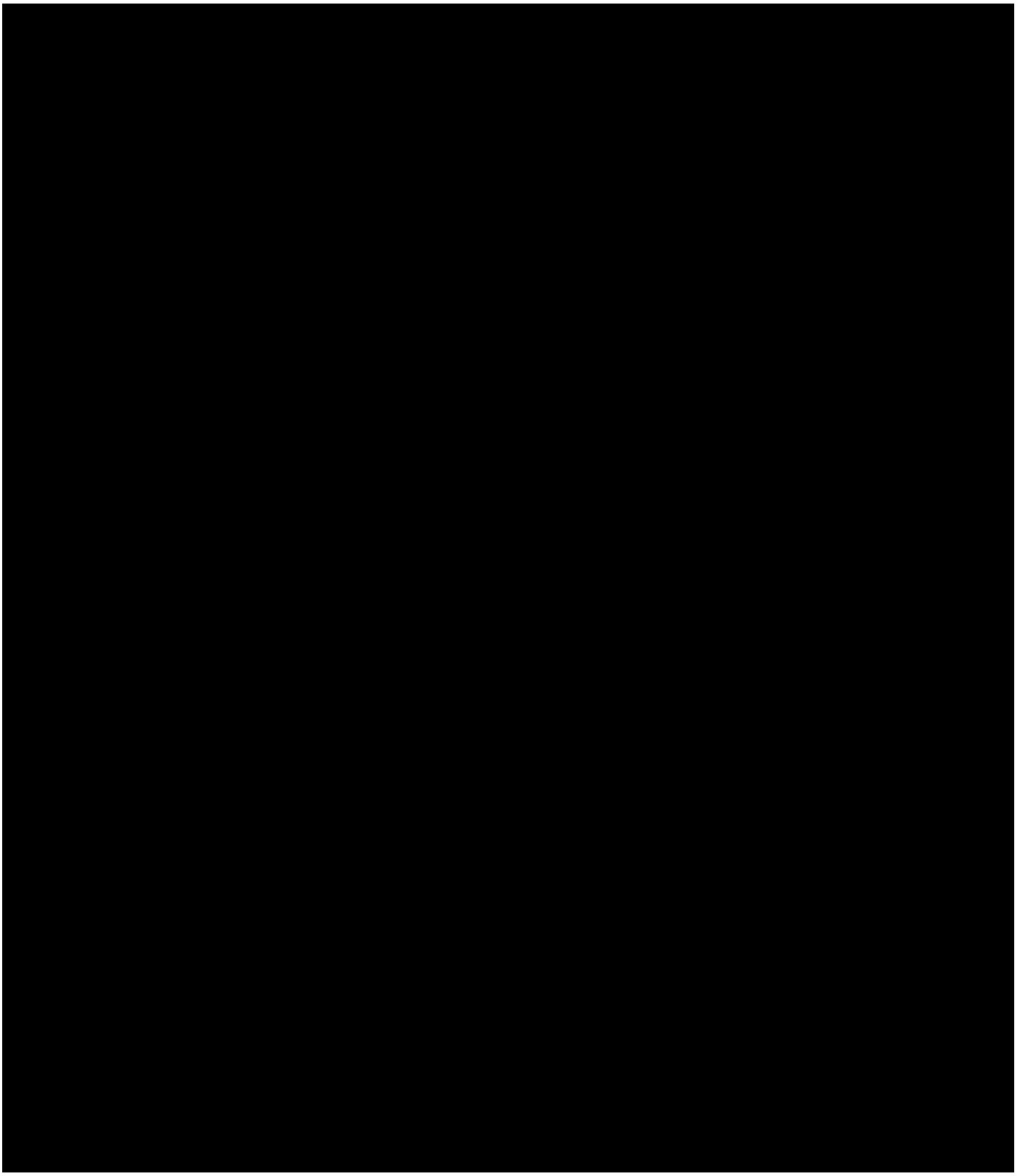
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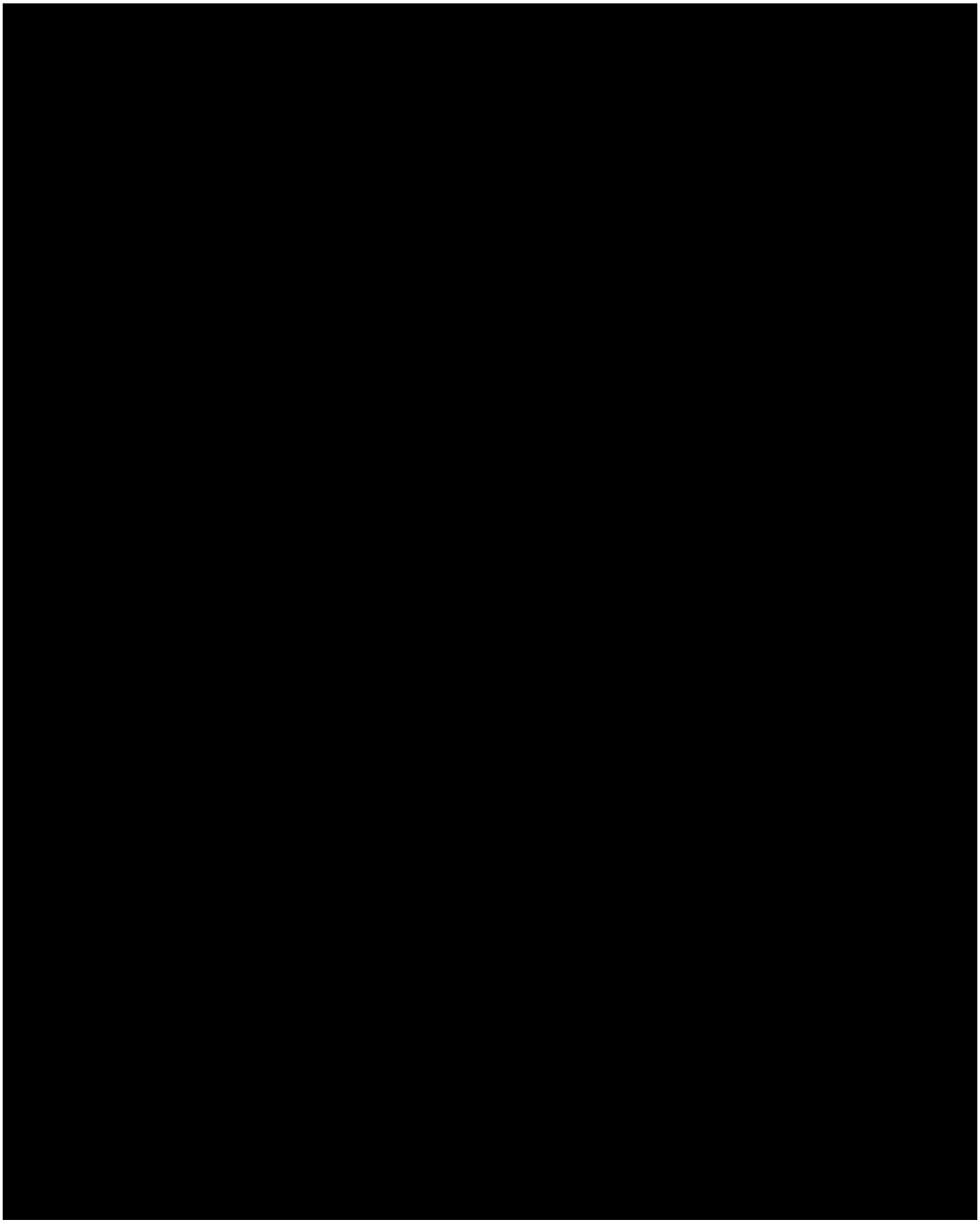




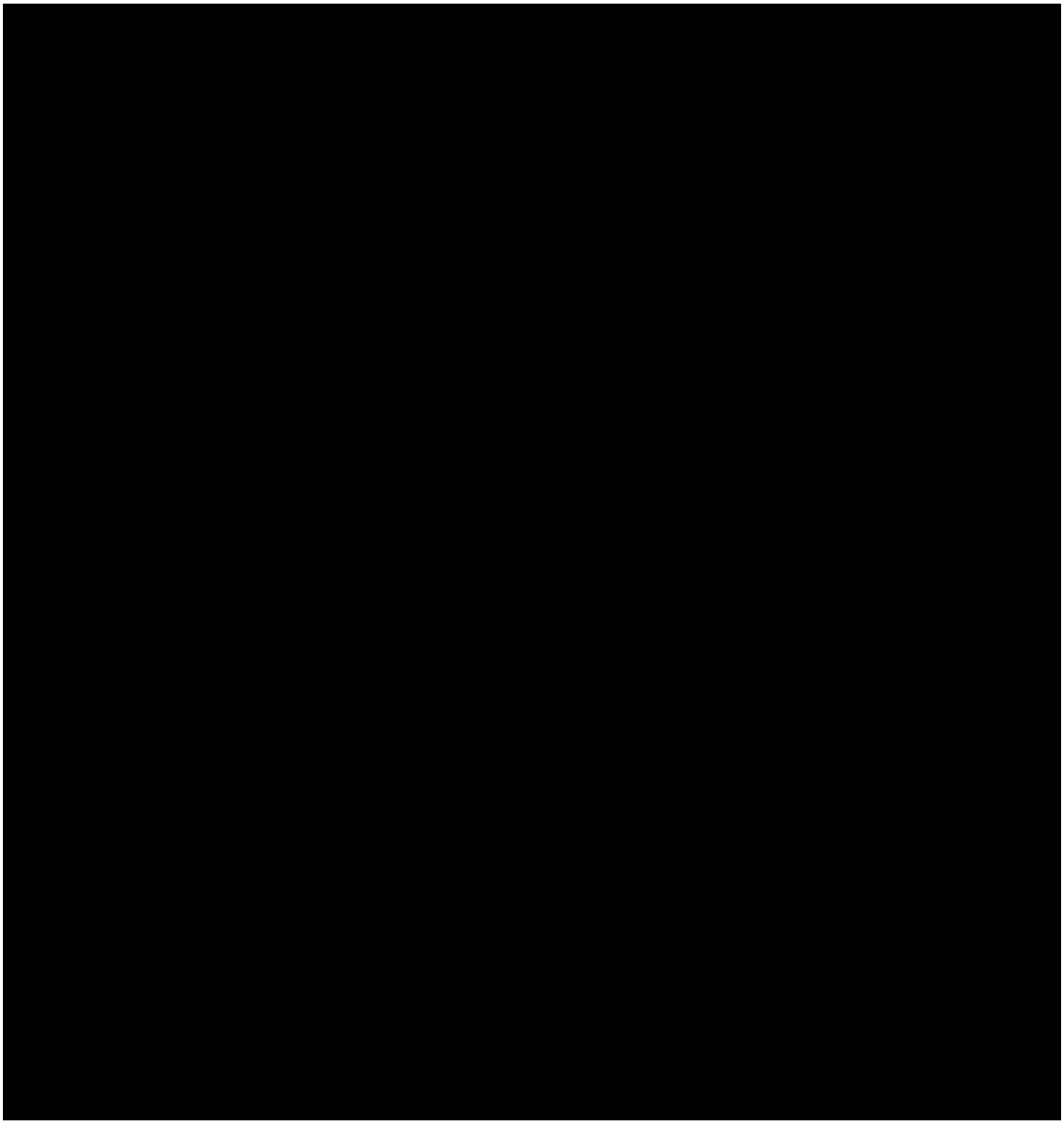


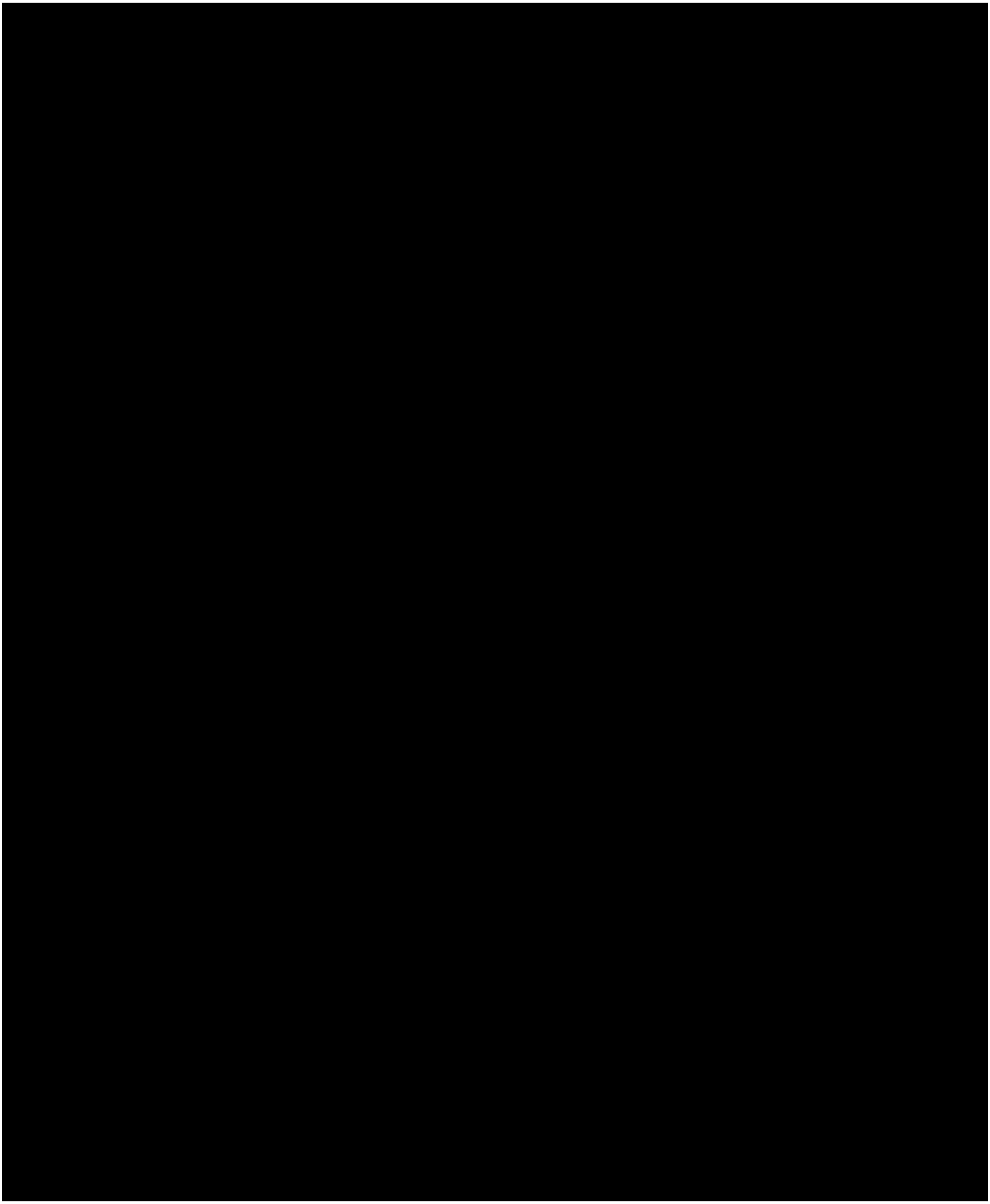


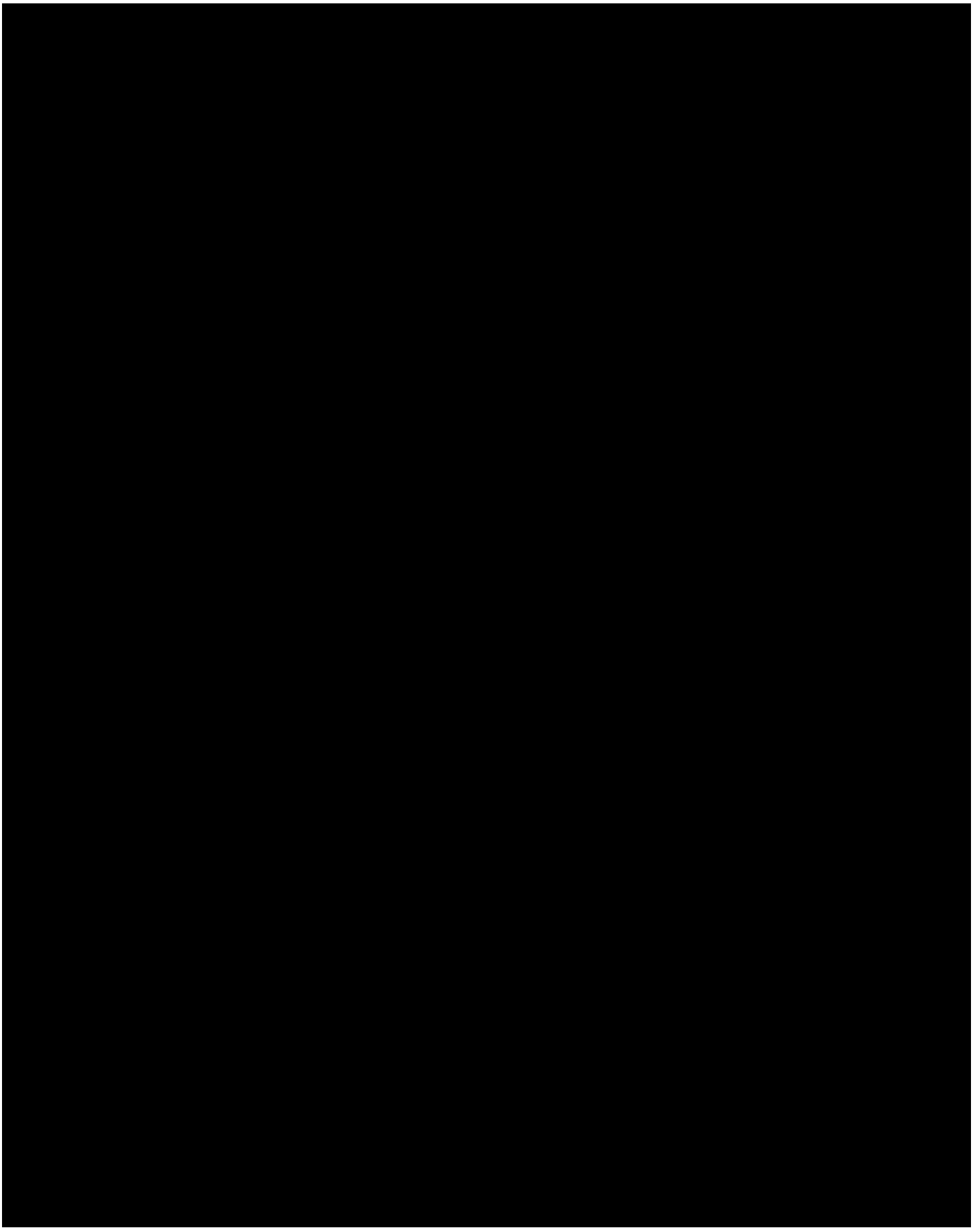














2.2 **Permit Info**

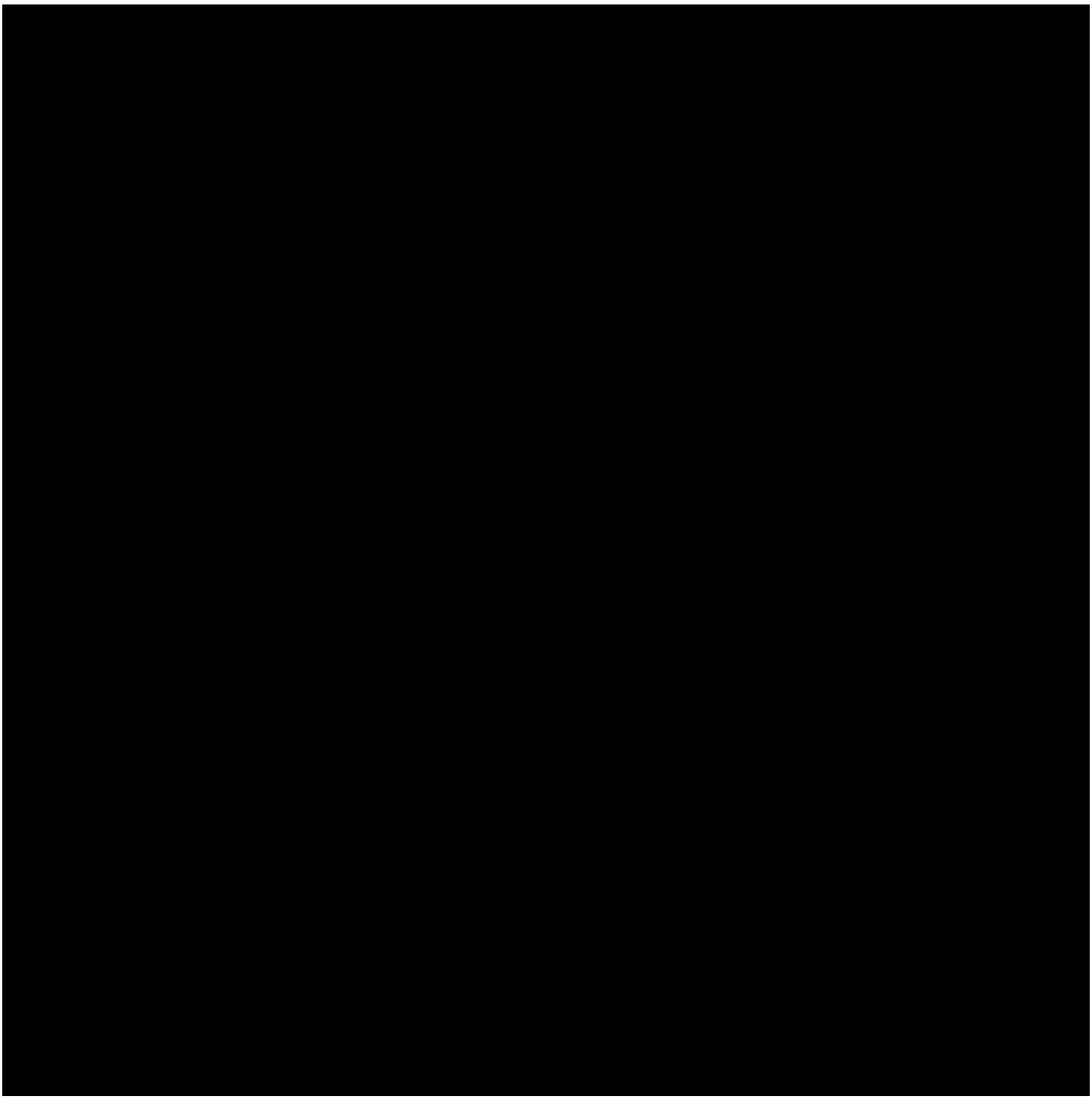
2.2.1 Permit Status

The Sun Lakes WWTF's current Domestic Wastewater Facility Permit is currently active. The most recent permit is effective until October 27th, 2030.

Table 2-3 Permitted Limits and Monitoring Requirements

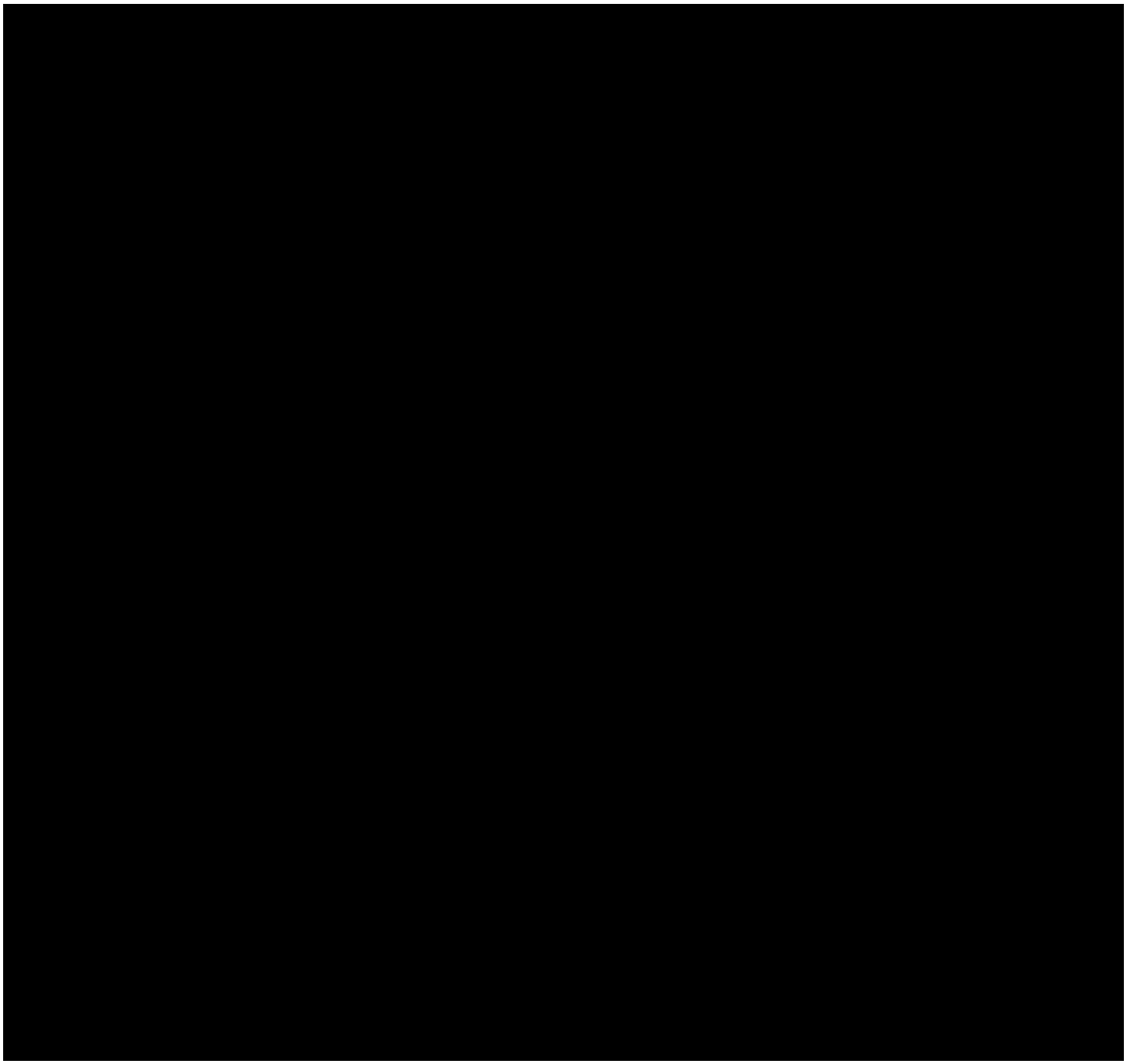
			Reclaimed Water Limitations		Monitoring Requirements			
Parameter	Units	Max./Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow (Flow to R-001)	MGD	Max Max	0.099 Report	Annual Average Monthly Average	5 Days/Week	Recording Flow Meter with Totalizer	FLW-1	
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Monthly	Grab	EFA-1	
Solids, Total Suspended	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Monthly	Grab	EFA-1	
Coliform, Fecal	#/100 mL	Max Max Max	200 800 Report	Annual Average Single Sample Monthly Geometric Mean	Monthly	Grab	EFA-1	
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	5 Days/Week	Grab	EFA-1	
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	5 Days/Week	Grab	EFA-1	
Nitrogen, Nitrate, Total (as N)	mg/L	Max	12.0	Single Sample	Monthly	Grab	EFA-1	
Nitrogen, Total	mg/L	Max Max	Report Report	Annual Average Monthly Average	Monthly	Grab	EFA-1	
Phosphorus, Total (as P)	mg/L	Max Max	Report Report	Annual Average Monthly Average	Monthly	Grab	EFA-1	





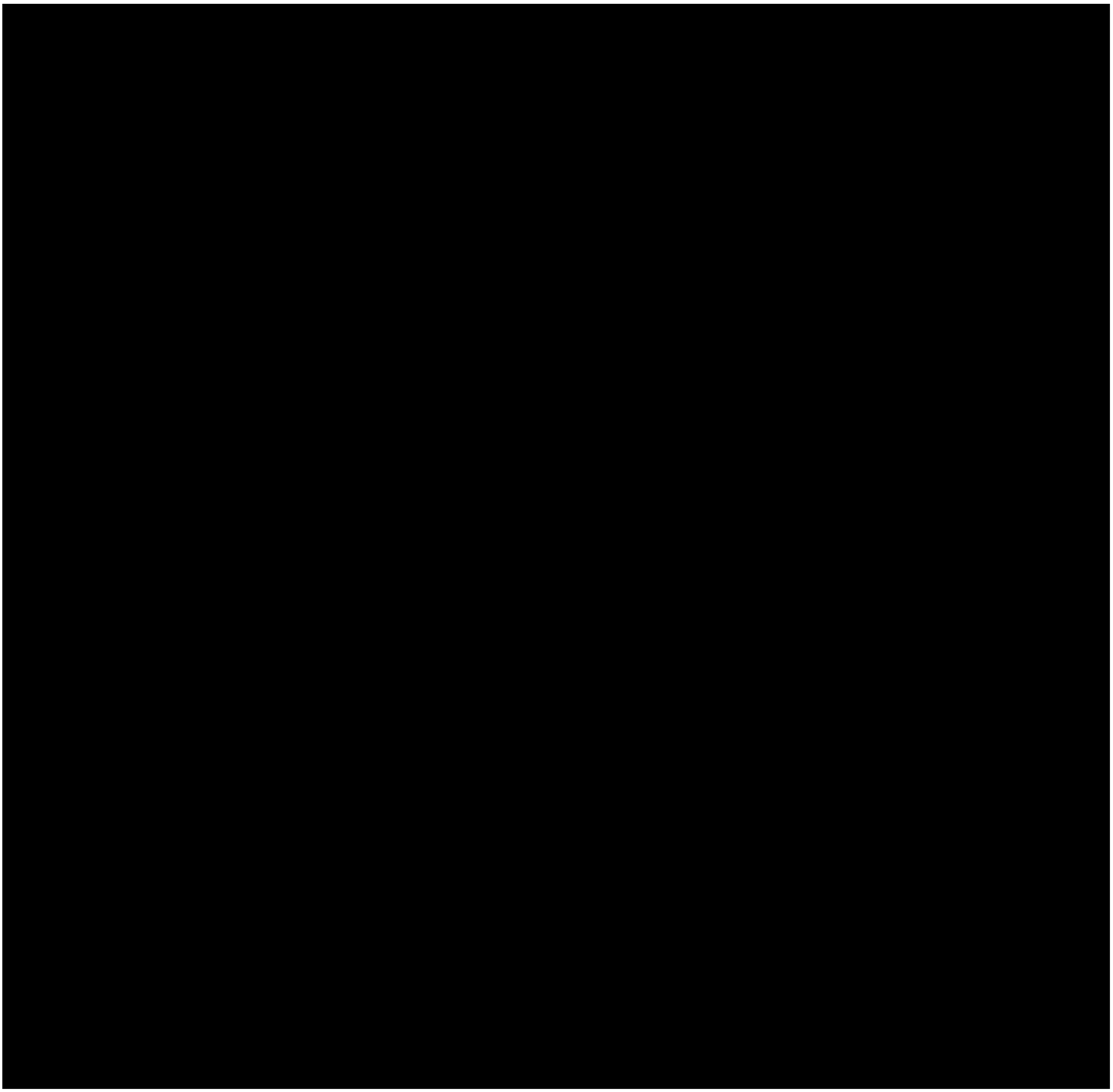
Section 3

Wastewater Collection System



Section 4

Capital Estimate

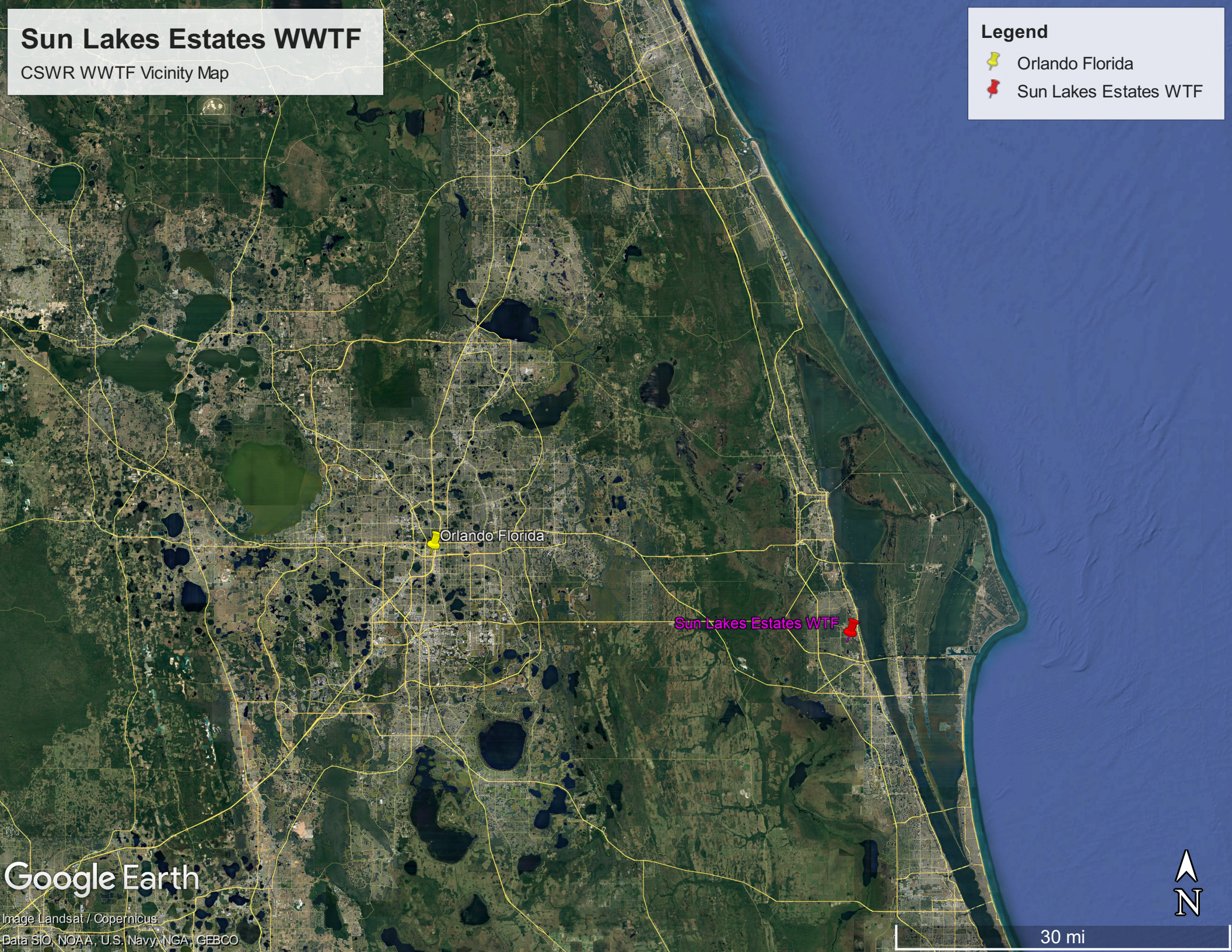




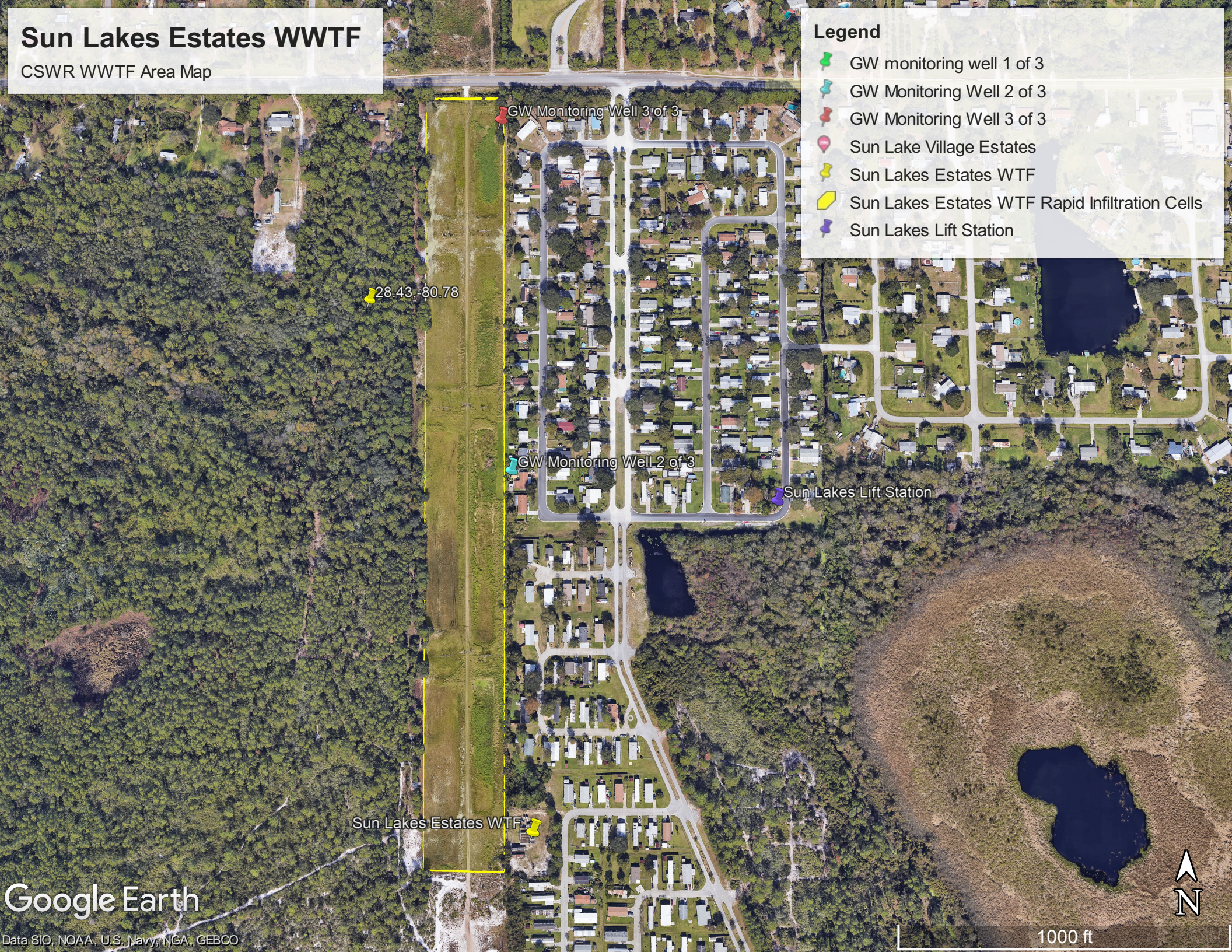
Section 5

Attachments

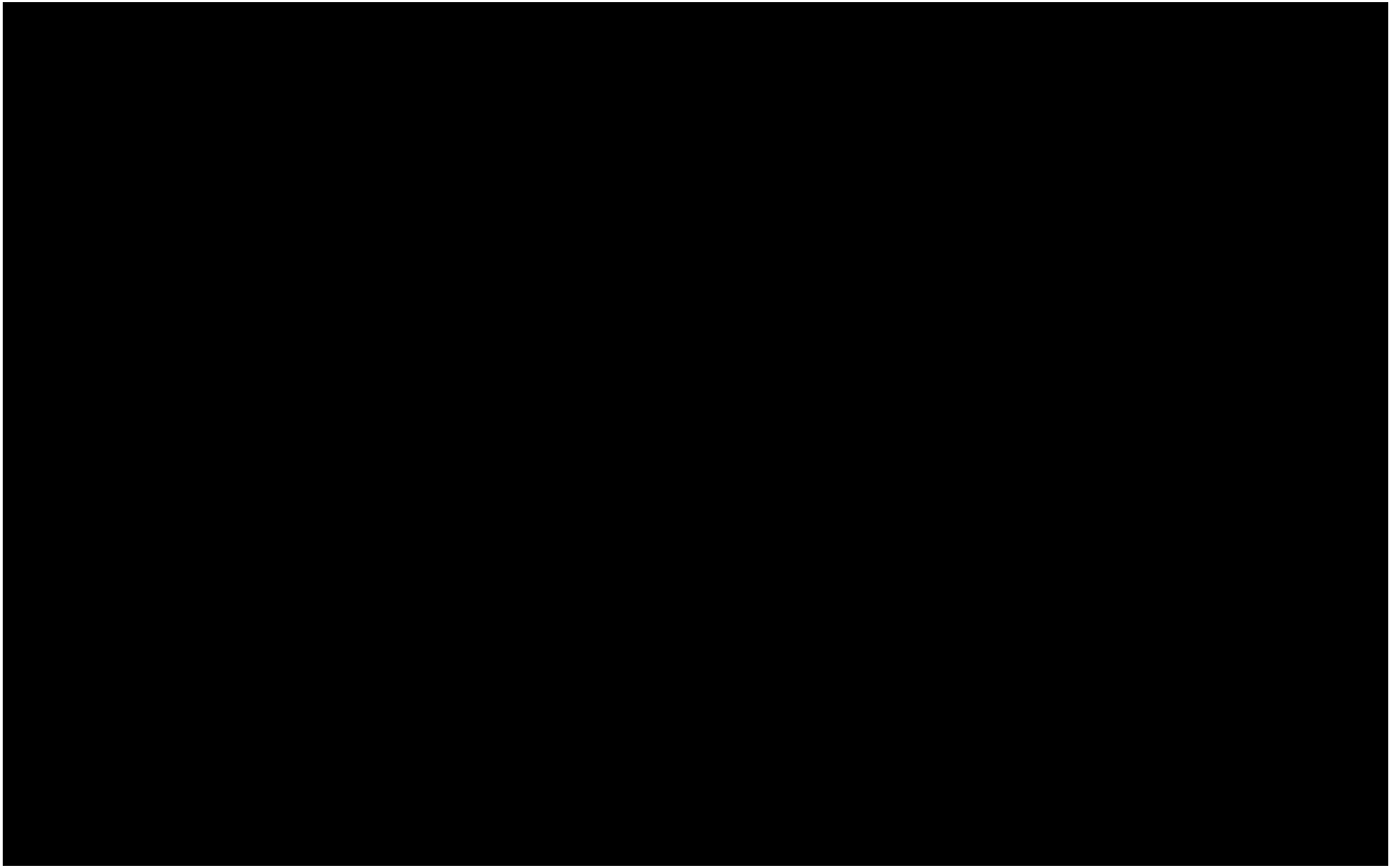
Attachment I – Vicinity Map


Sun Lakes Estates WWTF
CSWR WWTF Vicinity Map
Legend
Orlando Florida
Sun Lakes Estates WTF
Orlando Florida
Sun Lakes Estates WTF
Google Earth
Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
N
30 mi

Attachment II – Site Map

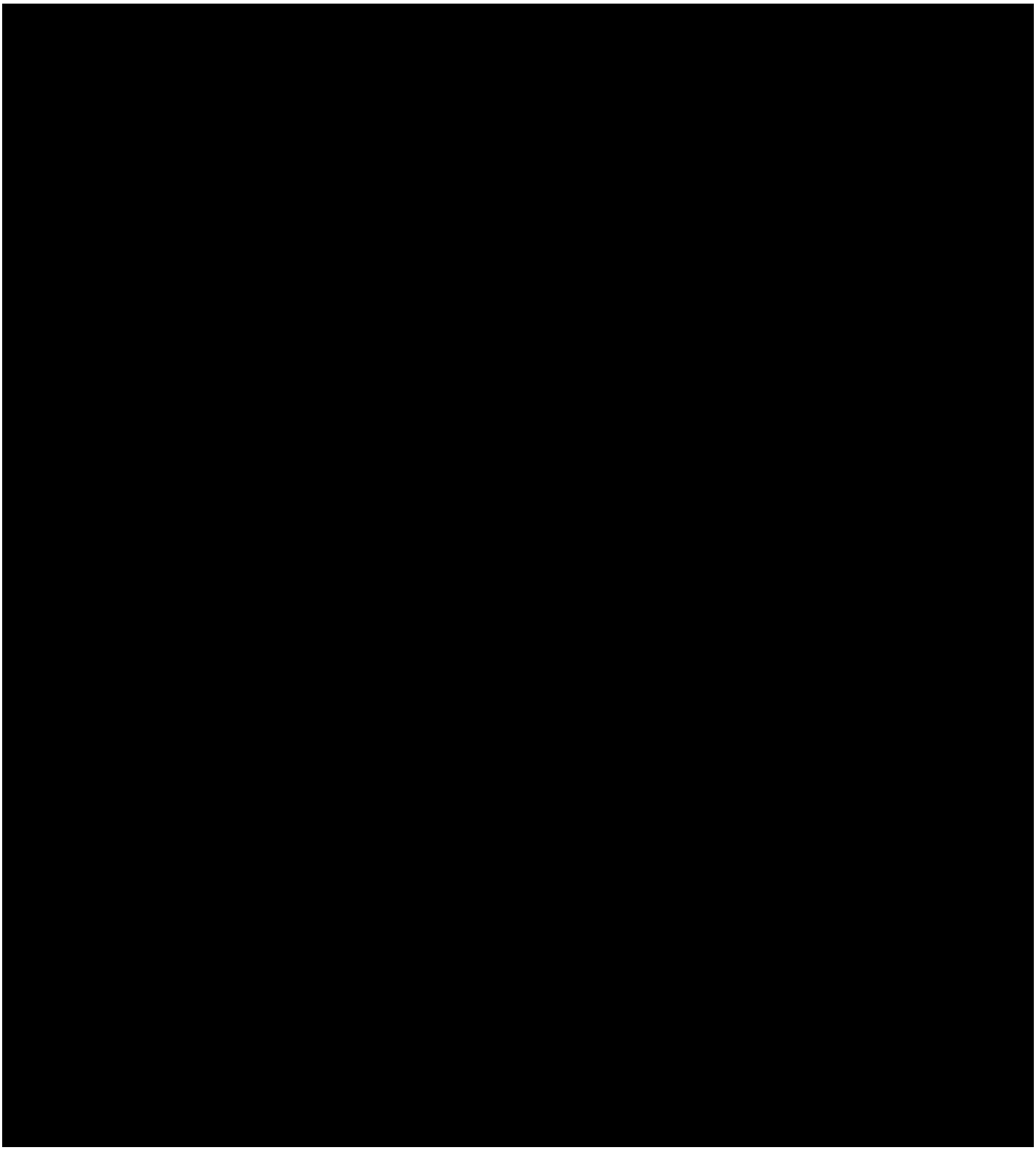

Sun Lakes Estates WWTF
CSWR WWTF Area Map
Legend
GW monitoring well 1 of 3
GW Monitoring Well 2 of 3
GW Monitoring Well 3 of 3
Sun Lake Village Estates
Sun Lakes Estates WTF
Sun Lakes Estates WTF Rapid Infiltration Cells
Sun Lakes Lift Station
GW Monitoring Well 3 of 3
28.43, -80.78
GW Monitoring Well 2 of 3
Sun Lakes Lift Station
Sun Lakes Estates WTF
Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
N
1000 ft

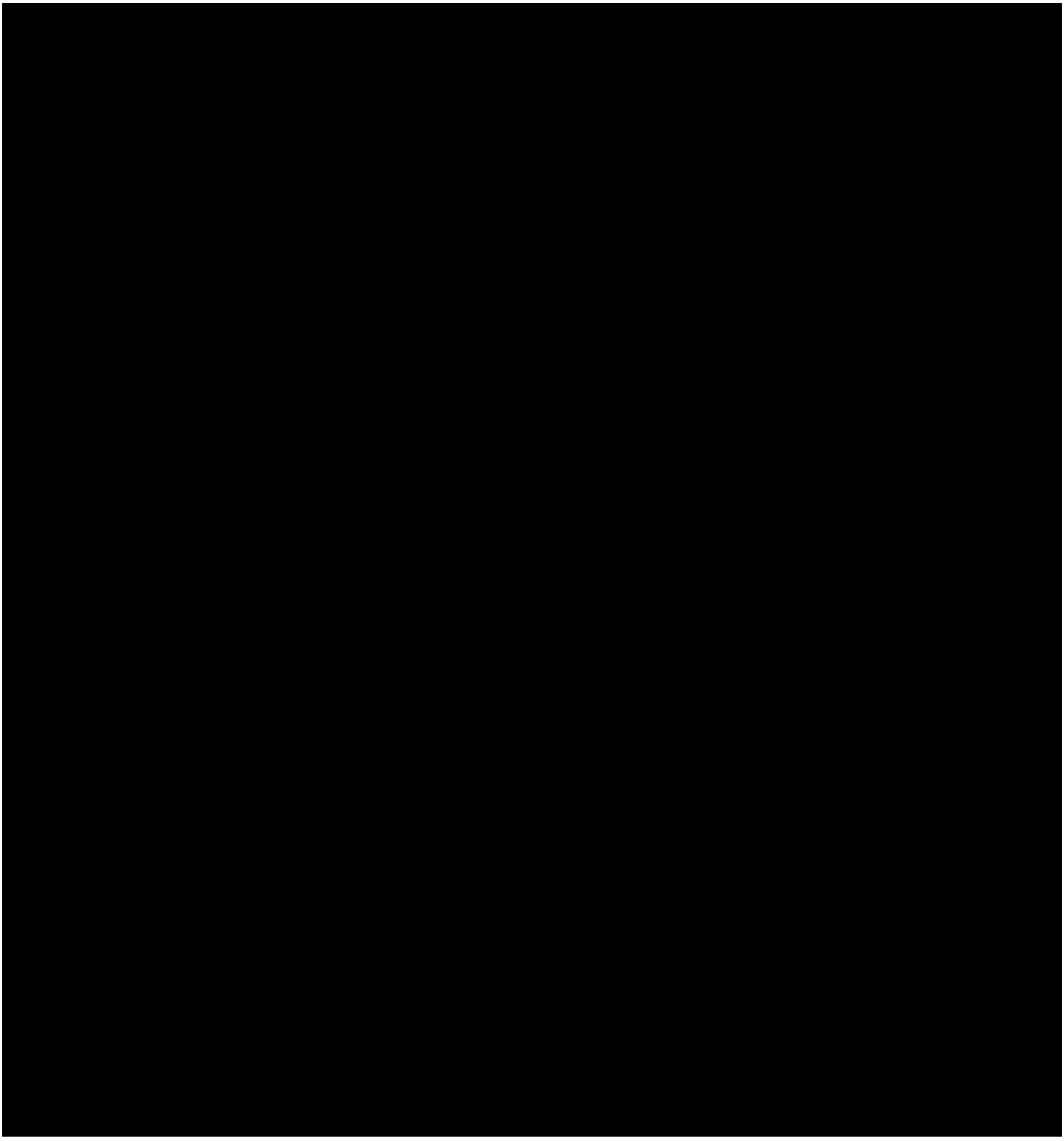
Attachment III – Process Flow Diagram

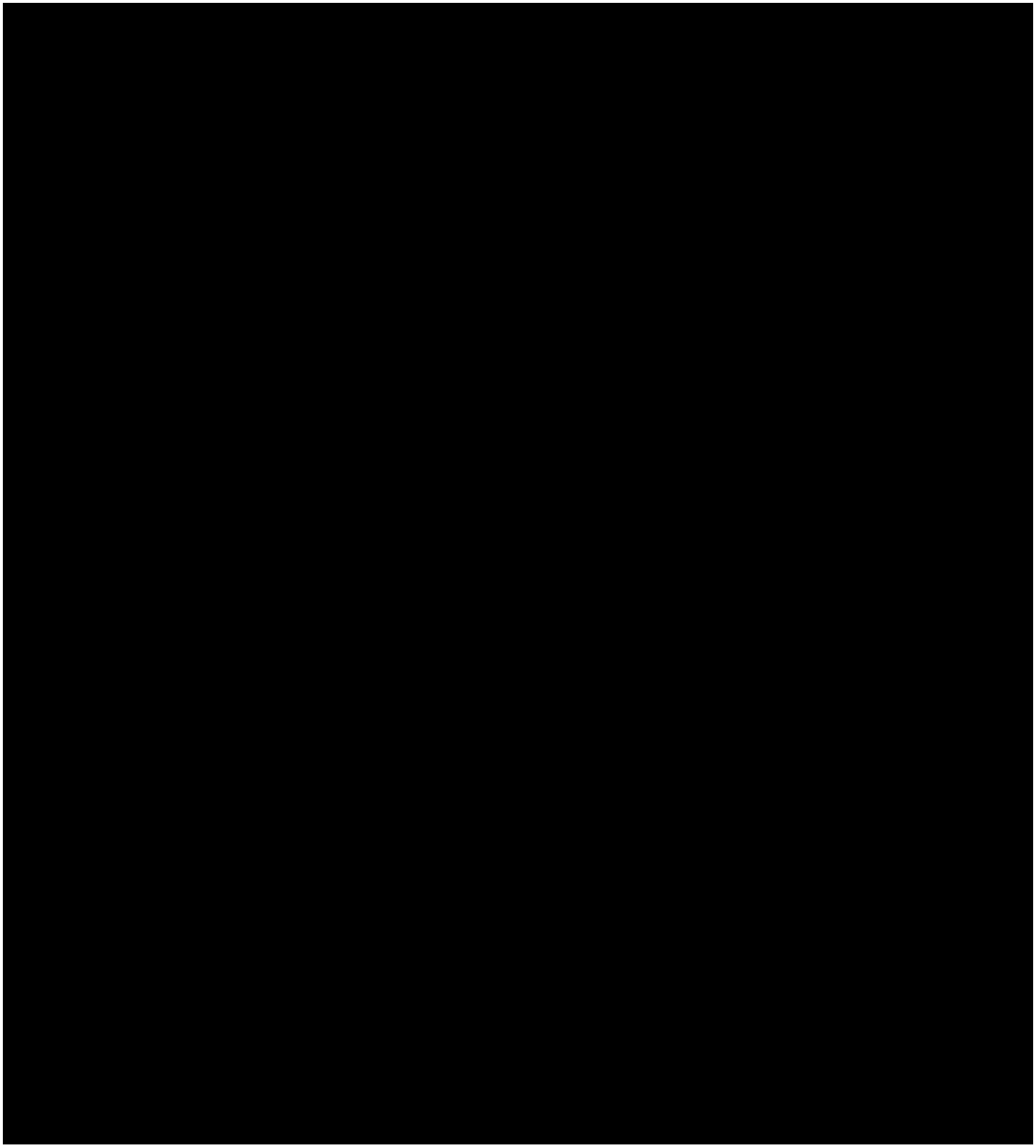


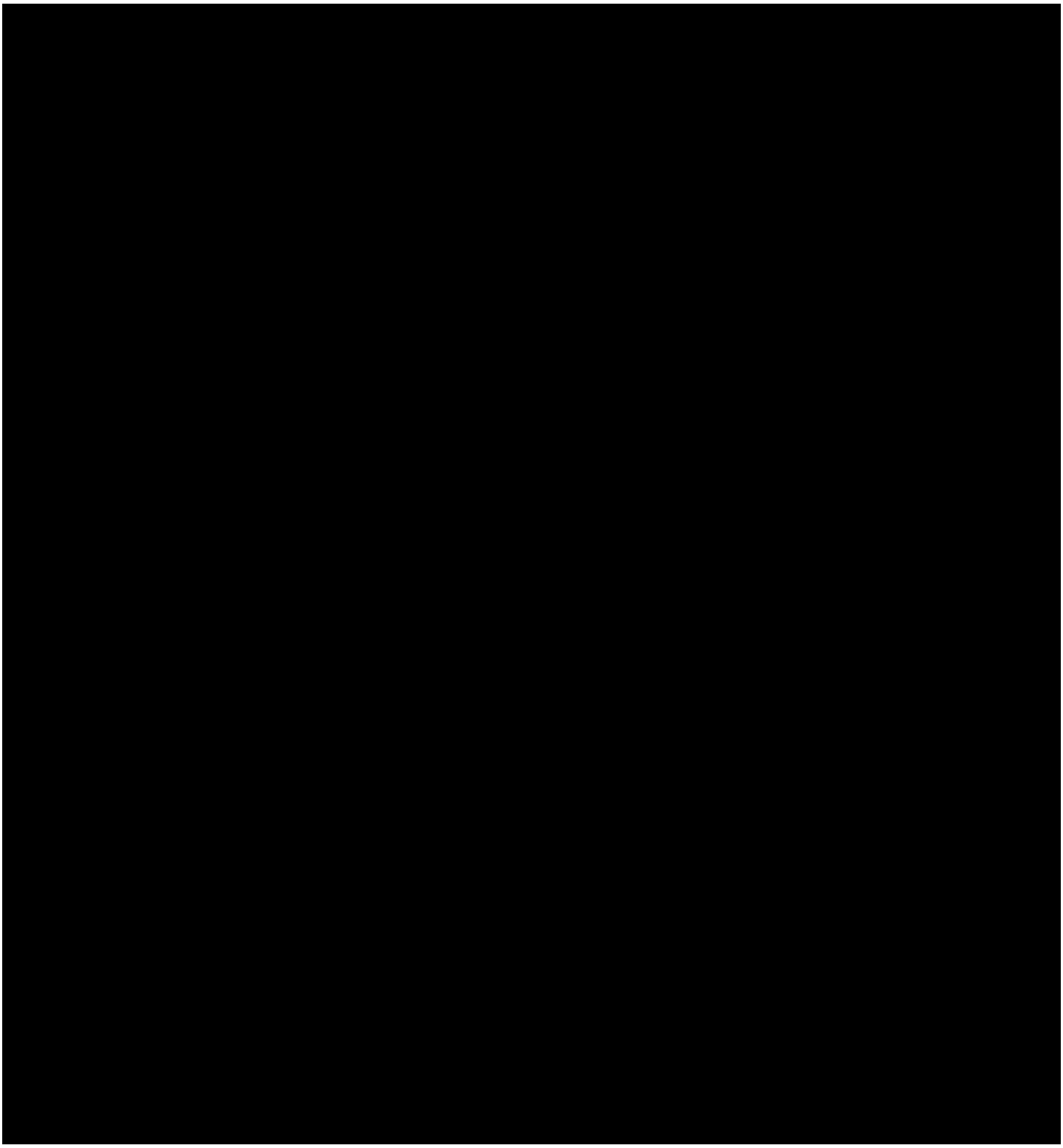
PROCESS FLOW DIAGRAM

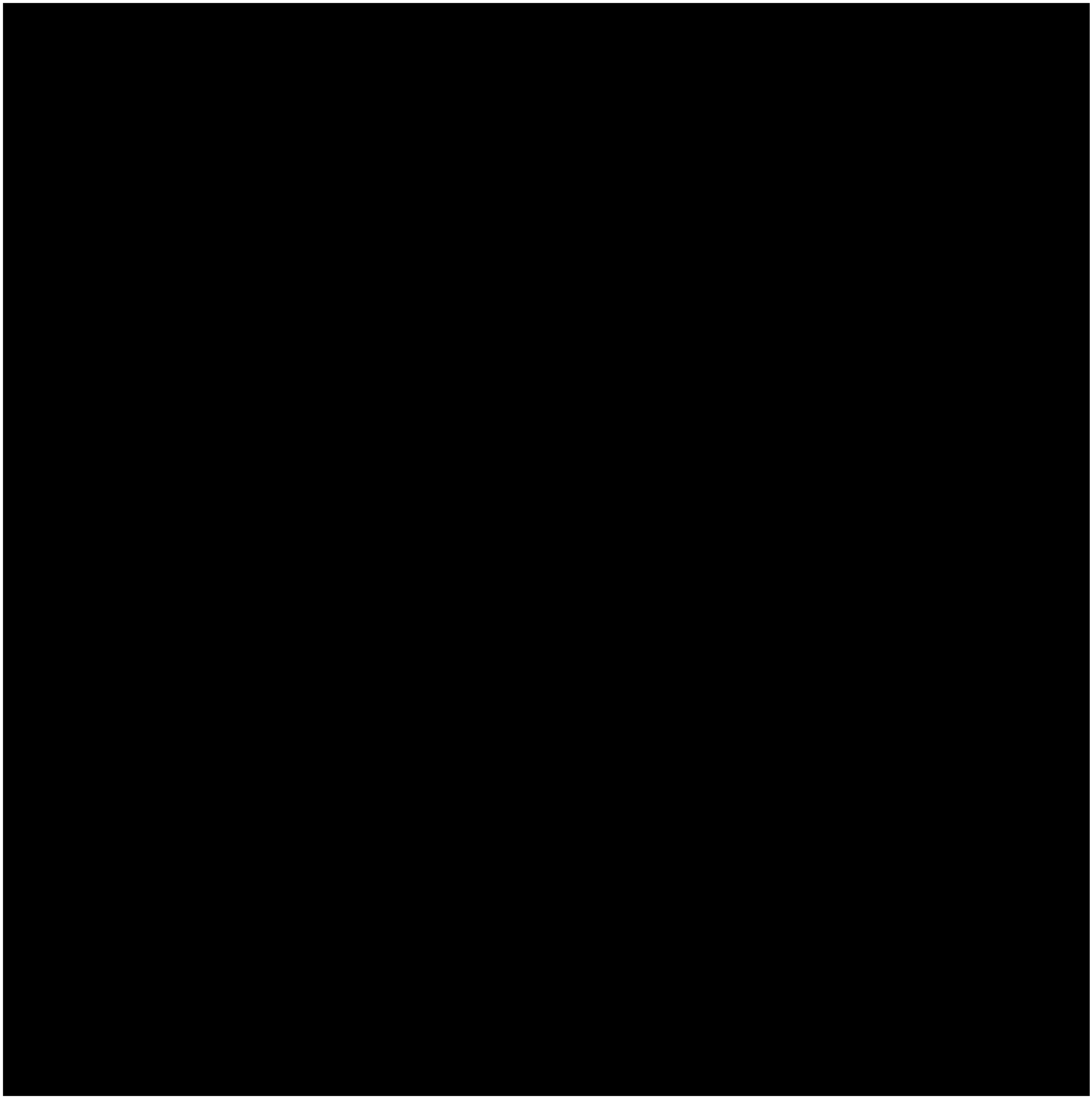
Attachment IV – WWTF Site Photos

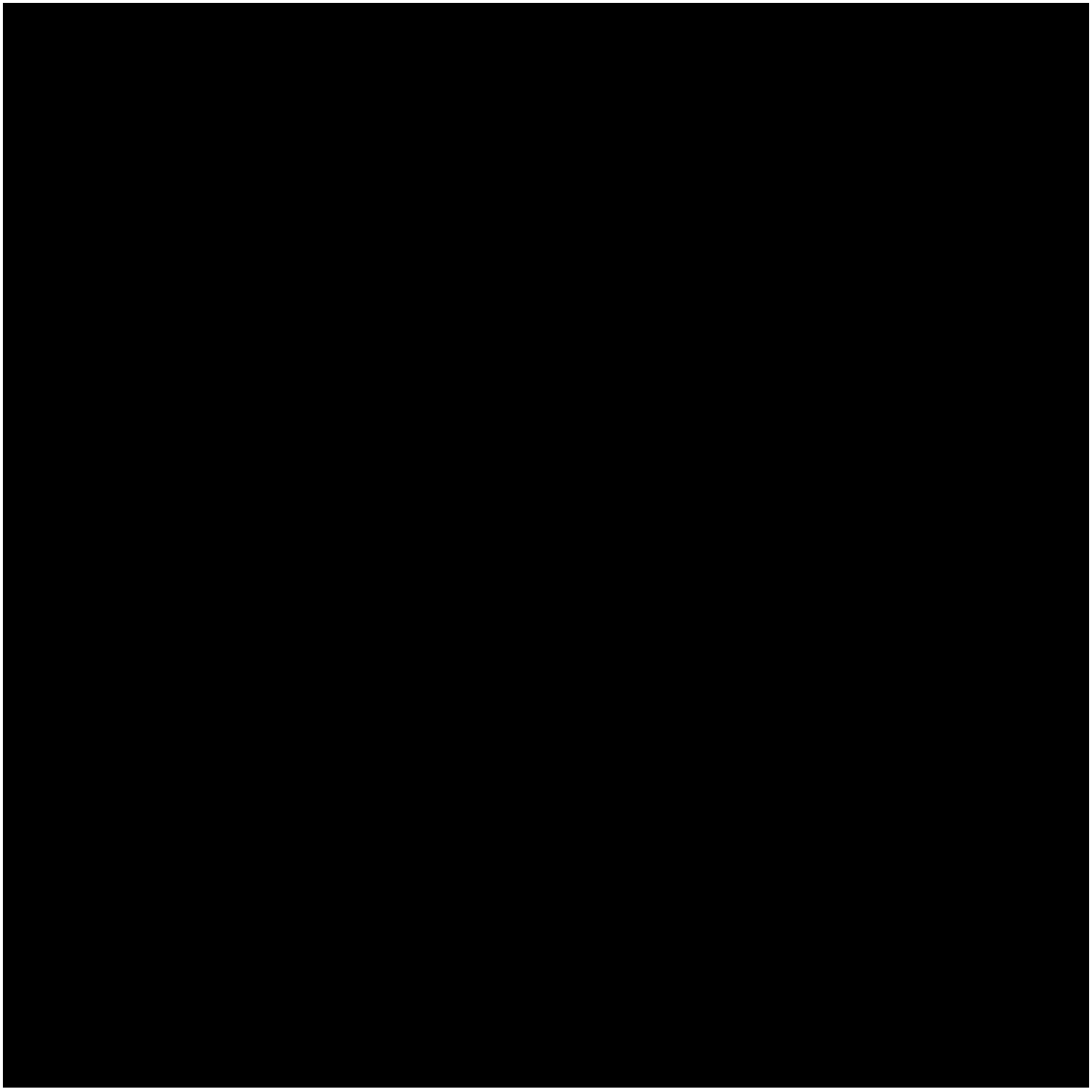


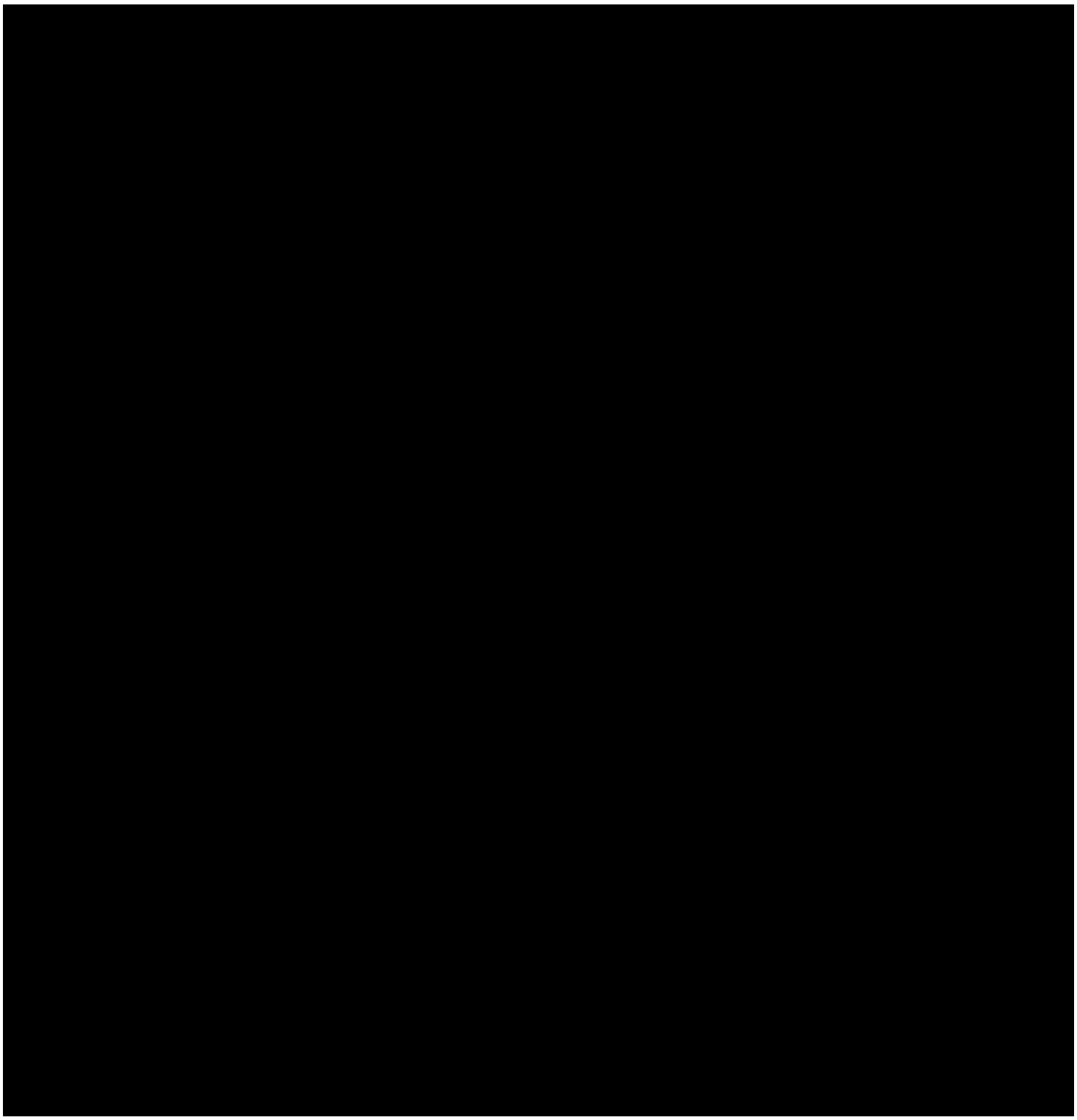


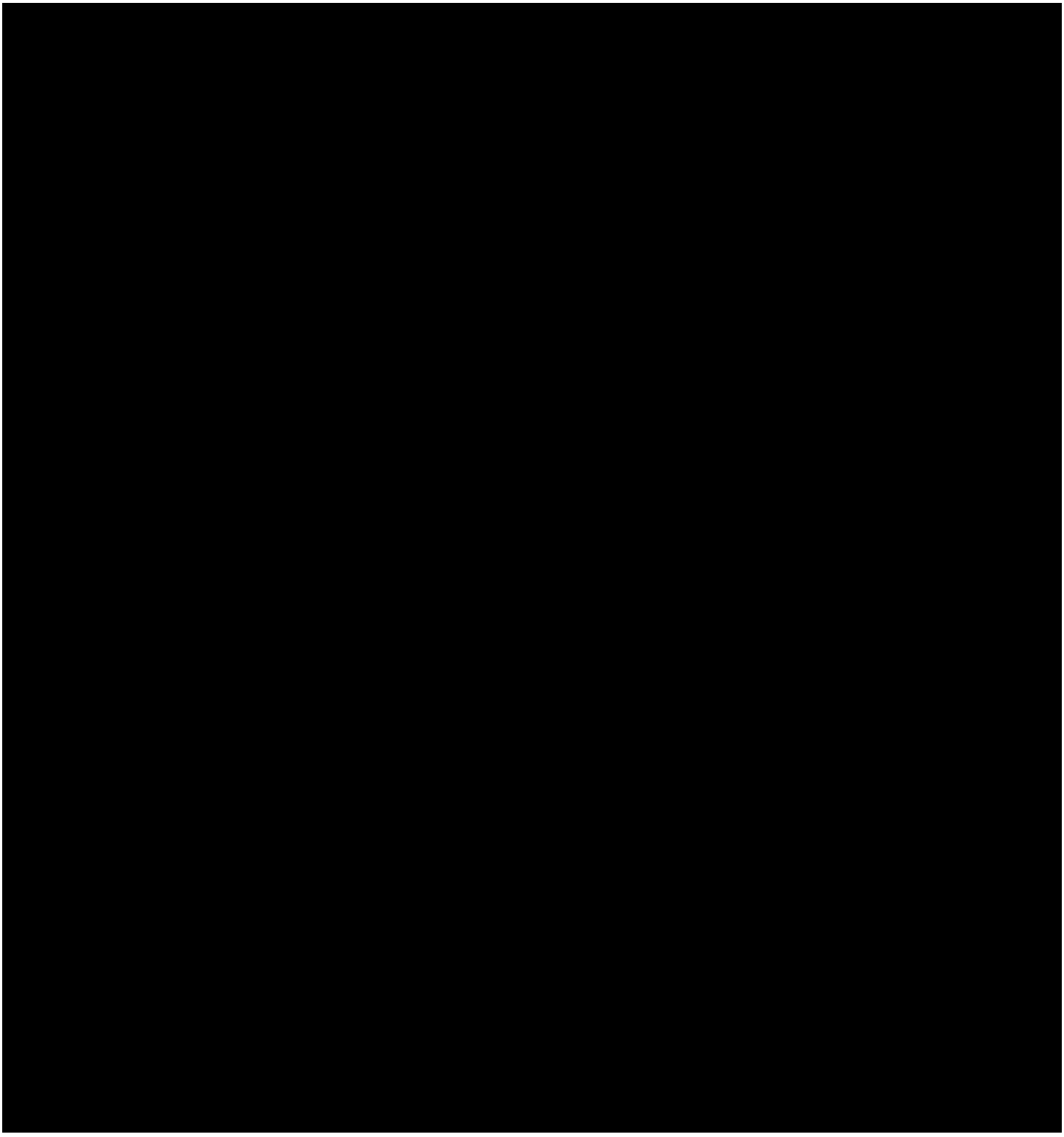


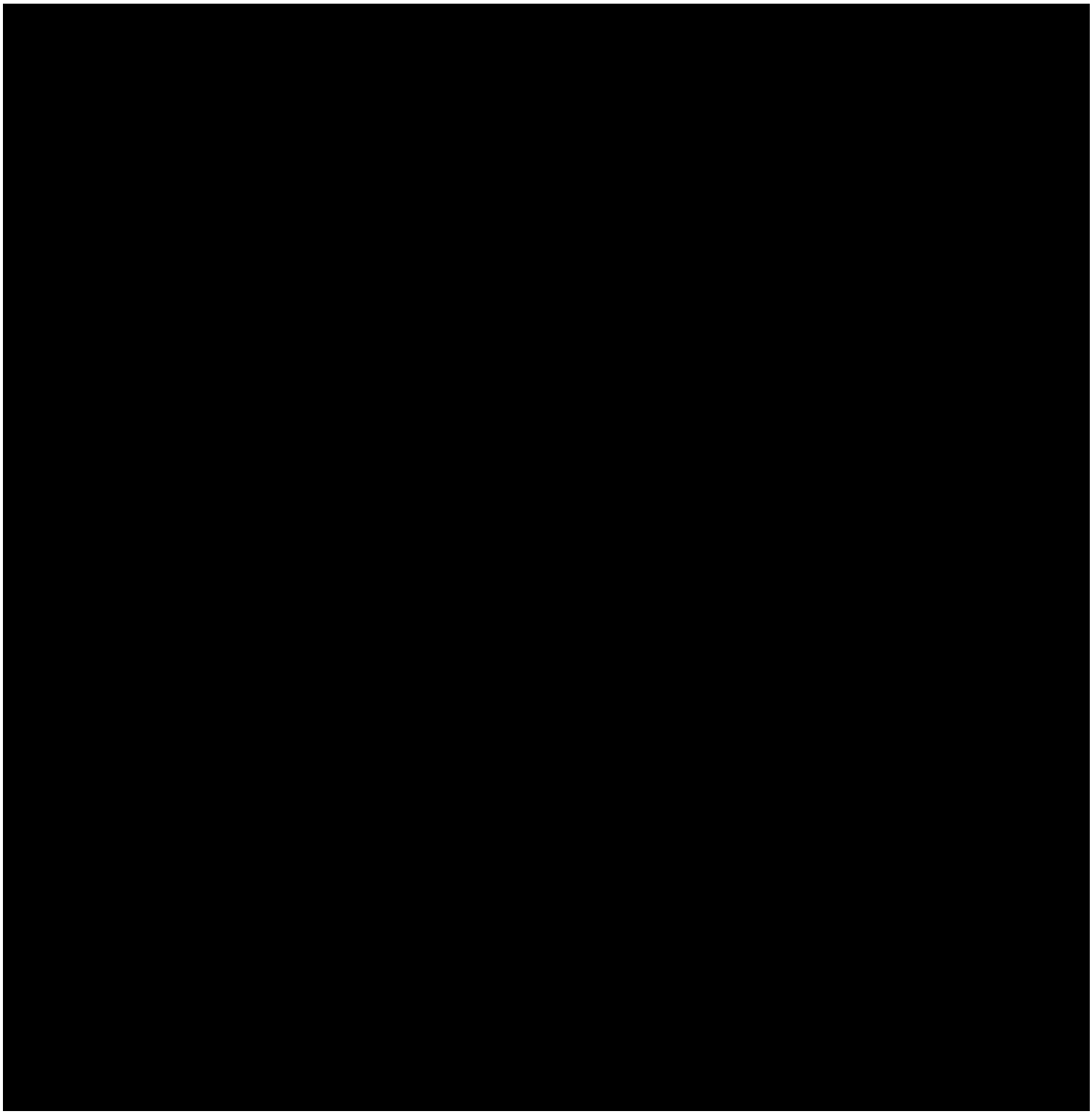


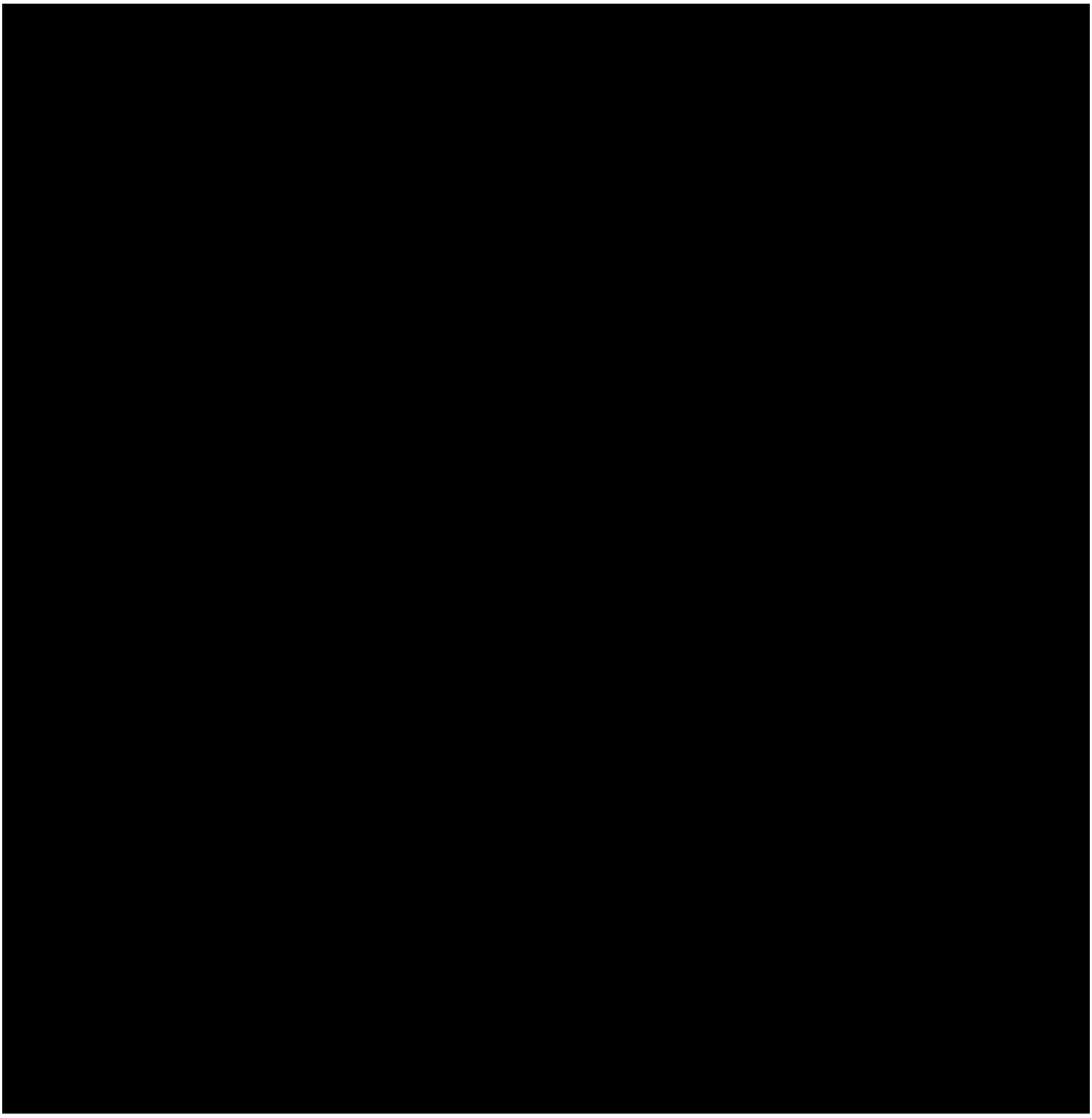


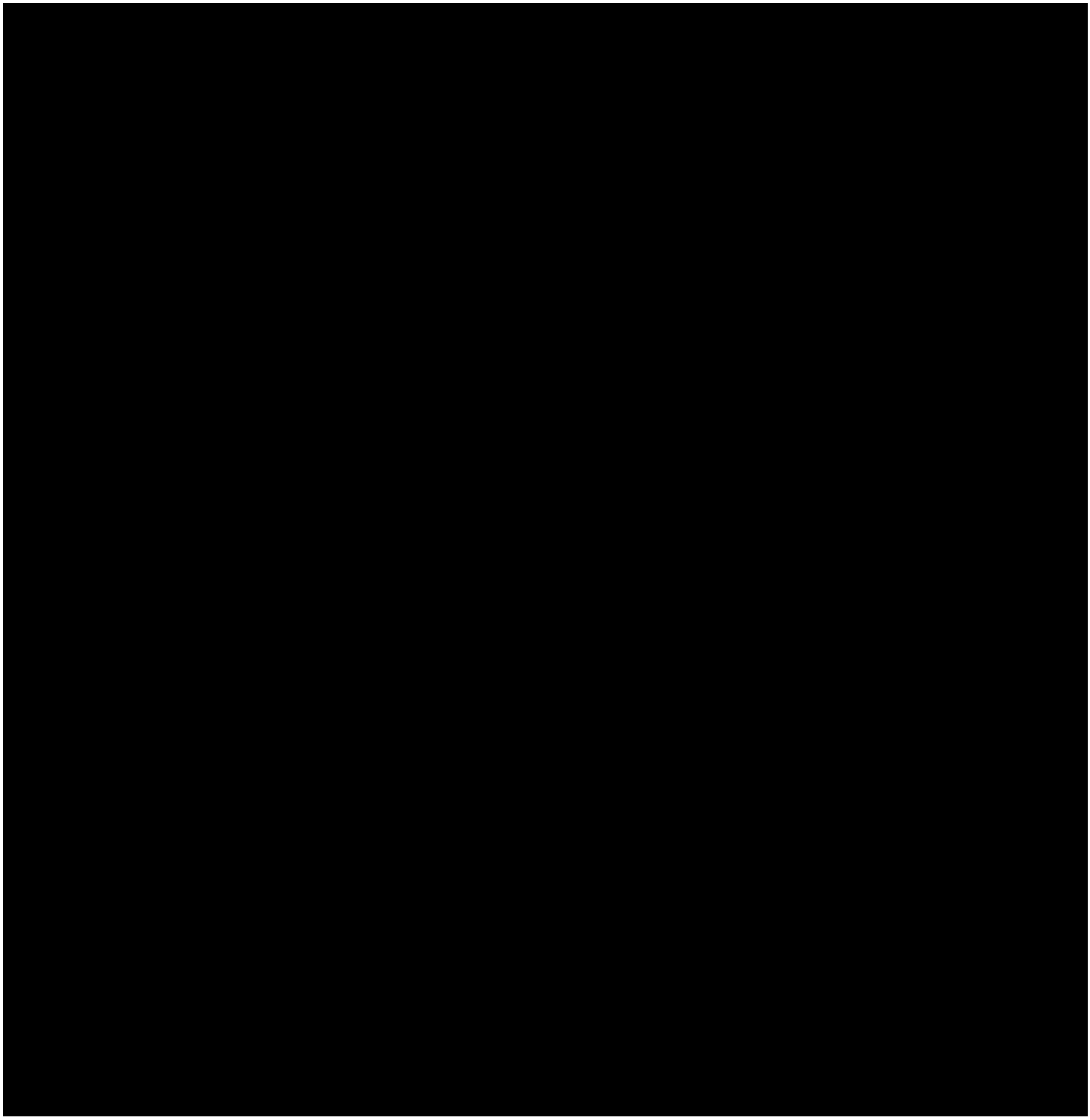


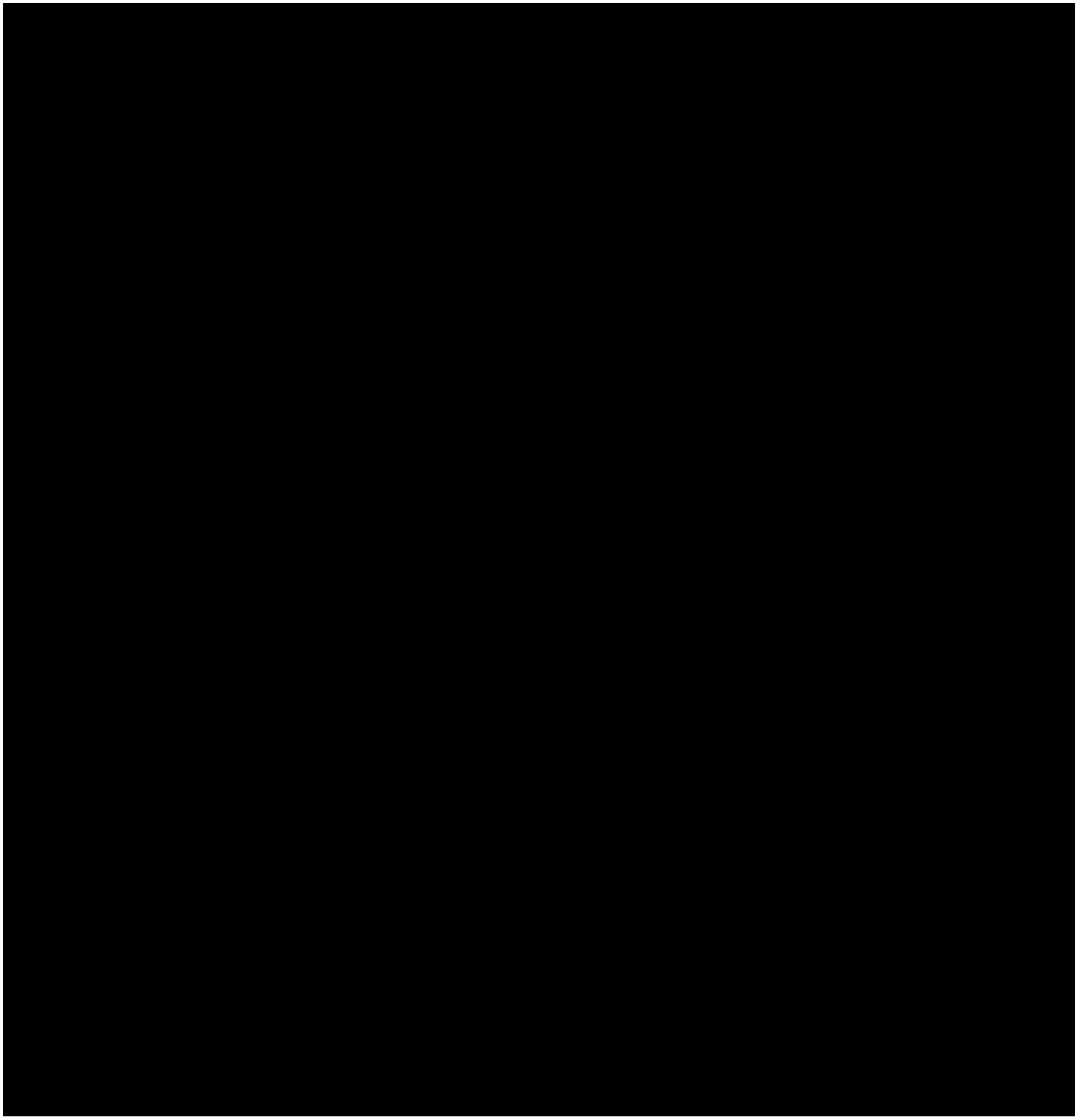


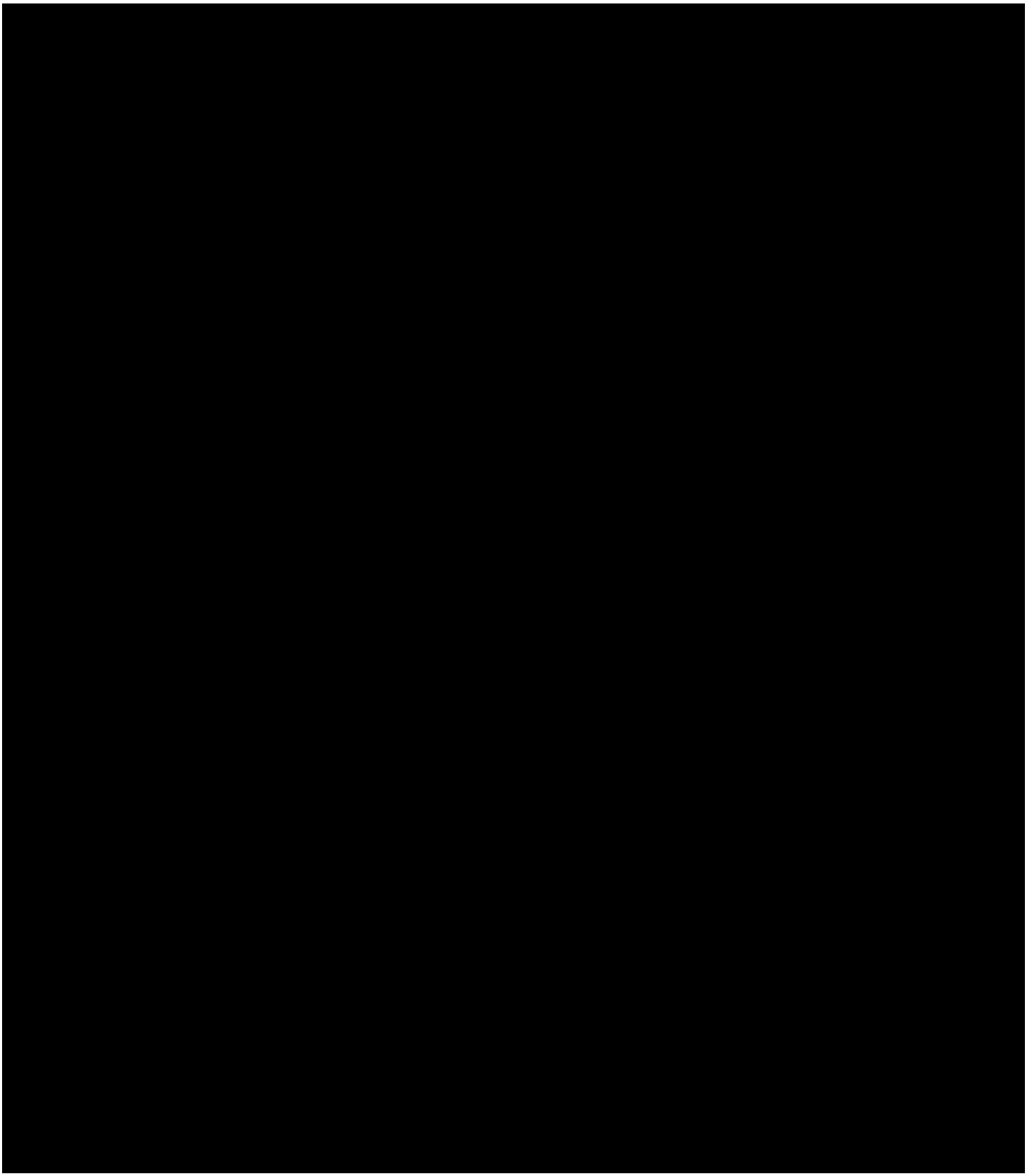


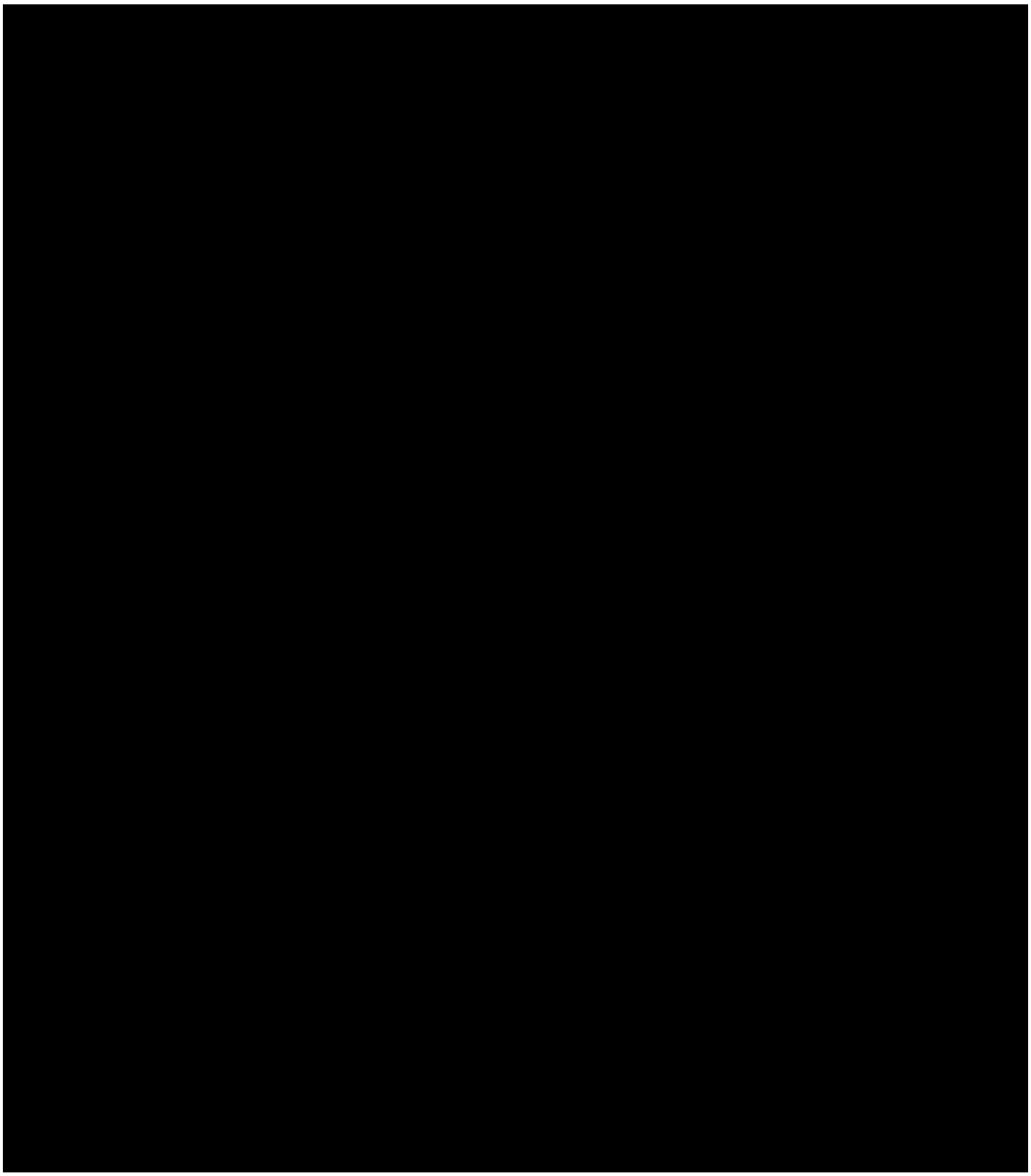


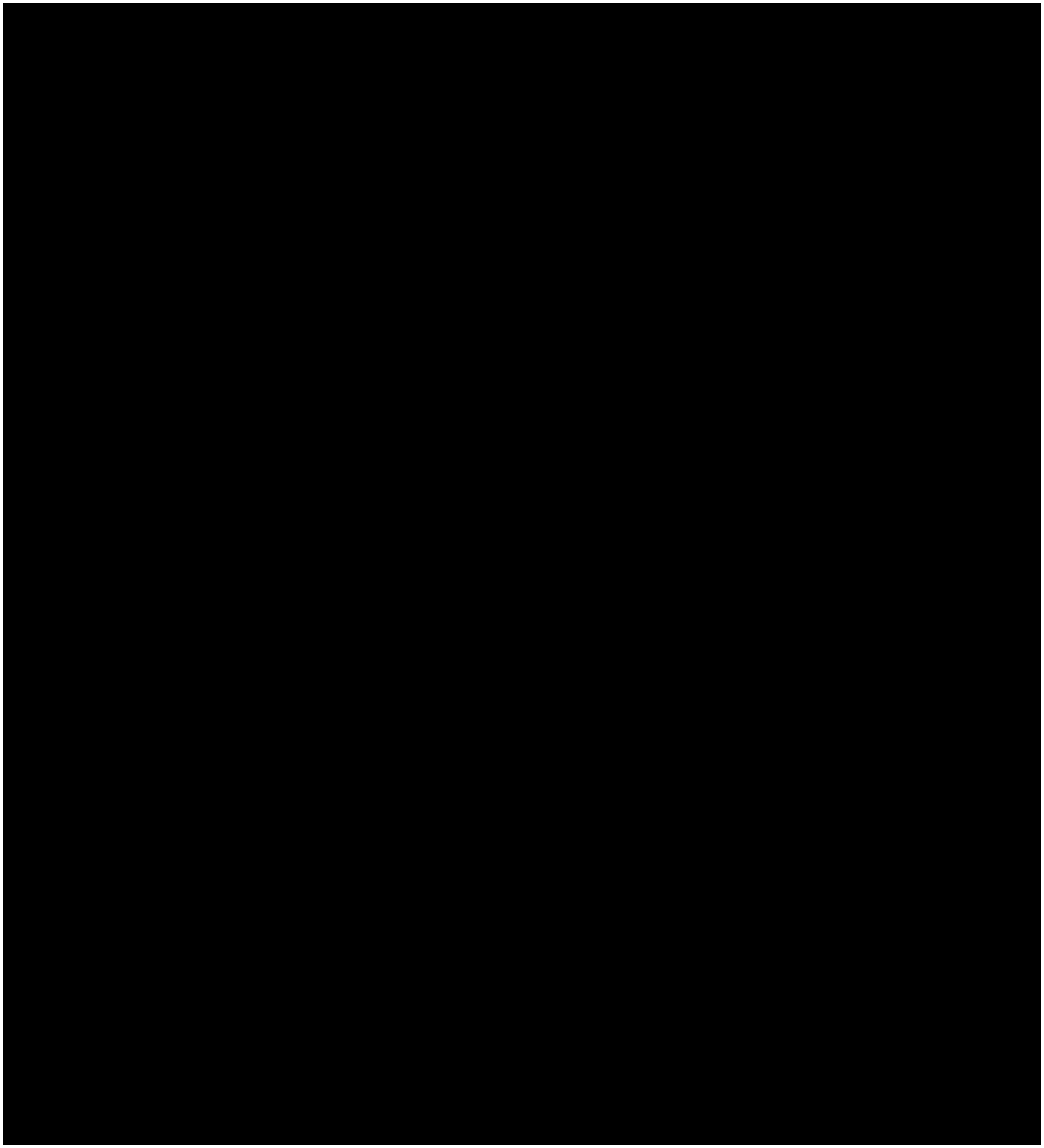


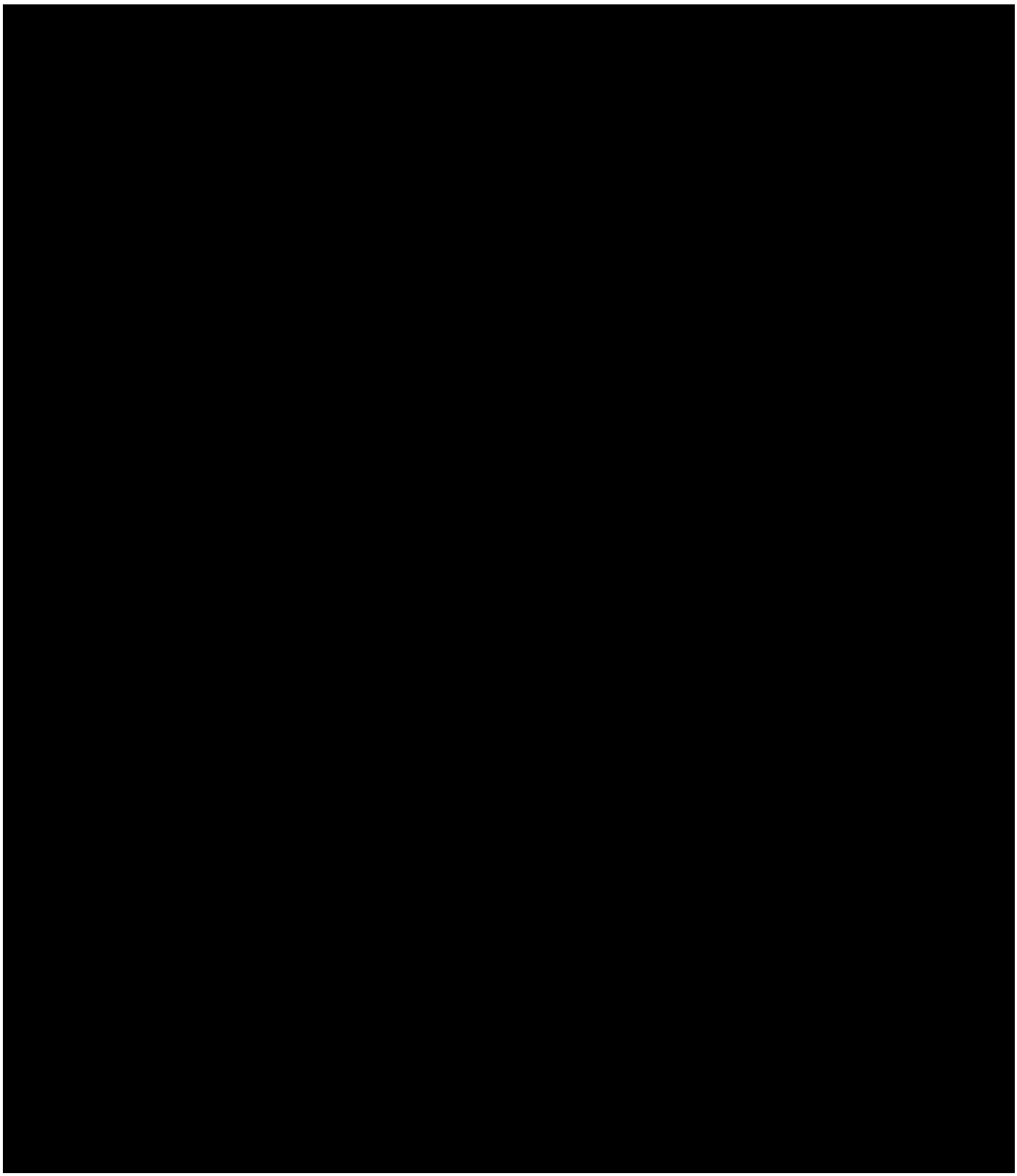


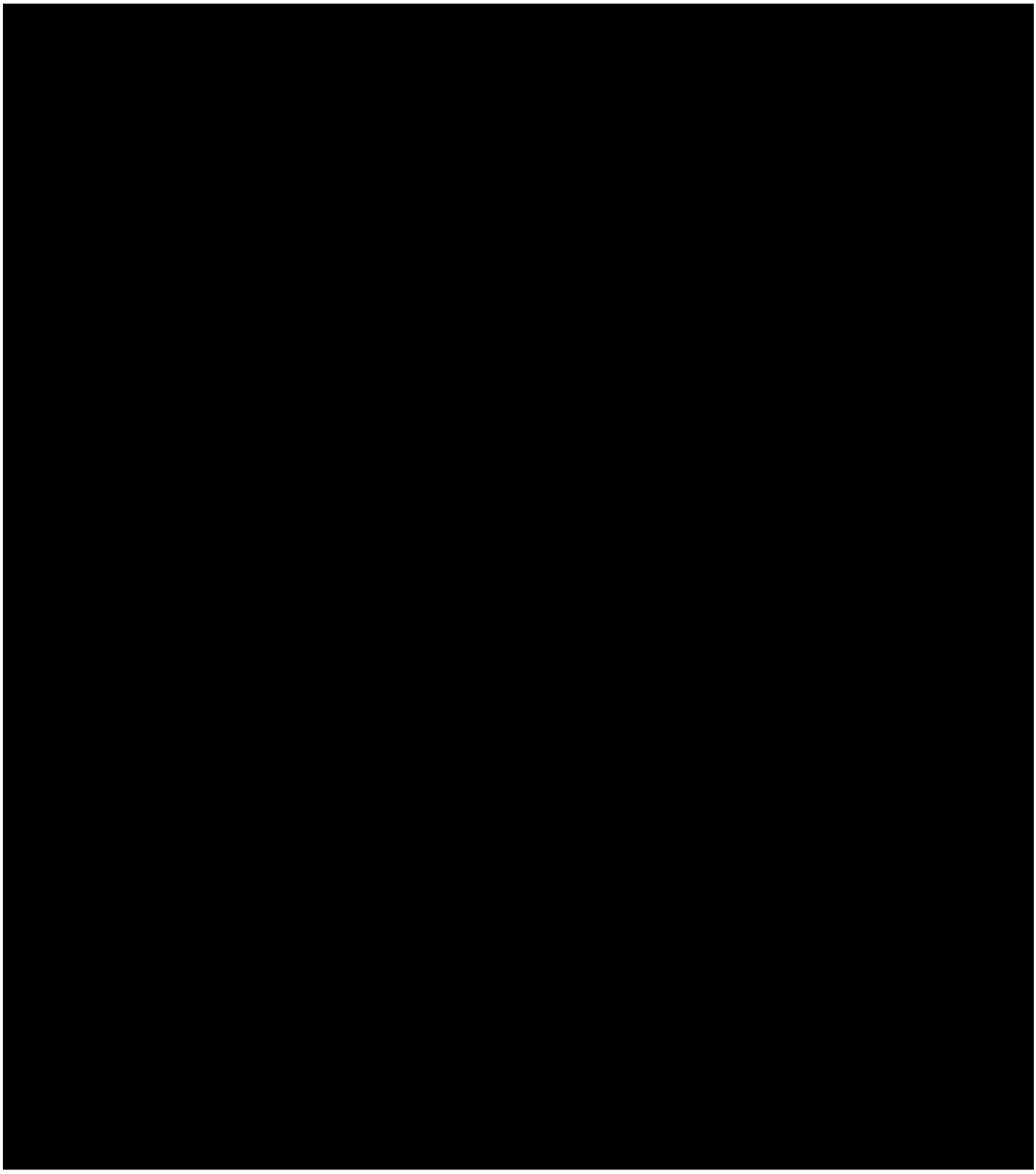


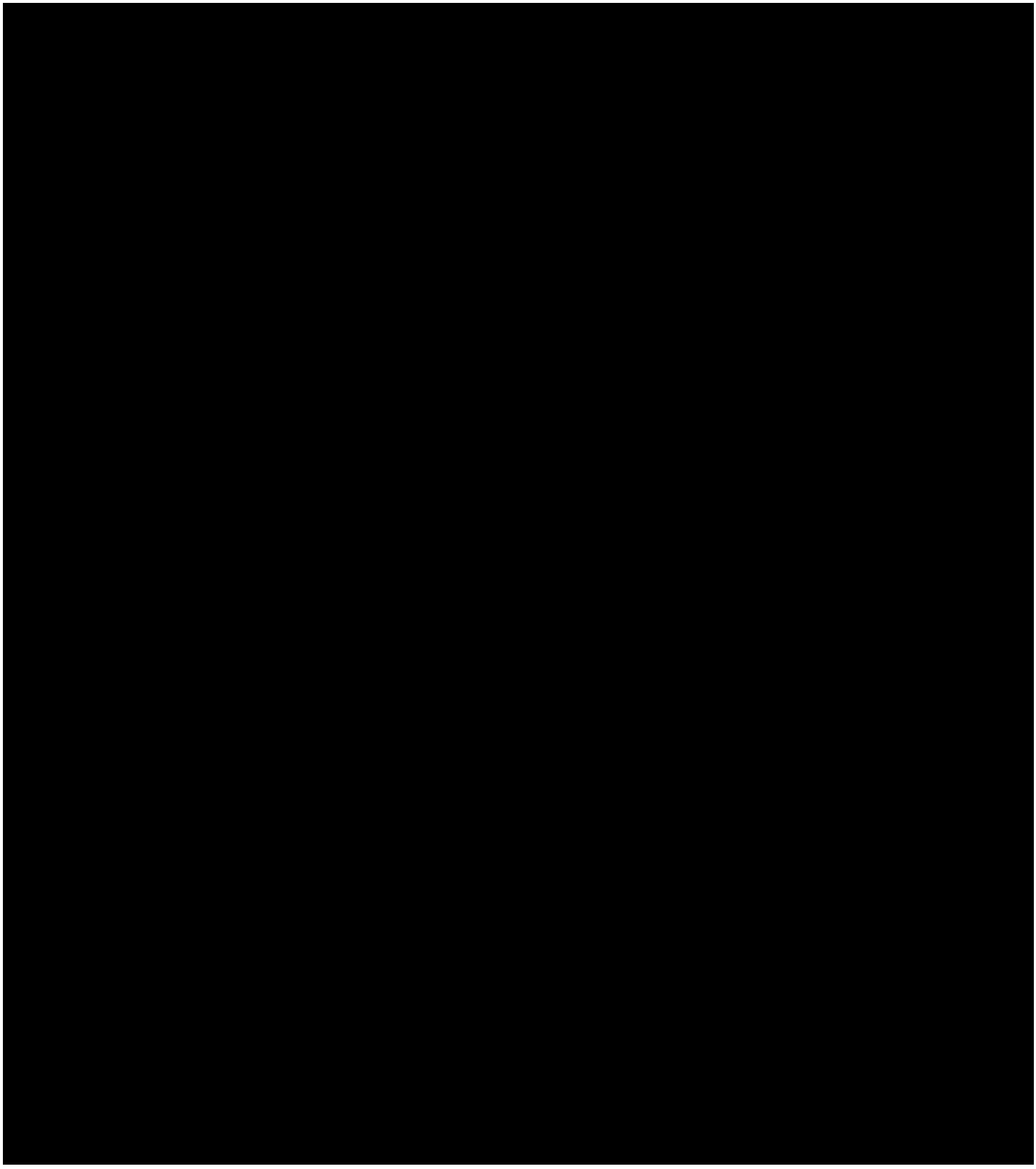


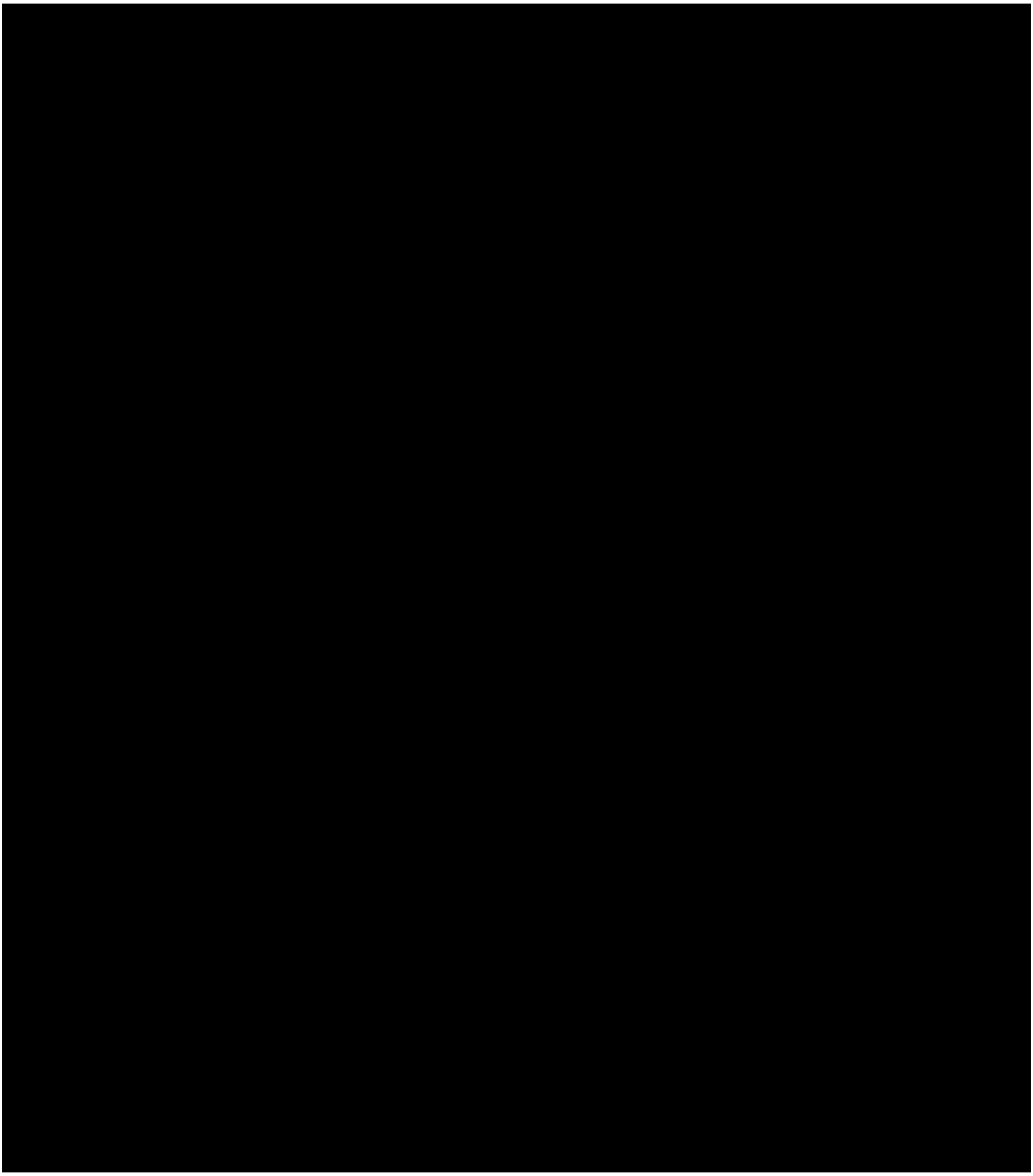


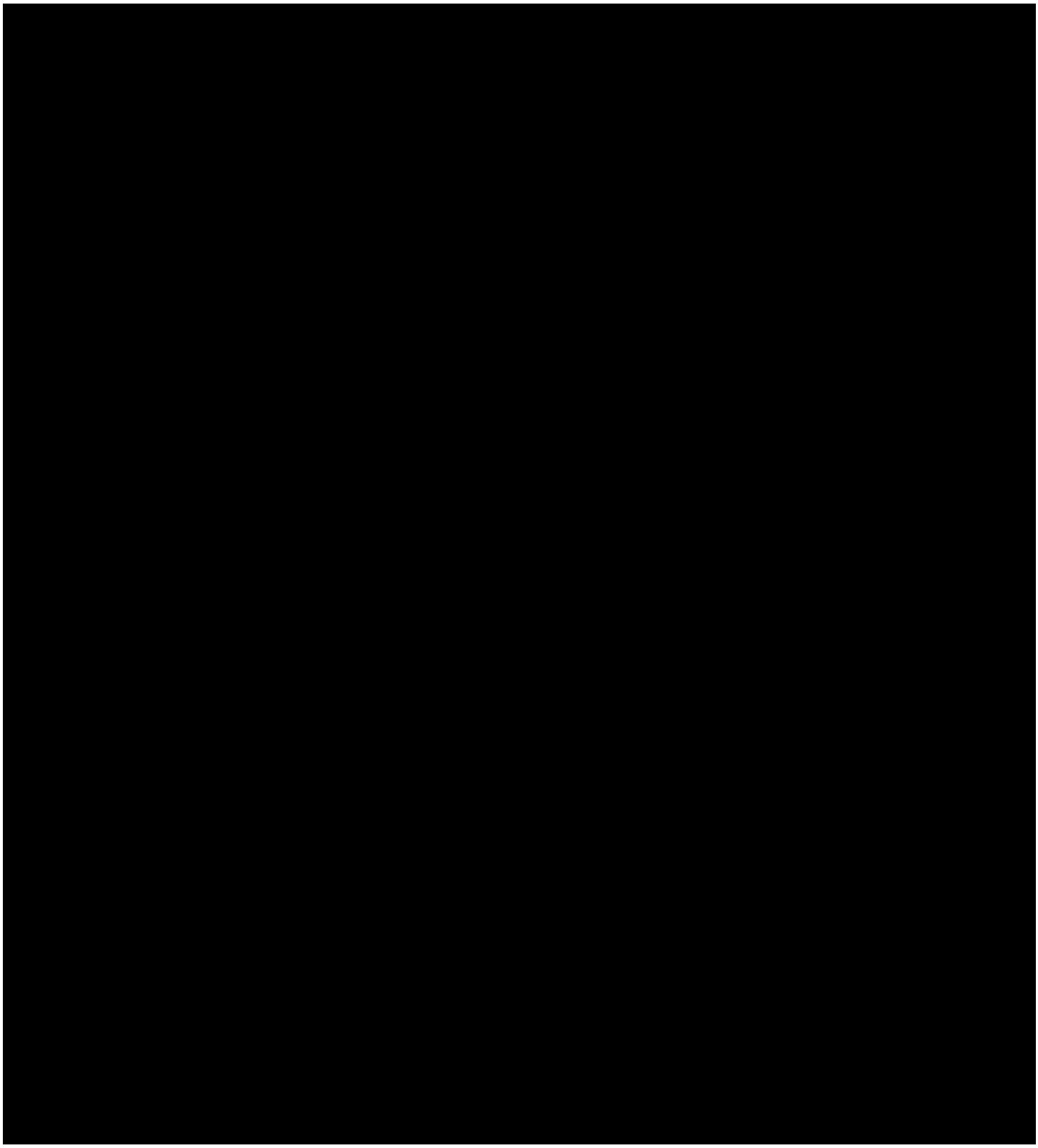


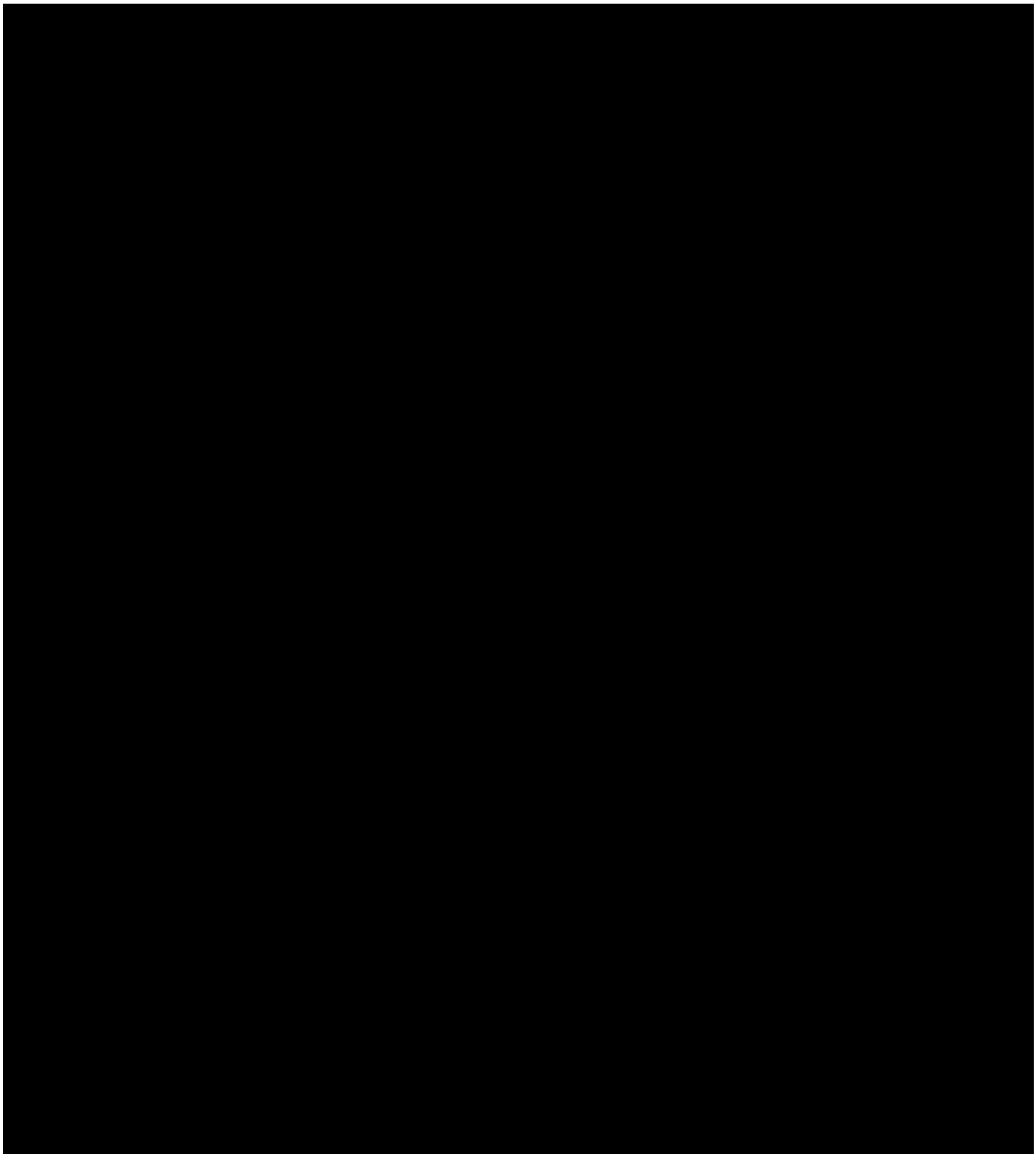


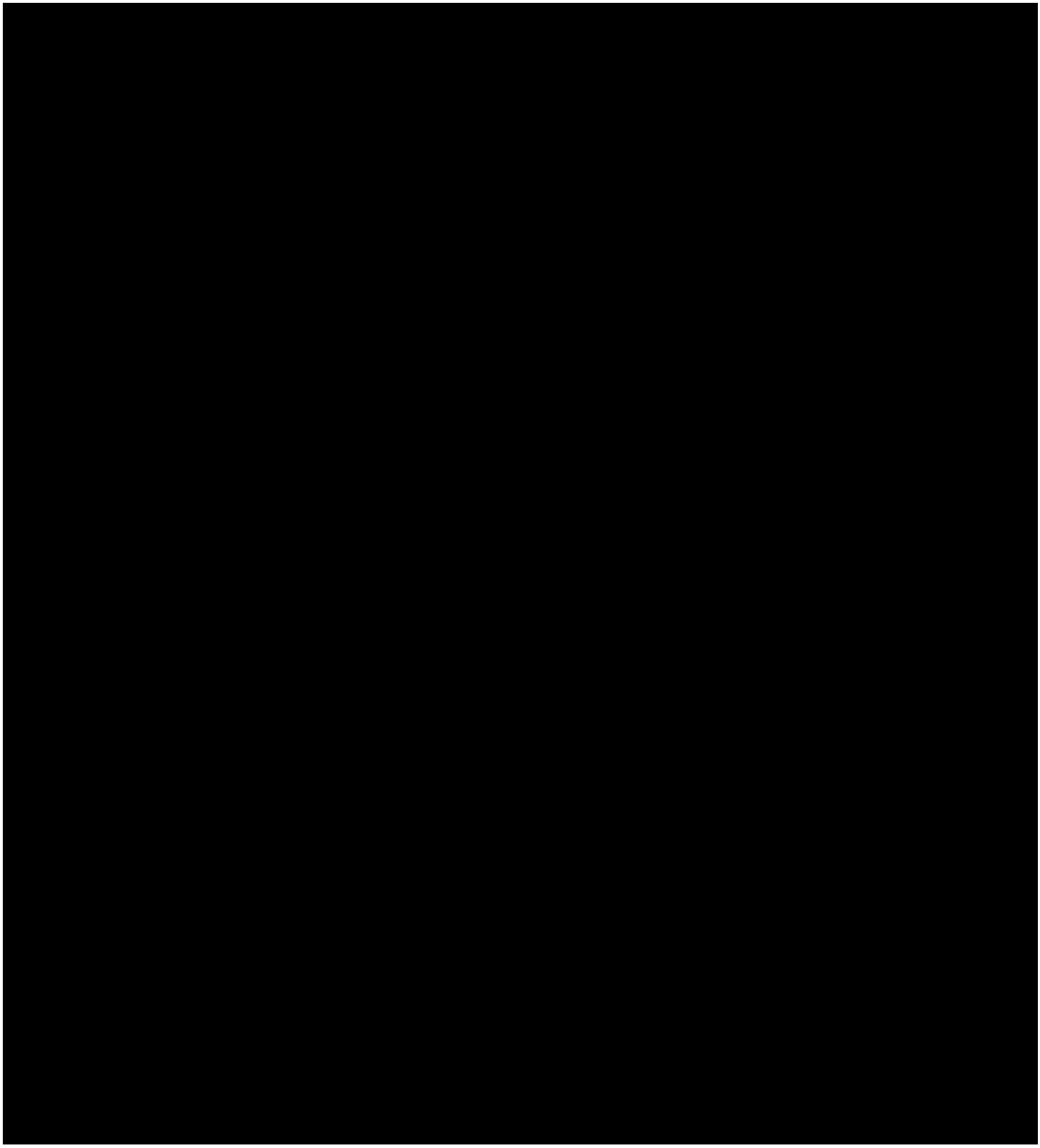


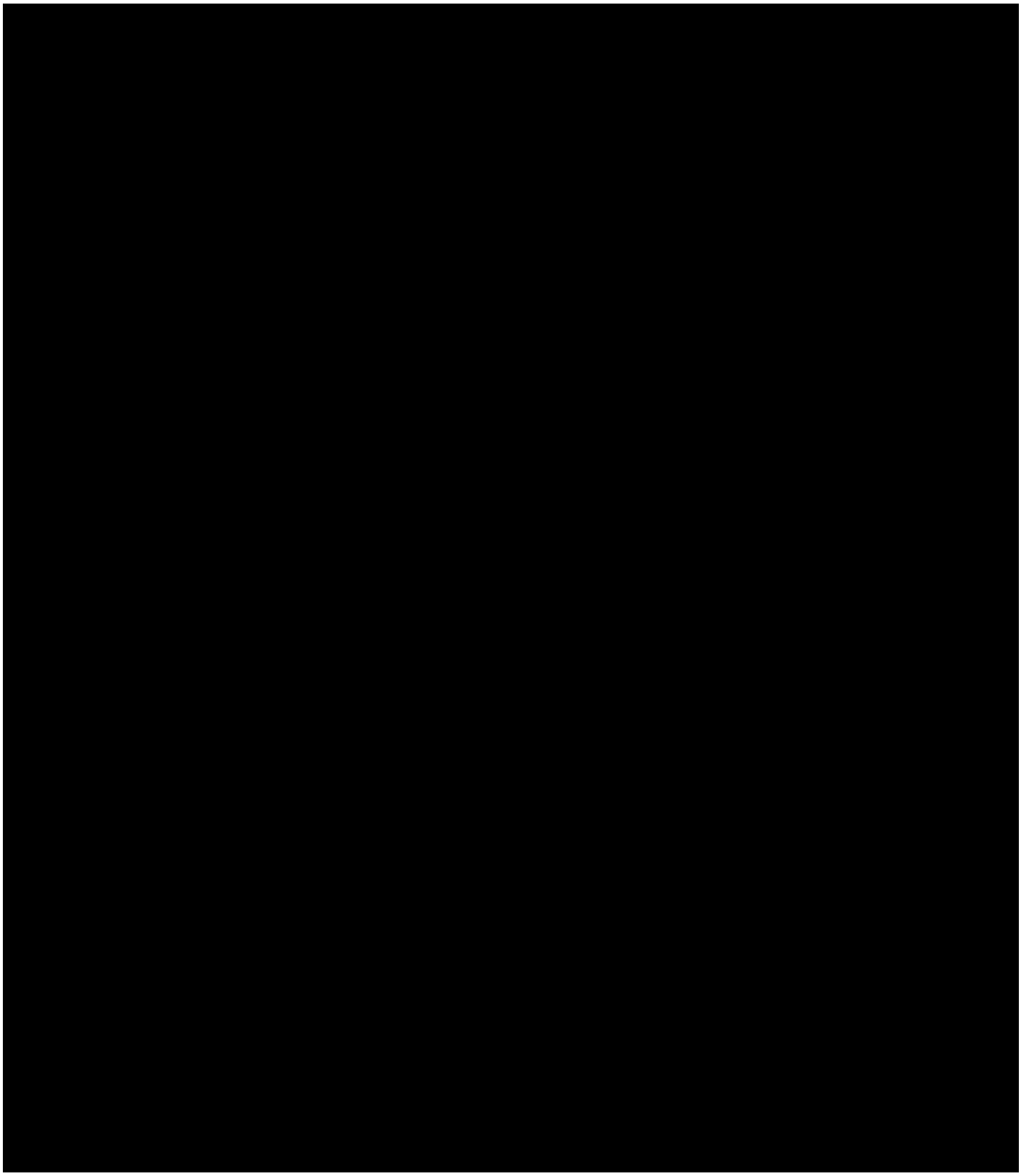


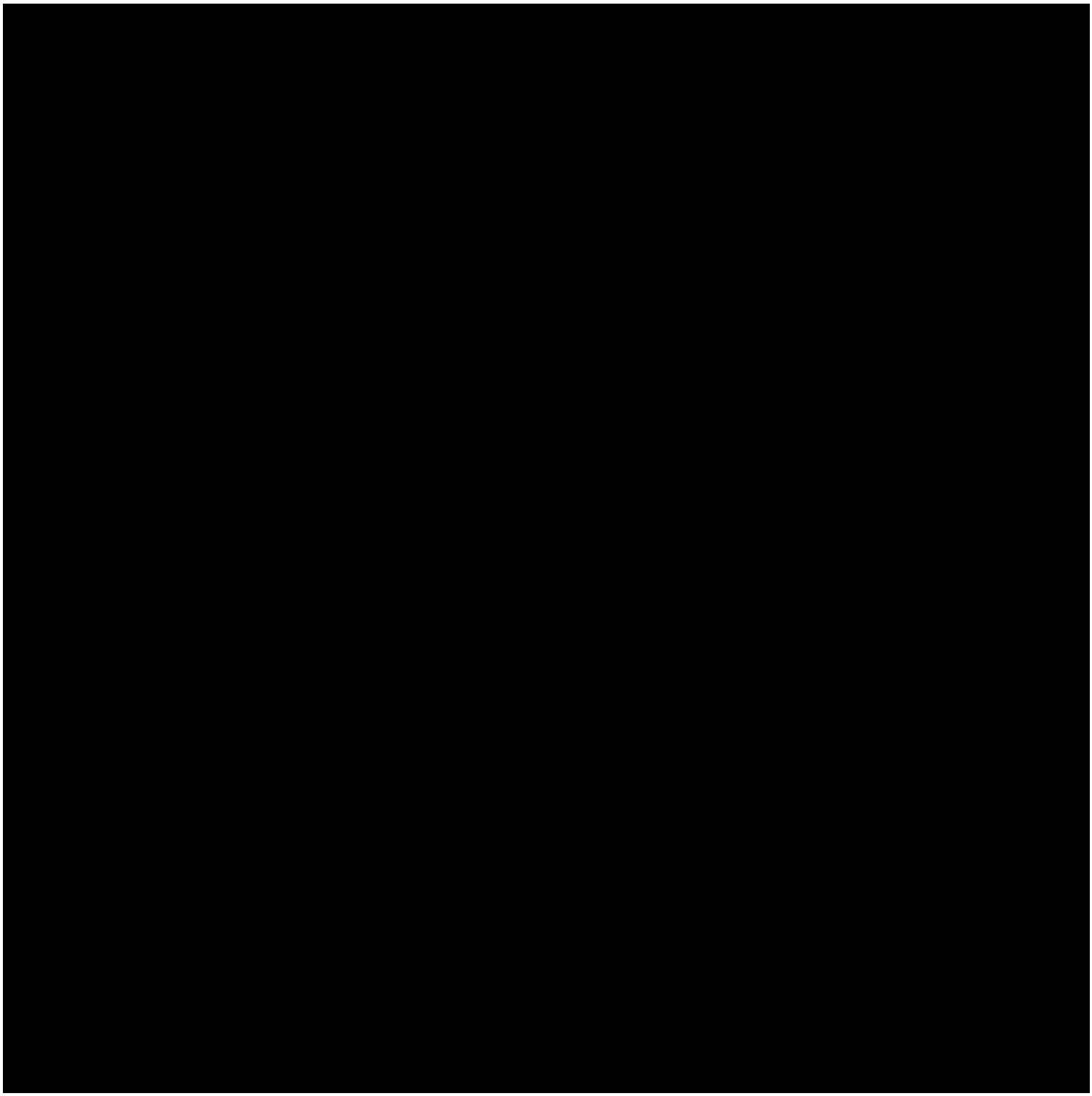












Attachment V – Domestic Wastewater Permit

FLORIDA DEPARTMENT OF Environmental Protection

Central District Office
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

In the Matter of an
Application for Permit by:

Sun Lake Estates
Thad Terry, Owner
5600 N Highway 1n
Sharps, Florida 32927
matlantisinvest@CFL.rr.com

File Number FLA010353-007-DW3P
Brevard County
Sun Lake Estates WWTF

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number FLA010353 to operate the Sun Lake Estates WWTF, issued under Chapter 403**,** Florida Statutes.

Monitoring requirements under this permit are effective on December 1, 2020. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing
A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a), F.A.C.

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point-of-entry.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation
Mediation is not available in this proceeding.

Judicial Review
Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) 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 must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING
Executed in Orlando, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



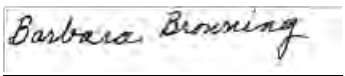
Reggie Phillips
Environmental Administrator
Permitting and Waste Cleanup Program

Attachment(s):
1. Permit No. FLA010353
2. Discharge Monitoring Report

CERTIFICATE OF SERVICE
The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

_____

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.



Clerk

May 1, 2020
Date

Copies Furnished to:
George McDonald, P.E, gmcdonald@mcdonaldgroup.com
DEP: Reggie Phillips, Dennise Judy, Mohamed Abouelkheir, David Smicherko

FLORIDA DEPARTMENT OF Environmental Protection

Central District Office
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

STATE OF FLORIDA
DOMESTIC WASTEWATER FACILITY PERMIT

PERMITTEE:
Sun Lake Estates

RESPONSIBLE OFFICIAL:
Thad Terry, Owner
5600 US Hwy 1N
Sharps, Florida 32927
(321) 639-1124
matlantisinvest@CFL.rr.com

PERMIT NUMBER: FLA010353
FILE NUMBER: FLA010353-007-DW3P
ISSUANCE DATE: May 1, 2020
EFFECTIVE DATE: October 28, 2020
EXPIRATION DATE: October 27, 2030

FACILITY:
Sun Lake Estates WWTF
616 Emerald Lake Dr
Cocoa, FL 32926-4671
Brevard County
Latitude: 28°25' 31.54" N Longitude: 80°46' 42.66" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.). This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above-named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

WASTEWATER TREATMENT:

This is an existing 0.099 million gallon per day (MGD) annual average daily flow (AADF) permitted capacity extended aeration domestic wastewater treatment plant (designed capacity 0.135 MGD AADF) consisting of flow equalization, influent screening, aeration, secondary clarification, chlorination, and aerobic digestion of biosolids.

REUSE OR DISPOSAL:

Land Application R-001 is an existing 0.206 MGD annual average daily flow designed capacity rapid infiltration basin (RIB) system limited to 0.099 MGD AADF, the permitted capacity of the treatment plant. R-001 is a reuse system which consists of four (4) dual-cell rapid infiltration basins with a total wetted area of 6.82 acres located approximately at latitude 28°25' 34" N, longitude 80°46' 43" W.

IN ACCORDANCE WITH: The limitations, monitoring requirements, and other conditions set forth in this cover sheet and Part I through Part IX on pages 1 through 18 of this permit.

I. RECLAIMED WATER AND EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Reuse and Land Application Systems

1. During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to direct reclaimed water to Reuse System R-001. Such reclaimed water shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.B.7.:

			Reclaimed Water Limitations		Monitoring Requirements			
Parameter	Units	Max./Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow (Flow to R-001)	MGD	Max Max	0.099 Report	Annual Average Monthly Average	5 Days/Week	Recording Flow Meter with Totalizer	FLW-1	See I.A.3
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Monthly	Grab	EFA-1	
Solids, Total Suspended	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Monthly	Grab	EFA-1	
Coliform, Fecal	#/100 mL	Max Max Max	200 800 Report	Annual Average Single Sample Monthly Geometric Mean	Monthly	Grab	EFA-1	See I.A.4 and I.A.5
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	5 Days/Week	Grab	EFA-1	
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	5 Days/Week	Grab	EFA-1	See I.A.6
Nitrogen, Nitrate, Total (as N)	mg/L	Max	12.0	Single Sample	Monthly	Grab	EFA-1	
Nitrogen, Total	mg/L	Max Max	Report Report	Annual Average Monthly Average	Monthly	Grab	EFA-1	
Phosphorus, Total (as P)	mg/L	Max Max	Report Report	Annual Average Monthly Average	Monthly	Grab	EFA-1	

2. Reclaimed water samples shall be taken at the monitoring site locations listed in Permit Condition I.A.1. and as described below:

Monitoring Site Number	Description of Monitoring Site
FLW-1	Flow meter at chlorine contact tank.
EFA-1	Chlorine contact tank effluent.

3. A recording flow meter with totalizer shall be utilized to measure flow and calibrated at least once every 12 months. *[62-600.200(25)]*

4. The effluent limitation for the monthly geometric mean for fecal coliform is only applicable if 10 or more values are reported. If fewer than 10 values are reported, the monthly geometric mean shall be calculated and reported on the Discharge Monitoring Report to be used to calculate the annual average. All other fecal coliform effluent limitations included in permit condition I.A.1 apply regardless of the number of values reported. *[62-600.440(5)(b)]*

5. To report the "90th percentile,"

   a. Place the bacteria results in ascending order (from lowest to highest value) and assign each sample a number, 1 for the lowest value.

   b. Multiply the total number of samples by 0.9 to determine the 90th percentile level.

   c. Report the value of the sample that corresponds to the 90th percentile level (e.g., 10 samples x 0.9 = 9, report the value of the 9th sample). If the 90th percentile level is not a whole number, rounding or interpolation should be used to determine the 90th percentile. When rounding, round down to the nearest whole number if the decimal is 0.4 or lower, and round up to the nearest whole number if the decimal is 0.5 or higher (e.g., 12 samples x 0.9 = 10.8, report the value of the 11th sample if rounding).

   [62-600.440(5)(a)3]

6. Total residual chlorine must be maintained for a minimum contact time of 15 minutes based on peak hourly flow. *[62-610.510] [62-600.440(5)(c) and (6)(b)]*

B. Other Limitations and Monitoring and Reporting Requirements

1. During the period beginning on the effective date and lasting through the expiration date of this permit, the treatment facility shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.B.7.:

			Limitations		Monitoring Requirements			
Parameter	Units	Max./Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow (Total Through Plant)	MGD	Max Max Max	0.099 Report Report	Annual Average Monthly Average Quarterly Average	5 Days/Week	Recording Flow Meter with Totalizer	FLW-1	See I.B.4
Percent Capacity, (TMADF/Permitted Capacity) x 100	percent	Max	Report	Monthly Average	Monthly	Calculated	CAL-1	
BOD, Carbonaceous 5 day, 20C (Influent)	mg/L	Max	Report	Monthly Average	Annually	Grab	INF-1	See I.B.3
Solids, Total Suspended (Influent)	mg/L	Max	Report	Monthly Average	Annually	Grab	INF-1	See I.B.3

2. Samples shall be taken at the monitoring site locations listed in Permit Condition I.B.1. and as described below:

Monitoring Site Number	Description of Monitoring Site
FLW-1	Flow meter at chlorine contact tank.
CAL-1	Calculate from daily flow.
INF-1	Raw influent to surge tank.

3. Influent samples shall be collected so that they do not contain digester supernatant or return activated sludge, or any other plant process recycled waters. *[62-600.660(4)(a)]*

4. A recording flow meter with totalizer shall be utilized to measure flow and calibrated at least once every 12 months. *[62-600.200(25)]*

5. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this permit shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-600, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantitation limits), which is titled "FAC 62-4 MDL/PQL Table (April 26, 2006)" is available at https://floridadep.gov/dear/quality-assurance/content/quality-assurance-resources. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:

   a. The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;

   b. The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and

   c. If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

   When the analytical results are below method detection or practical quantitation limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

   Where necessary, the permittee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. *[62-4.246, 62-160]*

6. The permittee shall provide safe access points for obtaining representative samples which are required by this permit. *[62-600.650(2)]*

7. Monitoring requirements under this permit are effective on December 1, 2020. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Unless specified otherwise in this permit, monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below. DMRs shall be submitted for each required monitoring period including periods of no discharge.

REPORT Type on DMR	Monitoring Period	Submit by
Monthly	first day of month - last day of month	28th day of following month
Once Every Two Months	January 1 - February 28/29 March 1 - April 30 May 1 - June 30 July 1 - August 31 September 1 - October 31 November 1 - December 31	March 28 May 28 July 28 September 28 November 28 January 28
Quarterly	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 - June 30 July 1 - December 31	July 28 January 28
Annual	January 1 - December 31	January 28

The permittee may submit either paper or electronic DMR forms. If submitting electronic DMR forms, the permittee shall use the electronic DMR system approved by the Department (EzDMR) and shall electronically submit the completed DMR forms using the DEP Business Portal at https://www.fldepportal.com/go/. Reports shall be submitted to the Department by the twenty-eighth (28th) of the month following the month of operation. Data submitted in electronic format is equivalent to data submitted on signed and certified paper DMR forms.

If submitting paper DMR forms, the permittee shall make copies of the attached DMR forms, without altering the original format or content unless approved by the Department, and shall mail the completed DMR forms to the Department's Central District Office at the address specified in Permit Condition I.B.8. by the twenty-eighth (28th) of the month following the month of operation.

[62-620.610(18)] [62-600.680(1)]

8. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Central District Office at the address specified below:

Electronic submittal is preferred, by sending to DEP_CD@dep.state.fl.us .

Florida Department of Environmental Protection
Central District
3319 Maguire Blvd
Suite 232
Orlando, Florida 32803-3767

Phone Number - (407)897-4100

[62-620.305]

9. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. *[62-620.305]*

II. BIOSOLIDS MANAGEMENT REQUIREMENTS

A. Basic Requirements

1. Biosolids generated by this facility may be transferred to BCUD/ Sykes Creek WRF (FLA0102695) or disposed of in a Class I solid waste landfill. Transferring biosolids to an alternative biosolids treatment facility does not require a permit modification. However, use of an alternative biosolids treatment facility requires submittal of a copy of the agreement pursuant to Rule 62-640.880(1)(c), F.A.C., along with a written notification to the Department at least 30 days before transport of the biosolids. *[62-620.320(6), 62-640.880(1)]*

2. The permittee shall monitor and keep records of the quantities of biosolids generated, received from source facilities, treated, distributed and marketed, land applied, used as a biofuel or for bioenergy, transferred to another facility, or landfilled. These records shall be kept for a minimum of five years. *[62-640.650(4)(a)]*

3. Biosolids quantities shall be monitored by the permittee as specified below. Results shall be reported on the permittee's Discharge Monitoring Report for Monitoring Group RMP-Q in accordance with Condition I.B.7.

			Biosolids Limitation		Monitoring Requirements			
Parameter	Units	Max./ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Biosolids Quantity (Transferred)	dry tons	Max	Report	Monthly Total	Monthly	Calculated	RMP-1	
Biosolids Quantity (Landfilled)	dry tons	Max	Report	Monthly Total	Monthly	Calculated	RMP-1	

[62-640.650(5)(a)1]

4. Biosolids quantities shall be calculated as listed in Permit Condition II.3 and as described below:

Monitoring Site Number	Description of Monitoring Site Calculations
RMP-1	Weight of biosolids measured or calculated (based on volume and %solids).

5. The treatment, management, transportation, use, land application, or disposal of biosolids shall not cause a violation of the odor prohibition in subsection 62-296.320(2), F.A.C. *[62-640.400(6)]*

6. Storage of biosolids or other solids at this facility shall be in accordance with the Facility Biosolids Storage Plan. *[62-640.300(4)]*

7. Biosolids shall not be spilled from or tracked off the treatment facility site by the hauling vehicle. *[62-640.400(9)]*

B. Disposal

1. Disposal of biosolids, septage, and "other solids" in a solid waste disposal facility, or disposal by placement on land for purposes other than soil conditioning or fertilization, such as at a monofill, surface impoundment, waste pile, or dedicated site, shall be in accordance with Chapter 62-701, F.A.C. *[62-640.100(6)(b) & (c)]*

C. Transfer

1. The permittee shall not be held responsible for treatment and management violations that occur after its biosolids have been accepted by a permitted biosolids treatment facility with which the source facility has an agreement in accordance with subsection 62-640.880(1)(c), F.A.C., for further treatment, management, or disposal. *[62-640.880(1)(b)]*

2. The permittee shall keep hauling records to track the transport of biosolids between the facilities. The hauling records shall contain the following information:

Source Facility
1. Date and time shipped
2. Amount of biosolids shipped
3. Degree of treatment (if applicable)
4. Name and ID Number of treatment facility
5. Signature of responsible party at source facility
6. Signature of hauler and name of hauling firm

Biosolids Treatment Facility or Treatment Facility
1. Date and time received
2. Amount of biosolids received
3. Name and ID number of source facility
4. Signature of hauler
5. Signature of responsible party at treatment facility

A copy of the source facility hauling records for each shipment shall be provided upon delivery of the biosolids to the biosolids treatment facility or treatment facility. The treatment facility permittee shall report to the Department within 24 hours of discovery any discrepancy in the quantity of biosolids leaving the source facility and arriving at the biosolids treatment facility or treatment facility.

[62-640.880(4)]

D. Receipt

1. If the permittee intends to accept biosolids from other facilities, a permit revision is required pursuant to paragraph 62-640.880(2)(d), F.A.C. *[62-640.880(2)(d)]*

III. GROUND WATER REQUIREMENTS

A. Construction Requirements

1. The permittee shall give at least 72-hour notice to the Department's Central District Office, prior to the installation of any monitoring wells. *[62-520.600(6)(h)]*

2. Before construction of new ground water monitoring wells, a soil boring shall be made at each new monitoring well location to properly determine monitoring well specifications such as well depth, screen interval, screen slot, and filter pack. *[62-520.600(6)(g)]*

3. Within 30 days after installation of a monitoring well, the permittee shall submit to the Department's Central District Office well completion reports and soil boring/lithologic logs on the attached DEP Form(s) 62-520.900(3), Monitoring Well Completion Report. *[62-520.600(6)(j) and .900(3)]*

4. All piezometers and monitoring wells not part of the approved ground water monitoring plan shall be plugged and abandoned in accordance with Rule 62-532.500(5), F.A.C., unless future use is intended. *[62-532.500(5)]*

B. Operational Requirements

1. For the Part IV land application system(s), all ground water quality criteria specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge for Land Application Site R-001 shall extend horizontally 100 feet from the application site and vertically to the base of the surficial aquifer. *[62-520.200(27)] [62-520.465]*

2. The ground water minimum criteria specified in Rule 62-520.400 F.A.C., shall be met within the zone of discharge. *[62-520.400 and 62-520.420(4)]*

3. If the concentration for any constituent listed in Permit Condition III.6. in the natural background quality of the ground water is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative background quality shall be the prevailing standard. *[62-520.420(2)]*

4. During the period of operation authorized by this permit, the permittee shall continue to sample ground water at the monitoring wells identified in Permit Condition III.5., below in accordance with this permit and the approved ground water monitoring plan prepared in accordance with Rule 62-520.600, F.A.C. *[62-520.600] [62-610.510]*

5. The following monitoring wells shall be sampled for Reuse System R-001 located at Land Application Site RIB-001.

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Latitude	Longitude	Depth (Feet)	Aquifer Monitored	Well Type	New or Existing
MWB-1	SUN LAKE ESTATES/BACK GMS3005A14849	28°25' 31"	80°46' 46"	10	Surficial	Background	Existing
MWC-3	SUN LAKE ESTATES/COMP. GMS3005A14851	28°25' 55"	80°46' 43"	10	Surficial	Compliance	Existing
MWI-2	SUN LAKE ESTATES/INTER. GMS3005A14850	28°25' 45"	80°46' 44"	10	Surficial	Intermediate	Existing

[62-520.600] [62-610.510]

6. The following parameters shall be analyzed for each monitoring well identified in Permit Condition III.5.:

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD	Report	ft	In Situ	Semi-Annually; twice per year
Nitrogen, Nitrate, Total (as N)	10	mg/L	Grab	Semi-Annually; twice per year
Solids, Total Dissolved (TDS)	500	mg/L	Grab	Semi-Annually; twice per year
Chloride (as Cl)	250	mg/L	Grab	Semi-Annually; twice per year
Coliform, Fecal	4	#/100mL	Grab	Semi-Annually; twice per year
pH	6.5-8.5	s.u.	Grab	Semi-Annually; twice per year
Turbidity	Report	NTU	Grab	Semi-Annually; twice per year

[62-520.600(11)(b)] [62-600.670] [62-600.650(3)] [62-520.310(5)]

7. Water levels shall be recorded before evacuating each well for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NAVD allowable) at a precision of plus or minus 0.01 foot. *[62-520.600(11)(c)] [62-610.510(3)(b)]*

8. Ground water monitoring wells shall be purged prior to sampling to obtain representative samples. *[62-160.210] [62-600.670(3)]*

9. Analyses shall be conducted on unfiltered samples, unless filtered samples have been approved by the Department's Central District Office as being more representative of ground water conditions. *[62-520.310(5)]*

10. Ground water monitoring test results shall be submitted on Part D of Form 62-620.910(10) in accordance with Permit Condition I.B.7. *[62-520.600(11)(b)] [62-600.670] [62-600.680(1)] [62-620.610(18)]*

11. If any monitoring well becomes inoperable or damaged to the extent that sampling or well integrity may be affected, the permittee shall notify the Department's Central District Office within two business days from discovery, and a detailed written report shall follow within ten days after notification to the Department. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent recurrence or request approval for replacement of the monitoring well. All monitoring well design and replacement shall be approved by the Department's Central District Office before installation. *[62-520.600(6)(l)]*

IV. ADDITIONAL REUSE AND LAND APPLICATION REQUIREMENTS

A. Part IV Rapid Infiltration Basins (RIBs)

1. Advisory signs shall be posted around the site boundaries to designate the nature of the project area. *[62-610.518]*

2. The maximum annual average loading rate to the RIBs shall be limited to 1.11 inches per day (as applied to the entire bottom area). *[62-610.523(3)]*

3. The RIBs normally shall be loaded for 7 days and shall be rested for 7 days. Infiltration ponds, basins, or trenches shall be allowed to dry during the resting portion of the cycle. *[62-610.523(4)]*

4. Rapid infiltration basins shall be routinely maintained to control vegetation growth and to maintain percolation capability by scarification or removal of deposited solids. Basin bottoms shall be maintained to be level. *[62-610.523(6) and (7)]*

5. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required. *[62-610.514 and 62-610.414]*

6. Overflows from emergency discharge facilities on storage ponds or on infiltration ponds, basins, or trenches shall be reported as abnormal events in accordance with Permit Condition IX.20. *[62-610.800(9)]*

V. OPERATION AND MAINTENANCE REQUIREMENTS

A. Staffing Requirements

1. During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision of one or more operators certified in accordance with Chapter 62-602, F.A.C. In accordance with Chapter 62-699, F.A.C., this facility is a Category III, Class C facility and, at a minimum, operators with appropriate certification must be on the site as follows:

   A Class C or higher operator 1/2 hour/day for 5 days/week and one visit each weekend. The lead/chief operator must be a Class C operator, or higher.

2. An operator meeting the lead/chief operator class for the plant shall be available during all periods of plant operation. "Available" means able to be contacted as needed to initiate the appropriate action in a timely manner. *[62-699.311(1)]*

B. Capacity Analysis Report and Operation and Maintenance Performance Report Requirements

1. **Submit an updated capacity analysis report prepared in accordance with Rule 62-600.405, F.A.C., five years from the date of issuance of this permit.** ***[62-600.405(5)]***

2. The application to renew this permit shall include an updated capacity analysis report prepared in accordance with Rule 62-600.405, F.A.C. *[62-600.405(5)]*

3. The application to renew this permit shall include a detailed operation and maintenance performance report prepared in accordance with Rule 62-600.735, F.A.C. *[62-600.735(1)]*

C. Recordkeeping Requirements

1. The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility.

   a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;

   b. Copies of all reports required by this permit for at least three years from the date the report was prepared;

   c. Records of all data, including reports and documents, used to complete the application for this permit for at least three years from the date the application was filed;

   d. Monitoring information, including a copy of the laboratory certification showing the laboratory certification number, related to the residuals use and disposal activities for the time period set forth in Chapter 62-640, F.A.C., for at least three years from the date of sampling or measurement;

   e. A copy of the current wastewater facility permit;

   f. Copies of the current operation and maintenance manuals for the wastewater facility and the collection/transmission systems owned or operated by the wastewater facility permittee as required by Chapters 62-600 and 62-604, F.A.C.;

   g. A copy of any required record drawings for the wastewater facility and the collection/transmission systems owned or operated by the wastewater facility permittee;

   h. Copies of the licenses of the current certified operators;

   i. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules. The logs shall, at a minimum, include identification of the plant; the signature and license number of the operator(s) and the signature of the person(s) making any entries; date and time in and out; specific operation and maintenance activities, including any preventive maintenance or repairs made or requested; results of tests performed and samples taken, unless documented on a laboratory sheet; and notation of any notification or reporting completed in accordance with Rule 62-602.650(3), F.A.C. The logs shall be maintained on-site in a location accessible to 24-hour inspection, protected from weather damage, and current to the last operation and maintenance performed; and

   j. Records of biosolids quantities, treatment, monitoring, and hauling for at least five years.

   [62-620.350, 62-604.500, 62-602.650, 62-640.650(4)]

VI. SCHEDULES

1. The following improvement actions shall be completed according to the following schedule:

Improvement Action	Completion Date
1. Submit an updated capacity analysis report in accordance with permit condition V.B.1.	Five years from the date of permit issuance

[62-620.320(6)]

2. The permittee is not authorized to discharge to waters of the state after the expiration date of this permit, unless:

   a. The permittee has applied for renewal of this permit at least 180 days before the expiration date of this permit using the appropriate forms listed in Rule 62-620.910, F.A.C., and in the manner established in the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.; or

b. The permittee has made complete the application for renewal of this permit before the permit expiration date.

[62-620.335(1) - (4)]

VII. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

1. This facility is not required to have a pretreatment program at this time. *[62-625.500]*

VIII. OTHER SPECIFIC CONDITIONS

1. The permittee shall comply with all conditions and requirements for reuse contained in their consumptive use permit issued by the Water Management District, if such requirements are consistent with Department rules. *[62-610.800(10)]*

2. In the event that the wastewater facilities or equipment, including collection/transmission systems, no longer function as intended, are no longer safe in terms of public health and safety (including inactive or abandoned facilities), or odor, noise, aerosol drift, or lighting adversely affects neighboring developed areas at the levels prohibited by paragraphs 62-600.400(2)(a) and 62-604.400(2)(c), F.A.C., corrective action (which may include additional maintenance or modifications of the permitted facilities) shall be taken by the permittee. Other corrective action may be required to ensure compliance with rules of the Department. Additionally, the treatment, management, use or land application of residuals shall not cause a violation of the odor prohibition in subsection 62-296.320(2), F.A.C. *[62-600.410(5), 62-604.500(3) and 62-640.400(6)]*

3. All collection/transmission systems shall be operated and maintained so as to provide uninterrupted service. *[62-604.500(2)]*

4. The deliberate introduction of stormwater in any amount into collection/transmission systems designed solely for the introduction (and conveyance) of domestic/industrial wastewater; or the deliberate introduction of stormwater into collection/transmission systems designed for the introduction or conveyance of combinations of storm and domestic/industrial wastewater in amounts which may reduce the efficiency of pollutant removal by the treatment plant is prohibited, except as provided by Rule 62-610.472, F.A.C. *[62-604.130(3)]*

5. Cross-connection, as defined in Rule 62-550.200, F.A.C., between the wastewater facility, including the collection/transmission system, and a potable water system is prohibited. *[62-550.360][62-604.130(3)]*

6. The collection/transmission operation and maintenance manual shall be maintained and revised periodically in accordance with subsection 62-604.500(4), F.A.C., to reflect any alterations performed or to reflect experience resulting from operation. However, a new operation and maintenance manual is not required to be developed for each project if there is already an existing manual that is applicable to the facilities being constructed. *[62-604.500(4)]*

7. Collection/transmission system overflows shall be reported to the Department in accordance with Permit Condition IX. 20. *[62-604.550] [62-620.610(20)]*

8. The operating authority of a collection/transmission system and the permittee of a treatment plant are prohibited from accepting connections of wastewater discharges which have not received necessary pretreatment or which contain materials or pollutants (other than normal domestic wastewater constituents):

   a. Which may cause fire or explosion hazards; or

   b. Which may cause excessive corrosion or other deterioration of wastewater facilities due to chemical action or pH levels; or

   c. Which are solid or viscous and obstruct flow or otherwise interfere with wastewater facility operations or treatment; or

   d. Which result in the wastewater temperature at the introduction of the treatment plant exceeding $40^{o}C$ or otherwise inhibiting treatment; or

e. Which result in the presence of toxic gases, vapors, or fumes that may cause worker health and safety problems.

[62-604.130(5)]

9. The treatment facility, storage ponds for Part II systems, rapid infiltration basins, and/or infiltration trenches shall be enclosed with a fence or otherwise provided with features to discourage the entry of animals and unauthorized persons. *[62-610.518(1) and 62-600.400(2)(b)]*

10. Screenings and grit removed from the wastewater facilities shall be collected in suitable containers and hauled to a Department approved Class I landfill or to a landfill approved by the Department for receipt/disposal of screenings and grit. *[62-701.300(1)(a)]*

11. Where required by Chapter 471 or Chapter 492, F.S., applicable portions of reports that must be submitted under this permit shall be signed and sealed by a professional engineer or a professional geologist, as appropriate. *[62-620.310(4)]*

12. The permittee shall provide verbal notice to the Department's Central District Office as soon as practical after discovery of a sinkhole or other karst feature within an area for the management or application of wastewater, wastewater residuals (sludges), or reclaimed water. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department's Central District Office in a written report within 7 days of the sinkhole discovery. *[62-620.320(6)]*

13. The permittee shall provide notice to the Department of the following:

    a. Any new introduction of pollutants into the facility from an industrial discharger which would be subject to Chapter 403, F.S., and the requirements of Chapter 62-620, F.A.C., if it were directly discharging those pollutants; and

    b. Any substantial change in the volume or character of pollutants being introduced into that facility by a source which was identified in the permit application and known to be discharging at the time the permit was issued.

    Notice shall include information on the quality and quantity of effluent introduced into the facility and any anticipated impact of the change on the quantity or quality of effluent or reclaimed water to be discharged from the facility. If pretreatment becomes necessary, this permit may be modified to require the permittee to develop and implement a local pretreatment program in accordance with the requirements of Chapter 62-625, F.A.C.

[62-620.625(2)]

IX. GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. *[62-620.610(1)]*

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications, or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. *[62-620.610(2)]*

3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. *[62-620.610(3)]*

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment 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. *[62-620.610(4)]*

5. This permit does not relieve the permittee from liability and penalties 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; 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. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[62-620.610(5)]*

6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. *[62-620.610(6)]*

7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. *[62-620.610(7)]*

8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. *[62-620.610(8)]*

9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:

    a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;

    b. Have access to and copy any records that shall be kept under the conditions of this permit;

    c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and

    d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

    [62-620.610(9)]

10. 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 as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. *[62-620.610(10)]*

11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. *[62-620.610(11)]*

12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, 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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. *[62-620.610(12)]*

13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. *[62-620.610(13)]*

14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. *[62-620.610(14)]*

15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. *[62-620.610(15)]*

16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. *[62-620.610(16)]*

17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:

    a. A description of the anticipated noncompliance;

    b. The period of the anticipated noncompliance, including dates and times; and

    c. Steps being taken to prevent future occurrence of the noncompliance.

    [62-620.610(17)]

18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-600, and 62-610, F.A.C., and 40 CFR 136, as appropriate.

    a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.

    b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

    c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.

    d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.

    e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.

f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

[62-620.610(18)]

19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. *[62-620.610(19)]*

20. The permittee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. For noncompliance events related to sanitary sewer overflows or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (sanitary sewer overflows or bypass events), type of sewer overflow (e.g., manhole), discharge volumes by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. The written submission may be provided electronically using the Department's Business Portal at http://www.fldepportal.com/go/ (via "Submit" followed by "Report" or "Registration/Notification"). Notice required under paragraph (d) may be provided together with the written submission using the Business Portal. All noncompliance events related to sanitary sewer overflows or bypass events submitted after December 21, 2020, shall be submitted electronically.

a. The following shall be included as information which must be reported within 24 hours under this condition:
   (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
   (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
   (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
   (4) Any unauthorized discharge to surface or ground waters.

b. Oral reports as required by this subsection shall be provided as follows:
   (1) For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph (a)4. that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the STATE WATCH OFFICE TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Watch Office:
      (a) Name, address, and telephone number of person reporting;
      (b) Name, address, and telephone number of permittee or responsible person for the discharge;
      (c) Date and time of the discharge and status of discharge (ongoing or ceased);
      (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
      (e) Estimated amount of the discharge;
      (f) Location or address of the discharge;
      (g) Source and cause of the discharge;
      (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
      (i) Description of area affected by the discharge, including name of water body affected, if any; and
      (j) Other persons or agencies contacted.

(2) Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to the Department's Central District Office within 24 hours from the time the permittee becomes aware of the circumstances.

c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Central District Office shall waive the written report.

[62-620.610(20)]

21. The permittee shall report all instances of noncompliance not reported under Permit Conditions IX.17., IX.18., or IX.19. of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition IX.20. of this permit. *[62-620.610(21)]*

22. Bypass Provisions.

a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.

b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Permit Condition IX.22.c. of this permit.

c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition IX.20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition IX.22.b.(1) through (3) of this permit.

e. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition IX.22.b. through d. of this permit.

[62-620.610(22)]

23. Upset Provisions.

a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.

(1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.

(2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.

b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in Permit Condition IX.20. of this permit; and

(4) The permittee complied with any remedial measures required under Permit Condition IX.5. of this permit.

c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.

d. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[62-620.610(23)]

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Reggie Phillips
Environmental Administrator
Permitting and Waste Cleanup Program

Attachment(s):
Discharge Monitoring Report

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Sun Lake Estates Homeowners Association	PERMIT NUMBER:	FLA010353-007-DW3P	**DMR EFFECTIVE DATE:**	December 1, 2020
				EXPIRATION DATE:	October 27, 2030
MAILING ADDRESS:	5600 N Highway 1n				
	Sharps, Florida 32927-	LIMIT:	Final	REPORT FREQUENCY:	Monthly
		CLASS SIZE:	N/A	PROGRAM:	Domestic
FACILITY:	Sun Lake Estates WWTF	MONITORING GROUP NUMBER:	R-001		
LOCATION:	616 Emerald Lake Dr	MONITORING GROUP DESCRIPTION:	Rapid Infiltration Basin, including Influent		
	Cocoa, FL 32926-4671	RE-SUBMITTED DMR: ☐			
		NO DISCHARGE FROM SITE: ☐			
COUNTY:	Brevard	MONITORING PERIOD From:	_____	_____	
			To:		
OFFICE:	Central District				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow (Flow to R-001)	Sample Measurement										
PARM Code 50050 Y Mon. Site No. FLW-1	Permit Requirement		0.099 (An.Avg.)	MGD						5 Days/Week	Flow Totalizer
Flow (Flow to R-001)	Sample Measurement										
PARM Code 50050 1 Mon. Site No. FLW-1	Permit Requirement		Report (Mo.Avg.)	MGD						5 Days/Week	Flow Totalizer
BOD, Carbonaceous 5 day, 20C	Sample Measurement										
PARM Code 80082 Y Mon. Site No. EFA-1	Permit Requirement					20.0 (An.Avg.)		mg/L		Monthly	Grab
BOD, Carbonaceous 5 day, 20C	Sample Measurement										
PARM Code 80082 A Mon. Site No. EFA-1	Permit Requirement				60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Monthly	Grab
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 Y Mon. Site No. EFA-1	Permit Requirement					20.0 (An.Avg.)		mg/L		Monthly	Grab
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 A Mon. Site No. EFA-1	Permit Requirement				60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Monthly	Grab

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Sun Lake Estates WWTF MONITORING GROUP NUMBER: R-001 PERMIT NUMBER: FLA010353-007-DW3P

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Coliform, Fecal	Sample Measurement										
PARM Code 74055 Y Mon. Site No. EFA-1	Permit Requirement					200 (An.Avg.)		#/100mL		Monthly	Grab
Coliform, Fecal	Sample Measurement										
PARM Code 74055 A Mon. Site No. EFA-1	Permit Requirement					Report (Mo.Geo.Mn.)	800 (Max.)	#/100mL		Monthly	Grab
pH	Sample Measurement										
PARM Code 00400 A Mon. Site No. EFA-1	Permit Requirement				6.0 (Min.)		8.5 (Max.)	s.u.		5 Days/Week	Grab
Chlorine, Total Residual (For Disinfection)	Sample Measurement										
PARM Code 50060 A Mon. Site No. EFA-1	Permit Requirement				0.5 (Min.)			mg/L		5 Days/Week	Grab
Nitrogen, Nitrate, Total (as N)	Sample Measurement										
PARM Code 00620 A Mon. Site No. EFA-1	Permit Requirement						12.0 (Max.)	mg/L		Monthly	Grab
Nitrogen, Total	Sample Measurement										
PARM Code 00600 Y Mon. Site No. EFA-1	Permit Requirement					Report (An.Avg.)		mg/L		Monthly	Grab
Nitrogen, Total	Sample Measurement										
PARM Code 00600 A Mon. Site No. EFA-1	Permit Requirement						Report (Mo.Avg.)	mg/L		Monthly	Grab
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 Y Mon. Site No. EFA-1	Permit Requirement					Report (An.Avg.)		mg/L		Monthly	Grab
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 A Mon. Site No. EFA-1	Permit Requirement						Report (Mo.Avg.)	mg/L		Monthly	Grab
Flow (Total Through Plant)	Sample Measurement										
PARM Code 50050 P Mon. Site No. FLW-1	Permit Requirement		0.099 (An.Avg.)	MGD						5 Days/Week	Flow Totalizer

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Sun Lake Estates WWTF MONITORING GROUP NUMBER: R-001 PERMIT NUMBER: FLA010353-007-DW3P

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow (Total Through Plant)	Sample Measurement										
PARM Code 50050 Q Mon. Site No. FLW-1	Permit Requirement	Report (Qt.Avg.)	Report (Mo.Avg.)	MGD						5 Days/Week	Flow Totalizer
Percent Capacity, (TMADF/Permitted Capacity) x 100	Sample Measurement										
PARM Code 00180 P Mon. Site No. CAL-1	Permit Requirement						Report (Mo.Avg.)	percent		Monthly	Calculated

ISSUANCE/REISSUANCE DATE: May 1, 2020
DMR EFFECTIVE DATE: 1st day of the 2nd month following effective date of permit - Permit expiration

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME: Sun Lake Estates Homeowners Association
MAILING ADDRESS: 5600 N Highway 1n
Sharps, Florida 32927-

FACILITY: Sun Lake Estates WWTF
LOCATION: 616 Emerald Lake Dr
Cocoa, FL 32926-4671

COUNTY: Brevard
OFFICE: Central District

PERMIT NUMBER: FLA010353-007-DW3P

LIMIT: Final
CLASS SIZE: N/A
MONITORING GROUP NUMBER: R-001
MONITORING GROUP DESCRIPTION: Rapid Infiltration Basin, including Influent
RE-SUBMITTED DMR: ☐
NO DISCHARGE FROM SITE: ☐
MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Annually
PROGRAM: Domestic

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
BOD, Carbonaceous 5 day, 20C (Influent)	Sample Measurement										
PARM Code 80082 G Mon. Site No. INF-1	Permit Requirement						Report (Mo.Avg.)	mg/L		Annually	Grab
Solids, Total Suspended (Influent)	Sample Measurement										
PARM Code 00530 G Mon. Site No. INF-1	Permit Requirement						Report (Mo.Avg.)	mg/L		Annually	Grab

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Sun Lake Estates Homeowners Association	PERMIT NUMBER:	FLA010353-007-DW3P		
MAILING ADDRESS:	5600 N Highway 1n				
	Sharps, Florida 32927-	LIMIT:	Final	REPORT FREQUENCY:	Monthly
		CLASS SIZE:	N/A	PROGRAM:	Domestic
FACILITY:	Sun Lake Estates WWTF	MONITORING GROUP NUMBER:	RMP-Q		
LOCATION:	616 Emerald Lake Dr	MONITORING GROUP DESCRIPTION:	Biosolids Quantity		
	Cocoa, FL 32926-4671	RE-SUBMITTED DMR: ☐			
		NO DISCHARGE FROM SITE: ☐			
COUNTY:	Brevard	MONITORING PERIOD From:	_____ To: _____		
OFFICE:	Central District				

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Biosolids Quantity (Transferred)	Sample Measurement										
PARM Code B0007 + Mon. Site No. RMP-1	Permit Requirement		Report (Mo.Total)	dry tons						Monthly	Calculated
Biosolids Quantity (Landfilled)	Sample Measurement										
PARM Code B0008 + Mon. Site No. RMP-1	Permit Requirement		Report (Mo.Total)	dry tons						Monthly	Calculated

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-007-DW3P Facility: Sun Lake Estates WWTF
Monitoring Period From: _____ To: _____

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Flow (Flow to R-001) MGD	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	
Code	80082	50060	74055	50050	00620	00600	00665	00530	00400	
Mon. Site	EFA-1	EFA-1	EFA-1	FLW-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	
1										
2										
3										
4										
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23										
24										
25										
26										
27										
28										
29										
30										
31										
Total										
Mo. Avg.										

PLANT STAFFING:

Day Shift Operator Class: _____ Certificate No: _____ Name: _____

Evening Shift Operator Class: _____ Certificate No: _____ Name: _____

Night Shift Operator Class: _____ Certificate No: _____ Name: _____

Lead Operator Class: _____ Certificate No: _____ Name: _____

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Sun Lake Estates WWTF
Permit Number: FLA010353-007-DW3P
County: Brevard

Office: Central District

Monitoring Well ID: MWB-1
Well Type: Background
Description: SUN LAKE ESTATES/BACK GMS3005A14849

Report Frequency: Semi-annually
Program: Domestic

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Semi-Annually; twice per year				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Semi-Annually; twice per year				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Semi-Annually; twice per year				
Chloride (as Cl)	00940		Report	mg/L	Grab	Semi-Annually; twice per year				
Coliform, Fecal	74055		Report	#/100mL	Grab	Semi-Annually; twice per year				
pH	00400		Report	s.u.	Grab	Semi-Annually; twice per year				
Turbidity	00070		Report	NTU	Grab	Semi-Annually; twice per year				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Sun Lake Estates WWTF
Permit Number: FLA010353-007-DW3P
County: Brevard

Office: Central District

Monitoring Well ID: MWC-3
Well Type: Compliance
Description: SUN LAKE ESTATES/COMP. GMS3005A14851

Report Frequency: Semi-annually
Program: Domestic

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Semi-Annually; twice per year				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Semi-Annually; twice per year				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Semi-Annually; twice per year				
Chloride (as Cl)	00940		250	mg/L	Grab	Semi-Annually; twice per year				
Coliform, Fecal	74055		4	#/100mL	Grab	Semi-Annually; twice per year				
pH	00400		6.5-8.5	s.u.	Grab	Semi-Annually; twice per year				
Turbidity	00070		Report	NTU	Grab	Semi-Annually; twice per year				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Sun Lake Estates WWTF
Permit Number: FLA010353-007-DW3P
County: Brevard

Monitoring Well ID: MWI-2
Well Type: Intermediate
Description: SUN LAKE ESTATES/INTER. GMS3005A14850

Report Frequency: Semi-annually
Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Semi-Annually; twice per year				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Semi-Annually; twice per year				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Semi-Annually; twice per year				
Chloride (as Cl)	00940		Report	mg/L	Grab	Semi-Annually; twice per year				
Coliform, Fecal	74055		Report	#/100mL	Grab	Semi-Annually; twice per year				
pH	00400		Report	s.u.	Grab	Semi-Annually; twice per year				
Turbidity	00070		Report	NTU	Grab	Semi-Annually; twice per year				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

Read these instructions before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28th of the month following the monitoring period. Facilities who submit their DMR(s) electronically through eDMR do not need to submit a hardcopy DMR. The DMR shall not be submitted before the end of the monitoring period.

The DMR consists of three parts--A, B, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are different.

CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.
DRY	Dry Well
FLD	Flood disaster.
IFS	Insufficient flow for sampling.
LS	Lost sample.
MNR	Monitoring not required this period.

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site.
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available.
SEF	Sampling equipment failure.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used, unless indicated otherwise in the permit or on the DMR:

1. Results greater than or equal to the PQL shall be reported as the measured quantity.
2. Results less than the PQL and greater than or equal to the MDL shall be reported as the laboratory's MDL value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
3. Results less than the MDL shall be reported by entering a less than sign ("<") followed by the laboratory's MDL value, e.g. < 0.001. A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.). Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following should be completed by the permittee or authorized representative:

Resubmitted DMR: Check this box if this DMR is being re-submitted because there was information missing from or information that needed correction on a previously submitted DMR. The information that is being revised should be clearly noted on the re-submitted DMR (e.g. highlight, circle, etc.)
No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number; however, if the monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.
Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.
Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units. Data qualifier codes are not to be reported on Part A.
No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. If none, enter zero.
Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.
Sample Type: The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.
Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.
Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.
Daily Monitoring Results: Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62-160, F.A.C., contains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate.

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
A	Value reported is the mean (average) of two or more determinations.
J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

To calculate the monthly average, add each reported value to get a total. For flow, divide this total by the number of days in the month. For all other parameters, divide the total by the number of observations.
Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.
Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.
Time Sample Obtained: Enter the time the sample was taken.
Sample Measurement: Record the results of the analysis. If the result was below the minimum detection limit, indicate that. Data qualifier codes are not to be reported on Part D.
Detection Limits: Record the detection limits of the analytical methods used.
Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.
Sampling Equipment Used: Indicate the procedure used to collect the sample (e.g. airlift, bucket/bailer, centrifugal pump, etc.)
Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).
Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.
Comments and Explanation: Use this space to make any comments on or explanations of results that are unexpected. If more space is needed, reference all attachments in this area.

SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES

Flow (Limited Wet Weather Discharge): Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).
Flow (Upstream): Enter the average flow rate in the receiving stream upstream from the point of discharge for the period of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.
Actual Stream Dilution Ratio: To calculate the Actual Stream Dilution Ratio, divide the average upstream flow rate by the average discharge flow rate. Enter the Actual Stream Dilution Ratio accurate to the nearest 0.1.
No. of Days the SDF > Stream Dilution Ratio: For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "*" and record the total number of days the Stream Dilution Factor was greater than the Stream Dilution Ratio.
$CBOD_5$: Enter the average $CBOD_5$ of the reclaimed water discharged during the period shown in duration of discharge.
TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.
Actual Rainfall: Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.
Rainfall During Average Rainfall Year: On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.
No. of Days LWWD Activated During Calendar Year: Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.
Reason for Discharge: Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

STATEMENT OF BASIS
FOR
STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT

PERMIT NUMBER: FLA010353-007

FACILITY NAME: Sun Lake Estates

FACILITY LOCATION: 616 Emerald Lake Dr, Cocoa, FL 32926-4671
Brevard County

NAME OF PERMITTEE: Thad Terry, Owner, Sun Lake Estates

PERMIT WRITER: Mohamed Abouelkheir

1. SUMMARY OF APPLICATION

a. Chronology of Application

Application Number: FLA010353-007-DW3P

Application Submittal Date: February 24, 2020

b. Type of Facility

Domestic Wastewater Treatment Plant

Ownership Type: Private

SIC Code: 4952

c. Facility Capacity

Existing Permitted Capacity:	0.099 MGD Annual Average Daily Flow
Proposed Increase in Permitted Capacity:	0.00 MGD Annual Average Daily Flow
Proposed Total Permitted Capacity:	0.099 MGD Annual Average Daily Flow

d. Description of Wastewater Treatment

This is an existing 0.099 million gallon per day (MGD) annual average daily flow (AADF) permitted capacity extended aeration domestic wastewater treatment plant (designed capacity 0.135 MGD AADF) consisting of flow equalization, influent screening, aeration, secondary clarification, chlorination, and aerobic digestion of biosolids.

e. Description of Effluent Disposal and Land Application Sites (as reported by applicant)

Land Application R-001 is an existing 0.206 MGD annual average daily flow designed capacity rapid infiltration basin (RIB) system limited to 0.099 MGD AADF, the permitted capacity of the treatment plant. R-001 is a reuse system which consists of four (4) dual-cell rapid infiltration basins with a total wetted area of 6.82 acres located approximately at latitude 28□25' 34" N, longitude 80□46' 43" W.

2. SUMMARY OF SURFACE WATER DISCHARGE

This facility does not discharge to surface waters.

3. BASIS FOR PERMIT LIMITATIONS AND MONITORING REQUIREMENTS

This facility is authorized to direct reclaimed water to Reuse System R-001, a rapid infiltration basin system, based on the following:

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Flow (Flow to R-001)	MGD	Max	0.099	Annual Average	62-600.700(2)(b) & 62-610.810(5) FAC
		Max	Report	Monthly Average	62-600.700(2)(b) & 62-610.810(5) FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	20.0	Annual Average	62-610.510 & 62-600.420(3)(a)1. FAC
		Max	30.0	Monthly Average	62-610.510 & 62-600.420(3)(a)2. FAC
		Max	45.0	Weekly Average	62-610.510 & 62-600.420(3)(a)3. FAC
		Max	60.0	Single Sample	62-610.510 & 62-600.420(3)(a)4. FAC
Solids, Total Suspended	mg/L	Max	20.0	Annual Average	62-610.510 & 62-600.420(3)(b)1. FAC
		Max	30.0	Monthly Average	62-610.510 & 62-600.420(3)(b)2. FAC
		Max	45.0	Weekly Average	62-610.510 & 62-600.420(3)(b)3. FAC
		Max	60.0	Single Sample	62-610.510 & 62-600.420(3)(b)4. FAC
Coliform, Fecal	#/100mL	Max	200	Annual Average	62-610.510 & 62-600.440(5)(a)1. FAC
		Max	800	Single Sample	62-610.510 & 62-600.440(5)(a)4. FAC
		Max	Report	Monthly Geometric Mean	62-610.510 & 62-600.440(5)(a)2. FAC
pH	s.u.	Min	6.0	Single Sample	62-600.445 FAC
		Max	8.5	Single Sample	62-600.445 FAC
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	62-610.510 & 62-600.440(5)(c) FAC
Nitrogen, Nitrate, Total (as N)	mg/L	Max	12.0	Single Sample	62-610.510(1) FAC
Nitrogen, Total	mg/L	Max	Report	Annual Average	62-600.650(3), F.A.C.
		Max	Report	Monthly Average	62-600.650(3), F.A.C.
Phosphorus, Total (as P)	mg/L	Max	Report	Annual Average	62-600.650(3), F.A.C.
		Max	Report	Monthly Average	62-600.650(3), F.A.C.

Other Limitations and Monitoring Requirements:

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Flow (Total Through Plant)	MGD	Max	0.099	Annual Average	62-600.700(2)(b) FAC
		Max	Report	Monthly Average	62-600.700(2)(b) FAC
		Max	Report	Quarterly Average	62-600.700(2)(b) FAC
Percent Capacity, (TMADF/Permitted Capacity) x 100	percent	Max	Report	Monthly Average	62-600.405(4) FAC

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
BOD, Carbonaceous 5 day, 20C (Influent)	mg/L	Max	Report	Monthly Average	62-600.650(3) FAC
Solids, Total Suspended (Influent)	mg/L	Max	Report	Monthly Average	62-600.650(3) FAC
Monitoring Frequencies and Sample Types	-	-	-	All Parameters	62-600 FAC & 62-699 FAC and/or BPJ of permit writer
Sampling Locations	-	-	-	All Parameters	62-600, 62-610.412, 62-610.463(1), 62-610.568, 62-610.613 FAC and/or BPJ of permit writer

4. IMPAIRMENT STATUS OF RECEIVING WATERS

This facility does not discharge to surface waters. However, the R-001 land application system is in a nutrient-impaired basin (Upper St. Johns Basin), although there is no assessment available for the Lake Wilson Canal Outlet WBID 3048, When effluent is land applied it infiltrates into groundwater and has the potential to deliver nutrient loads to the aquifer and hydrologically connected surface waters. Monitoring for total nitrogen and total phosphorus is included for R-001, land application system in permit condition, in order to provide reasonable assurance that the discharge to ground waters will not cause or contribute to the nutrient impairment in the basin.

5. DISCUSSION OF CHANGES TO PERMIT LIMITATIONS

The current wastewater permit for this facility FLA010353-007-DW3P expires on October 27, 2030.

6. BIOSOLIDS MANAGEMENT REQUIREMENTS

Biosolids generated by this facility may be transferred to Brevard County Regional Facility (FLA0102695) or disposed of in a Class I solid waste landfill.

See the table below for the rationale for the biosolids quantities monitoring requirements.

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Biosolids Quantity (Transferred)	dry tons	Max	Report	Monthly Total	62-640.650(5)(a)1. FAC
Biosolids Quantity (Landfilled)	dry tons	Max	Report	Monthly Total	62-640.650(5)(a)1. FAC
Monitoring Frequency		All Parameters			62-640.650(5)(a) FAC

7. GROUND WATER MONITORING REQUIREMENTS

Ground water monitoring requirements have been established in accordance with Chapters 62-520, 532, 601, 610, and 620, F.A.C.

8. PERMIT SCHEDULES

Improvement Action	Completion Date
1. Submit an updated capacity analysis report in accordance with permit condition V.B.1.	Five years from the effective date of the permit

9. INDUSTRIAL PRETREATMENT REQUIREMENTS

At this time, the facility is not required to develop an approved industrial pretreatment program. However, the Department reserves the right to require an approved program if future conditions warrant.

10. ADMINISTRATIVE ORDERS (AO) AND CONSENT ORDERS (CO)

This permit is not accompanied by an AO, and the permittee has not entered into a CO with the Department that affects this permit.

11. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

No variances were requested for this facility.

12. THE ADMINISTRATIVE RECORD

The administrative record including application, draft permit, fact sheet, public notice (after release), comments received and additional information is available for public inspection during normal business hours at the location specified in item 14. Copies will be provided at a minimal charge per page.

13. PROPOSED SCHEDULE FOR PERMIT ISSUANCE

Notice of Permit Issuance May 1, 2020

14. DEP CONTACT

Additional information concerning the permit and proposed schedule for permit issuance may be obtained during normal business hours from:

Mohamed Abouelkheir, Engineering Specialist
Mohamed.Abouelkheir@FloridaDep.gov
Central District Office

3319 Maguire Blvd
Suite 232
Orlando, FL 32803-3767

Telephone No.: (407)897-2966

Attachment VI – 2015 Permit Renewal Application

McDONALD GROUP INTERNATIONAL, INC. C.A.-0007580

GEORGE J. McDONALD, P.E.
WATER, WASTEWATER & ENVIRONMENTAL ENGINEERING

9030 S. BRITTANY PATH INVERNESS FLORIDA 34452
TOLL FREE NATIONWIDE: (877) 593-2364
FAX (888)523-0884 VOICE (352) 637-1652
E-MAIL: *gmcdonald@mcdonaldgroup.com*
WEB SITE: *www.mcdonaldgroup.com*

July 8, 2015

RECEIVED
JUL 17 2015
DEP Central District

Denise Judy, P.E.
Domestic Wastewater Permitting
Florida Department of Environmental Protection
Central District
3319 Maguire Blvd Ste 232
Orlando Florida 32803-3767

Subject Wastewater Permit Renewal Application for Sun Lakes Estates:
FLA010353, expires 10/27/2015 Brevard County, Florida

Dear Ms. Judy;

In reply to your last email requesting additional information, I can comment as follows:

#1 on your RAI response to Sun Lake Estates WWTF, an agreement with a permitted Biosolids Treatment Facility (BTF) was not received. You said "it seems they no longer enter into individual agreements." This is not the case. In order to assist you, enclosed is a copy of a recent agreement for another facility. Be sure to contact the appropriate person to obtain a similar agreement.

You are correct, the operator for Sun Lake reported he had originally contacted the main County utilities office and was advised by staff there agreements or letters were no longer being issued, however, the operator reported that direct communication with the operator of the County WWTF indicated these documents are issued from that office, and he obtained same, see attached.

#5 on your RAI response to Sun Lake Estates WWTF, effluent data was received; however, influent data was not received. You said that you could not find any influent test results for the last 12 months. As you said, please pull a new sample ASAP. Please provide the results.

No record data of any previous sample in this time period was found. A new sample was pulled by the operator, results attached

#6 on your RAI response to Sun Lake Estates WWTF, Lab reports were received that show that complete nitrification has been happening. Please submit a corrective action plan to reduce Nitrate levels to less than 12 mg/L. Also, the new permit, when issued, will specify monthly testing of nitrogen.

The previous response said was that complete nitrification occurred in some months in 2012 and 2013, this was not intended to mean this was an ongoing condition in every month, and was intended to mean that the plant could be operated to not induce complete nitrification.

> "Using this data and using data from part B of the DMRs, we have found that in 2012 and 2013, complete nitrification occurred in five months, resulting in nitrate results above 12 mg/L. From November 13 to December 2014, monthly nitrate results were below 12, with the exception of September of 2014. It is noted that nitrate is only required by the current permit to be pulled annually.
>
> In summary, judging from the TN and nitrate test results, the facility can be operated to partially nitrify and produce an effluent less than 12 mg/L Nitrate, although total nitrogen, which has no limit at this time, will likely have a higher numerical result"

While in 2012 and 2013, there were a number of monthly nitrate results found on lab sheets exceeding 12 mg/L, since then the operator has avoided complete nitrification, with the exception of 9/14:

The following had been provided in the DMR data table attached to the last RAI response.

	Nitrate	TN
Nov-13	9.1	29
Dec-13	0.056	25
Jan-14	0.019	14
Feb-14	0.36	34
Mar-14	0.072	38
Apr-14	0.97	42
May-14	5.8	32
Jun-14	0.025	43
Jul-14	0.077	38
Aug-14	0.032	32
Sep-14	19	20
Oct-14	0.065	18
11-2014	2.9	12
Dec-14	0.18	16

The data demonstrate the plant can be operated to not completely nitrify.

As to a corrective action plan, I am not seeing a need for plant modifications, just continuing operating practices consistent with the November 2013 to December 2014 data. With respect to that, nitrification and denitrification in an extended aeration plant is controlled by adjustment of the total blower running time per day, typical schedule for best results is 30 minute On/Off cycle, with longer On periods in the morning and longer Off periods at night. The actual cycle is determined by the operator, and the use of ammonia and nitrate test kits to periodically check the effluent and adjust the extent of nitrification as needed are very useful.

With respect to continued monitoring for Total Nitrogen (and TP) , such monitoring began last permit cycle "..in accordance with Rule 62-601.300(6), F.A.C., all Type I and II facilities that land apply in an area with impaired waters.. " (I am quoting a October 8, 2010 permit renewal RAI letter announcing the intent to require this monitoring).

Founded on rule, we have no objection to continued TN monitoring and look forward to the results of the study being conducted with all the data captured over the last five years, with this caveat: The facility was downrated to 0.099 MGD and is therefore a Type III, not a type I or II plant. In consideration of same, I wish to inquire if continuing TN and TP monitoring under the rule for this size plant can still be required. If not, we ask that it be dropped or reduce as may be allowed by rule.

With respect to Nitrate, from discussions with the operator, we would object to increasing the monitoring and compliance reporting of nitrate from annually to monthly. Such proposed increased reporting should be cited to a specific rule (as was done in 2010) and would be expected to be universal, for example, if all such Type III facilities in Central District and the area in question will be having to monitor monthly for nitrate.

As noted in the previous RAI response, and if the Department determines requiring monthly continued monitoring of TN is allowable under the rule, nitrate is necessarily tested monthly in order to determine the TN result. The permittee and operator would agree under such circumstances to continue to furnish the lab reports with the DMR and with the lab reports showing the nitrate result, but would object if the compliance standard and DMR reporting was changed from annual to monthly.

#8 on your RAI response to Sun lake Estates WWTF, the schedule for corrective action items for repairing tank leaks and installing belt guards on the blowers was given as 180 days after permit issuance. This is OK for tank leaks, but for installing belt guards on the blowers (a safety item), please schedule to complete prior to permit issuance, and reply with a completion notification.

According to the operator, the belt guards were off not because they were damaged or removed for servicing and can be quickly repaired or reinstalled, they are missing from the site entirely (the operator believes they were stolen). New guards can either be made to order or field fabricated and installed, but it will take about 45 days to do so. In order to bring the review of the permit to a conclusion, the recommendation to for this to be a scheduled improvement item completed in 180 days is changed to 45 days.

#9c on your RAI response to Sun Lake Estates WWTF, a schedule of 180 days after permit issuance was provided for removing the grit , which was one to two feet thick, in the surge tank. Please schedule to complete prior to permit issuance, and reply with a completion notification.

This unfortunately will not be possible in less than 180 days mainly due to financial considerations. What has to happen is that the surge tank has to be taken off line temporarily bypassed, dewatered, and multiple trucks are needed to get the job done, with staff going into the tank to shovel out material that cannot be lift suctioned out, and operator advises the utility cannot afford this expense in the couple of months. As it is, the plant has probably been operating this way for a long time, and while not desirable, is not thought to be impairing the flow equalization function, and is not an emergency treatment issue meriting a more rapid response than finances might allow.

Should you require additional information, please do not hesitate to call.

Sincerely,

[redacted] GROUP INTERNATIONAL, INC..

[redacted] Donald P.E.

Cc
Thad Terry

Brevard County Utility Services Department

South Central Regional Wastewater Treatment Plant
10001 N Wickham Road
Viera, Florida 32940

BOARD OF COUNTY COMMISSIONERS

June 15, 2015

Mr. Thad Terry
Sun Lakes Estates
750 Malabar Rd
Malabar, FL 32950

Dear Mr. Thad Terry,

Sun Lakes Estates is authorized to have sludge from their Category III, Class C, domestic Wastewater Treatment Facility operated under permit FLA010353-003 treated by Brevard County South Central Regional Wastewater Treatment Plant's Septage Management Facility in accordance with permit number FLA-010277. The sludge hauler shall have a Certificate of Liability Insurance on file with Brevard County Utility Services Department. The sludge hauler shall have an Application for the Treatment and Disposal of Septage approval on file with Brevard County Utility Services Department. The Hauler shall deposit a Brevard County Septage Manifest form for each offload at BCUD SMF. That manifest will be filled out in accordance with permit FLA-010277 Article II Section 40. The sludge hauler shall also submit a form to Sun Lakes Estates verifying their offload location in accord with Sun Lakes Estates permit FLA010353-003, Article II, Section 6 (1) et seq. Section 6(6). This letter constitutes compliance with FAC 62-640.880(1)(c) and FAC 62-620.320(6).

Sincerely:

Stan Sircello, Plant Supervisor

321-255-4328

stan.sircello@brevardcounty.us

Job ID: 660-67604-1

Laboratory: TestAmerica Tampa

4

Narrative

Job Narrative
660-67604-1

Comments
No additional comments.

Receipt
The samples were received on 6/24/2015 at 1:20 PM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 2.1° C.

General Chemistry
Method SM 2540D: Insufficient sample volume was provided to produce results within the specifications of SM 2540D which requires at least 2.5 mg dried residue with a sample volume not to exceed 1L. A sample volume less than 1L, that yielded less than 2.5 mg dried residue, was provided for the following sample: Effluent (660-67604-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract non-Sister
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

General Chemistry

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

5

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Sunlake Homeowners Association, Inc
Project/Site: Sunlake Estates Annual Waste Water

TestAmerica Job ID: 660-67604-1

Client Sample ID: Influent — Lab Sample ID: 660-67604-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	0.094		0.050	0.010	mg/L	1		353.2	Total/NA
Total Suspended Solids	260		25	25	mg/L	1		SM 2540D	Total/NA
Carbonaceous Biochemical Oxygen Demand	270		120	120	mg/L	1		SM 5210B	Total/NA

Client Sample ID: Effluent — Lab Sample ID: 660-67604-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	15		2.0	1.0	mg/L	10		351.2	Total/NA
Nitrate Nitrite as N	0.055		0.050	0.010	mg/L	1		353.2	Total/NA
Phosphorus	1.3		0.10	0.041	mg/L	1		365.4	Total/NA
Total Suspended Solids	2.8		1.9	1.9	mg/L	1		SM 2540D	Total/NA
Nitrogen, Total	15		0.25	0.25	mg/L	1		Total Nitrogen	Total/NA

This Detection Summary does not include radiochemical test results.

McDONALD GROUP INTERNATIONAL, INC. C.A.-0007580

GEORGE J. McDONALD, P.E.
WATER, WASTEWATER & ENVIRONMENTAL ENGINEERING

9030 S. BRITTANY PATH INVERNESS FLORIDA 34452
TOLL FREE NATIONWIDE: (877) 593-2364
FAX (888)523-0884 VOICE (352) 637-1652
E-MAIL: *gmcdonald@mcdonaldgroup.com*
WEB SITE: *www.mcdonaldgroup.com*

March 18, 2015

Denise Judy, P.E.
Domestic Wastewater Permitting
Florida Department of Environmental Protection
Central District
3319 Maguire Blvd Ste 232
Orlando Florida 32803-3767

RECEIVED
APR 16 2015
DEP Central District

Subject Wastewater Permit Renewal Applications for Sun Lakes Estates:
FLA010353, expires 10/27/2015 Brevard County, Florida

Dear Ms. Judy;

Enclosed, please see the following documents the referenced facility::

- (2) copies of Form(s) 1 and 2, Wastewater Facility Permit Application
- (2) copies of a Capacity Analysis Report
- (2) copies of an Operations and Maintenance Performance Report
- a check for the application fee

Your review and approval of the enclosed material is requested. I trust you find the documents complete and adequate for this purpose.

The permittee requests consideration of a 10 year permit.

Should you require additional information, please do not hesitate to call.

Sincerely,
McDONALD GROUP INTERNATIONAL, INC..

George J. McDonald, P.E.

Cc
Thad Terry

WASTEWATER FACILITY OR ACTIVITY PERMIT
APPLICATION FORM 1
GENERAL INFORMATION

I - IDENTIFICATION NUMBER:

Facility ID FLA010353

II - CHARACTERISTICS:

INSTRUCTIONS: Complete the questions below to determine whether you need to submit any permit application forms to the Department of Environmental Protection. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the blank in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements. See Section B of the instructions. See also, Section C of the instructions for definitions of the terms used here.

SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED
A. Is this facility a domestic wastewater facility which results in a discharge to surface or ground waters?	X		
B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters?		X	
C. Does or will this facility (other than those describe in A. or B.) discharge process wastewater, or non-process wastewater regulated by effluent guidelines or new source performance standards, to surface waters?		X	
D. Does or will this facility (other than those described in A. or B.) discharge process wastewater to ground waters?		X	
E. Does or will this facility discharge non-process wastewater, not regulated by effluent guidelines or new source performance standards, to surface waters?		X	
F. Does or will this facility discharge non-process wastewater to ground waters?		X	
G. Does or will this facility discharge stormwater associated with industrial activity to surface waters?		X	
H. Is this facility a non-discharging/closed loop recycle system?		X	
I. Is this facility a public water system whose primary purpose is the production of potable water for public consumption and which discharges demineralization concentrate to surface water or groundwater?		X	

III - NAME OF FACILITY: (80 characters and spaces)

Sun Lakes Estates WWTP

Facility ID FLA010353

IV - FACILITY CONTACT: (A. 30 characters and spaces)

A. Name and Title (Last, first, & title)	B. Phone (area code & no.)
Thad Terry Owner	321-639-1124

V - FACILITY MAILING ADDRESS: (A. 30 characters and spaces; B. 25 characters and spaces)

A. Street or P.O. Box: 5600 US Hwy 1N		
B. City or Town: Sharps	State: FL	Zip Code:32927

VI - FACILITY LOCATION: (A. 30 characters and spaces; B. 24 characters and spaces; C. 3 spaces (if known); D. 25 characters and spaces; E. 2 spaces; F. 9 spaces)

A. Street, Route or Other Specific Identifier: 616 Emerald Lake Drive		
B. County Name: Brevard	C. County Code (if known):30	
D. City or Town: Cocoa	E. State: FL	F. Zip Code:32927

VII - SIC CODES: (4-digit, in order of priority)

1. Code #:4952	(Specify) Domestic Waste	2. Code #:	(Specify)
3. Code #:	(Specify)	4. Code #:	(Specify)

VIII - OPERATOR INFORMATION: (A. 40 characters and spaces; B. 1 character; C. 1 character (if other, specify); D. 12 characters; E. 30 characters and spaces; F. 25 characters and spaces; G. 2 characters; H. 9 characters)

A. Name: Jerry Padrick		B. Is the name in VIII A. the owner? ☐Yes X No	
C. Status of Operator: F = Federal; S = State; P = Private; O = Other; M = Public (other than F or S)	(code) P	(specify) Private	D. Phone No.: 321-639-1273
E. Street or P. O. Box: 4220 Temple St			
F. City or Town: Cocoa	G. State: FL	H. Zip Code: 32926	

IX - INDIAN LAND:

A. Is the facility located on Indian lands?	☐ Yes X No

Facility ID FLA010353

X - EXISTING ENVIRONMENTAL PERMITS:

A. NPDES Permit No.	B. UIC Permit No.	C. Other (specify)	D. Other (specify)
N/A	N/A	FDEP FLA010353	

XI - MAP: Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII - NATURE OF BUSINESS (provide a brief description)

This treatment facility provides domestic wastewater treatment to the mobile home community and residents of Sun Lake Estates.

XIII - CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Thad Terry	
A. Name (type or print)	B. Signature
Owner	4-13-15
Official Title (type or print)	C. Date Signed

WASTEWATER APPLICATION FORM 2A FOR A DOMESTIC WASTEWATER FACILITY PERMIT

Instructions for selected items are included in the "INSTRUCTIONS FOR FORM 2A". Refer to these instructions before filling out each item.

SECTION 1. APPLICANT AND FACILITY DESCRIPTION

1. Application Type

New
Substantial Modification
X Permit Renewal

2. Facility Type

X Wastewater Treatment
X Reuse or Disposal
Limited Wet Weather Discharge
Residuals/Septage Management

3. Treatment Facility Information

a. Name: Sun Lakes Estates WWTF

b. Facility Identification Number: FLA010353

c. Location

Number and Street	physical: 616 Emerald Lake Drive, Cocoa, FL mailing: 5600 US Hwy 1N
City/State/Zip Code	Sharps, FL, 32927
Telephone	321-639-1124

Latitude	28-25-31.54	"N
Longitude	80-46-42.66	"W

Dates Coordinates Determined	unknown
Method Used to Obtain Coordinates	FDEP Database

d. Ownership Type

Municipal
County
State
X Private

e. Contact

Name	Thad Terry
Title	Owner
Telephone	321-639-1124

f. Facility Mailing Address

Number and Street	5600 US Hwy 1N
City/State/Zip Code	Sharps, FL, 32927

g. Year Facility Began Operation 1984

4. Applicant or Authorized Representative

Legal Name	Sun Lakes Homeowners Association
Number and Street	5600 US Hwy 1N
City/State/Zip Code	Sharps
Telephone	321-639-8440
Contact Person	Thad Terry
Title	Owner
Telephone Number	321-639-1124

Is the applicant the owner or operator (or both) of the facility? X Owner Operator

Indicate whether correspondence regarding this facility should be directed to the facility or the applicant.
Facility X Applicant

5. Project Name and Description

Sun Lakes Estates WWTF, providing chlorinated effluent to percolation evaporation ponds.
Treatment consists of: flow equalization, aeration, final settling and sludge digestion, and disinfection

6. Municipalities or Areas Served

Name of Municipality or Area	Ownership	Population Served
Sun Lakes Estates	Private	206 mobile homes

Total mobile homes 206

7. Reclaimed Water Reuse and Effluent Disposal

Method of Reuse or Disposal	Number of Reuse or Disposal Points	Total Design Capacity (mgd)	Basis of Design Flow
Surface Waters - Excluding Ocean Outfalls and Wetlands (Rule 62-600.510, F.A.C.)			
Ocean Outfalls (Rule 62-600.520, F.A.C.)			
Wetlands (Rule 62-600.620, F.A.C.)			
Reuse of Reclaimed Water and Land Application (Rule 62-600.530, F.A.C.)	1	0.206	AADF
Ground Water Disposal by Underground Injection (Rule 62-600.540, F.A.C.)			
Other (Describe)			
Total	1	0.206	AADF

8. Flows to Another Wastewater Facility

a. Does the facility discharge or transport treated or untreated wastewater to another treatment facility?
Yes X No

b. If yes, describe the mean(s) by which the wastewater from the treatment facility is discharged or transported to the other treatment facility (e.g., collection/transmission system, reclaimed water distribution system)?

If transport is by a party other than the applicant, provide the following:
Transporter name:
Mailing Address:

Contact person:
Title:
Telephone number:

c. For each treatment facility that receives this discharge, provide the following:
Name:
Mailing Address:

Contact person:
Title:
Telephone number:

NOTE: DISPOSAL SYSTEM HAS A PERMITTED CAPACITY OF 0.206 MGD, PLANT HAS PHYSICAL CAPACITY OF 0.135 MGD, LIMITED TO 0.099 mgd.

d. Facility Identification Number of Facility Which Receives the Flow

e. Average Daily Flow Rate to the Receiving Facility mgd

9. Residuals Use or Disposal

a. Amount of Residuals Generated by the Facility 7 dry tons/year

b. Does this facility receive residuals from another facility for further treatment and disposal? Yes X No

c. Method of Residuals Use or Disposal

Method	Number of Sites or Number of Receiving Facilities	Dry Tons Used or Disposed per Year
Land Application (Chapter 62-640, F.A.C.)	0	0
Distribution and Marketing (Chapter 62-640, F.A.C.)		
Landfill Disposal (Chapter 62-701, F.A.C.)		
Incineration (Chapter 62-200 Series, F.A.C.)		
Transport to Another Treatment Facility	1	7
Other (Describe)		
	Total	7

d. If residuals are transported to another facility for landfill disposal, incineration, or treatment, provide the facility name, Facility identification number and address.

Name	Brevard County Regional
Facility Identification Number	FLA102695
Number and Street	3630 N Courtenay Pkwy
City/State/Zip Code	Merrit Island
County	Brevard
Telephone	3216332093
Treatment Processes Used by Receiving Facility	AS

10. Permits and Applications

a. Expiration Date of Current NPDES Permit _____

b. Expiration Date of Current DEP Permit 10/27/2015

Permit Number of Any Existing Environmental Permits

NPDES	PSD
UIC	Other
RCRA	Other

d. Orders and Notices

Type or Order or Notice	Issuing Agency	Date of Order or Notice
Notice or Violation		
Consent Order		
Administrative Order		
Other (Describe.)		

SECTION 2. TREATMENT FACILITY DESCRIPTION

1. Flow

a. Design Capacity

Current Design Capacity	0.099	mgd
Proposed Incremental Design Capacity	+ 0	mgd
Proposed Total Design Capacity	0.099	mgd

b. Basis of Design Flow

Annual Average Daily Flow
Maximum Monthly Average Daily Flow
X Three-Month Average Daily Flow
Other. If other, specify.

	Two Years Ago	Last Year	This Year	
c. Annual Average Daily Flow Rate	0.035	0.035	0.032	mgd
d. Maximum Daily Flow Rate	0.041	0.039	0.039	mgd

2. Design Treatment Levels

Parameter	Effluent Concentration	Units	Basis	Percent Removal
pH	6.00-8.50	Standard Units		
$CBOD_5$	20	mg/L	annual average	90
TSS	20	mg/L	annual average	90
TRC	0.5	mg/L	any sample	
Fecal Coliform	200	#//100 ML	annual average	
Nitrate	12	mg/L	any sample	

3. Disinfection Level Provided

Low-level
X Basic
Intermediate
High-level
High-level Alternative

If the facility disinfects by chlorination and the discharge is to surface waters, is dechlorination provided? Yes No

4. Residuals Treatment

a. Class of Residuals

Class AA (Rule 62-640.850, F.A.C.)
Class A (Rule 62-640.600, F.A.C.)
_ Class B (Rule 62-640.600, F.A.C.)
X Other

If other, describe

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

Aerobic Digestion followed by transport to a BTF

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

Option 1 (Minimum 38 percent reduction in volatile solids)
Option 2 (Anaerobic process, with bench-scale demonstration)
Option 3 (Aerobic process, with bench-scale demonstration)
Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
Option 5 (Aerobic processes plus raised temperature)
Option 6 (Raise pH to 12 and retain at 11.5)
Option 7 (75 percent solids with no unstabilized solids)
Option 8 (90 percent solids with unstabilized solids)
Option 9 (Injection below land surface)
Option 10 (Incorporation into soil within 6 hours)
Option 11 (Covering active sewage sludge unit daily)
X None or unknown

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

Aerobic Digestion followed by transport to a BTF

e. Parameter Concentrations

POLLUTANT	CONC.	UNITS
Total Nitrogen		% dry weight
Total Phosphorus		% dry weight
Total Potassium		% dry weight
Arsenic		mg/kg dry
Cadmium		mg/kg dry
Chromium		mg/kg dry
Copper		mg/kg dry
Lead		mg/kg dry
Mercury		mg/kg dry
Molybdenum		mg/kg dry
Nickel		mg/kg dry
Selenium		mg/kg dry
Zinc		mg/kg dry
pH		standard units
Total Solids		%
Other Parameters		

Date of Sample

5. Reliability Class

Class I
Class II
Class III
X Other Equivalent Reliability

Older Plant predating rules, Class III Not required.

SECTION 3. A. DISCHARGES TO SURFACE WATERS (including wetlands)
NOT APPLICABLE

1. Discharge Serial Number and Name

Discharge Serial Number _____

2. Discharge Location

County _____
Street or Description _____
City or Town (if applicable) _____
Zip Code _____
Latitude ° ' "N
Longitude ° ' "W
Dates Coordinates Determined _____
Method Used to Obtain Coordinates _____

3. Design Capacity of the Outfall

Current Design Capacity _____ mgd
Proposed Incremental Design Capacity + _____ mgd
Proposed Total Design Capacity = _____ mgd

4. Basis of Design Flow

Annual Average Daily Flow
Maximum Monthly Average Daily Flow
Three-Month Average Daily Flow
Other

If other, specify _____

5. Basis for Effluent Limitations

TBEL
Level I WQBEL
Level II WQBEL
Other

If other, specify _____

Date Effluent Limitations Established _____

6. Description of Receiving Waters

a. Name of Receiving Water _____

b. Type of Receiving Waterbody

Fresh
Brackish or Marine

c. Classification of Receiving Waterbody

Class I
Class II
Class III
Class IV
Class V

Is the receiving waterbody contiguous to, or identified as, an Outstanding Florida Water (OFW) or an Outstanding National Resource Water? Yes No

If yes, name and locate on a USGS map. _____

Does this facility discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flow through) Indian Country? Yes No

d. Name of Watershed (if known)

United States Soil Conservation Service 14-digit Watershed Code (if known)

e. Name of State Management/River Basin (if known)

United States Geological Survey 8-digit Hydrologic Cataloging Unit Code (if known)

f. Critical low flow of receiving stream (if applicable)

acute cfs chronic cfs

g. Total hardness of receiving stream at critical low flow (if applicable) mg/l of $CaCO_3$

7. Outfall Information

Description of Outfall and Diffuser _____

_____

_____

_____

Construction Materials _____

Length From Shore _____ feet

Diameter _____ inches

Discharge Depth Below Water Surface _____ feet

Receiving Water Bottom Depth Below Water Surface _____ feet

Is the outfall equipped with a diffuser? Yes No

8. Surface Water Improvement and Management (SWIM)

a. Will the discharge affect any SWIM plan waterbodies? Yes No

b. If yes, name the waterbody _____

c. Has the SWIM plan been approved by a water management district and the Department? Yes No

d. If yes, attach documentation that the proposed discharge is consistent with the SWIM plan.

9. Additional Information Required for Intermittent or Periodic Discharges

Frequency	_____	Times Per Year
Duration	_____	Days
Volume	_____	Thousand Gallons Per Incident
Occurrence		

	Jan		May		Sep
	Feb		Jun		Oct
	Mar		Jul		Nov
	Apr		Aug		Dec

10. Additional Information Required for Limited Wet Weather Discharges Permitted in Accordance with Rule 62-610.860, F.A.C.

a. Downstream Waterbody

Name of nearest downstream lake, estuary, reservoir, OFW, or Class I water. Show location on a USGS map. _____

Classification of Downstream Waterbody
Class I
Class II
Class III
Class IV
Class V

Distance Downstream _____ miles

Average Flow Velocity During Anticipated Periods of Discharge _____ feet per second

Travel Time During Anticipated Periods of Discharge _____ hours

b. Rainfall Information

Rainfall Gauging Station Location _____

Period of Record Analyzed:
Beginning Year _____
Ending Year _____
Number of Years _____
Average Annual Rainfall _____ inches per year

c. Simulation of Operation of the Reuse, Storage, and Limited Wet Weather Discharge for an Average Rainfall Year

Year Simulated	_____	
Annual Rainfall During Average Year	_____	inches
Number of Days Limited Wet Weather Discharge is Used During Average Rainfall Year (N)	_____	days
Percent of the Days of the Year that the Limited Wet Weather Discharge will Occur During Average Rainfall Year (P)	_____	%

Note:
P = [(N) / (365)] x 100%.
P cannot exceed 25% or be less than 1%.

d. Reclaimed Water Quality (maximum monthly average)

$CBOD_5$	_____	mg/L
TKN (as Nitrogen)	_____	mg/L

e. Minimum Acceptable Stream Dilution Factor (SDF) _____

Note:
SDF = P(0.085 x $CBOD_5$ + 0.272 x TKN - 0.484)
The values for $CBOD_5$ and TKN should be in terms of maximum monthly average limitations as provided in 14.d. above. The value of P should be as calculated in 14.c. above.

f. Adjusted Stream Dilution Factor _____

Note:
If the travel time shown in 14.a., above, is less than 24 hours, provide the adjusted minimum acceptable stream dilution factor.
Adjusted SDF = SDF x (24 hours)/(travel time in hours)

11. Additional Information Required for Wetland Discharges

a. Is the wetland a jurisdictional wetland (i.e. within the landward extent of waters as defined in Rule 62-301.400. F.A.C., or isolated and not owned entirely by one person, or owned entirely by the State)? Yes No

b. Will the wetland be used as a treatment wetland or receiving wetland?

If the wetland is to be used as a treatment wetland, attach documentation showing ownership or the applicant's legal interest in the treatment wetland.

Treatment
Receiving

c. If the wetland is to be used for treatment, identify the type.
Unaltered

Man-made
Hydrologically Altered

d. Is the wetland herbaceous or woody?
Woody

Herbaceous

e. Identify the classification of surface waters within the wetland.
Class III
Class IV
Class V

Class I
Class II

f. Are the waters within the wetland part of an OFW?

Yes No

12. Effluent Testing Information.

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)		s.u.	-	-	-
pH (Maximum)		s.u.	-	-	-
Flow Rate					
Temperature (Winter)					
Temperature (Summer)					

* For pH, please report a minimum and maximum daily value.

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	MDL/ PQL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
CARBONACEOUS BIOCHEMICAL OXYGEN DEMAND							
TOTAL SUSPENDED SOLDS (TSS)							
FECAL COLIFORM							

13. Additional Application Information for Applicants with a Design Flow Greater Than or Equal to 0.1 mgd

a. Effluent Testing Data

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	MDL/ PQL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL							
DISSOLVED OXYGEN							
TOTAL KJELDAHL							
NITRATE PLUS NITRITE							
NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED							
OTHER PARAMETERS							

b.Inflow and Infiltration

Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

c. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? Yes No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name:

Mailing Address:

Telephone Number:

Responsibilities of Contrator:

14. Expanded Effluent Testing Data: 1.0 mgd and Pretreatment Treatment Works.

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE				ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC											
HARDNESS (AS											

Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.

VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON											
CLOROBENZENE											
CHLORODIBROMO-											
CHLOROETHANE											
2-CHLORO-											
CHLOROFORM											
DICHLOROBROMO-											
1,1-											
1,2-											
TRANS-1,2-DICHLORO-											
1,1-DICHLORO-											
1,2-											
1,3-DICHLORO-											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE											

1,1,2,2-TETRACHLORO-											
TETRACHLORO-											
TOLUENE											
1,1,1-											
1,1,2-											
TRICHLOR-											
VINYL CHLORIDE											

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-											
2-CHLOROPHENOL											
2,4-											
2,4-											
4,6-DINITRO-O-											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLORO-											
PHENOL											
2,4,6-											

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)-											
BENZO(A)PYRENE											
3,4 BENZO-											
BENZO(GHI)-											
BENZO(K)-											
BIS (2-CHLOROETHOXY)											
BIS (2-CHLOROETHYL)-											
BIS (2-CHLOROISO-											
BIS (2-ETHYLHEXYL)											
4-BROMOPHENYL											
BUTYL BENZYL											
2-CHLORO-											
4-CHLORPHENYL											
CHRYSENE											
DI-N-BUTYL											

DI-N-OCTYL											
DIBENZO(A,H)											
1,2-											
1,3-											
1,4-											
3,3-DICHLOROBENZIDIN											
DIETHYL											
DIMETHYL											
2,4-											
2,6-											
1,2-DIPHENYL-											
FLUORANTHENE											
FLUORENE											
HEXACHLORO-											
HEXACHLORO-											
HEXACHLORO-											
HEXACHLORO-											
INDENO(1,2,3-											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-											
N-NITROSODI-											
N-NITROSODI-											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLORO-											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

SECTION 3. B. REUSE AND LAND APPLICATION SYSTEMS

1. Reuse or Land Application System Serial Number and Name

Reuse or Land Application System Serial Number	R001

2. Reuse or Land Application System Location

County	Brevard	
City or Town (if applicable)	Cocoa	
Street or Description	616 Emeral Lake Drive	
Latitude	28-25-31.54	"N
Longitude	80-46-42.66	"W
Dates Coordinates Determined	unknown	
Method Used to Obtain Coordinates	reference to FDEP database	

3. Design Capacity of the Reuse or Land Application System

Current Design Capacity	0.206	mgd
Proposed Incremental Design Capacity	+ 0	mgd
Proposed Total Design Capacity	= 0.206	mgd

4. Basis of Design Flow

X Annual Average Daily Flow
Maximum Monthly Average Daily Flow
__ Three-Month Average Daily Flow
Other

If other, specify

5. Is land application continuous or intermittent? X Continuous Intermittent

6. Underdrains and Perimeter Ditches

a. Is the reuse or land application system underdrained? Yes X No

b. Are perimeter ditches used? Yes X No

If yes, will they be excavated to a depth which will intersect the seasonal high ground water table or the ground water mound during any portion of the year? Yes No

7. Type of Reuse or Land Application System

_ Slow-rate land application system/restricted public access (Chapter 62-610, F.A.C., Part II)
_ Slow-rate land application system/public access areas, residential irrigation, and edible crop irrigation (Chapter 62-610, F.A.C., Part III)
X Rapid-rate land application system (Chapter 62-610, F.A.C., Part IV)
_ Absorption field system (Chapter 62-610, F.A.C., Part V)
_ Overland flow system (Chapter 62-610, F.A.C., Part VI)
_ Other land application system with additional levels of preapplication treatment (Rule 62-610.660, F.A.C.)
_ Other land application system with lower levels of preapplication treatment (Rule 62-610.670, F.A.C.)

8. Application Areas and Rates

Site/Use Type/Major User	Area (acres)	Rate (inches/week)	Capacity (mgd)
Sun Lakes Estates	6.82	7.79	0.206
Total	6.82	7.79	0.206

9. Additional Information Required for Reuse Systems Permitted Under Part III of Chapter 62-610, F.A.C.

a. Areas Irrigated

Residential lawns
Golf courses
Cemeteries
Parks, playgrounds
Landscape areas
Highway medians, rights-of-way
Edible crops
Others

If other, specify _____

b. Other Uses of Reclaimed Water

Toilet flushing
Fire protection
Construction dust control
Aesthetic purposes (decorative ponds, fountains, etc.)
Others

If other, specify. _____

c. How many hours per day, seven days per week, is or will an operator be on-site at the wastewater treatment facility? _____ hours per day

If the treatment facility is or will be staffed by an operator less than 24 hrs/day, describe the additional levels of reliability included within the treatment or reuse systems (See Rule 62-610.462, F.A.C.)

d. For permit renewals, list the dates on which the operating protocols (as described in Rule 62-610.463, F.A.C.) were submitted to the Department and the date of the Department's approvals during the last five years.

Date Submitted	Date Approved

e. For each site where edible crops are or will be irrigated with reclaimed water, describe the crops grown; the type of application system used; provisions for crop washing and for processing, if any; and provisions for control of public access, if any. (See Rule 62-610.475, F.A.C.)

SECTION 3. C. GROUND WATER DISPOSAL BY UNDERGROUND INJECTION

NOT APPLICABLE

1. Underground Injection Well Facility Serial Number and Name

Underground Injection Well Facility Serial Number _____

2. Underground Injection Well Facility Location

County _____

City or Town (if applicable) _____

Street or Description _____

Latitude ____ ° ____ ' ____ "N

Longitude ____ ° ____ ' ____ "W

Dates Coordinates Determined _____

Method Used to Obtain Coordinates _____

3. Underground Injection Well Facility DEP Identification Number or Permit Application Number _____

4. Design Capacity of the Underground Injection Well Facility

Current Design Capacity _____ mgd

Proposed Incremental Design Capacity + _____ mgd

Proposed Total Design Capacity = _____ mgd

5. Basis of Design Flow

Annual Average Daily Flow
Maximum Monthly Average Daily Flow
Three-Month Average Daily Flow
Other

If other, specify.

6. Is injection continuous or intermittent? Continuous Intermittent

SECTION 4. SCHEDULED IMPROVEMENTS AND SCHEDULES OF IMPLEMENTATION N/A

1. Improvements Required

a. Discharge Serial Numbers, Reclaimed Water Reuse or Land Application System Serial Numbers, and Underground Injection Well Facility Serial Numbers Affected _____

b. Authority Imposing Requirement

Local
State
Federal
Developed by Applicant
Other

If other, specify. _____

2. Implementation Schedule and Actual Completion Dates

Implementation Steps	Schedule	Actual Completion
a. Preliminary Plans Complete		
b. Final Plans and Specifications Complete		
c. Financing Complete		
d. Site Acquired		
e. Begin Construction		
f. End Construction		
g. Begin Reuse or Disposal		
h. Operational Level Attained		

3. Have appropriate permits/clearances concerning other Federal/State requirements been obtained?

Yes No

If so, describe briefly:

SECTION 5. INDUSTRIAL WASTEWATER CONTRIBUTIONS n/a

1. **Does the treatment works have, or is it subject to, an approved pretreatment program?** Yes No

2. **Provide the number of each of the following types of industrial users that discharge to the treatment works.**

   a. Number of non-categorical SIUs.
   b. Number of CIUs.

3. **Significant Industrial User Information**

   Name _____
   Number and Street _____
   City/State/Zip Code _____
   County _____

Industrial processes Affecting or Contributing to the SIU's Discharge

Principal Product(s) and Raw Material(s)

Principal product(s):
Raw material(s):

6. **Flow Rate**

   a. Process wastewater flow rate.

   _____ gpd Intermittent Continuous

   b. Non-process wastewater flow rate.

   _____ gpd Intermittent Continuous

7. **Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits Yes No

b. Categorical pretreatment standards Yes No

If subject to categorical pretreatment standards, which category and subcategory?

8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g. upsets, interference) at the treatment works in the past three years?

Yes No

If yes, describe each episode.

RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?
Yes No If no, go to question 12.

10. Waste Transport. Method by which RCRA waste is received (check all that apply):
Truck Rail Dedicated Pipe

11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

12. Remediation Waste. Does the treatment works currently (or has it been modified that it will) receive waste from remedial activities?
Yes (complete 13. through 15.) No

Provide a list of sites and the requested information (13. – 15.) for each current and future site.

13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?
Yes No
If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?
Continuous Intermittent

If intermittent, describe discharge schedule.

SECTION 6. ADDITIONAL INFORMATION REQUIRED FOR PERMIT RENEWALS

1. Have there been any modifications to the treatment facilities or reuse or disposal system, since the issuance of the current permit? If yes, describe on a separate sheet and attach. __ Yes X No

2. For limited wet weather discharges, have any modifications been made to the operation, frequency of discharge, or stream hydrology since the original limited wet weather discharge permit or the most recent permit. If yes, describe on a separate sheet and attach. __Yes NoX NA

3. Have there been any violations during the last six months? If yes, describe on a separate sheet and attach. __ Yes X No

4. Have there been any treatment facility interferences due to the discharge of industrial wastewater to the treatment facility during the last six months? If yes, describe on a separate sheet and attach. _ Yes X No

5. Is there any enforcement action pending against these treatment, reuse, or disposal facilities? If yes, describe on a separate sheet and attach. _ Yes X No

6. Have all previous permit conditions, including pretreatment requirements, monitoring requirements, and operator attendance been complied with? If no, describe on a separate sheet and attach. X Yes __ No

7. For permit renewals involving a limited wet weather discharge permitted under Rule 62-610.860, F.A.C., list the number of days during each of the last five years that the limited wet weather discharge was used. Also, list the total annual rainfall for each year.

Year	Number of Days Used	P (%)	Annual Rainfall (inches)
1.			
2.			
3.			
4.			
5.			
Total/Average			

8. For permit renewals involving a limited wet weather discharge permitted under Rule 62-610.860, F.A.C., provide the number of days during each of the last five years that the actual dilution ratio, as defined in Rule 62-610.860, F.A.C., was less than the minimum SDF and the number of months in which the monthly average $CBOD_5$ or TKN in the limited wet weather discharge exceeded the permit limitations.

	Number of Days the Dilution	Number of Months the Limits Were Exceeded	
Year	Ratio Was Less Than SDF	$CBOD_5$	TKN
1.			
2.			
3.			
4.			
5.			

SECTION 7. ADDITIONAL INFORMATION REQUIRED FOR RESIDUALS/SEPTAGE MANAGEMENT FACILITIES

NOT APPLICABLE

1. Location of Residuals Treatment Processes _____

(Describe in relation to the wastewater treatment processes.)

2. Type and Amount of Waste Treated at this Facility

Type	Amount (dry tons/day)	Amount (gallons/day)
Residuals	or	
Septage		
Food Establishment Sludge		
Portable Toilet Waste		
Holding Tank Waste		
Boat or Marina Waste		
Other (Describe.)	or	
Total	or	

Is the total amount estimated or actual? Estimated / Actual

3. Information on Treatment Facilities Transporting Residuals

a. DEP Permit Number _____

b. Facility Name _____
Number and Street _____
City/State/Zip Code _____
County _____
Telephone _____

c. Facility Type Type I / Type II / Type III

d. Amount of Residuals Received From This Facility _____ dry tons/day or _____ gpd

Is this amount estimate or actual? Estimated / Actual

e. Describe the treatment provided by this facility before transport

f. Parameter Concentrations

POLLUTANT	CONC.	UNITS
Total Nitrogen		% dry weight
Total Phosphorus		% dry weight
Total Potassium		% dry weight
Arsenic		mg/kg dry weight
Cadmium		mg/kg dry weight
Chromium		mg/kg dry weight
Copper		mg/kg dry weight
Lead		mg/kg dry weight
Mercury		mg/kg dry weight
Molybdenum		mg/kg dry weight
Nickel		mg/kg dry weight
Selenium		mg/kg dry weight
Zinc		mg/kg dry weight
pH		standard units
Total Solids		%
Other Parameters		

Date of Sample _____

4. Describe the manifest system used for tracking residuals during transport from the facilities.

SECTION 8. DOCUMENTATION SUBMITTED

1. General Application Requirements	Attached Yes	Attached No
a. Process Flow Diagram	X	
b. Site Plan	X	
c. Location Map	X	
d. Agricultural Use Plan or Dedicated Site Plan		X
e. Capacity Analysis Report	X	
f. Results of Whole Effluent Biological Toxicity Testing		X
g. Reuse Feasibility Study		X
h. Binding Agreements and Documentation of Controls on Individual Users of Reclaimed Water		X

2. Additional Application Requirements for New Facilities and Modifications to Existing Facilities	Yes	No
a. Preliminary Design Report		
b. Documentation of Compliance with Antidegradation Requirements		
c. Public Service Commission Certification Number and Copy of Certificate or Order Number and Copy of Order		
d. Letter from the Management and Storage of Surface Waters Permitting Agency		
e. Request for Approval of Monitoring Plans for Discharge of Domestic Wastewater to Wetlands		
f. Concurrent Application for Ground Water Disposal by Underground Injection		
g. Application for Monitoring Plan Approval		

3. Additional Application Requirements for Permit Renewals	Yes	No
a. Operation and Maintenance Performance Report	X	
b. Reclaimed Water or Effluent Analysis Report		X
c. Technical Evaluation of Need to Revise Local Pretreatment Limits		X
d. Results of Mechanical Integrity Testing		X

SECTION 9. CERTIFICATIONS

1. Certifications for Construction of New Facilities or Modifications to Existing Facilities

a. Applicant or Authorized Representative

I certify that the statements made in this application for a permit and all attachments are true, correct, and complete to the best of my knowledge and belief. I agree to retain the design engineer, or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a notification of completion of construction, and to review record drawings for adequacy as referenced in Rule 62-620.630, F.A.C. Further, I agree to provide an appropriate operation and maintenance manual for the facilities pursuant to Rule 62-620.630, F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare or revise, if necessary) the manual. For projects regulated by Chapter 62-610, F.A.C., I agree to provide the additional operation requirements of that Chapter.

(Signature of Applicant or Authorized Representative[1]) _____ Date_____
Name (please type)_____ Company Name_____
Title _____ Company Street Address or P O Box_____

Telephone No. (including area code_____City, State, Zip Code_____

b. Professional Engineer Registered in Florida

I certify that the engineering features of this domestic wastewater project have been (designed) (examined) by me and found to conform to engineering principles applicable to such projects. In my professional judgment, this facility, when properly constructed, operated, and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department.

Name (please type): _____ Company Name:_____
Florida Registration Number: _____ Company Street Address or P O Box_____
Telephone No. (including area code)_____ City/State/Zip Code:_____

(Seal, Signature, Date, Registration No.)

c. Professional Engineer Registered in Florida

I certify that this firm or individual has been retained by the applicant to prepare a notification of completion of construction, to prepare operation and maintenance manuals, and to review record drawings for adequacy as referenced in Rules 62-620.630, 62-600.717, and 62-600.720, F.A.C.

Name (please type): _____ Company Name:_____
Florida Registration Number: _____ Company Street Address or P O Box_____
Telephone No. (including area code)_____ City/State/Zip Code:_____

(Seal, Signature, Date, Registration No.)

[1] If signed by the authorized representative, attach a letter of authorization.

2. Certifications for Permit Renewals

a. Applicant or Authorized Representative

I certify that the statements made in this application for a permit and all attachments are true, correct and complete to the best of my knowledge and belief. I agree to operate and maintain these wastewater facilities in such a manner as to comply with the provisions of Chapter 403, F.S., Chapter 62-600, F.A.C., and all other applicable rules of the Department. Further, an appropriate operation and maintenance manual which has been examined by a professional engineer as certified below is available and located at 5600 US Hwy 1N , Sharps and can be submitted upon request as part of the permit procedure. A copy of the record drawings or other plans (as applicable) showing modifications to existing acilities, as referenced in Rule 62-600.717, F.A.C., is available at the same location. I also understand that a permit if granted by the Department, is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C., and I will notify the Department in accordance with this rule upon sale or legal transfer of the permitted facilities. In the event of abandonment or inactivation of the facilities, I will notify the Department and ensure that public health and safety are protected as required by Rule 62-620.610, F.A.C.

(Signature of Applicant or Authorized Representative[2])

4-13-15
Date

Thad Terry
Name (please type)

Owner
Title

321-639-8440
Telephone No. (including area code)

Sun Lakes Homeowners Association
Company Name

5600 US Hwy 1N
Company Street Address or P O Box

Sharps, FL, 32927
City, State, Zip Code

b. Professional Engineer

I certify that the engineering features of these domestic wastewater facilities have been examined by me and found to conform to engineering principles applicable to such projects. I certify that the operation and maintenance manual for these wastewater facilities has been prepared or examined by me or by individual(s) under my direct supervision and that there is reasonable assurance, in my professional judgement, that the facilities, when properly operated and maintained in accordance with this manual, will comply with all applicable statutes of the State of Florida and rules of the Department.

George L McDonald, P.E.
Name (please type)

44740
Florida Registration Number:

352-637-1652
Telephone No. (including area code)

44740
(Seal, Signature, Date, Registration No.)

McDonald Group International, Inc.
Company Name:

9030 S Brittany Pt.
Company Street Address or P O Box

Inverness FL 34452
City/State/Zip Code:

[2] If signed by the authorized representative, attach a letter of authorization.

UPDATED CAPACITY ANALYSIS

REPORT

FOR

SUN LAKES ESTATES

WASTEWATER TREATMENT PLANT

RECEIVED
APR 16 2015
DEP Central District

BREVARD COUNTY, FLORIDA
Facility ID: FLA010353
Permit No.: FLA010353 Expires: 10/27/2015

Prepared For:
SUN LAKES HOMEOWNERS ASSOCIATION
5600 US HWY 1N
SHARPS, FLORIDA,32927

MARCH 13, 2015

Prepared By:
MCDONALD GROUP INTERNATIONAL, INC.
9030 S. BRITTANY PATH
INVERNESS, FLORIDA 34452
C.A.-7580

CAPACITY ANALYSIS

REPORT

FOR

Sun Lakes Estates

Wastewater Treatment Plant

Brevard County, Florida

The information contained in this report was prepared in accordance with sound engineering principals, and the recommendations contained within have been discussed with the permittee.

Date: 4/13/15

George J. McDonald, P.E.,
FL PROFESSIONAL ENGINEER NO. 44740
McDonald Group International, Inc. CA 0007580
9030 S. Brittany Path, Inverness, Florida 34452
(352)-637-1652

I am fully aware and intend to comply with the recommendations and schedules included in this report

Date: 4-13-15

Thad Terry
Sun Lakes Homeowners Association
5600 US Hwy 1N
Sharps, Florida,32927
321-639-1124

CAPACITY ANALYSIS REPORT
FOR Sun Lakes Estates
WASTEWATER TREATMENT PLANT

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CAPACITY ANALYSIS REPORT

1.0. General

Florida Department of Environmental Protection (FDEP) Rule 62-600.405(4) F.A.C. requires that a capacity analysis report be submitted to the Department with a permit application to renew a Wastewater facility permit.

This capacity analysis is submitted to the FDEP by McDonald Group International, George J. McDonald, P.E., consultant engineer for Sun Lakes Homeowners Association, the owner and operator of the Sun Lakes Estates Wastewater Treatment Plant located in Brevard County, Florida in order to comply with Rule 62-600.405, F.A.C. The last capacity analysis report is believed to have been performed during the last permit renewal.

The facility is located at 616 Emerald Lake Drive, in Sharps, Brevard County Florida. A location map and USGS quad map are provided in Figures 1.1 and 1.2, respectively.

1.1 Authorization and Purpose

Sun Lakes Homeowners Association has retained George J. McDonald, P.E. to study their plant's historical flows, service area characteristics, and issues which effect changes in future capacity requrements of their wastewater treatment plant in order to provide a capacity analysis report (CAR) in support of the wastewater plant permit application.

1.2 Related Reports and Documents

Accompanying this report is an Operations and Maintenance Performance Report, as well as FDEP Forms 1 and 2A for a domestic wastewater treatment plant. Additional information is contained in the accompanying reports and documents.

1.3 General Service Area Description

The treatment facility serves Sun Lakes Estates. This area consists of approximately of about 206 mobile home units at present.

1.4 Facility Information

This Wastewater Treatment Plant is presently permitted for the flow capacity and discharge limitation standards in the following table:

Table 1.4 WWTF Effluent Limitation Standards
Sun Lakes Estates

1. Maximum flow capacity -0.135 MGD (permitted for 0.099 MGD) (plant)
   - 0.206 MGD (effluent disposal)
2. BOD and TSS maximum concentrations -
   20 mg/L annual average
   30 mg/L monthly average
   45 mg/L weekly average
   60 mg/L any one sample
3. pH range - 6.00 to 8.50
4. Fecal Coliform -
   200 #/100 annual average
   800 #/100 maximum
5. Minimum Cl_2 conc. - 0.5 mg/L
6. Nitrate 12 mg/L max

The Sun Lakes Estates Wastewater Treatment Plant has been permitted for operation since 1/84.

Process

It is an activated sludge waste treatment facility operating in the extended aeration mode.
The treatment process comprises the following: flow equalization, aeration, final settling; sludge digestion, disinfection. A process plan follows the USGS map in the following pages as figure 1.3.

Modifications

The facility has not been reported to have been modified in the last 5 years, however, permitted capacity was reduced to 0.099 MGD (facility capacity of 0.135 MGD recognized).

N*otices of violation*

According to the Owner and the operator, no recent notices of violation have been received or consent orders entered into.

1.5 Scope of Report

Although containing many elements of a regular capacity analysis report, the depth and scope of this report is meant to equal or exceed the requirements for an "abbreviated" capacity analysis report.

1.6 Information Sources

This report is prepared based on information supplied by the permittee, information that may be found in FDEP public databases, the current permit, and information supplied by the operator. The report relies on the accuracy of this information for all analysis and opinions.

Figure 1.1 Street Location Map



Figure 1.2 USGS Map

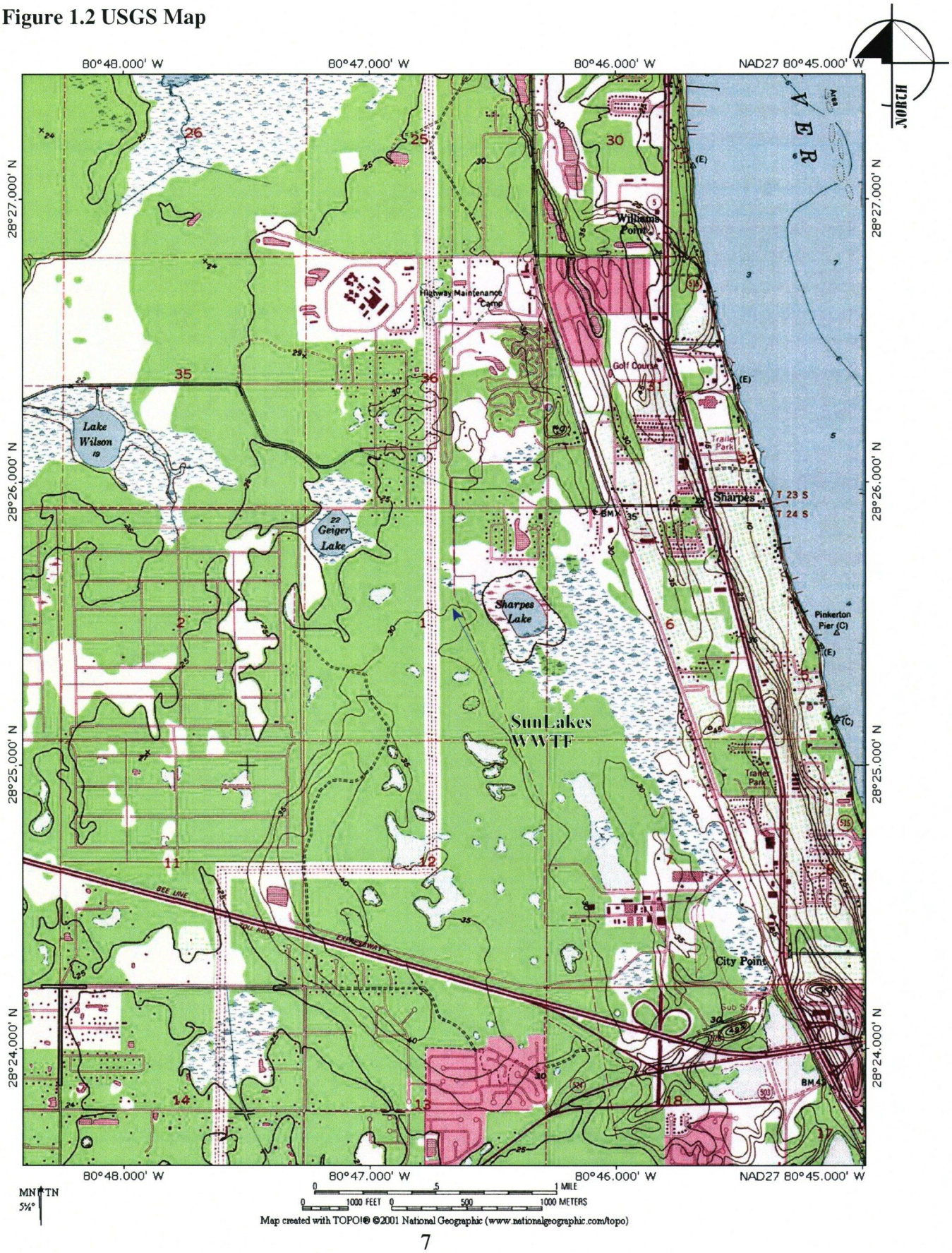


Figure 1.3 Process Plan

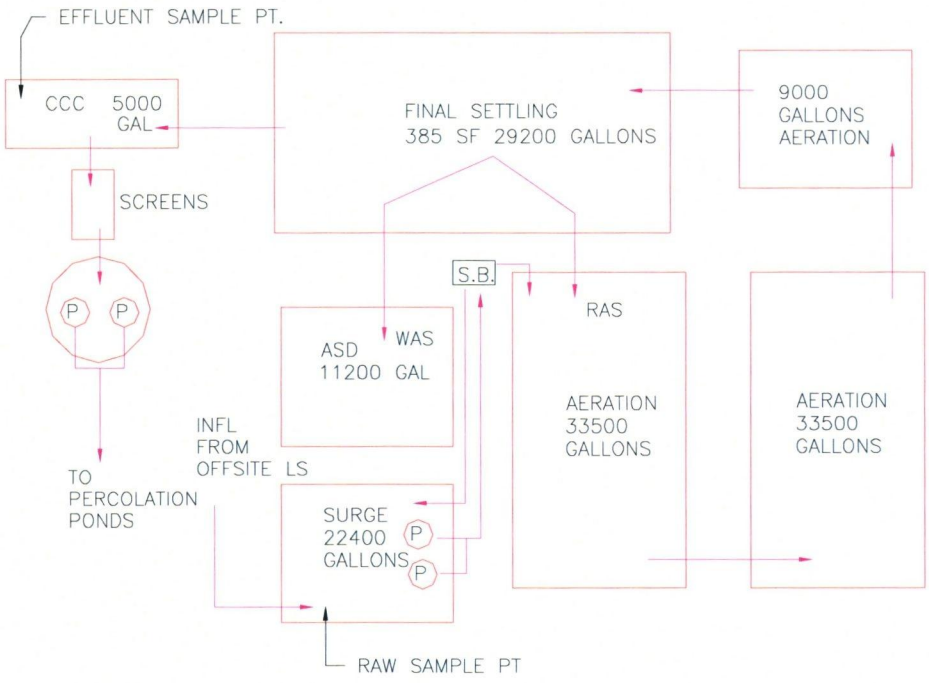
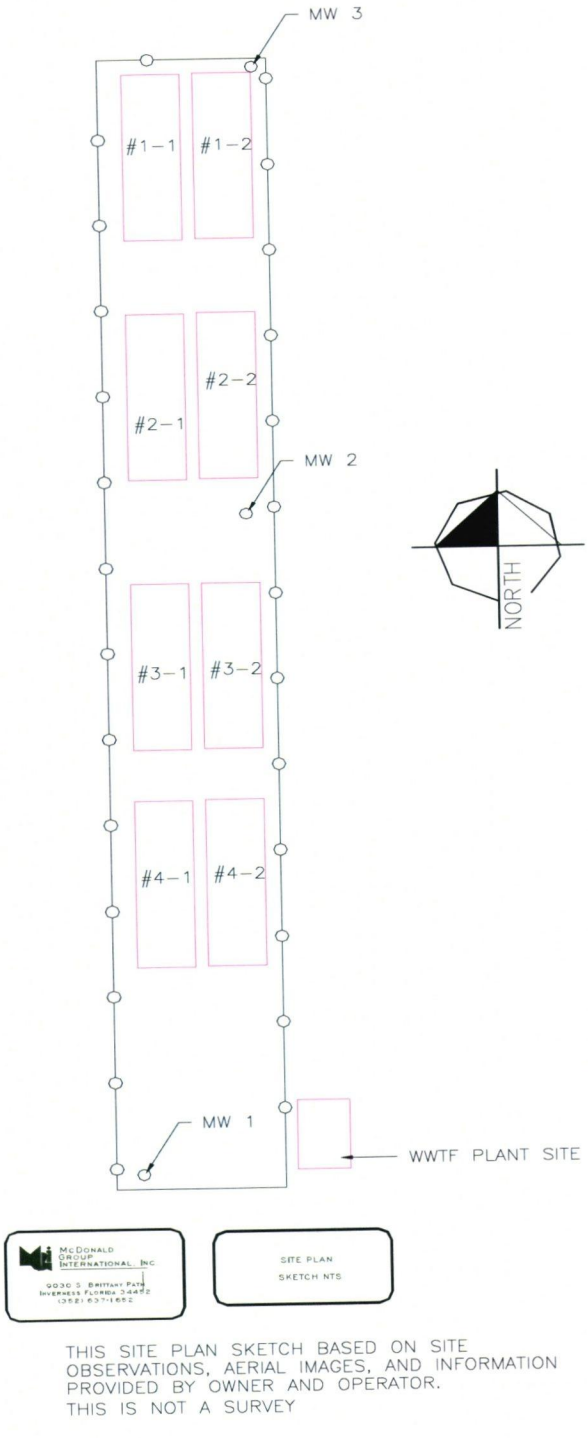


Figure 1.4 Site Plan



2.0 Existing Conditions and Permitted Capacities

The Sun Lakes Estates Wastewater Treatment Plant has been permitted for operation since 1/84. It is an activated sludge waste treatment facility operating in the extended aeration mode. The current operating permit, FLA010353 is due to expire October 27, 2015.

The Wastewater Treatment Plant is presently permitted to discharge effluent meeting the Secondary Treatment Technology Based Effluent Standards listed in the table in section 1.4.

2.1 Influent Strength

The major parameters used to evaluate influent strength are influent BOD, TSS, TKN. Of these only BOD and TSS are often required to be tested by permit.

Based on available test data, the influent strength is estimated to be as follows:

Table 2.1 Influent Strength

Parameter	Characterization
$CBOD_5$	249 mg/L
TSS	321 mg/L

This is considered to be a normal strength wastewater

2.2 Updated Flow Information

In this section, data and analysis is presented regarded current plant flows

2.2.1 Flow Calibration

Flows to this treatment plant are measured by a elapsed time meters, measuring the running time of the effluent pumps. Calibration was last checked January 5, 2015 by the Florida Rural Water Association

2.2.2 Plant Flow Characteristics

Data from Discharge Monitoring Reports (DMRs) were studied to determine the present plant flow characteristics. Table 2.2 summarizes the data taken from the DMRs for the period reviewed.

Figure 2.2 graphically illustrates the month average and rolling three month average flow for the period reviewed:

Figure 2.2 Flow Chart

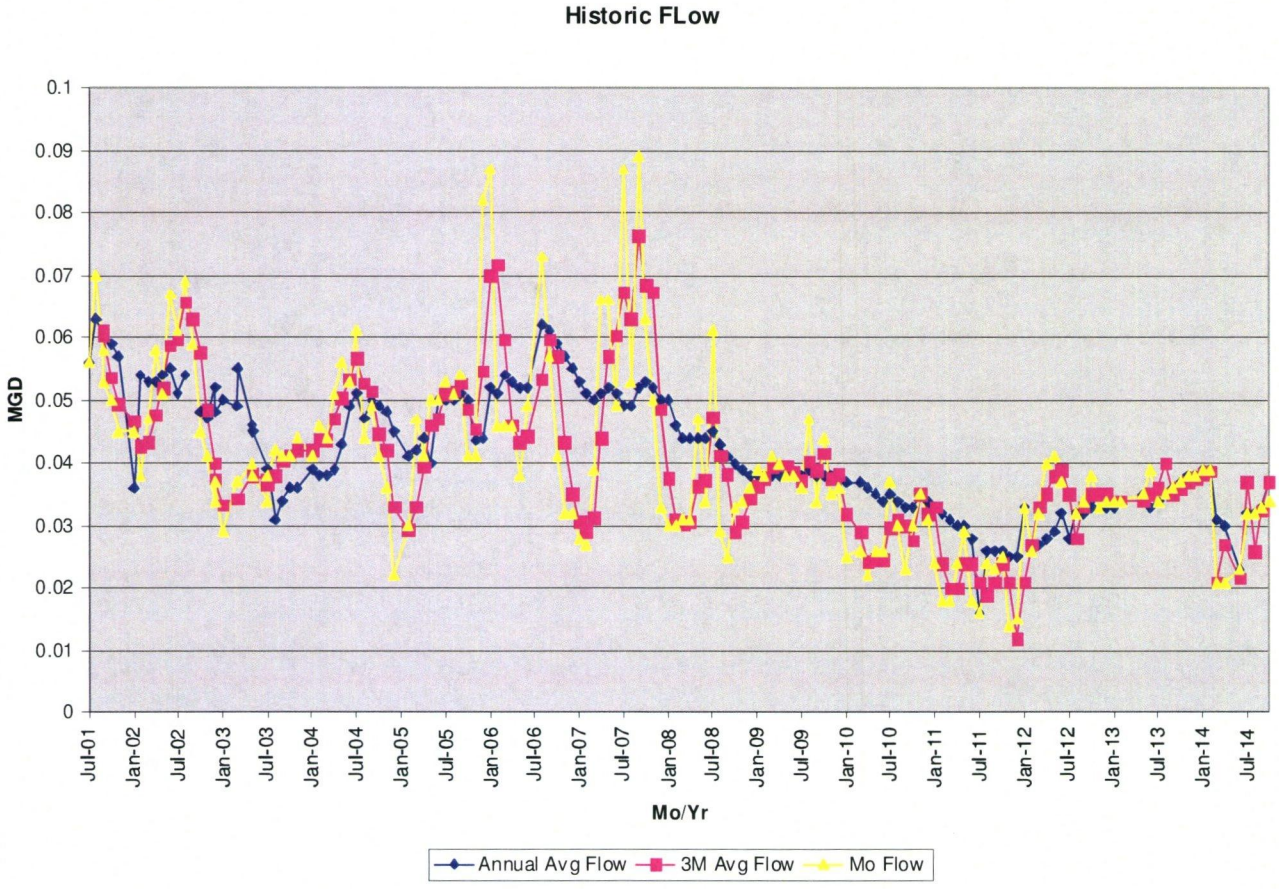


Table 2.2 Flow and Performance History

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Jul-01	0.056		0.056	19.6	24.6		23.5	23.5		6.8	7	200	200		0.02		
Aug-01	0.063		0.07	23.8	28.1		33.2	21.4		7.4	8.4	99	2	0	0.02		
Sep-01	0.061	0.061	0.058	58.2	63.5		26.9	14.4		6.6	8.4	100	103	0.5	0.022		
Oct-01	0.06	0.060	0.053	54	3.75		25.4	8		7.4	8.2	93.1	11	0.6	0.03		
Nov-01	0.059	0.054	0.05	50	3.1		23.8	5		7.5	8.3	105.7	258	0.5	0.08		
Dec-01	0.057	0.049	0.045	46.4	4.3		22.4	6.5		7.3	8	98.2	9	0.6	0.89		
Jan-02	0.036	0.047	0.045	40.8	2		20.6	12.2		7.1	8	97	90	0.6	1.152		
Feb-02	0.054	0.043	0.038	38	4.7	5.8	19.6	8	12.3	7.5	8.4	89.6	2	0.5	0.99		
Mar-02	0.053	0.043	0.047	35.8	9.7	17.9	23	23.2	41.5	7.5	8.5	87.7	65	0.6	1.15		
Apr-02	0.053	0.048	0.058	33.5	3.5		25.9	61.7		7	8.3	82.8	25	0.6	0.45		
may-02	0.054	0.052	0.051	25.8			48.5	22.9		7	7.2	507.3	502	0.5	0.02		
Jun-02	0.055	0.059	0.067	13.1	3.7	6	17.5	9.25	14	6.7	7.5		17	0.5	0.058		
Jul-02	0.051	0.060	0.061	11.3	2.5	2.6	15.7	2.5	2.6	6.9	7.8	48.2	2.5	0.5	0.339		
Aug=02	0.054	0.066	0.069	9	7.85	7.85	15.19	7.85	9.7	7.2	7.6	56.5	48.5	0.5	0.189		
Sep-02		0.063	0.059		2.6	2.6		7.5	10	7.1	7.4	99.08	653	0.5	0.238		
Oct-02	0.048	0.058	0.045	4.55	3.95	4.2	14.41	5.75	6	7	7.4	98.2	6	0.5	0.18		
Nov-02	0.047	0.048	0.041	4.53	4.35	5.2	14.5	16.75	26.5	7.2	7.6	6	9	0.5	1.89		
Dec-02	0.052	0.040	0.034	4.45	2.55	5	14.4	4.25	5	7.3	7.8	77.3	6.5	0.5	1.34		
Jan-03	0.048	0.037	0.037	4.83	5.9	8.3	14.06	5	8	6.5	7.6	69.9	1	0.5	0.092		
Feb-03	0.05	0.033	0.029	4.33	2.9	4.3	13.9	8.5	13	7.2	7.8	71.4	1	0.5	0.376		
Mar-03	0.049	0.034	0.037	4.43	5.65	9.8	14.4	20.5	27	7.4	7.6	68.7	37.5	0.5	1.4		
Apr-03	0.055	0.034	0.037	4.51	4.8	4.9	14.8	20.5	29	7.4	7.6	66.1	13	0.5	0.116		
May-03	0.046	0.038	0.04	4.4	6.8	6.8	10.8	14.5	14.5	7.4	7.8	66.3	2	0.5	0.074		
Jun-03	0.045	0.038	0.038	4.4	4.7	7.9	11.7	23.2	31	7.5	7.8	65.2	6.5	0.5	0.063		
Jul-03	0.039	0.037	0.034							7.4	7.8			1.8			
August 08	0.039	0.037	0.038							7.4	7.6			0.5			
Sep-03	0.031	0.038	0.042	4.6	6.6	6.6	16.4	36	36	7.5	7.8	61	1	0.5	0.116		
Oct-03	0.034	0.040	0.041	4.8	7.4	9.6	15.8	9.25	16	7.5	7.8	56.3	1	0.9	0.721		
Nov-03	0.036	0.041	0.041	4.7	4.5	4.5	16.9	30.2	50	7	7.4	50.4	2	0.6	0.092		
Dec-03	0.036	0.042	0.044	4.8	5.6	8	15.2	8.25	9	7.6	7.8	51.9	1	2.2			
Feb-04	0.039	0.042	0.041	6	7.1	8	14.7	6.5	7	7.1	7.8	4.96	4	0.5	0.067		
Mar-04	0.038	0.044	0.046	6.1	8.1	16.3	14	5.7	8.5	7.4	7.9	4.65	1	0.5	0.144		
Apr-04	0.038	0.044	0.044	5.9	4	4		26.5	26.5	7.8	7.2	7.98	48	2	0.005		
May-04	0.039	0.047	0.051	5.7	3.35	5.2	13.3	5.5	7.5	6.8	7.5	7.3	1	0.8	10.4		

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Jun-04	0.043	0.050	0.056	5.9	8.2	9.7	13.3	14.4	18.8	7.5	7.8	7.4	9.5	0.5	0.056		
Jul-04	0.049	0.053	0.053	6	7.35	13.1	13.1	10.65	14	7.5	7.8	8.05	17	0.5	0.049		
Aug 04	0.051	0.057	0.061	6.73	10.9	12	15.23	11.1	14	7.5	7.8	62.7	667	0.6	0.025		
Sep-04	0.047	0.053	0.044	6.33	2	2	12.6	5.2	8.4	7.3	7.6	63.7	12.5	0.5	0.54		
Oct-04	0.05	0.051	0.049	5.99	2	2	12.1	6.3	6.6	7.6	7.9	59.3	7.5	0.5	0.045		
Nov-04	0.049	0.045	0.041	5.6	2	2	11.4	3.9	4.4	7.5	7.7	54.8	1	1	0.181		
Dec-04	0.048	0.042	0.036	5.3	2	2	11.3	11	12	7.4	7.9	50.6	1	0.5	0.663		
Jan-05	0.045	0.033	0.022	4.8	9.6	17	3.98	9.6	17	7.3	7.8	1	1	0.6	0.0215		
Mar-05	0.041	0.029	0.03	4.77	2.8	3.3	9.2	8.1	10.8	7.2	7.6	10.5	54.5	0.5	0.76		
Apr-05	0.042	0.033	0.047	4.71	4.1	4.4	8.8	8.4	16.8	6.1	7.8	9.76	1	0.5	0.95		
May 05	0.044	0.039	0.041	4.28	4.1	4.1	8.49	3	3	7.1	7.5	6.02	1	0.5	0.032		
Jun-05	0.04	0.046	0.05	5.16	12.5	15	8.61	9.1	11	7.2	7.5	8.56	1	0.5	0.058		
Jul-05	0.05	0.047	0.05	5.13	4.85	7.7	8.34	5.2	8.4	7.1	7.5	7.97	1	0.5	0.0635		
Aug 05	0.05	0.051	0.053	5.08	4.45	6.9	8.05	4.6	7.2	7.1	7.5	1	5	0.8	0.425		
Sep-05	0.05	0.051	0.051	7.15	32	32	7.58	2	2	7.3	7.6	1	1	0.5	1.3		
Oct-05	0.051	0.053	0.054	6.75	2	2	7.25	3.3	6.4	7.2	7.4	1.19	3.5	0.5	6.3		
Nov-05	0.05	0.049	0.041	6.38	2	2	6.8	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA		NO DATA	
Dec-05	0.044	0.045	0.041	7	2	2	5	2	2	7	7.3	5.1	1	0.8	27		
Jan-06	0.044	0.055	0.082	6.61	2.05	2.1	5.1	6.5	11	7.3	7.6	4.78	1	0.5	0.035		
Feb-06	0.052	0.070	0.087	6.12	2	2	5.38	6.9	10	7.1	7.4	1.88	13.5	0.5	2.7		
Mar-06	0.051	0.072	0.046	5.8	2	2	5.43	6.1	7	7.1	7.4	12.5	1	0.5	2.88		
Apr-06	0.054	0.060	0.046	5.88	2	2	4.64	1.5	2	7.2	7.3	2.5	1.5	0.5	0.398		
May 06	0.053	0.046	0.046	5.64	2.85	3.3	5.48	15.6	24	7.1	7.4	1.5	2	0.5	0.0835		
Jun-06	0.052	0.043	0.038	5.47	3.55	3.6	5.95	11.7	15	7.2	7.3	1.65	3.5	0.5	0.12		
Jul-06	0.052	0.044	0.049	5.26	2.85	3.3	5.88	5.1	5.2	7.2	7.3	1.6	1	0.5	0.417		
Sep-06	0.062	0.053	0.073	4.83	2	2.1	6.46	11.8	15	7	7.3	1	1	0.5	1.29		
Oct-06	0.061	0.060	0.057	4.61	2.02	2.04	6.23	3.5	3.6	7	7.2	1	1	0.5	2.03		
Nov-06	0.059	0.057	0.041	4.41	2	2	6.27	6.65	10.3	6.9	7.3	1.1	2.5	0.5	4.76		
Dec-06	0.057	0.043	0.032	4.29	2.85	2.87	6.01	3	3.2	7	7.3	1	1	0.5	1.27		
Jan-07	0.055	0.035	0.032	4.27	4.04	6.09	6.33	10.2	14	6.8	7.2	1	1	0.5	0.587		
Feb-07	0.053	0.031	0.028	4.17	2.98	3.18	7.41	20.4	30	7	7.2	1	1	0.7	0.0814		
Mar-07	0.051	0.029	0.027	4.33	6.37	9.99	7.76	12.07	18.4	7	7.3	1	1	0.5	0.01		
Apr-07	0.05	0.031	0.039	4.36	4.73	NO DATA	7.5	4.4	NO DATA	7	7.4	1	1	0.5	0.0691		
May 07	0.051	0.044	0.066	4.2	2.36	2.72	7.24	4.2	5.2	7.1	7.4	1	1	0.5	0.035		
Jun-07	0.052	0.057	0.066	4.47	3.51	3.51	7.27	7.75	10	7	7.5	50	225	0.5	0.3145		

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Jul-07	0.051	0.060	0.049	4.28	2	2	7.03	4.25	4.25	7.1	7.4	1	1	0.5	1.23		
August 07	0.049	0.067	0.087	4.1	2	2	7.11	8.09	9.67	7.1	7.5	1	1	0.5	0.42		
Sep-07	0.049	0.063	0.053	3.93	2	2	6.93	4.88	5.33	7.1	7.4	1	1	0.5	0.01		
Oct-07	0.052	0.076	0.089	3.79	2.19	2.38	4.81	4	6.25	7.1	7.4	1	1	0.5	0.562		
Nov-07	0.053	0.068	0.063	3.65	2	2	4.7	3.4	4.8	7.2	7.4	1	1	0.5	1.695		
Dec-07	0.052	0.067	0.05	3.52	2.05	2.11	4.17	3.87	4	7.2	7.6	1	1.5	0.5	0.0313		
Jan-08	0.05	0.049	0.033	3.49	3.18	4.37	4.18	5.62	6.5	7.2	7.8	1	4.5	0.5	0.463		
Feb-08	0.05	0.038	0.03	3.37	2	2	4.79	11	12	7.3	7.5	1	1	0.5	0.0235		
Mar-08	0.046	0.031	0.03	3.26	2	2	4.98	7.72	7.75	7.2	7.5	1	1	0.5	0.02245		
Apr-08	0.044	0.030	0.031	3.16	2	2	5.52	12.1	12.3	7.3	7.5	1	1	0.5	0.153		
May 08	0.044	0.031	0.031	3.23	2.95	5.9	5.94	17.5	20.8	7.2	7.5	1	1	0.5	0.057		
Jun-08	0.044	0.036	0.047	3.15	2.2	2.41	6.14	8.55	12.3	7.2	7.5	1	1	0.5	0.01		
Jul-08	0.044	0.037	0.034	3.1	2.25	2.5	8.41	5.9	6.8	7.2	7.5	1	1.5	0.8	0.054		
Aug 8	0.045	0.047	0.061	3.06	2.7	3.4	8.16	5.25	5.5	7	7.4	1.1	3.5	0.8	0.296		
Sep-08	0.043	0.041	0.029	3.08	3.6	3.6	7.9	5	5	7	7.5	1	2	0.5	0.057		
Oct-08	0.041	0.038	0.025	3.07	3.05	6.1	7.67	5	5	7.2	7.4	1.1	2.5	0.5	0.0415		
Nov-08	0.04	0.029	0.033	3.35	6.75	10.1	7.52	5.75	6.5	7.1	7.5	1	2	0.8	5.036		
Dec-08	0.039	0.031	0.034	3.56	6.2	7.1	7.66	9.4	11	7.2	7.6	1	1	0.5	0.023		
Jan-09	0.038	0.034	0.036	3.74	5.95	6.4	7.57	6.5	7	7.4	7.6	3.9	50	0.5	0.116		
Feb-09	0.038	0.036	0.039	3.88	5.6	5.7	7.49	6.6	6.7	7.3	7.6	3.6	1	0.5	0.375		
Mar-09	0.038	0.038	0.038	4.27	9.05	9.6	7.65	9.65	10	7.2	7.5	3.4	1.5	0.5	0.0915		
Apr-09	0.038	0.039	0.041	4.75	10	11	9.86	12.5	12.5	7.3	7.5	2	2	0.5	0.0765		
May 9	0.038	0.040	0.04	4.69	4	6	9.92	10.75	16	7.3	7.4	1	2	0.5	0.063		
Jun-09	0.038	0.040	0.038	4.76	5.65	6.9	9.84	8.9	9.3	7.2	7.4	1	1.5	1	0.08		
Jul-09	0.038	0.039	0.038	4.92	6.85	6.6	9.85	10	15	7.2	7.4	5	60.5	1	0.089		
Aug 9	0.038	0.037	0.036	4.71	2.25	2.3	9.49	5.25	5.5	7.2	7.4	2	2	0.8	0.226		
Sep-09	0.039	0.040	0.047	4.58	3.05	4.1	9.18	5.5	6	7.2	7.3	2	2	1	0.425		
Oct-09	0.038	0.039	0.034	4.38	2.05	2.1	9.47	13	8	7.2	7.4	2	2.5	0.5	0.214		
Nov-09	0.038	0.042	0.044	4.3	3.35	4.1	9.16	5.5	6	7.2	7.4	1	1	0.8	2.03		
Dec-09	0.038	0.038	0.035	4.17	2.65	3.0U	8.84	5.0U	5.0U	7.2	7.4	1	1.0U	0.8	0.585		
Jan-10	0.038	0.038	0.036	4.27	5.5	7.5	8.54	5.0U	5.0U	7.2	7.3	1.0U	1.0U	1.5	2.35		
Feb-10	0.037	0.032	0.025	4.18	3.15	3.6	9.49	21	32	7.2	7.3	1.0U	1.0U	0.5	0.18		
Mar-10	0.037	0.029	0.026	4.28	5.6	6.9	9.25	6.45	6.9	7.1	7.3	1	1	0.5	0.225		
Apr-10	0.036	0.024	0.022	4.28	4.4	5.8	9.24	6.25	7.5	7.2	7.4	1	no data	0.5	0.165		
May-10	0.035	0.025	0.026	4.16	2.8	2.8	9.37	11	12	7.3	7.5	1	no data	0.5	0.31		

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Jun-10	0.034	0.025	0.026	4.02	2.4	2.4	9.03	5	5	7.1	7.3	1	no data	0.5	18		
Jul-10	0.035	0.030	0.037	4.08	4.8	5.3	8.72	5	5	7.2	7.3	1	1	0.5	2.92		
Aug 10	0.034	0.031	0.03	4.01	3.2	3.7	8.64	7.75	8	7.2	7.3	1	1	0.5	0.562		
Sep-10	0.033	0.030	0.023	4.04	4.4	4.9	8.43	6	7	7.1	7.3	1	no data	0.5	0.52		
Oct-10	0.033	0.028	0.03	4.15	5.55	9.1	8.16	5	5	7.2	7.4	1	no data	0.8	2.36		
Nov-10	0.035	0.035	0.035	4.03	2.65	3.3	7.91	5	5	7.1	7.3	1	1	0.8	0.455	0.58	*
Dec-10	0.034	0.032	0.031	3.87	2	2	7.68	5	5	7.1	7.3	1	1	0.5	0.985	NO DATA	*
Jan-11	0.033	0.033	0.024	4.3	9.55	10.2	7.53	5.75	6.5	7.2	7.2	1	1	0.5	0.42	*	4.8
Feb-11	0.032	0.024	0.018	4.37	5.3	8.6	7.43	6.25	7.5	7.2	7.3	1	1	0.5	0.24	20.9	4.6
Mar-11	0.031	0.020	0.018	4.44	5.3	6.2	7.41	7.25	9.5	7.1	7.3	1	1	0.5	0.173	19.2	3.6
Apr-11	0.03	0.020	0.024	4.86	10	10.2	7.8	12.5	13	7.2	7.3	1	1.5	1	0.435	26.05	4.5
May 11	0.03	0.024	0.029	4.64	3	3.8	7.58	5	5	7.1	7.2	1	1	1	1.65	34.6	5.5
Jun-11	0.028	0.024	0.018	4.52	3.2	3.8	7.59	7.75	10.5	7.1	7.2	1	1	1	2.58	42.6	2.5
Jul-11	0.016	0.021	0.016	4.47	3.9	4.8	7.96	12.5	2	7.1	7	1	1	1	9.06	7	7.2
Aug 11	0.026	0.019	0.024	4.3	2.3	2.6	7.84	6.5	8	7	7.2	1	1	1	0.0321	0.815	3.8
Sep-11	0.026	0.021	0.023	4.34	4.85	5	7.64	5.25	5.5	7.1	7.2	1	1	0.5	6.01	2.3	4.4
Oct-11	0.026	0.024	0.025	4.22	2.8	3	7.43	5	5	7.1	7.2	1	1.5	0.8	0.412	2.65	7.1
Nov-11	0.025	0.021	0.014	4.09	2.55	3.1	7.24	5	5	7	7.1	1	1	0.8	0.3	2.7	5.6
Dec-11	0.025	0.012	0.015	4.1	4.25	6.5	7.06	5	5	7.2	7.2	1	1	0.5	0.21	2.35	4.9
Jan-12	0.033	0.021	0.033	4.27	6.4	7.2	6.94	5.5	6	7.2	7.2	1	1	1	0.24	6.7	4.5
Feb-12	0.026	0.027	0.026	4.39	5.85	8.7	7.75	17.5	2.45	7.1	7.3	1	1	0.5	0.042	27.8	7.7
Mar-12	0.027	0.033	0.032	4.33	2.5	3.64	7.69	7	7.4	7.1	7.2	1	1	1	0.1	26.5	4.5
Apr-12	0.028	0.035	0.04	4.15	2	2	3.9	6.6	8.6	7.1	7.2	1	1	0.5	0.395	51	5.7
May 12	0.029	0.038	0.041	4.18	4.55	6.7	4.17	7.5	11	7.1	7.2	1	1	0.5	0.1	47	6.9
Jun-12	0.032	0.039	0.037	4.08	2.95	3.9	4	2.05	2.8	7.1	7.2	1	1	0.5	0.02	9.2	4.4
Jul-12	0.028	0.035		3.92	2	2	5.53	24	24	7	DNP	1	1	0.5	18	18	6
Aug-12	0.032	0.028	0.032	3.77	2	2	5.84	9.6	9.6	7	7.2	1	1	0.5		8.8	4
Sep-12	0.032	0.033	0.034	3.63	2	2	5.91	6.8	6.8	7.2	7.3	1	1	1		DNP	DNP
Oct-12	0.033	0.035	0.038	3.5	2	2	DNP	1.2	1.2	7.1	7.4	1	1	0.5		MNR	MNR
Nov-12	0.035	0.035	0.033	3.38	2	2	5.39	3.6	3.6	7.1	7.3	1	DNP	0.5		3.6	8.1
Dec-12	0.033	0.035	0.034	3.27	2	2	5.12	2	2	7.1	7.3	1	1	1.2		22	5.4
Jan-13	0.033	0.034	0.034	3.17	2	2	5.37	8.4	8.4	7.2	7.3	1	1	1		8.7	1.6
Feb-13	0.034	0.034	0.034	3.08	2	2	5.26	4	4	7	7.2	1	1	0.5		98	4.9
March 13	0.035	0.034	0.035	3.12	4.6	4.6	8.53	6.4	6.4	7.1	7.2	1	1	0.5		DNP	DNP
Jun-13	0.033	0.035	0.039	2.84	2	2	5.34	8	8	7	7.2	1	1	0.5		39	5.1
Jul-13	0.034	0.036	0.034	2.77	2	2	5.51	7.6	7.6	7.1	7.2	1	1	1		36	7.6

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Aug 13	0.035	0.040	0.035	2.71	2	2	5.3	2.8	2.8	7.1	7.2	1	1	1		17	5.5
Sep-13	0.036	0.035	0.036	2.65	2	2	5.41	6.8	6.8	7.2	7.2	1	1	1		15	4
Oct-13	0.037	0.036	0.037	2.6	2	2	5.27	3.6	3.6	7.1	7.2	1	1	0.5		31	4
Nov-13	0.038	0.037	0.038	2.55	2	2	5.35	6.4	6.4	7.1	7.2	1	1	0.5		28	DNP
Dec-13	0.038	0.038	0.038	2.81	6	6	5.52	7.6	7.6	7	7.2	1	1	0.5		25	2.2
Jan-14	0.039	0.038	0.039	2.74	2	2	5.46	4.8	4.8	7	7.2	1	1	0.5		14	2.4
Feb-14	0.039	0.039	0.039	2.68	2	2	5.88	11	11	7.1	7.1	1	1	1		34	4.3
Mar-14	0.031	0.021	0.021	2.62	2	2	5.95	6.8	6.8	7.1	7.2	1	1	0.5		38	5.1
Apr-14	0.03	0.027	0.021	2.57	2	2	6.2	9.2	9.2	7.1	7.2	1	1	0.5		42	5.3
Jun-14	0.023	0.022	0.023	2.45	2	2	7.6	26	26	7	7.1	1	1	0.5		43	4.5
Jul-14	0.032	0.037	0.032	2.48	2	2	16.9	22	22	7.1	7.1	1	1	0.5		38	4.5
Aug 14	0.032	0.026	0.032	2.44	2	2	15.8	5	5	7.1	7.4	1	1	1		32	4.2
Sep-14	0.033	0.032	0.033	2.4	2	2	15.1	5.6	5.6	7	7.2	1	1	0.5		20	2.8
Oct-14	0.037	0.037	0.034	2.37	2	2	14.5	8.4	8.4	7.1	7.1	1	1	0.8		18	5.8

2.2.3 Peak Hour Flows

Peak hour flows were estimated by consideration of the availability of a surge tank and the probable attenuation.

Based on this, the peak hour factor is estimated to be 3.5, attenuated to 1.9 times the average daily flow.

2.3 Effluent Quality

The treated wastewater leaving the plant must meet specific limitations established by the FDEP in the current permit. Table 2.3 shows the current plant performance for the period studied versus the permitted requirements for effluent quality.

Table 2.3 Effluent Quality Analysis
Sun Lakes Estates

From October 2011 to October 2014

Parameter	Result	Units	Limit
AADF	0.039	MGD	0.099
M3MADF	0.051	MGD	
Mo Flow	0.041	MGD	
BOD An Avg	4.39	mg/L	20
BOD Mo Avg	6.4	mg/L	30
BOD Max	8.7	mg/L	60
TSS An Avg	16.9	mg/L	20
TSS Mo Avg	26	mg/L	30
TSS Max	26	mg/L	60
p H Min	7		6
p H Max	7.4		8.5
Fecal An Avg	1	#/100 ML	200
Fecal Max	1.5	#/100 ML	800
Nitrate	18	mg/L	12
TRC	0.5	mg/L	0.5

Departures from permitted requirements are considered in section 7 of the accompanying OMPR report.

2.4 Design and Current Loadings

The Sun Lakes Estates Wastewater Treatment Plant is an activated sludge wastewater treatment plant operating in the extended aeration mode.

Figure 1.3 at the beginning of this report provides a graphical illustration of the unit process flow scheme.

Table 2.4 lists each unit process along with the associated loading rate with pertinent dimensional or volumetric data. (Volumetric, areas and dimensional data is estimated from information in the manufacturer's catalog data, and also by approximate field measure)

Process design data is also incorporated into table 2.4.

Table 2.4 - Process Data

Summary

			Current Flow	*Permitted Flow*	*Facility Capacity*
Influent Characteristics:					
	BOD	mg/L	249	249	250
	TSS	mg/L	321	321	350
	TKN	mg/L	40	40	40
	AADF	MGD	0.039	0.099	0.135
Effluent Targets					
	BOD	mg/L	<20	<20	<20
	TSS	mg/L	<20	<20	<20
	Nitrate	mg/L	<12	<12	<12
	Disinfection		basic	basic	basic
Surge Tank					
	Volume of Tank	Gal	22400	22400	22400
	Vs/Q		0.57	0.23	0.17
	Inflow Peak Factor		3.5	3.5	3.5
	Design - OutFlow Peak		1.9	1.9	1.9
	Theoretical Minimum Vs	Gal	6370	16170	22050
Process Design:					
	Process Mode		Ext Aer	Ext Aer	Conv Aer
	Temp		20	20	20
	MLSS mg/L		3820	3836	3897
	SRT days		51	16	11
	Yield Coefficient		0.59	0.75	0.80

	Current Flow	*Permitted Flow*	*Facility Capacity*
anoxic	0	0	0
aeration	0.076	0.076	0.076
Total Volume MGAL	0.076	0.076	0.076
V/Q, hrs.	46.8	18.4	13.5
BOD Loading, #/1000 cf	8.0	20.2	27.7
Solids, Oxic, Lbs	2421	2432	2470
Solids, Anoxic, Lbs	0	0	0
MLSS Recirculation, %	0	0	0
RAS Recycle, %	100	100	100
RAS mg/L	7640	7673	7794
WAS, lb/day	47	151.97	224.55
WAS, gpd	745	2375	3455
Tank Configuration	series	series	series

Aeration System:

Process O2, lb/day	232	532	702
Diffuser Efficiency, %	6	6	6
Air Rqd., SCFM	156	357	471
lb O2/#BOD	2.9	2.6	2.5
Air supply, CF/# BOD	2772	2500	2408
Type Aeration	Diffused	Diffused	Diffused
Number of Eductors	3	3	3
Return Rate/Eductor, GPM	9.0	22.9	31.3
Air Eductors	38.4	68.4	78.4
Skimmer Air	12.8	22.8	26.1
Air Rqd. RAS:	51	91	104
Air Rqd. Process:	156	357	471
Air Rqd.Digester	45	45	45
Volume Surge	22400	22400	22400
Air Rqd.Surge	90	90	90
Total Air Rqd.:	342	583	710
HP Required	13.7	23.3	28.4
Hp provided	(2) 20 Hp	(2) 20 Hp	(2) 20 Hp

Final Settling:

No. of Clarifiers	1	1	1
Surface Area, EA., Total	385	385	385
Est Side Depth	10	10	10
Total Depth to Hopper Bottom	16	16	16
Volume	29200	29200	29200
V/Q, hrs.	18.0	7.1	5.2
Design Peak Factor	1.9	1.9	1.9
Hydraulic Overflow:			
Avg., gpd/sf	101	257	257
Peak, gpd/sf	192	489	489
Solids Loading Rate:			

	Current Flow	*Permitted Flow*	*Facility Capacity*
Avg., lb/d-sf	6	16	23
Peak, lb/d-sf	9	24	33

Disinfection:

Method	Hypochlorination	Hypochlorination	Hypochlorination
No. of CCCs	1	1	1
Volume EA, gallons	5000	5000	5000
Total CCC volume est	5000	5000	5000
Cl2 Residual, mg/L	0.5	0.5	0.5
Cl2 Dose, mg/L	8	8	8
Consumption, lb/day	2.60	6.61	9.01
Hypochlorination System			
Est. Sodium Hypochlorite strength, %	12.5	12.5	12.5
Dose required, mg/L	8	8	8
Available Chlorine, lb/gal	1.04	1.04	1.04
dose, #/gal	0.0000668	0.0000668	0.0000668
Avg dose, #/day	2.60	6.61	9.01
Avg dose, gal/day	2.5	6.3	8.6
Peak Hour Capacity, gal/day	5	12	16
CCC Retention Time			
@ ADF, minutes	185	73	53
@ PHF, minutes	97	38	28
Residual * Detention	49	19	14
Disinfection Level	Basic	Basic	Basic

Aerobic Sludge Digestion:

WAS Flow, gpd	745	2375	3455
Total Solids,#/day	47.47	152	225
WAS, mg/L	7640	7673	7794
% Volatile	75	75	75
WASv, mg/L	5730	5754	5846
Total VSS,#/d	36	114	168
VSS, #/Digester cf/day	0.02	0.08	0.11
Thick Solids,%	1	1	1
Digester Vol, gal	11200	11200	11200
Initial Est.SRT, days	17	5	4
Temp, Degrees C	20	20	20
VSS Destroyed, %	26.00	14.60	13.14
Avg. Solids, mg/L	7000	7000	7000
Supernatant Solids,mg/L	300	300	300
WAS Fraction Not Destroyed	0.80	0.89	0.90
WAS Fraction in Digester	0.61	0.68	0.70
Supernatant, gpd	287	752	1027
TSS in Digester, #	654	654	654
Total SS Removed, #/d	39	137	205
Supernatant TSS,#/d	0.7	1.9	2.6
Sludge Discharge,#/d	38	135	202

	Current Flow	*Permitted Flow*	*Facility Capacity*
Sludge Rem/year, DTR	7.0	24.7	36.9
Sludge Discharge,gpd	458	1623	2427
Digester SRT, days	16.8	4.8	3.2
Sludge Stabiliz. Class	<B	<B	<B
Digester HRT, days	15.0	4.7	3.2
O2 Rqd, VSS, #/d	19	33	44
Air, SCFM	15	28	37
Diffuser Effic.,%	5	5	5
Air Rqd. Mixing, SCFM	45	45	45
Design SCFM	45	45	45

Land Application System

System	ROO1	ROO1	ROO1
Flow	0.039	0.206	0.206
Land Application Area, sf	297000	297000	297000
Land Application Area, ac	6.82	6.82	6.82
Type System	perc ponds	perc ponds	perc ponds
# SubCells	4x2	4x2	4x2
Load Rate, gpd/sf	0.13	0.69	0.69
Load Rate, in/wk	1.47	7.79	7.79

2.5 Effluent Disposal / Reuse

Effluent from the treatment plant is disposed or reused by percolation evaporation ponds.

The relationship of the effluent disposal system to the treatment facility is shown in the site plan in figure 1.4

The associated loading rates of this system at current and design flows is as follows:

Table 2.5 Effluent Disposal\Reuse System

System Type	Application Area (acres)	Flow (MGD)	Loading Rate (in/wk)
percolation evaporation ponds	6.82	0.206	7.79
		0.039	1.47

Note: 1.9 gpd/sf equals 21.3 in/wk; 5.6 gpd/sf equals 62.9 in/wk.

The hydraulic application area consists of 6.82 acres per permit. The system consists of four dual cell percolation evaporation ponds.

The effluent disposal system has a nominal permitted capacity of 0.206 MGD, annual average flow. It is limited however by the permitted capacity of the plant.

2.6.2 Disposal and Reuse of Waste Sludge From Sun Lakes Estates WWTP.

Estimated sludge removal quantities (dry annual tonnage) is shown below. Sludge from this facility is removed by Shelley's Environmental. Please refer to the process calculations in table 2.4 for information on the SRT and predicted VSS destruction from this facility from the aerobic process alone. Sludge from this facility is hauled to another treatment plant for further stabilization and disposal. The disposition of the sludge is as follows:

Table 2.6 Sludge (Residuals) Disposal

	Direct Land Application	**Biosolids Treatment Facility**
Quantity	0 dry-tons/yr	7 dry-tons/yr
Site/Facility Name		Brevary County Regional
Location County		Brevard

3.0 Future Conditions - Wastewater Flow Projection

3.1 Unit Waste Generation Rates

From section 3.1, the annual average daily flow is 0.039 MGD.

There are 206 mobile homes served by this facility at the present.

From this, it is concluded that the unit waste generation rate is 189 gpd per mobile home.

3.2 Future Possible Average Flow

The future possible average flow to this facility is calculated in table 3.2 under the premise that the maximum future or build out flow is equal to the maximum number of units that contribute wastewater times their unit waste generation rate.

Table 3.2 Future Possible Average Flow

Type of Unit	#of Units	Unit Waste Generation Rate	Future Flow
mobile home	450	189 gpd per mobile home	0.085 MGD

3.3 Growth Rate

Future growth rates can be predicted from several methods. In general, the major methods are: linear regression of historical flow, local municipal comprehensive plan projections, and site specific knowledge.

In this case, site specific knowledge was used to predict flows using information supplied by the owners. The 206 lots presently occupied represent the bulk of the constructed subdivision and the areas is essentially built out. The owner has additional property which are undeveloped which might bring the number of connected units to 450, but, there are no plans for any such expansion at this time. The population demographics appear stable, and no further growth is expected for the next ten years. Annual average flows are expected to remain at present levels for the foreseeable future.

4.0 Summary and Recommendations

Based on the analysis of the wastewater treatment plant, effluent disposal or reuse system and sludge handling stream, the maximum ratable capacity of the wastewater treatment system is 0.135 MGD, as noted in the foregoing sections, but its permitted capacity is to remain at 0.099 MGD.

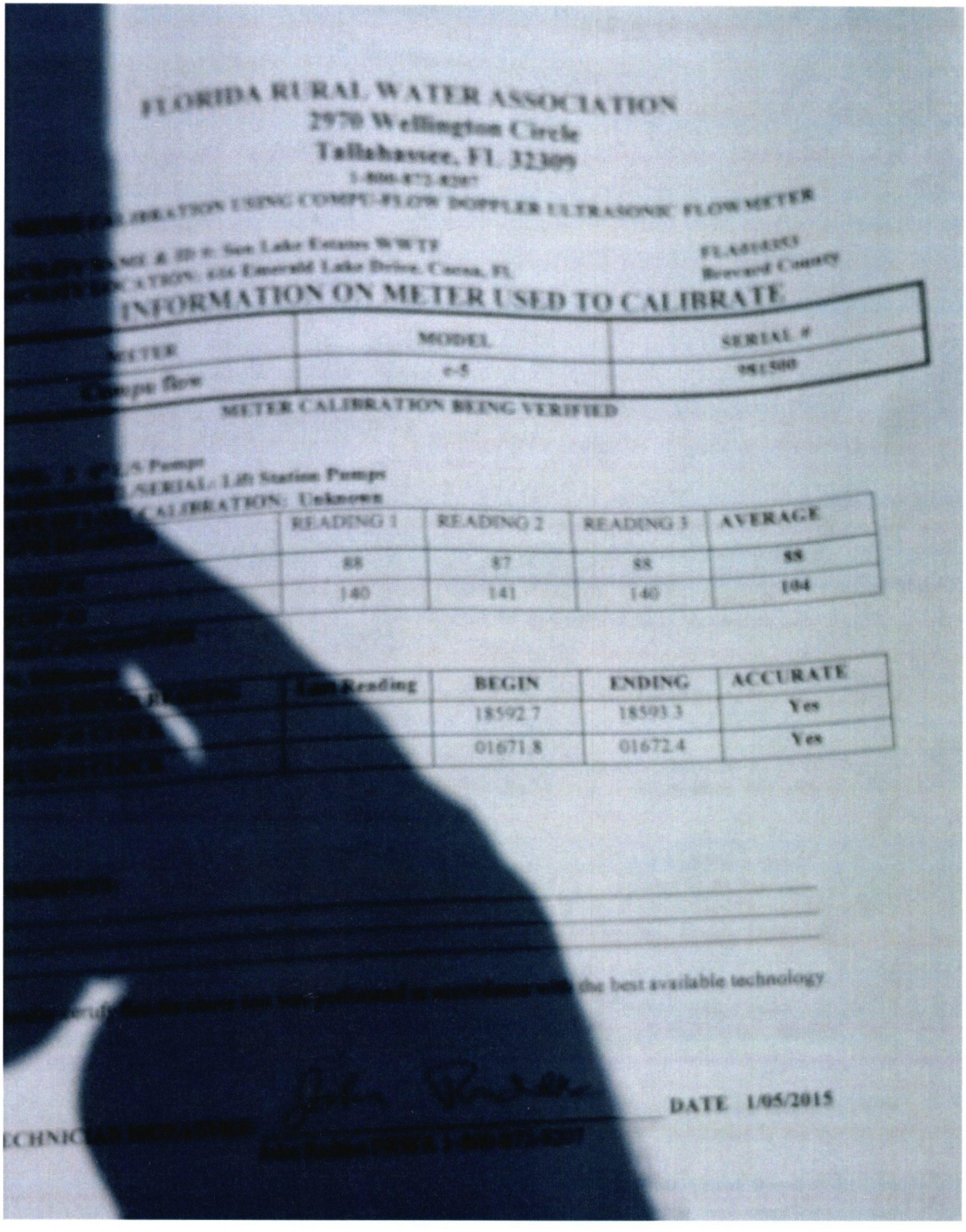
The effluent disposal system has a nominal, recognized permitted capacity of 0.206 MGD, annual average flow. It is limited however to the permitted capacity of the plant.

Future maximum capacity actually required for the next five to ten years is anticipated to not exceed 0.039 MGD, annual average basis. If future development were to proceed, annual average flows are not expected to exceed 0.085 MGD.

In accordance with 62-600.405 F.A.C. and based on future flow projections and present capacity, the owner of this facility needs to continue to monitor the proper operation of the plant.

Poor Quality Original

Appendix



FLORIDA RURAL WATER ASSOCIATION
2970 Wellington Circle
Tallahassee, FL 32309

INFORMATION ON METER USED TO CALIBRATE

METER	MODEL	SERIAL #
Compu flow	e-5	981500

METER CALIBRATION BEING VERIFIED

SERIAL: Lift Station Pumps
CALIBRATION: Unknown

	READING 1	READING 2	READING 3	AVERAGE
	88	87	88	88
	140	141	140	104

	Reading	BEGIN	ENDING	ACCURATE
		18592.7	18593.3	Yes
		01671.8	01672.4	Yes

the best available technology

DATE 1/05/2015

Poor Quality Original

OPERATIONS AND MAINTENANCE

PERFORMANCE

REPORT

FOR

SUN LAKES ESTATES

WASTEWATER TREATMENT PLANT

BREVARD COUNTY, FLORIDA
ID: FLA010353
Permit No.: FLA010353 Expires: 10/27/2015
Date of Field Visit: 3/2/2015

Prepared For:
SUN LAKES HOMEOWNERS ASSOCIATION
5600 US HWY 1 N
SHARPS, FLORIDA, 32927

MARCH 11, 2015

Prepared By:
MCDONALD GROUP INTERNATIONAL, INC.
9030 S. BRITTANY PATH
INVERNESS, FLORIDA 34452
C.A.-7580

OPERATIONS AND MAINTENANCE PERFORMANCE REPORT FOR Sun Lakes Estates WASTEWATER TREATMENT PLANT

Brevard County, Florida

The information contained in this report is true and correct to the best of my knowledge, the report was prepared in accordance with sound engineering principles, and I have discussed the recommendations and schedules with the permittee or the permittee's delegated representative and the lead operator and agrees that if the recommended schedules for corrective action are met, the facilities, when properly operated and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department.

Date: 4/13/15

George J. McDonald, P.E.
FL PROFESSIONAL ENGINEER NO. 49740
McDonald Group International, Inc, CA-0007580
9030 S. Brittany Path, Inverness Florida 34452, (352)637-1652

I have reviewed and am fully aware of and intend to comply with the recommendations and schedules included in this report.

Date: 4-13-15

Thad Terry, Sun Lakes Homeowners Association
5600 US Hwy 1N, Sharps, FL, 32927
(321)-639-1124

OPERATIONS AND MAINTENANCE PERFORMANCE REPORT FOR Sun Lakes Estates WASTEWATER TREATMENT PLANT

Brevard County, Florida

I have reviewed and am fully aware of the recommendations and schedules included in this report

Date: 4-13-15

Jerry Padrick Plant Operator
4220 Temple St, Cocoa, FL, 321-639-1273

OPERATIONS AND MAINTENANCE PERFORMANCE REPORT
Sun Lakes Estates WWTP

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Operations and Performance Report For
Sun Lakes Estates WWTP

1.0. General

In accordance with Florida Department of Environmental Protection (FDEP) Rule 62-600.732, owners of wastewater plants requesting a renewal of their wastewater permit must have an evaluation made of the plant operations and performance history. This evaluation must be made by a professional engineer registered in the State of Florida and presented in the form of an Operations and Maintenance Performance Report (OMPR).

At the request of Sun Lakes Homeowners Association a site visit was made to the Sun Lakes Estates Wastewater Treatment plant by George J. McDonald, P.E., of McDonald Group International Inc. in conjunction with preparing the evaluation.

Information contained in this report is based on information collected during that site visit as well as information furnished by the Owner and operator.

The facility is located on 616 Emerald Lake Drive, Cocoa, Brevard County, Florida. A location map and USGS quad map are provided in Figures 1.1 and 1.2 respectively.

1.1 Authorization and Purpose

Sun Lakes Homeowners Association has retained George J. McDonald, P.E. to study the performance history at the Sun Lakes Estates Wastewater Treatment Plant in order to provide the necessary operations and maintenance performance report in support of the wastewater plant permit renewal application. As such, it is a specific purpose report intended for review by the Owner and the FDEP. It is not intended for reuse by any other party, as for example, a due diligence report

1.2 Related Reports and Information

Additional information concerning the capacity of the wastewater plant, process analysis, treatment performance, unit process capacity, summary of monthly operating reports and other data is contained in the companion report, "Capacity Analysis Report For Sun Lakes Estates WWTP".

Also refer to FDEP Forms 1 and 2A which accompany the permit renewal application.

1.3 Facility Information

This Wastewater Treatment Plant is presently permitted for the flow capacity and discharge limitation standards in the following table:

Table 1.3 WWTF Effluent Limitation Standards
Sun Lakes Estates

1. Maximum flow capacity - 0.135 MGD (permitted for 0.099 MGD) (plant)
   - 0.206 MGD (effluent disposal)
2. BOD and TSS maximum concentrations -
   20 mg/L annual average
   30 mg/L monthly average
   45 mg/L weekly average
   60 mg/L any one sample
3. pH range - 6.00 to 8.50
4. Fecal Coliform -
   200 #/100 annual average
   800 #/100 maximum allowable
5. Minimum Cl_2 conc. - 0.5 mg/L
6. Nitrate 12 mg/L max

The Sun Lakes Estates Wastewater Treatment Plant has been permitted for operation since January of 1984.

Process

It is an activated sludge waste treatment facility operating in the extended aeration mode. The treatment process comprises the following: flow equalization, aeration, final settling; sludge digestion, disinfection. A process plan is included as figure 1.3

Modifications

The facility has not been reported to have been modified in the last 5 years, however, permitted capacity was reduced to 0.099 MGD (facility capacity of 0.135 MGD recognized).

N*otices of violation*

According to the Owner and the operator, no recent notices of violation have been received or consent orders entered into.

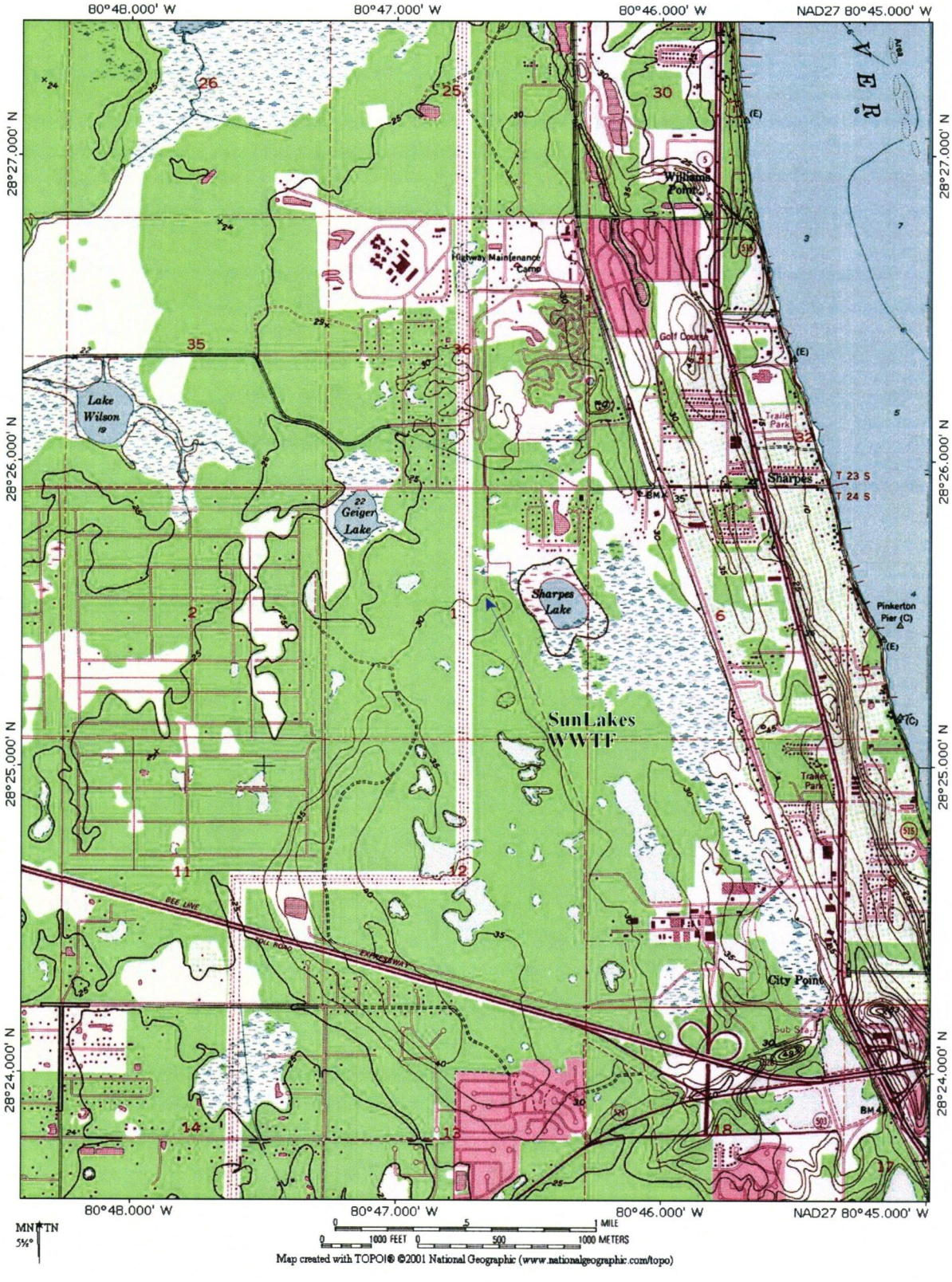
1.4 Information Sources

This report is prepared based on information supplied by the permittee, information that may be found in FDEP public databases, the current permit, and information supplied by the operator. The report relies on the accuracy of this information for all analysis and opinions.

Figure 1.1 Location Map

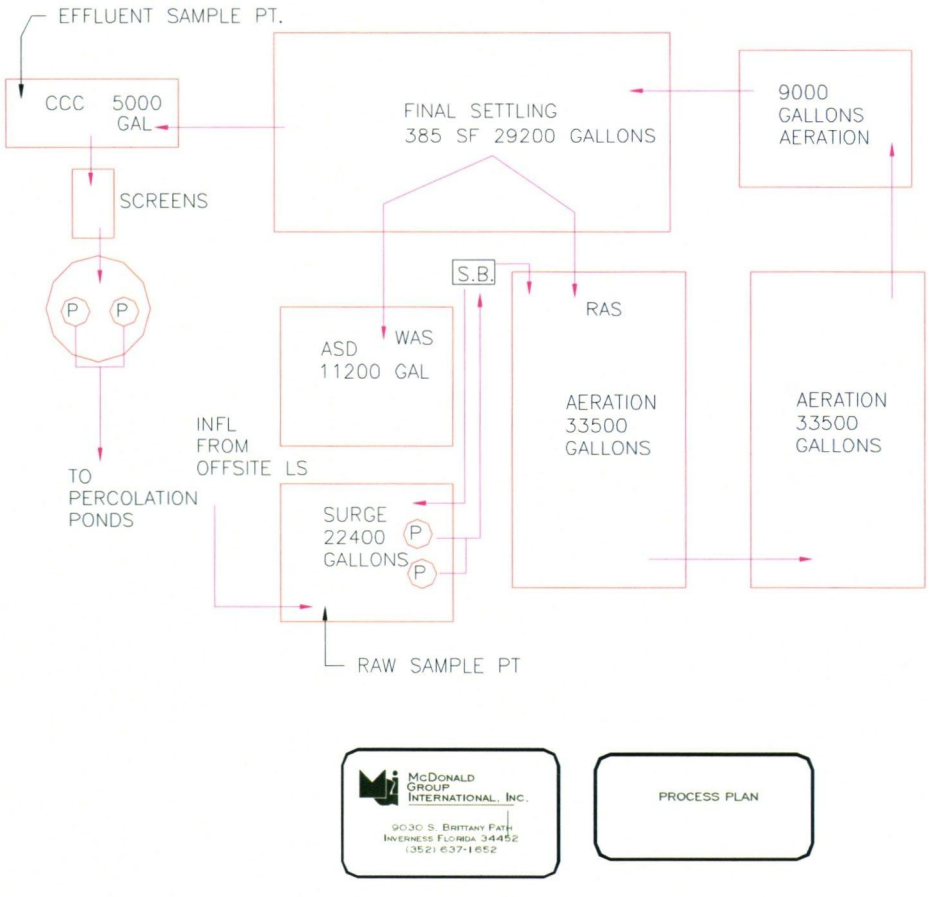


Figure 1.2 USGS Map



Map created with TOPO!® ©2001 National Geographic (www.nationalgeographic.com/topo)

Figure 1.3 Process Plan



2.0 Physical Condition

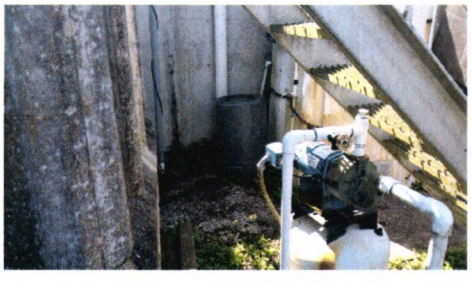
The following information has concerning the physical condition of the treatment plant has been developed from our own checklist developed specifically to evaluate treatment plants of this size and type.

General Information

This facility was visited by George J. McDonald, P.E., March 2, 2015.

The Sun Lakes Estates wastewater treatment plant is of the following type of construction: precast, field erected concrete. The manufacturer of the components is the Marolf company.

The facility operator is a contract service provider, Jerry Padrick, C-7051.



Access to the facility is controlled as follows: site is enclosed with a fence.

Water for plant washdown purposes is obtained from a site non potable water well.

Flow Measurement



Flows to this treatment plant are measured by a elapsed time meters, measuring the running time of the effluent pumps. Calibration was last checked January 5, 2015 by the Florida Rural Water Association.

Flow Equalization



This facility is equipped with flow equalization. Dual pumps discharge to a splitter box. The following describes the features observed on the flow equalization system:

Surge Tank Aeration surge tank was aerated
Surge Tank Pumps surge tank pumps were operational
Surge Tank Splitter Box in place and functional

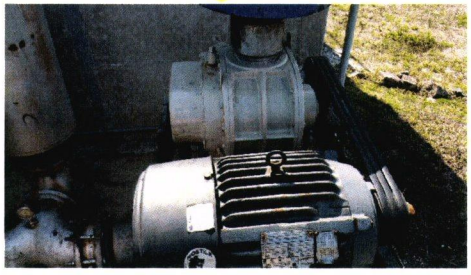


Pretreatment

This facility has limited pretreatment equipment. It was noted that a coarse bar rack was installed where the raw influent enters the surge tank. This was in good condition.

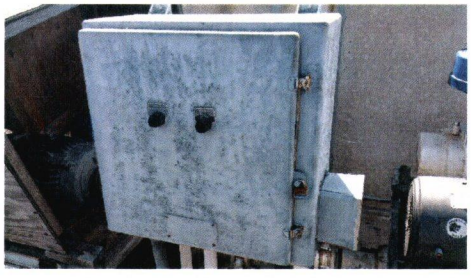
Aeration System

Aeration is supplied to this facility using diffused aeration. It is equipped with dual blowers.



The following was noted with respect to the equipment observed:

Blower Mfr./Model Sutorbilt 6MF
Motor Mfr. US Electric
Horsepower 20
Intake Filters Intake filters were in place
Other Comments both blowers were operational this visit



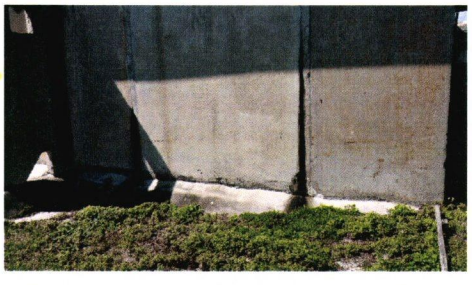
The control panel was observed and was noted to be a fibreglass panel in satisfactory condition.

Piping from the blowers was observed and found to be mix of both PVC and galvanized steel and PVC, all in fair condition. The diffusers were observed and all were observed operating normally.

Activated Sludge Process

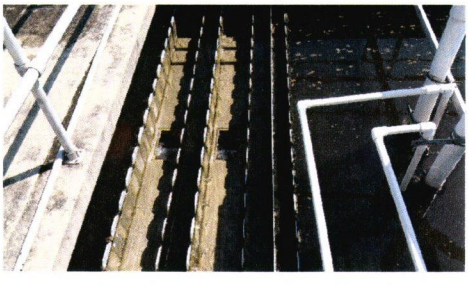


The following was noted with respect to the condition of the tankage and biological process. The process mode is extended aeration. The mixed liquor was medium brown in color, appeared to be adequately mixed, with an ample amount of tan covered foam over the aerated liquid.



The main plant structure overall was satisfactory, however it was noted that weeps have developed along the seams of some of the precast panels on the east side of the plant and will have to be repaired. It was also observed that there were some minor leaks at the seams of the CCC tank

Sand/Grit Layer



Process tankage bottoms were probed and no significant sand or grit layer was found, except in the surge tank. Grit layer varied but was between 1 and 2 feet thick.

Final Settling

Effluent from the final settling tank appeared slightly turbid on the day of the visit. The surface of the clarifier had some

scum on it but was retained adequately by the baffles.

The sludge blanket was deep, not visible.



The skimmer was observed to be operating at the time of the visit

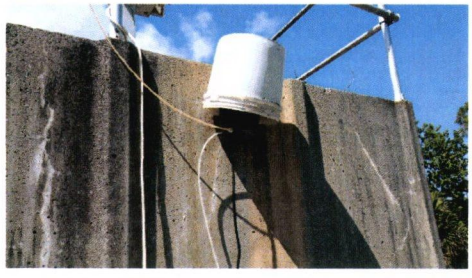
The sludge collector is an eductor type system, with (3) units in (3) hoppers. All eductors were working properly.

Other observations were as follows:

RAS/WASPiping RAS/WAS piping was PVC, in serviceable condition
Baffles in place, seemed to be working satisfactorily

Disinfection

The disinfection system consists of chlorination and contact in a detention tank. After chlorination, effluent passes through a tank, which formerly had screens placed in it. From there effluent passes to an effluent dose tank and is pumped to the percolation ponds.



Observations concerning this system are as follows:



Number of Chlorine Contact Tanks single CCC tank

General Condition CCC generally in good condition, some weeps observed at the seam of the top and bottom half of the tank
Method of Disinfection Hypochlorination
Equipment Mfr. Stenner
Equipment Evaluation: overall, appeared to be working adequately

Sludge Digestion & Disposal



This treatment plant has a holding compartment for waste sludge. Comments are as follows:

Sludge Digester Aeration sludge digester tank was aerated

Solids in Digester tank was about full of thickened sludge during this visit
Supernatant Supernatant is removed from digester both by gravity and also by eductor

The current sludge hauler is reported to be All Service. They take the sludge for processing at the Brevard County Regional Treatment Plant for subsequent processing and disposal.

Effluent Disposal and Reuse

Effluent from this treatment plant is disposed or reused by percolation evaporation ponds. The hydraulic application area consists of 6.82 acres per permit. The permit states that the system consists of "4 dual- cell percolation ponds" and has a capacity of 0.206 MGD, but limited to the permitted capacity of the plant.

Condition, depth, appearance: at the time of the visit, the periodic mowing and maintenance of the berms was taking place. Ponds are loaded and rested, with loading and resting of the ponds taken place. Some standing water in loaded cells, little water in rested cells.
Access Control site is fenced .
Odor :none noticed







3.0 Treatment Efficiency

The treatment plant must meet the target treatment levels described in section 1.3. Treatment efficiency is considered in this section from two points of view. The first, in section 3.1, is the load on each unit process considered under a current load and also under its permitted capacity. Loads are calculated in accordance with standard engineering criteria such as process SRT and MLSS conentration, hydraulic retention time, hydraulic and solids overflow on the clarifier, etc. In section 3.2, the overall performance of the treatment plant to meet its treatment objectives is reviewed.

3.1 Treatment Units

The Sun Lakes Estates wastewater treatment plant is an activated sludge wastewater treatment plant operating in the extended aeration mode.

Table 3.1 lists each unit process along with the associated loading rate with pertinent dimensional or volumetric data, as well as process control data. (Volumetric, areas and dimensional data is estimated from information contained in the manufacturer's catalog as well as approximate field measurements of the tankage.)

Table 3.1 Unit Process Summary

			Current Flow	*Permitted Flow*	*Facility Capacity*
Influent Characteristics:					
	BOD	mg/L	249	249	250
	TSS	mg/L	321	321	350
	TKN	mg/L	40	40	40
	AADF	MGD	0.039	0.099	0.135
Effluent Targets					
	BOD	mg/L	<20	<20	<20
	TSS	mg/L	<20	<20	<20
	Nitrate	mg/L	<12	<12	<12
	Disinfection		basic	basic	basic
Surge Tank					
	Volume of Tank	Gal	22400	22400	22400
	Vs/Q		0.57	0.23	0.17
	Inflow Peak Factor		3.5	3.5	3.5
	Design - OutFlow Peak		1.9	1.9	1.9
	Theoretical Minimum Vs	Gal	6370	16170	22050
Process Design:					
	Process Mode		Ext Aer	Ext Aer	Conv Aer
	Temp		20	20	20

	Current Flow	*Permitted Flow*	*Facility Capacity*
MLSS mg/L	3820	3836	3897
SRT days	51	16	11
Yield Coefficient	0.59	0.75	0.80
anoxic	0	0	0
aeration	0.076	0.076	0.076
Total Volume MGAL	0.076	0.076	0.076
V/Q, hrs.	46.8	18.4	13.5
BOD Loading, #/1000 cf	8.0	20.2	27.7
Solids, Oxic, Lbs	2421	2432	2470
Solids, Anoxic, Lbs	0	0	0
MLSS Recirculation, %	0	0	0
RAS Recycle, %	100	100	100
RAS mg/L	7640	7673	7794
WAS, lb/day	47	151.97	224.55
WAS, gpd	745	2375	3455
Tank Configuration	series	series	series

Aeration System:

Process O2, lb/day	232	532	702
Diffuser Efficiency, %	6	6	6
Air Rqd., SCFM	156	357	471
lb O2/#BOD	2.9	2.6	2.5
Air supply, CF/# BOD	2772	2500	2408
Type Aeration	Diffused	Diffused	Diffused
Number of Eductors	3	3	3
Return Rate/Eductor, GPM	9.0	22.9	31.3
Air Eductors	38.4	68.4	78.4
Skimmer Air	12.8	22.8	26.1
Air Rqd. RAS:	51	91	104
Air Rqd. Process:	156	357	471
Air Rqd.Digester	45	45	45
Volume Surge	22400	22400	22400
Air Rqd.Surge	90	90	90
Total Air Rqd.:	342	583	710
HP Required	13.7	23.3	28.4
Hp provided	(2) 20 Hp	(2) 20 Hp	(2) 20 Hp

Final Settling:

No. of Clarifiers	1	1	1
Surface Area, EA., Total	385	385	385
Est Side Depth	10	10	10
Total Depth to Hopper Bottom	16	16	16
Volume	29200	29200	29200
V/Q, hrs.	18.0	7.1	5.2
Design Peak Factor	1.9	1.9	1.9
Hydraulic Overflow:			

	Current Flow	*Permitted Flow*	*Facility Capacity*
Avg., gpd/sf	101	257	257
Peak, gpd/sf	192	489	489
Solids Loading Rate:			
Avg., lb/d-sf	6	16	23
Peak, lb/d-sf	9	24	33

Disinfection:

Method	Hypochlorination	Hypochlorination	Hypochlorination
No. of CCCs	1	1	1
Volume EA, gallons	5000	5000	5000
Total CCC volume est	5000	5000	5000
Cl2 Residual, mg/L	0.5	0.5	0.5
Cl2 Dose, mg/L	8	8	8
Consumption, lb/day	2.60	6.61	9.01
Hypochlorination System			
Est. Sodium Hypochlorite strength, %	12.5	12.5	12.5
Dose required, mg/L	8	8	8
Available Chlorine, lb/gal	1.04	1.04	1.04
dose, #/gal	0.0000668	0.0000668	0.0000668
Avg dose, #/day	2.60	6.61	9.01
Avg dose, gal/day	2.5	6.3	8.6
Peak Hour Capacity, gal/day	5	12	16
CCC Retention Time			
@ ADF, minutes	185	73	53
@ PHF, minutes	97	38	28
Residual * Detention	49	19	14
Disinfection Level	Basic	Basic	Basic

Aerobic Sludge Digestion:

WAS Flow, gpd	745	2375	3455
Total Solids,#/day	47.47	152	225
WAS, mg/L	7640	7673	7794
% Volatile	75	75	75
WASv, mg/L	5730	5754	5846
Total VSS,#/d	36	114	168
VSS, #/Digester cf/day	0.02	0.08	0.11
Thick Solids,%	1	1	1
Digester Vol, gal	11200	11200	11200
Initial Est.SRT, days	17	5	4
Temp, Degrees C	20	20	20
VSS Destroyed, %	26.00	14.60	13.14
Avg. Solids, mg/L	7000	7000	7000
Supernatant Solids,mg/L	300	300	300
WAS Fraction Not Destroyed	0.80	0.89	0.90
WAS Fraction in Digester	0.61	0.68	0.70
Supernatant, gpd	287	752	1027
TSS in Digester, #	654	654	654

	Current Flow	*Permitted Flow*	*Facility Capacity*
Total SS Removed, #/d	39	137	205
Supernatant TSS,#/d	0.7	1.9	2.6
Sludge Discharge,#/d	38	135	202
Sludge Rem/year, DTR	7.0	24.7	36.9
Sludge Discharge,gpd	458	1623	2427
Digester SRT, days	16.8	4.8	3.2
Sludge Stabiliz. Class	<B	<B	<B
Digester HRT, days	15.0	4.7	3.2
O2 Rqd, VSS, #/d	19	33	44
Air, SCFM	15	28	37
Diffuser Effic.,%	5	5	5
Air Rqd. Mixing, SCFM	45	45	45
Design SCFM	45	45	45

Land Application System

System	ROO1	ROO1	ROO1
Flow	0.039	0.206	0.206
Land Application Area, sf	297000	297000	297000
Land Application Area, ac	6.82	6.82	6.82
Type System	perc ponds	perc ponds	perc ponds
# SubCells	4x2	4x2	4x2
Load Rate, gpd/sf	0.13	0.69	0.69
Load Rate, in/wk	1.47	7.79	7.79

3.2 Overall Treatment Efficiency

The treated wastewater leaving the plant must meet limitations contained in the treatment plant's permit. Table 3.2 shows the current plant performance for the period reviewed versus the permitted requirements for effluent quality.

Table 3.2 Effluent Quality Analysis
Sun Lakes Estates

From October 2011 to October 2014

Parameter	Result	Units	Limit
AADF	0.039	MGD	0.099
M3MADF	0.051	MGD	
Mo Flow	0.041	MGD	
BOD An Avg	4.39	mg/L	20
BOD Mo Avg	6.4	mg/L	30
BOD Max	8.7	mg/L	60
TSS An Avg	16.9	mg/L	20
TSS Mo Avg	26	mg/L	30
TSS Max	26	mg/L	60
p H Min	7		6
p H Max	7.4		8.5
Fecal An Avg	1	#/100 ML	200
Fecal Max	1.5	#/100 ML	800
Nitrate	18	mg/L	12
TRC	0.5	mg/L	0.5

Departures from permitted requirements are considered in section 7 of this report.

4.0 Performance Trends

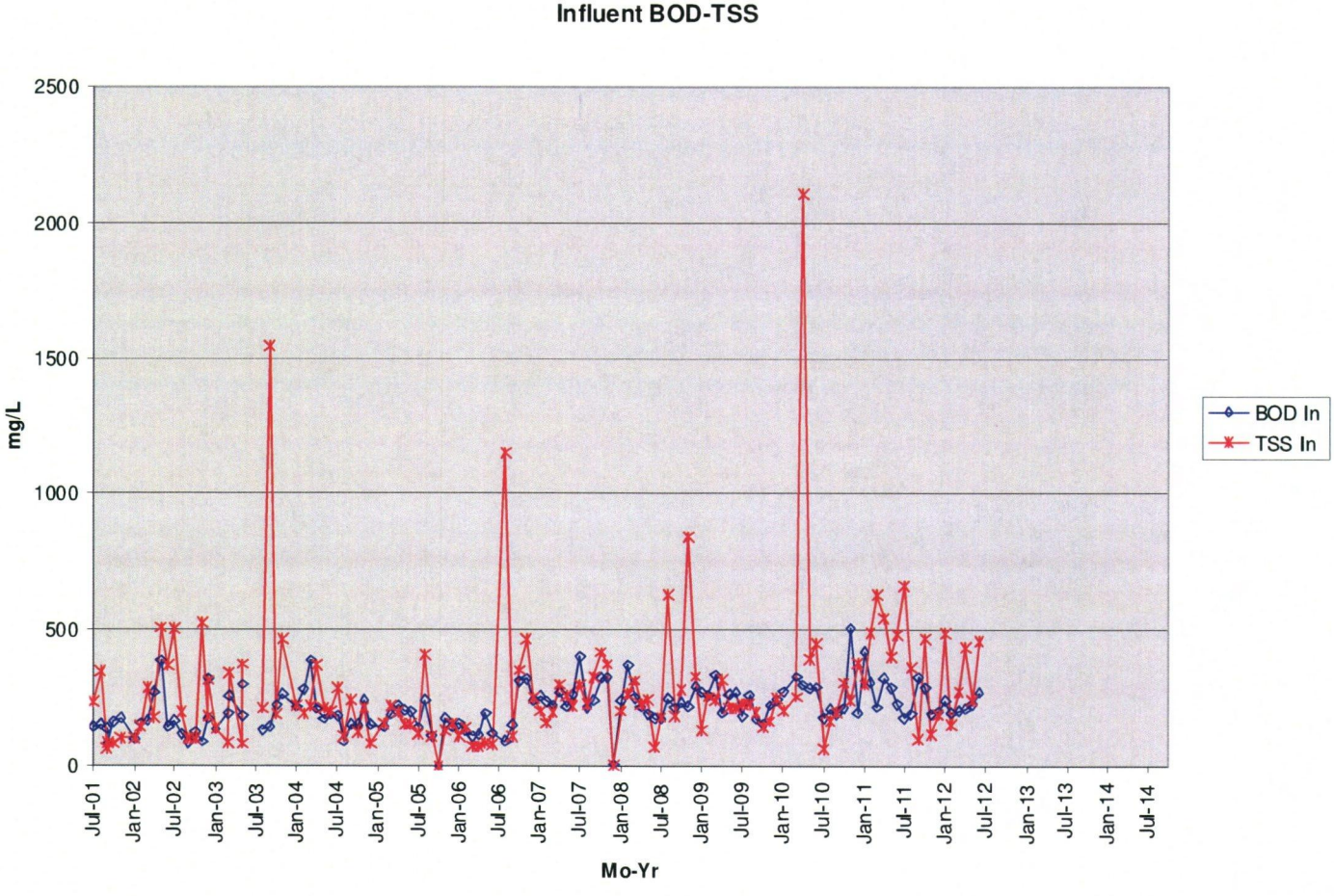
4.1 Influent

The major parameters used to evaluate influent strength are influent BOD, TSS, TKN. Based on available test data, the influent strength is estimated to be as follows:

Table 4.1 Influent Strength

Parameter	Characterization
$CBOD_5$	249 mg/L
TSS	321 mg/L

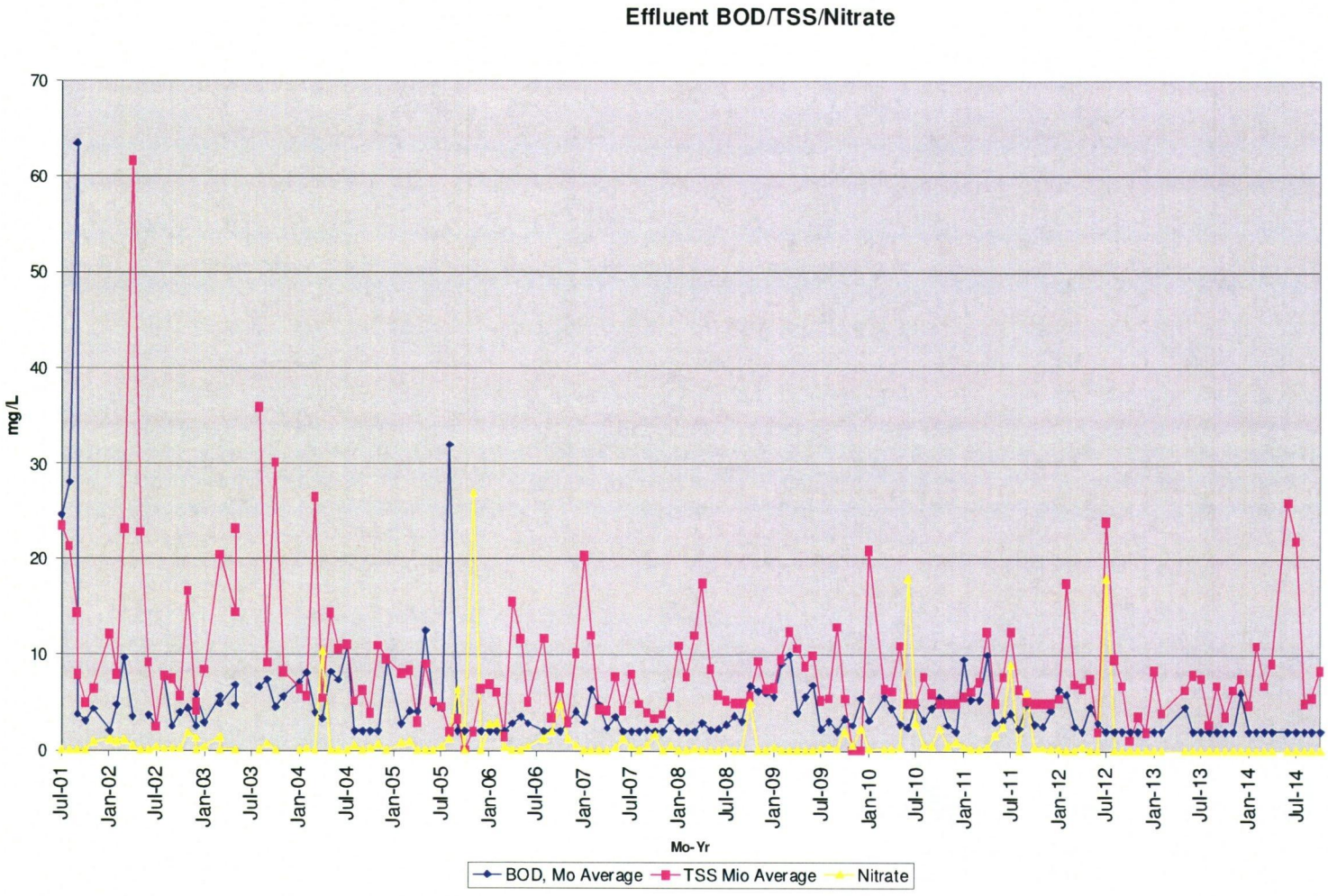
No change is foreseen in the overall strength of the wastewater.



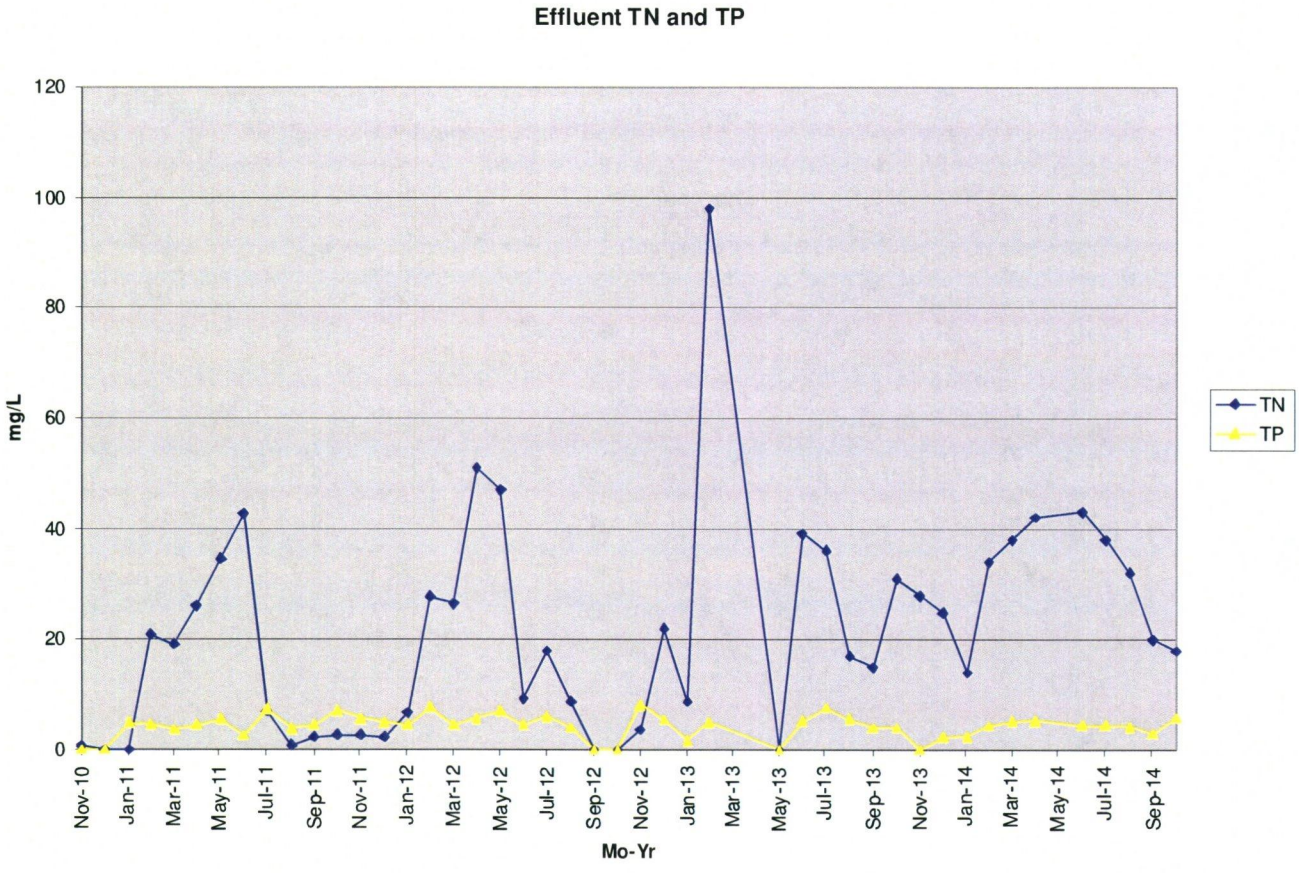
4.2 *Effluent Quality*

Data from Discharge Monitoring Reports (DMRs) were studied to determine the actual plant flow characteristics. See table 3.2 from the preceding section which summarizes the data taken from the DMRs for the current period.

In general, effluent quantity and quality appears to be within standard and no changes in the future to this are expected.



The treatment plant is required to monitor and report effluent total nitrogen and phosphorus. These test results are graphically portrayed below:



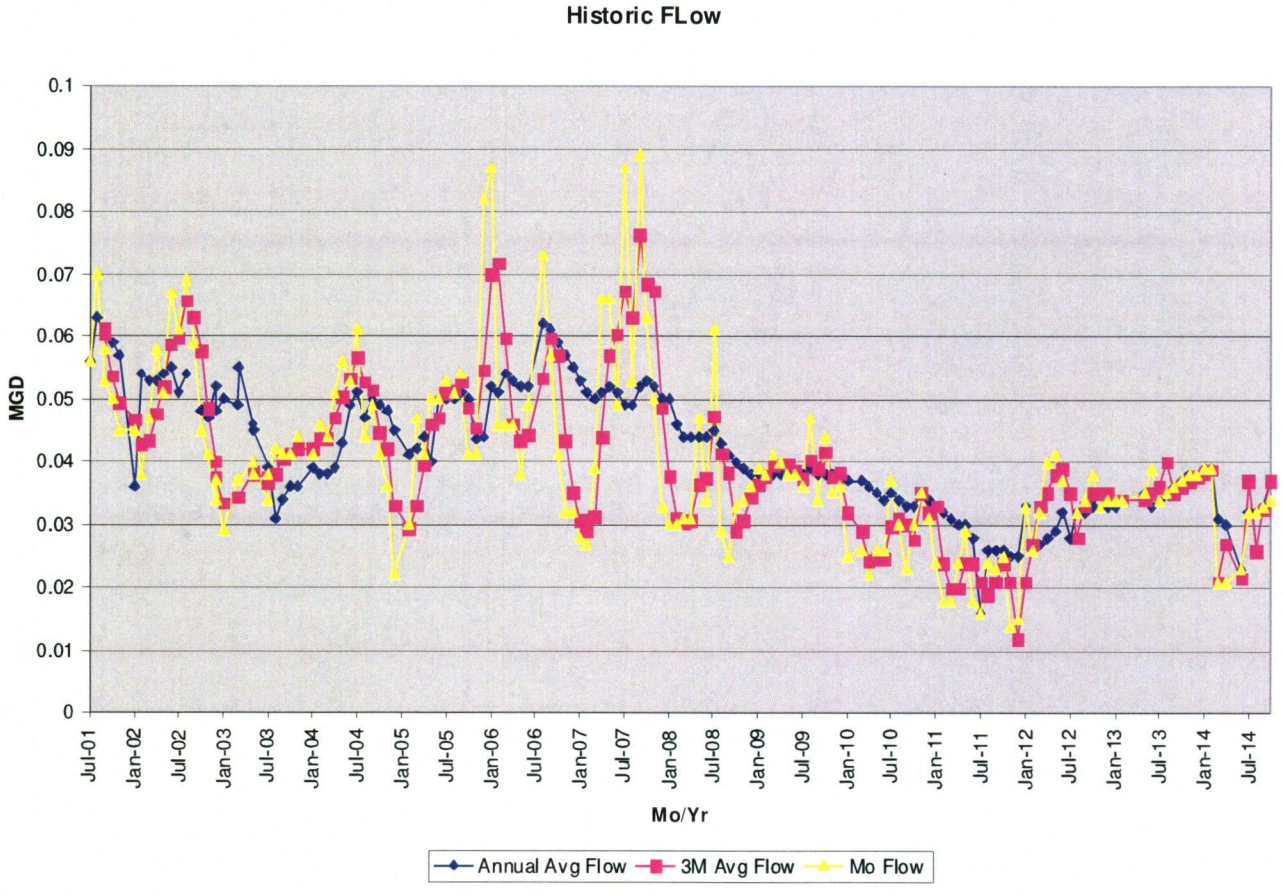
4.3 *Flow : Three Month Average Daily and Monthly Average*

The figure below illustrates the month average and rolling three month average flow for the period reviewed.

The maximum month flow is 0.041 MGD. The annual average daily flow for this facility is 0.039 MGD. The maximum three month average daily flow is 0.040 MGD. The plant permitted capacity is 0.099 MGD, based on an annual average daily flow basis. This facility appears therefore to be operating at 39 % capacity. See also the accompanying Capacity Analysis Report for further analysis.

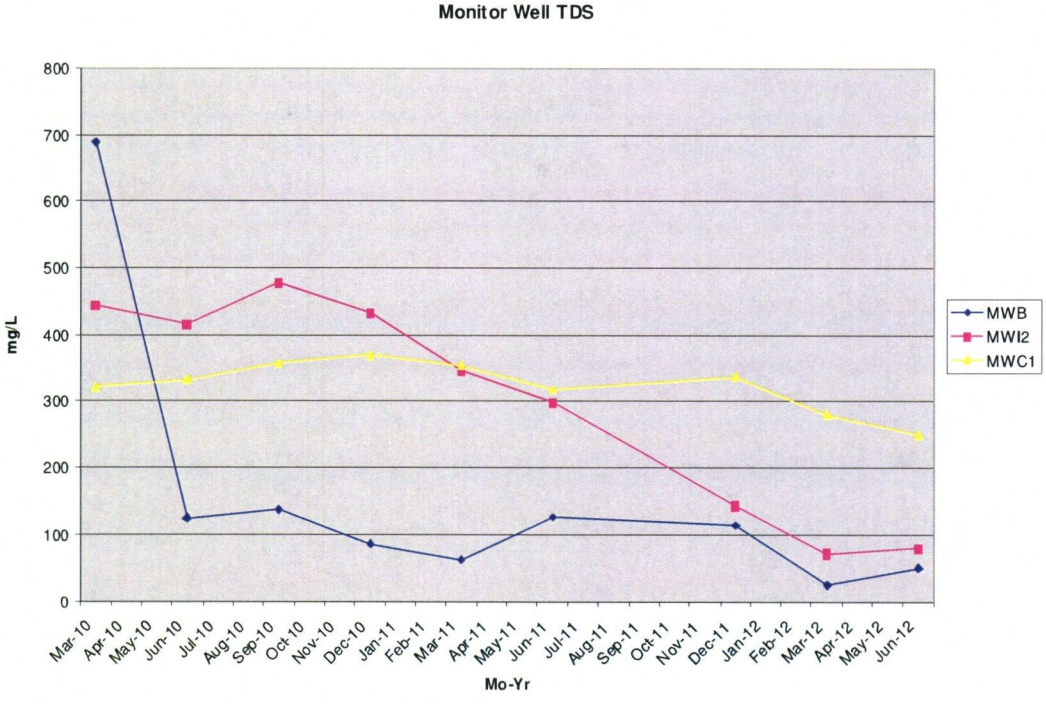
Peak hour flows were estimated by consideration of the availability of a surge tank and the probable attenuation. Based on this, the peak hour factor is estimated to be 3.5, attenuated to 1.9 times the average daily flow.

Figure 4.3 Flow Chart



4.4 *Groundwater Quality*

This facility has three monitor wells, a background, intermediate and compliance well have monitor wells. Monitor well data follows table 4.2. The charts below compare the selected parameters of TDS and Nitrate of the three wells:



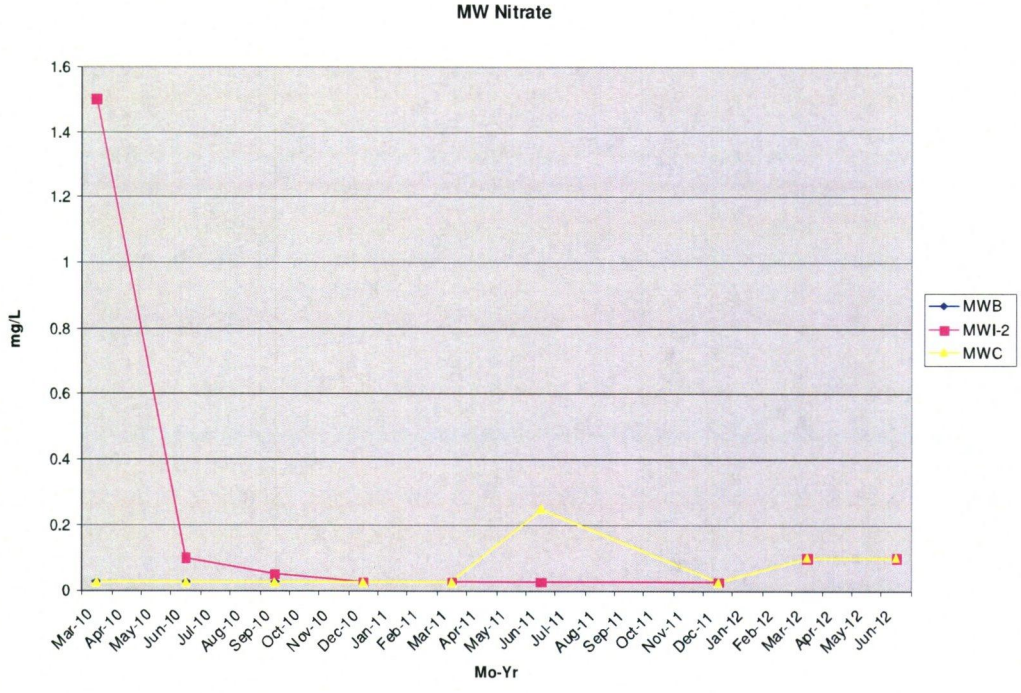


Table 4.2 Historical Effluent Flow and Quality

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Jul-01	0.056		0.056	19.6	24.6		23.5	23.5		6.8	7	200	200		0.02		
Aug-01	0.063		0.07	23.8	28.1		33.2	21.4		7.4	8.4	99	2	0	0.02		
Sep-01	0.061	0.061	0.058	58.2	63.5		26.9	14.4		6.6	8.4	100	103	0.5	0.022		
Oct-01	0.06	0.060	0.053	54	3.75		25.4	8		7.4	8.2	93.1	11	0.6	0.03		
Nov-01	0.059	0.054	0.05	50	3.1		23.8	5		7.5	8.3	105.7	258	0.5	0.08		
Dec-01	0.057	0.049	0.045	46.4	4.3		22.4	6.5		7.3	8	98.2	9	0.6	0.89		
Jan-02	0.036	0.047	0.045	40.8	2		20.6	12.2		7.1	8	97	90	0.6	1.152		
Feb-02	0.054	0.043	0.038	38	4.7	5.8	19.6	8	12.3	7.5	8.4	89.6	2	0.5	0.99		
Mar-02	0.053	0.043	0.047	35.8	9.7	17.9	23	23.2	41.5	7.5	8.5	87.7	65	0.6	1.15		
Apr-02	0.053	0.048	0.058	33.5	3.5		25.9	61.7		7	8.3	82.8	25	0.6	0.45		
may-02	0.054	0.052	0.051	25.8			48.5	22.9		7	7.2	507.3	502	0.5	0.02		
Jun-02	0.055	0.059	0.067	13.1	3.7	6	17.5	9.25	14	6.7	7.5		17	0.5	0.058		
Jul-02	0.051	0.060	0.061	11.3	2.5	2.6	15.7	2.5	2.6	6.9	7.8	48.2	2.5	0.5	0.339		
Aug=02	0.054	0.066	0.069	9	7.85	7.85	15.19	7.85	9.7	7.2	7.6	56.5	48.5	0.5	0.189		
Sep-02		0.063	0.059		2.6	2.6		7.5	10	7.1	7.4	99.08	653	0.5	0.238		
Oct-02	0.048	0.058	0.045	4.55	3.95	4.2	14.41	5.75	6	7	7.4	98.2	6	0.5	0.18		
Nov-02	0.047	0.048	0.041	4.53	4.35	5.2	14.5	16.75	26.5	7.2	7.6	6	9	0.5	1.89		
Dec-02	0.052	0.040	0.034	4.45	2.55	5	14.4	4.25	5	7.3	7.8	77.3	6.5	0.5	1.34		
Jan-03	0.048	0.037	0.037	4.83	5.9	8.3	14.06	5	8	6.5	7.6	69.9	1	0.5	0.092		
Feb-03	0.05	0.033	0.029	4.33	2.9	4.3	13.9	8.5	13	7.2	7.8	71.4	1	0.5	0.376		
Mar-03	0.049	0.034	0.037	4.43	5.65	9.8	14.4	20.5	27	7.4	7.6	68.7	37.5	0.5	1.4		
Apr-03	0.055	0.034	0.037	4.51	4.8	4.9	14.8	20.5	29	7.4	7.6	66.1	13	0.5	0.116		
May-03	0.046	0.038	0.04	4.4	6.8	6.8	10.8	14.5	14.5	7.4	7.8	66.3	2	0.5	0.074		
Jun-03	0.045	0.038	0.038	4.4	4.7	7.9	11.7	23.2	31	7.5	7.8	65.2	6.5	0.5	0.063		
Jul-03	0.039	0.037	0.034							7.4	7.8			1.8			
August 08	0.039	0.037	0.038							7.4	7.6			0.5			
Sep-03	0.031	0.038	0.042	4.6	6.6	6.6	16.4	36	36	7.5	7.8	61	1	0.5	0.116		
Oct-03	0.034	0.040	0.041	4.8	7.4	9.6	15.8	9.25	16	7.5	7.8	56.3	1	0.9	0.721		
Nov-03	0.036	0.041	0.041	4.7	4.5	4.5	16.9	30.2	50	7	7.4	50.4	2	0.6	0.092		
Dec-03	0.036	0.042	0.044	4.8	5.6	8	15.2	8.25	9	7.6	7.8	51.9	1	2.2			
Feb-04	0.039	0.042	0.041	6	7.1	8	14.7	6.5	7	7.1	7.8	4.96	4	0.5	0.067		
Mar-04	0.038	0.044	0.046	6.1	8.1	16.3	14	5.7	8.5	7.4	7.9	4.65	1	0.5	0.144		
Apr-04	0.038	0.044	0.044	5.9	4	4		26.5	26.5	7.8	7.2	7.98	48	2	0.005		
May-04	0.039	0.047	0.051	5.7	3.35	5.2	13.3	5.5	7.5	6.8	7.5	7.3	1	0.8	10.4		
Jun-04	0.043	0.050	0.056	5.9	8.2	9.7	13.3	14.4	18.8	7.5	7.8	7.4	9.5	0.5	0.056		

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Jul-04	0.049	0.053	0.053	6	7.35	13.1	13.1	10.65	14	7.5	7.8	8.05	17	0.5	0.049		
Aug 04	0.051	0.057	0.061	6.73	10.9	12	15.23	11.1	14	7.5	7.8	62.7	667	0.6	0.025		
Sep-04	0.047	0.053	0.044	6.33	2	2	12.6	5.2	8.4	7.3	7.6	63.7	12.5	0.5	0.54		
Oct-04	0.05	0.051	0.049	5.99	2	2	12.1	6.3	6.6	7.6	7.9	59.3	7.5	0.5	0.045		
Nov-04	0.049	0.045	0.041	5.6	2	2	11.4	3.9	4.4	7.5	7.7	54.8	1	1	0.181		
Dec-04	0.048	0.042	0.036	5.3	2	2	11.3	11	12	7.4	7.9	50.6	1	0.5	0.663		
Jan-05	0.045	0.033	0.022	4.8	9.6	17	3.98	9.6	17	7.3	7.8	1	1	0.6	0.0215		
Mar-05	0.041	0.029	0.03	4.77	2.8	3.3	9.2	8.1	10.8	7.2	7.6	10.5	54.5	0.5	0.76		
Apr-05	0.042	0.033	0.047	4.71	4.1	4.4	8.8	8.4	16.8	6.1	7.8	9.76	1	0.5	0.95		
May 05	0.044	0.039	0.041	4.28	4.1	4.1	8.49	3	3	7.1	7.5	6.02	1	0.5	0.032		
Jun-05	0.04	0.046	0.05	5.16	12.5	15	8.61	9.1	11	7.2	7.5	8.56	1	0.5	0.058		
Jul-05	0.05	0.047	0.05	5.13	4.85	7.7	8.34	5.2	8.4	7.1	7.5	7.97	1	0.5	0.0635		
Aug 05	0.05	0.051	0.053	5.08	4.45	6.9	8.05	4.6	7.2	7.1	7.5	1	5	0.8	0.425		
Sep-05	0.05	0.051	0.051	7.15	32	32	7.58	2	2	7.3	7.6	1	1	0.5	1.3		
Oct-05	0.051	0.053	0.054	6.75	2	2	7.25	3.3	6.4	7.2	7.4	1.19	3.5	0.5	6.3		
Nov-05	0.05	0.049	0.041	6.38	2	2	6.8	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA		NO DATA	
Dec-05	0.044	0.045	0.041	7	2	2	5	2	2	7	7.3	5.1	1	0.8	27		
Jan-06	0.044	0.055	0.082	6.61	2.05	2.1	5.1	6.5	11	7.3	7.6	4.78	1	0.5	0.035		
Feb-06	0.052	0.070	0.087	6.12	2	2	5.38	6.9	10	7.1	7.4	1.88	13.5	0.5	2.7		
Mar-06	0.051	0.072	0.046	5.8	2	2	5.43	6.1	7	7.1	7.4	12.5	1	0.5	2.88		
Apr-06	0.054	0.060	0.046	5.88	2	2	4.64	1.5	2	7.2	7.3	2.5	1.5	0.5	0.398		
May 06	0.053	0.046	0.046	5.64	2.85	3.3	5.48	15.6	24	7.1	7.4	1.5	2	0.5	0.0835		
Jun-06	0.052	0.043	0.038	5.47	3.55	3.6	5.95	11.7	15	7.2	7.3	1.65	3.5	0.5	0.12		
Jul-06	0.052	0.044	0.049	5.26	2.85	3.3	5.88	5.1	5.2	7.2	7.3	1.6	1	0.5	0.417		
Sep-06	0.062	0.053	0.073	4.83	2	2.1	6.46	11.8	15	7	7.3	1	1	0.5	1.29		
Oct-06	0.061	0.060	0.057	4.61	2.02	2.04	6.23	3.5	3.6	7	7.2	1	1	0.5	2.03		
Nov-06	0.059	0.057	0.041	4.41	2	2	6.27	6.65	10.3	6.9	7.3	1.1	2.5	0.5	4.76		
Dec-06	0.057	0.043	0.032	4.29	2.85	2.87	6.01	3	3.2	7	7.3	1	1	0.5	1.27		
Jan-07	0.055	0.035	0.032	4.27	4.04	6.09	6.33	10.2	14	6.8	7.2	1	1	0.5	0.587		
Feb-07	0.053	0.031	0.028	4.17	2.98	3.18	7.41	20.4	30	7	7.2	1	1	0.7	0.0814		
Mar-07	0.051	0.029	0.027	4.33	6.37	9.99	7.76	12.07	18.4	7	7.3	1	1	0.5	0.01		
Apr-07	0.05	0.031	0.039	4.36	4.73	NO DATA	7.5	4.4	NO DATA	7	7.4	1	1	0.5	0.0691		
May 07	0.051	0.044	0.066	4.2	2.36	2.72	7.24	4.2	5.2	7.1	7.4	1	1	0.5	0.035		
Jun-07	0.052	0.057	0.066	4.47	3.51	3.51	7.27	7.75	10	7	7.5	50	225	0.5	0.3145		
Jul-07	0.051	0.060	0.049	4.28	2	2	7.03	4.25	4.25	7.1	7.4	1	1	0.5	1.23		
August 07	0.049	0.067	0.087	4.1	2	2	7.11	8.09	9.67	7.1	7.5	1	1	0.5	0.42		

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Sep-07	0.049	0.063	0.053	3.93	2	2	6.93	4.88	5.33	7.1	7.4	1	1	0.5	0.01		
Oct-07	0.052	0.076	0.089	3.79	2.19	2.38	4.81	4	6.25	7.1	7.4	1	1	0.5	0.562		
Nov-07	0.053	0.068	0.063	3.65	2	2	4.7	3.4	4.8	7.2	7.4	1	1	0.5	1.695		
Dec-07	0.052	0.067	0.05	3.52	2.05	2.11	4.17	3.87	4	7.2	7.6	1	1.5	0.5	0.0313		
Jan-08	0.05	0.049	0.033	3.49	3.18	4.37	4.18	5.62	6.5	7.2	7.8	1	4.5	0.5	0.463		
Feb-08	0.05	0.038	0.03	3.37	2	2	4.79	11	12	7.3	7.5	1	1	0.5	0.0235		
Mar-08	0.046	0.031	0.03	3.26	2	2	4.98	7.72	7.75	7.2	7.5	1	1	0.5	0.02245		
Apr-08	0.044	0.030	0.031	3.16	2	2	5.52	12.1	12.3	7.3	7.5	1	1	0.5	0.153		
May 08	0.044	0.031	0.031	3.23	2.95	5.9	5.94	17.5	20.8	7.2	7.5	1	1	0.5	0.057		
Jun-08	0.044	0.036	0.047	3.15	2.2	2.41	6.14	8.55	12.3	7.2	7.5	1	1	0.5	0.01		
Jul-08	0.044	0.037	0.034	3.1	2.25	2.5	8.41	5.9	6.8	7.2	7.5	1	1.5	0.8	0.054		
Aug 8	0.045	0.047	0.061	3.06	2.7	3.4	8.16	5.25	5.5	7	7.4	1.1	3.5	0.8	0.296		
Sep-08	0.043	0.041	0.029	3.08	3.6	3.6	7.9	5	5	7	7.5	1	2	0.5	0.057		
Oct-08	0.041	0.038	0.025	3.07	3.05	6.1	7.67	5	5	7.2	7.4	1.1	2.5	0.5	0.0415		
Nov-08	0.04	0.029	0.033	3.35	6.75	10.1	7.52	5.75	6.5	7.1	7.5	1	2	0.8	5.036		
Dec-08	0.039	0.031	0.034	3.56	6.2	7.1	7.66	9.4	11	7.2	7.6	1	1	0.5	0.023		
Jan-09	0.038	0.034	0.036	3.74	5.95	6.4	7.57	6.5	7	7.4	7.6	3.9	50	0.5	0.116		
Feb-09	0.038	0.036	0.039	3.88	5.6	5.7	7.49	6.6	6.7	7.3	7.6	3.6	1	0.5	0.375		
Mar-09	0.038	0.038	0.038	4.27	9.05	9.6	7.65	9.65	10	7.2	7.5	3.4	1.5	0.5	0.0915		
Apr-09	0.038	0.039	0.041	4.75	10	11	9.86	12.5	12.5	7.3	7.5	2	2	0.5	0.0765		
May 9	0.038	0.040	0.04	4.69	4	6	9.92	10.75	16	7.3	7.4	1	2	0.5	0.063		
Jun-09	0.038	0.040	0.038	4.76	5.65	6.9	9.84	8.9	9.3	7.2	7.4	1	1.5	1	0.08		
Jul-09	0.038	0.039	0.038	4.92	6.85	6.6	9.85	10	15	7.2	7.4	5	60.5	1	0.089		
Aug 9	0.038	0.037	0.036	4.71	2.25	2.3	9.49	5.25	5.5	7.2	7.4	2	2	0.8	0.226		
Sep-09	0.039	0.040	0.047	4.58	3.05	4.1	9.18	5.5	6	7.2	7.3	2	2	1	0.425		
Oct-09	0.038	0.039	0.034	4.38	2.05	2.1	9.47	13	8	7.2	7.4	2	2.5	0.5	0.214		
Nov-09	0.038	0.042	0.044	4.3	3.35	4.1	9.16	5.5	6	7.2	7.4	1	1	0.8	2.03		
Dec-09	0.038	0.038	0.035	4.17	2.65	3.0U	8.84	5.0U	5.0U	7.2	7.4	1	1.0U	0.8	0.585		
Jan-10	0.038	0.038	0.036	4.27	5.5	7.5	8.54	5.0U	5.0U	7.2	7.3	1.0U	1.0U	1.5	2.35		
Feb-10	0.037	0.032	0.025	4.18	3.15	3.6	9.49	21	32	7.2	7.3	1.0U	1.0U	0.5	0.18		
Mar-10	0.037	0.029	0.026	4.28	5.6	6.9	9.25	6.45	6.9	7.1	7.3	1	1	0.5	0.225		
Apr-10	0.036	0.024	0.022	4.28	4.4	5.8	9.24	6.25	7.5	7.2	7.4	1	no data	0.5	0.165		
May-10	0.035	0.025	0.026	4.16	2.8	2.8	9.37	11	12	7.3	7.5	1	no data	0.5	0.31		
Jun-10	0.034	0.025	0.026	4.02	2.4	2.4	9.03	5	5	7.1	7.3	1	no data	0.5	18		
Jul-10	0.035	0.030	0.037	4.08	4.8	5.3	8.72	5	5	7.2	7.3	1	1	0.5	2.92		
Aug 10	0.034	0.031	0.03	4.01	3.2	3.7	8.64	7.75	8	7.2	7.3	1	1	0.5	0.562		

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Sep-10	0.033	0.030	0.023	4.04	4.4	4.9	8.43	6	7	7.1	7.3	1	no data	0.5	0.52		
Oct-10	0.033	0.028	0.03	4.15	5.55	9.1	8.16	5	5	7.2	7.4	1	no data	0.8	2.36		
Nov-10	0.035	0.035	0.035	4.03	2.65	3.3	7.91	5	5	7.1	7.3	1	1	0.8	0.455	0.58	*
Dec-10	0.034	0.032	0.031	3.87	2	2	7.68	5	5	7.1	7.3	1	1	0.5	0.985	NO DATA	*
Jan-11	0.033	0.033	0.024	4.3	9.55	10.2	7.53	5.75	6.5	7.2	7.2	1	1	0.5	0.42	*	4.8
Feb-11	0.032	0.024	0.018	4.37	5.3	8.6	7.43	6.25	7.5	7.2	7.3	1	1	0.5	0.24	20.9	4.6
Mar-11	0.031	0.020	0.018	4.44	5.3	6.2	7.41	7.25	9.5	7.1	7.3	1	1	0.5	0.173	19.2	3.6
Apr-11	0.03	0.020	0.024	4.86	10	10.2	7.8	12.5	13	7.2	7.3	1	1.5	1	0.435	26.05	4.5
May 11	0.03	0.024	0.029	4.64	3	3.8	7.58	5	5	7.1	7.2	1	1	1	1.65	34.6	5.5
Jun-11	0.028	0.024	0.018	4.52	3.2	3.8	7.59	7.75	10.5	7.1	7.2	1	1	1	2.58	42.6	2.5
Jul-11	0.016	0.021	0.016	4.47	3.9	4.8	7.96	12.5	2	7.1	7	1	1	1	9.06	7	7.2
Aug 11	0.026	0.019	0.024	4.3	2.3	2.6	7.84	6.5	8	7	7.2	1	1	1	0.0321	0.815	3.8
Sep-11	0.026	0.021	0.023	4.34	4.85	5	7.64	5.25	5.5	7.1	7.2	1	1	0.5	6.01	2.3	4.4
Oct-11	0.026	0.024	0.025	4.22	2.8	3	7.43	5	5	7.1	7.2	1	1.5	0.8	0.412	2.65	7.1
Nov-11	0.025	0.021	0.014	4.09	2.55	3.1	7.24	5	5	7	7.1	1	1	0.8	0.3	2.7	5.6
Dec-11	0.025	0.012	0.015	4.1	4.25	6.5	7.06	5	5	7.2	7.2	1	1	0.5	0.21	2.35	4.9
Jan-12	0.033	0.021	0.033	4.27	6.4	7.2	6.94	5.5	6	7.2	7.2	1	1	1	0.24	6.7	4.5
Feb-12	0.026	0.027	0.026	4.39	5.85	8.7	7.75	17.5	2.45	7.1	7.3	1	1	0.5	0.042	27.8	7.7
Mar-12	0.027	0.033	0.032	4.33	2.5	3.64	7.69	7	7.4	7.1	7.2	1	1	1	0.1	26.5	4.5
Apr-12	0.028	0.035	0.04	4.15	2	2	3.9	6.6	8.6	7.1	7.2	1	1	0.5	0.395	51	5.7
May 12	0.029	0.038	0.041	4.18	4.55	6.7	4.17	7.5	11	7.1	7.2	1	1	0.5	0.1	47	6.9
Jun-12	0.032	0.039	0.037	4.08	2.95	3.9	4	2.05	2.8	7.1	7.2	1	1	0.5	0.02	9.2	4.4
Jul-12	0.028	0.035		3.92	2	2	5.53	24	24	7	DNP	1	1	0.5	18	18	6
Aug-12	0.032	0.028	0.032	3.77	2	2	5.84	9.6	9.6	7	7.2	1	1	0.5		8.8	4
Sep-12	0.032	0.033	0.034	3.63	2	2	5.91	6.8	6.8	7.2	7.3	1	1	1		DNP	DNP
Oct-12	0.033	0.035	0.038	3.5	2	2	DNP	1.2	1.2	7.1	7.4	1	1	0.5		MNR	MNR
Nov-12	0.035	0.035	0.033	3.38	2	2	5.39	3.6	3.6	7.1	7.3	1	DNP	0.5		3.6	8.1
Dec-12	0.033	0.035	0.034	3.27	2	2	5.12	2	2	7.1	7.3	1	1	1.2		22	5.4
Jan-13	0.033	0.034	0.034	3.17	2	2	5.37	8.4	8.4	7.2	7.3	1	1	1		8.7	1.6
Feb-13	0.034	0.034	0.034	3.08	2	2	5.26	4	4	7	7.2	1	1	0.5		98	4.9
March 13	0.035	0.034	0.035	3.12	4.6	4.6	8.53	6.4	6.4	7.1	7.2	1	1	0.5		DNP	DNP
Jun-13	0.033	0.035	0.039	2.84	2	2	5.34	8	8	7	7.2	1	1	0.5		39	5.1
Jul-13	0.034	0.036	0.034	2.77	2	2	5.51	7.6	7.6	7.1	7.2	1	1	1		36	7.6
Aug 13	0.035	0.040	0.035	2.71	2	2	5.3	2.8	2.8	7.1	7.2	1	1	1		17	5.5
Sep-13	0.036	0.035	0.036	2.65	2	2	5.41	6.8	6.8	7.2	7.2	1	1	1		15	4
Oct-13	0.037	0.036	0.037	2.6	2	2	5.27	3.6	3.6	7.1	7.2	1	1	0.5		31	4
Nov-13	0.038	0.037	0.038	2.55	2	2	5.35	6.4	6.4	7.1	7.2	1	1	0.5		28	DNP

	Flow An Avg	Flow 3MADF	Flow Mo Avg	BOD An Avg	BOD Mo Avg	BOD Max	Tss An Avg	TSS Mo Avg	TSS Max	pH Min	pH Max	Fecal An	Fecal Max	TRC	Nitrate	TN	TP
Dec-13	0.038	0.038	0.038	2.81	6	6	5.52	7.6	7.6	7	7.2	1	1	0.5		25	2.2
Jan-14	0.039	0.038	0.039	2.74	2	2	5.46	4.8	4.8	7	7.2	1	1	0.5		14	2.4
Feb-14	0.039	0.039	0.039	2.68	2	2	5.88	11	11	7.1	7.1	1	1	1		34	4.3
Mar-14	0.031	0.021	0.021	2.62	2	2	5.95	6.8	6.8	7.1	7.2	1	1	0.5		38	5.1
Apr-14	0.03	0.027	0.021	2.57	2	2	6.2	9.2	9.2	7.1	7.2	1	1	0.5		42	5.3
Jun-14	0.023	0.022	0.023	2.45	2	2	7.6	26	26	7	7.1	1	1	0.5		43	4.5
Jul-14	0.032	0.037	0.032	2.48	2	2	16.9	22	22	7.1	7.1	1	1	0.5		38	4.5
Aug 14	0.032	0.026	0.032	2.44	2	2	15.8	5	5	7.1	7.4	1	1	1		32	4.2
Sep-14	0.033	0.032	0.033	2.4	2	2	15.1	5.6	5.6	7	7.2	1	1	0.5		20	2.8
Oct-14	0.037	0.037	0.034	2.37	2	2	14.5	8.4	8.4	7.1	7.1	1	1	0.8		18	5.8

Monitor Well Summary Data

MWB - Background

Date	Parameter	Result	Unit
Mar-10	Turbidity, Lab, Ntu	19.6	NTU
Jun-10	Turbidity, Lab, Ntu	4.1	NTU
Sep-10	Turbidity, Lab, Ntu	5.8	NTU
Dec-10	Turbidity, Lab, Ntu	4.6	NTU
Mar-11	Turbidity, Lab, Ntu	11.7	NTU
Jun-11	Turbidity, Lab, Ntu	2.3	NTU
Dec-11	Turbidity, Lab, Ntu	8.4	NTU
Mar-12	Turbidity	6.2	NTU
Jun-12	Turbidity	3.2	NTU
Mar-10	pH	4.65	SU
Jun-10	pH	3.97	SU
Sep-10	pH	5.2 U	SU
Dec-10	pH	5.24	SU
Mar-11	pH	4.95	SU
Jun-11	pH	3.05	SU
Dec-11	pH	5.33	SU
Mar-12	pH	5.15	s.u.
Jun-12	pH	5.01	s.u.
Mar-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Jun-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Sep-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Dec-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Mar-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Jun-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Dec-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Mar-12	Nitrogen, Nitrate, Total (as N)	0.1	mg/L
Jun-12	Nitrogen, Nitrate, Total (as N)	0.1	mg/L
Mar-10	Chloride (as Cl)	6.4	MG/L
Jun-10	Chloride (as Cl)	30.5	MG/L
Sep-10	Chloride (as Cl)	32.1	MG/L
Dec-10	Chloride (as Cl)	7.9	MG/L
Mar-11	Chloride (as Cl)	N/A	MG/L
Jun-11	Chloride (as Cl)	16.7	MG/L
Dec-11	Chloride (as Cl)	17.6	MG/L
Mar-12	Chloride (as Cl)	6.8	mg/L
Jun-12	Chloride (as Cl)	5.4	mg/L
Mar-10	Solids, Total Dissolved (TDS)	689	MG/L
Jun-10	Solids, Total Dissolved (TDS)	124	MG/L
Sep-10	Solids, Total Dissolved (TDS)	137	MG/L
Dec-10	Solids, Total Dissolved (TDS)	86	MG/L
Mar-11	Solids, Total Dissolved (TDS)	62	MG/L
Jun-11	Solids, Total Dissolved (TDS)	126	MG/L
Dec-11	Solids, Total Dissolved (TDS)	114	MG/L
Mar-12	Solids, Total Dissolved (TDS)	25	mg/L
Jun-12	Solids, Total Dissolved (TDS)	50	mg/L

Date	Parameter	Result	Unit
Mar-10	Coliform, Fecal	2	#/100ML
Jun-10	Coliform, Fecal	2	#/100ML
Sep-10	Coliform, Fecal	1	#/100ML
Dec-10	Coliform, Fecal	12	#/100ML
Mar-11	Coliform, Fecal	1	#/100ML
Jun-11	Coliform, Fecal	1	#/100ML
Dec-11	Coliform, Fecal	1	#/100ML
Mar-12	Coliform, Fecal	2	#/100mL
Jun-12	Coliform, Fecal	5	#/100mL
Mar-10	Water Level Relative to NGVD	28.19	FEET
Jun-10	Water Level Relative to NGVD	27.54	FEET
Sep-10	Water Level Relative to NGVD	28.28	FEET
Dec-10	Water Level Relative to NGVD	28.28	FEET
Mar-11	Water Level Relative to NGVD	27.37	FEET
Jun-11	Water Level Relative to NGVD	26.24	FEET
Dec-11	Water Level Relative to NGVD	28.77	FEET
Mar-12	Water Level Relative to NGVD	27.95	ft
Jun-12	Water Level Relative to NGVD	26.69	ft

MWC-1

Date	Parameter	Result	Unit
Mar-10	Turbidity, Lab, Ntu	9.6	NTU
Jun-10	Turbidity, Lab, Ntu	5	NTU
Sep-10	Turbidity, Lab, Ntu	6.7	NTU
Dec-10	Turbidity, Lab, Ntu	9.8	NTU
Mar-11	Turbidity, Lab, Ntu	2.1	NTU
Jun-11	Turbidity, Lab, Ntu	9.7	NTU
Dec-11	Turbidity, Lab, Ntu	2.4	NTU
Mar-12	Turbidity	3.7	NTU
Jun-12	Turbidity	6.6	NTU
Mar-10	pH	5.83	SU
Jun-10	pH	5.82	SU
Sep-10	pH	6.02	SU
Dec-10	pH	6.02	SU
Mar-11	pH	5.9	SU
Jun-11	pH	3.96	SU
Dec-11	pH	5.99	SU
Mar-12	pH	5.97	s.u.
Jun-12	pH	6.09	s.u.
Mar-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Jun-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Sep-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Dec-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Mar-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Jun-11	Nitrogen, Nitrate, Total (as N)	0.25	MG/L
Dec-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Mar-12	Nitrogen, Nitrate, Total (as N)	0.1	mg/L
Jun-12	Nitrogen, Nitrate, Total (as N)	0.1	mg/L
Mar-10	Chloride (as Cl)	64	MG/L
Jun-10	Chloride (as Cl)	67.3	MG/L
Sep-10	Chloride (as Cl)	74.4	MG/L
Dec-10	Chloride (as Cl)	29.4	MG/L

Date	Parameter	Result	Unit
Mar-11	Chloride (as Cl)	N/A	MG/L
Jun-11	Chloride (as Cl)	44.7	MG/L
Dec-11	Chloride (as Cl)	45.3	MG/L
Mar-12	Chloride (as Cl)	43	mg/L
Jun-12	Chloride (as Cl)	36	mg/L
Mar-10	Solids, Total Dissolved (TDS)	322	MG/L
Jun-10	Solids, Total Dissolved (TDS)	333	MG/L
Sep-10	Solids, Total Dissolved (TDS)	358	MG/L
Dec-10	Solids, Total Dissolved (TDS)	370	MG/L
Mar-11	Solids, Total Dissolved (TDS)	354	MG/L
Jun-11	Solids, Total Dissolved (TDS)	318	MG/L
Dec-11	Solids, Total Dissolved (TDS)	338	MG/L
Mar-12	Solids, Total Dissolved (TDS)	280	mg/L
Jun-12	Solids, Total Dissolved (TDS)	250	mg/L
Mar-10	Coliform, Fecal	2	#/100ML
Jun-10	Coliform, Fecal	2	#/100ML
Sep-10	Coliform, Fecal	1	#/100ML
Dec-10	Coliform, Fecal	2	#/100ML
Mar-11	Coliform, Fecal	1	#/100ML
Jun-11	Coliform, Fecal	1	#/100ML
Dec-11	Coliform, Fecal	2	#/100ML
Mar-12	Coliform, Fecal	2	#/100mL
Jun-12	Coliform, Fecal	2	#/100mL
Mar-10	Water Level Relative to NGVD	21.72	FEET
Jun-10	Water Level Relative to NGVD	21.5	FEET
Sep-10	Water Level Relative to NGVD	21.62	FEET
Dec-10	Water Level Relative to NGVD	21.62	FEET
Mar-11	Water Level Relative to NGVD	21.67	FEET
Jun-11	Water Level Relative to NGVD	21.24	FEET
Dec-11	Water Level Relative to NGVD	21.5	FEET
Mar-12	Water Level Relative to NGVD	21.53	ft
Jun-12	Water Level Relative to NGVD	21.36	ft

MWI-2

Date	Parameter	Result	Unit
Mar-10	Turbidity, Lab, Ntu	1.7	NTU
Jun-10	Turbidity, Lab, Ntu	3.2	NTU
Sep-10	Turbidity, Lab, Ntu	2.5	NTU
Dec-10	Turbidity, Lab, Ntu	25.4	NTU
Mar-11	Turbidity, Lab, Ntu	33.6	NTU
Jun-11	Turbidity, Lab, Ntu	45	NTU
Dec-11	Turbidity, Lab, Ntu	14.1	NTU
Mar-12	Turbidity	10.3	NTU
Jun-12	Turbidity	3.4	NTU
Mar-10	pH	5.63	SU
Jun-10	pH	5.63	SU
Sep-10	pH	5.77	SU
Dec-10	pH	5.77	SU
Mar-11	pH	5.94	SU
Jun-11	pH	3.21	SU
Dec-11	pH	5.95	SU
Mar-12	pH	5.65	s.u.

Date	Parameter	Result	Unit
Jun-12	pH	5.96	s.u.
Mar-10	Nitrogen, Nitrate, Total (as N)	1.5	MG/L
Jun-10	Nitrogen, Nitrate, Total (as N)	0.1	MG/L
Sep-10	Nitrogen, Nitrate, Total (as N)	0.05	MG/L
Dec-10	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Mar-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Jun-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Dec-11	Nitrogen, Nitrate, Total (as N)	0.025	MG/L
Mar-12	Nitrogen, Nitrate, Total (as N)	0.1	mg/L
Jun-12	Nitrogen, Nitrate, Total (as N)	0.1	mg/L
Mar-10	Chloride (as Cl)	150	MG/L
Jun-10	Chloride (as Cl)	108	MG/L
Sep-10	Chloride (as Cl)	145	MG/L
Dec-10	Chloride (as Cl)	98.7	MG/L
Mar-11	Chloride (as Cl)	N/A	MG/L
Jun-11	Chloride (as Cl)	21.4	MG/L
Dec-11	Chloride (as Cl)	3.31	MG/L
Mar-12	Chloride (as Cl)	2.4	mg/L
Jun-12	Chloride (as Cl)	4	mg/L
Mar-10	Solids, Total Dissolved (TDS)	444	MG/L
Jun-10	Solids, Total Dissolved (TDS)	416	MG/L
Sep-10	Solids, Total Dissolved (TDS)	478	MG/L
Dec-10	Solids, Total Dissolved (TDS)	433	MG/L
Mar-11	Solids, Total Dissolved (TDS)	346	MG/L
Jun-11	Solids, Total Dissolved (TDS)	299	MG/L
Dec-11	Solids, Total Dissolved (TDS)	143	MG/L
Mar-12	Solids, Total Dissolved (TDS)	72	mg/L
Jun-12	Solids, Total Dissolved (TDS)	80	mg/L
Mar-10	Coliform, Fecal	2	#/100ML
Jun-10	Coliform, Fecal	2	#/100ML
Sep-10	Coliform, Fecal	1	#/100ML
Dec-10	Coliform, Fecal	2	#/100ML
Mar-11	Coliform, Fecal	1	#/100ML
Jun-11	Coliform, Fecal	1	#/100ML
Dec-11	Coliform, Fecal	1	#/100ML
Mar-12	Coliform, Fecal	2	#/100mL
Jun-12	Coliform, Fecal	2	#/100mL
Mar-10	Water Level Relative to NGVD	24.69	FEET
Jun-10	Water Level Relative to NGVD	27.51	FEET
Sep-10	Water Level Relative to NGVD	23.68	FEET
Dec-10	Water Level Relative to NGVD	23.68	FEET
Mar-11	Water Level Relative to NGVD	23.28	FEET
Jun-11	Water Level Relative to NGVD	22.18	FEET
Dec-11	Water Level Relative to NGVD	24.26	FEET
Mar-12	Water Level Relative to NGVD	23.98	ft
Jun-12	Water Level Relative to NGVD	22.78	ft

5.0 Evaluation of Operation and Maintenance Program

5.1 Record Drawings

A copy of the record drawings of the WWTF was not available for review. For operational purposes, sketches and information in this report and the O&M manual should suffice.

5.2 Operation and Maintenance Manual

A copy of an operations and maintenance manual was not found on site. The engineer however has supplied a replacement document.

5.3 Log Book

It was observed that the operator has a log book and appears to record appropriate information about his O&M activities in the book.

5.4 General

Discharge Monitoring Reports

Copies of discharge monitoring reports were readily available to review past plant performance.

Staffing

The prior operating permit required the following with respect to operator attendance:

Class C, 1/2 hour per day, 5 days per week and a weekend visit.

A facility operator, Jerry Padrick, C-7051 of Cocoa, is retained by the permittee to meet this requirement.

Permit

A copy of the current permit was available for review.

6.0 Collection System Evaluation

A reconnaissance of the collection system was performed.

The existing collection system serves domestic wastewater connections. There are no industrial wastewater dischargers.

Odors or other indicators of septicity were not noted.

7.0 Identification of Problems

7.1 Capacity Related Problems

Please refer the accompanying Capacity Analysis Report. This facility does not appear to be suffering operational problems due to limiting capacity.

7.2 Equipment Related Problems

As noted in section 2 of this report, the facility equipment was generally in fair and serviceable condition and should be expected to give adequate service to meet permit requirements with proper O&M practices for the duration of the next permit. The only exception noted to this during the site visit was that the some of the tanks exhibited weeping at the joints and these will need to be repaired. Recommendations follow in section 7.4 below.

7.3 O&M Program Related Problems

Provided the recommendations noted in the following section are carried out, it is the opinion of the engineer that the treatment facility is in adequate physical condition to continue to operate properly for the permit period.

Effluent quality is generally within required discharge limits. A single instance of elevated nitrate was noted in July of 2012, but does not appear to be indicative of a recurring pattern.

Analysis and recommendations are discussed below in section 7.4.

7.4 Recommendations

The following recommendations are concluded based on this Capacity Analysis / Operations & Maintenance evaluation:

The treatment plant is constructed of field erected, precast concrete. This means the tank walls are comprised of precast panels joined at seams. It is not unusual as these plants age to develop weeps at these seems. Repair is not difficult, however it does require that the area leaking be drilled, and an epoxy like chemical injected to stop the leak. The original tank manufacturer is still in business would be able to make the necessary repairs.

It is recommended these repairs be carried out within 180 days.

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-004-DW3 Facility: Sun Lake Estates WWTF
Monitoring Period From: 09-01-14 To: 09-30-14

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Flow (To RIBs) MGD
Code	80082	50060	74055	00620	00600	00665	00530	00400	50050
Mon. Site	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	FLW-1
1		.5						7.2	.040
2		.5						7.1	.044
3		.9						7.0	.029
4		1.0						7.0	.022
5		1.0						7.0	.032
6		1.4						7.0	.021
7		1.4						7.0	.022
8									
9		.5						7.0	.050
10		1.0						7.0	.045
11		1.3						7.0	.026
12		1.0						7.1	.030
13		1.0						7.1	.039
14		1.0						7.1	.043
15									
16		1.0						7.1	.035
17		1.0						7.1	.034
18		1.0						7.1	.034
19		.5						7.2	.029
20		.5						7.2	.044
21									
22		1.0						7.2	.060
23		1.0						7.2	.049
24		1.0						7.2	.052
25	2.0	1.0	1	19	20	2.8	5.6	7.2	.037
26		1.0						7.0	.062
27		1.0						7.1	.038
28									
29		1.2						7.0	.029
30		1.8						7.0	.061
31									
Total									1.007
Mo. Avg.	2.0		1	19	20	2.8	5.6		.039

PLANT STAFFING:

Day Shift Operator	Class: _____	Certificate No: _____	Name: _____		
Evening Shift Operator	Class: _____	Certificate No: _____	Name: _____		
Night Shift Operator	Class: _____	Certificate No: _____	Name: _____		
Lead Operator	Class: C	Certificate No: 7051	Name: Jerry Padrick		

ISSUANCE/REISSUANCE DATE:

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-004-DW3
Monitoring Period From: 10-01-13 To: 10-31-13
Facility: Sun Lake Estates WWTF

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Flow (To RIBs) MGD
Code	80082	50060	74055	00620	00600	00665	00530	00400	50050
Mon. Site	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	FLW-1
1		1.0						7.2	.048
2		1.0						7.2	.039
3		.5						7.1	.048
4		.5						7.1	.049
5		1.0						7.1	.055
6									
7		1.9						7.1	.059
8		1.5						7.1	.090
9		1.0						7.1	.066
10		1.6						7.1	.050
11		1.0						7.1	.041
12									
13		1.6						7.2	.045
14		1.5						7.2	.042
15		1.2						7.2	.040
16		1.0						7.2	.039
17		1.0						7.2	.093
18		1.0						7.2	.081
19		1.8						7.2	.054
20									
21		1.5						7.2	.048
22		1.5						7.2	.049
23	2.0	1.5	1	30	31	4.0	3.6	7.2	.029
24		1.5						7.2	.050
25		1.5						7.2	.050
26		1.6						7.2	.048
27									
28		1.8						7.2	.034
29		1.0						7.1	.029
30		1.0						7.1	.045
31		1.0						7.1	.057
Total									1.378
Mo. Avg.	2.0		1	3.0	31	4.0	3.6		.051

PLANT STAFFING:

Day Shift Operator	Class:		Certificate No:		Name:
Evening Shift Operator	Class:		Certificate No:		Name:
Night Shift Operator	Class:		Certificate No:		Name:
Lead Operator	Class:	C	Certificate No:	7051	Name: Jerry Padrick

ISSUANCE/REISSUANCE DATE:

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-004-DW3
Monitoring Period From: 09-01-13 To: 09-30-13
Facility: Sun Lake Estates WWTF

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Flow (To RIBs) MGD
Code	80082	50060	74055	00620	00600	00665	00530	00400	50050
Mon. Site	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	FLW-1
1		1.8						7.2	.044
2		1.8						7.2	.045
3									
4		1.0						7.2	.044
5		1.0						7.2	.040
6		1.0						7.2	.039
7		1.5						7.2	.083
8									
9		1.8						7.2	.086
10		1.6						7.2	.050
11		1.5						7.2	.049
12		1.5						7.2	.034
13		1.5						7.2	.044
14		1.0						7.2	.047
15									
16		1.6						7.2	.048
17		1.5						7.2	.048
18		1.5						7.2	.051
19	2.0	1.5	1	<1.5	16	4.0	6.8	7.2	.034
20		2.0						7.2	.048
21		2.0						7.2	.044
22									
23		2.0						7.2	.049
24		2.0						7.2	.050
25		2.0						7.2	.050
26		2.0						7.2	.061
27		2.0						7.2	.040
28		2.1						7.2	.055
29									
30		2.1						7.2	.062
31									
Total									1.245
Mo. Avg.	2.0		1	15	16	4.0	6.8		.050

PLANT STAFFING:

Day Shift Operator	Class:		Certificate No:		Name:	
Evening Shift Operator	Class:		Certificate No:		Name:	
Night Shift Operator	Class:		Certificate No:		Name:	
Lead Operator	Class:	C	Certificate No:	7051	Name:	Jerry Padrick

ISSUANCE/REISSUANCE DATE:

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-004-DW3 Facility: Sun Lake Estates WWTF
Monitoring Period From: 06-01-13 To: 06-30-13

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Flow (To RIBs) MGD
Code	80082	50060	74055	00620	00600	00665	00530	00400	50050
Mon. Site	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	FLW-1
1									
2									
3		1.0						7.1	.040
4		2.1						7.1	.043
5		2.0						7.2	.046
6		1.6						7.2	.042
7		1.6						7.2	.027
8		1.6						7.2	.030
9									
10		1.6						7.2	.034
11		1.6						7.2	.037
12		1.6						7.2	.022
13		1.3		RECEIVED				7.2	.039
14		1.3						7.0	.027
15		1.3						7.0	.028
16				DEP Central District					
17		1.0						7.1	.046
18		.5						7.0	.025
19									
20		1.0						7.6	.040
21		2.1						7.1	.052
22		1.8						7.1	.034
23									
24		1.5						7.1	.056
25		2.0						7.1	.027
26		2.0						7.1	.043
27	2.0	2.6	1	38	39	5.1	8.0	7.2	.070
28		2.3						7.2	.049
29		1.5						7.2	.047
30									
31									
Total									.904
Mo. Avg.	2.0		1	38	39	5.1	8.0		.039

PLANT STAFFING:

Day Shift Operator	Class:		Certificate No:		Name:	
Evening Shift Operator	Class:		Certificate No:		Name:	
Night Shift Operator	Class:		Certificate No:		Name:	
Lead Operator	Class:	C	Certificate No:	7051	Name:	Jerry Padrick

ISSUANCE/REISSUANCE DATE:

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Sun Lake Estates WWTF

MONITORING GROUP NUMBER: R-001

PERMIT NUMBER: FLA010353-004-DW3

MONITORING PERIOD From: 02-01-13 To: 02-28-13

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Solids, Total Suspended	Sample Measurement				4.0	1.0	4.0	mg/L	0	Monthly	Grab
PARM Code 00530 A Mon. Site No. EFA-1	Permit Requirement				60.0 (Max.)	45.0 (Wk.Avg.)	30.0 (Mo.Avg.)	mg/L	0	Monthly	Grab
Coliform, Fecal	Sample Measurement					< 1.0		#/100mL	0	Monthly	Grab
PARM Code 74055 Y Mon. Site No. EFA-1	Permit Requirement					200 (An.Avg.)		#/100mL	0	Monthly	Grab
Coliform, Fecal	Sample Measurement					1.0	1.0	#/100mL	0	Monthly	Grab
PARM Code 74055 A Mon. Site No. EFA-1	Permit Requirement					Report (Mo.Geo.Mn.)	800 (Max.)	#/100mL	0	Monthly	Grab
pH	Sample Measurement				7.0		7.2	S.U.	0	5 Days/week	Grab
PARM Code 00400 A Mon. Site No. EFA-1	Permit Requirement				6.0 (Min.)		8.5 (Max.)	s.u.	0	5 Days/Week	Grab
Chlorine, Total Residual (For Disinfection)	Sample Measurement				.5			mg/L	0	5 Days/week	Grab
PARM Code 50060 A Mon. Site No. EFA-1	Permit Requirement				0.5 (Min.)			mg/L	0	5 Days/Week	Grab
Nitrogen, Total	Sample Measurement						9.8	mg/L	0	Monthly	Grab
PARM Code 00600 A Mon. Site No. EFA-1	Permit Requirement						Report (Max.)	mg/L	0	Monthly	Grab
Phosphorus, Total (as P)	Sample Measurement						4.9	mg/L	0	Monthly	Grab
PARM Code 00665 A Mon. Site No. EFA-1	Permit Requirement						Report (Max.)	mg/L	0	Monthly	Grab
Flow (Total Through Plant)	Sample Measurement	.034	.034	Mgd					0	5 Days/week	Flow Totalizer
PARM Code 50050 R Mon. Site No. FLW-1	Permit Requirement	Report (Mo.Avg.)	Report (Qt.Avg.)	MOD					0	5 Days/Week	Flow Totalizer
Percent Capacity, (TMADF/ Permitted Capacity) x 100	Sample Measurement						.034	34%	0	Monthly	Calculated
PARM Code 00180 P Mon. Site No. CAL-1	Permit Requirement						Report (Mo.Avg.)	percent		Monthly	Calculated

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DEP Southwest District

ISSUANCE/REISSUANCE DATE:

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-004-DW3
Monitoring Period From: 02-01-13 To: 02-28-13
Facility: Sun Lake Estates WWTF

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Flow (To RIBs) MGD
Code	80082	50060	74055	00620	00600	00665	00530	00400	50050
Mon. Site	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	FLW-1
1		1.0						7.2	.028
2		.5							.040
3									
4		1.3						7.1	.036
5		1.5						7.2	.034
6		1.7						7.2	.030
7		1.4						7.2	.026
8		1.2						7.2	.035
9		1.0						7.2	.036
10									
11		1.0						7.2	.035
12		2.1						7.2	.032
13		2.1						7.2	.029
14		2.0						7.2	.030
15		.5						7.1	.034
16		1.5						7.1	.029
17									
18		1.2						7.1	.041
19		1.6						7.1	.028
20		1.2						7.2	.027
21		1.2						7.2	.029
22		.8						7.1	.038
23		1.0						7.1	.046
24									
25		1.0						7.1	.033
26		1.0						7.1	.030
27	2.0	1.0	1	9.2	9.8	4.9	4.0	7.1	.048
28		1.0						7.0	.036
29									
30									
31									
Total									0.81
Mo. Avg.	2.0		1	9.2	9.8	4.9	4.0		.034

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Lee County Utilities

PLANT STAFFING:

Day Shift Operator	Class:		Certificate No:		Name:	
Evening Shift Operator	Class:		Certificate No:		Name:	
Night Shift Operator	Class:		Certificate No:		Name:	
Lead Operator	Class:	C	Certificate No:	7051	Name:	Jerry Padrick

ISSUANCE/REISSUANCE DATE:

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-004-DW3 Facility: Sun Lake Estates WWTF
Monitoring Period From: 12-01-12 To: 12-31-12

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Flow (To RIBs) MGD
Code	80082	50060	74055	00620	00600	00665	00530	00400	50050
Mon. Site	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	FLW-1
1		1.8						7.1	.030
2									
3		1.5						7.2	.028
4		1.0						7.2	.030
5		1.0						7.2	.030
6		2.0						7.2	.027
7		2.0						7.2	.038
8		2.0						7.2	.032
9									
10		1.6						7.2	.033
11		1.5						7.2	.033
12		1.2						7.2	.034
13		1.8						7.3	.033
14		1.0						7.3	.040
15		1.8						7.4	.033
16									
17		1.5						7.3	.036
18		1.0						7.3	.030
19	2.0	3.1	1	22	23	5.4	2.0	7.4	.034
20		2.8						7.3	.039
21		2.0						7.2	.032
22									
23		1.5						7.2	.033
24		1.5						7.2	.039
25								Christmas	
26		1.5						7.2	.029
27		1.8						7.2	.044
28		1.8						7.2	.034
29		1.5						7.2	.035
30									
31		1.7						7.2	.034
Total									.840
Mo. Avg.	2.0		1	22	23	5.4	2.0		.034

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PLANT STAFFING:

Day Shift Operator	Class:		Certificate No:		Name:	
Evening Shift Operator	Class:		Certificate No:		Name:	
Night Shift Operator	Class:		Certificate No:		Name:	
Lead Operator	Class:	C	Certificate No:	7051	Name:	Terry Padrick

ISSUANCE/REISSUANCE DATE:

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Sun Lake Estates Homeowners Association	PERMIT NUMBER:	FLA010353-004-DW3
MAILING ADDRESS:	5600 US Hwy 1 N Sharps, Florida 32927	LIMIT:	Final
		CLASS SIZE:	N/A
FACILITY:	Sun Lake Estates WWTF	MONITORING GROUP NUMBER:	R-001
LOCATION:	616 Emerald Lake Drive Cocoa, FL 32926-4648	MONITORING GROUP DESCRIPTION:	Rapid Infiltration Basin, including Influent
		RE-SUBMITTED DMR:	☐
		NO DISCHARGE FROM SITE:	☐
COUNTY:	Brevard	MONITORING PERIOD From:	07-01-12 To: 07-31-12
OFFICE:	Central District	REPORT FREQUENCY:	Annually
		PROGRAM:	Domestic

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Nitrogen, Nitrate, Total (as N)	Sample Measurement						18	mg/L	0	Annually	Grab
PARM Code 00620 A Mon. Site No. EFA-1	Permit Requirement						12.0 (Max.)	mg/L	0	Annually	Grab
BOD, Carbonaceous 5 day, 20C (Influent)	Sample Measurement						100	mg/L	0	Annually	Grab
PARM Code 80082 G Mon. Site No. INF-1	Permit Requirement						Report (Mo.Avg.)	mg/L	0	Annually	Grab
Solids, Total Suspended (Influent)	Sample Measurement						210	mg/L	0	Annually	Grab
PARM Code 00530 G Mon. Site No. INF-1	Permit Requirement						Report (Mo.Avg.)	mg/L	0	Annually	Grab

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)
Jerry Fadrick Operator		321-639-1773	08-27-2012

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ISSUANCE/REISSUANCE DATE:

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA010353-004-DW3 Facility: Sun Lake Estates WWTF
Monitoring Period From: 07-01-12 To: 07-31-12

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Flow (To RIBs) MGD
Code	80082	50060	74055	00620	00600	00665	00530	00400	50050
Mon. Site	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	EFA-1	FLW-1
1									
2		.5						7.2	.030
3		.5						7.2	.026
4									
5		1.0						7.1	.033
6		1.0						7.2	.038
7		1.0						7.1	.044
8		1.0						7.1	.026
9		1.0						7.1	.025
10		.5						7.0	.033
11	2.0	1.0	1.0	0.010	18	6.0	24	7.1	.037
12		1.3						7.0	.061
13		1.3						7.0	.031
14		1.2						7.0	.020
15									
16		1.0						7.0	.019
17		1.0						7.0	.038
18		1.0						7.0	.024
19		1.0						7.0	.039
20		1.0						7.0	.028
21		1.0						7.0	.029
22									
23		1.0						7.0	.030
24		1.0						7.0	.045
25		1.0						7.0	.032
26		1.8						7.0	.026
27		1.5						7.0	.029
28		1.4						7.0	.028
29		1.0						7.0	.027
30		.5						7.0	.045
31		1.0						7.1	.031
Total									.877
Mo. Avg.	2.0		1.0	0.010	18	6.0	24		.032

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PLANT STAFFING:

Day Shift Operator	Class:		Certificate No:		Name:	
Evening Shift Operator	Class:		Certificate No:		Name:	
Night Shift Operator	Class:		Certificate No:		Name:	
Lead Operator	Class:	C	Certificate No:	7051	Name:	Jerry Padrick

ISSUANCE/REISSUANCE DATE:

Client Sample Results

Client: Sunlake Homeowners Association, Inc
Project/Site: Annual Sludge

TestAmerica Job ID: 660-48799-1

Client Sample ID: Effluent

Date Collected: 07/11/12 09:30
Date Received: 07/11/12 11:45

Lab Sample ID: 660-48799-1
Matrix: Solid
Percent Solids: 0.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	25	U	55	25	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Cadmium	9.5	U	55	9.5	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Chromium	30	I	110	19	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Copper	260		220	55	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Lead	32	I	55	16	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Molybdenum	18	U	110	18	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Nickel	47	U	440	47	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Potassium	0.80	I	1.1	0.18	Percent	☼	07/18/12 07:54	07/18/12 11:48	1
Selenium	41	U	110	41	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1
Zinc	1500		220	55	mg/Kg	☼	07/18/12 07:54	07/18/12 11:48	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.2	U	3.7	1.2	mg/Kg	☼	07/12/12 10:51	07/12/12 13:00	1

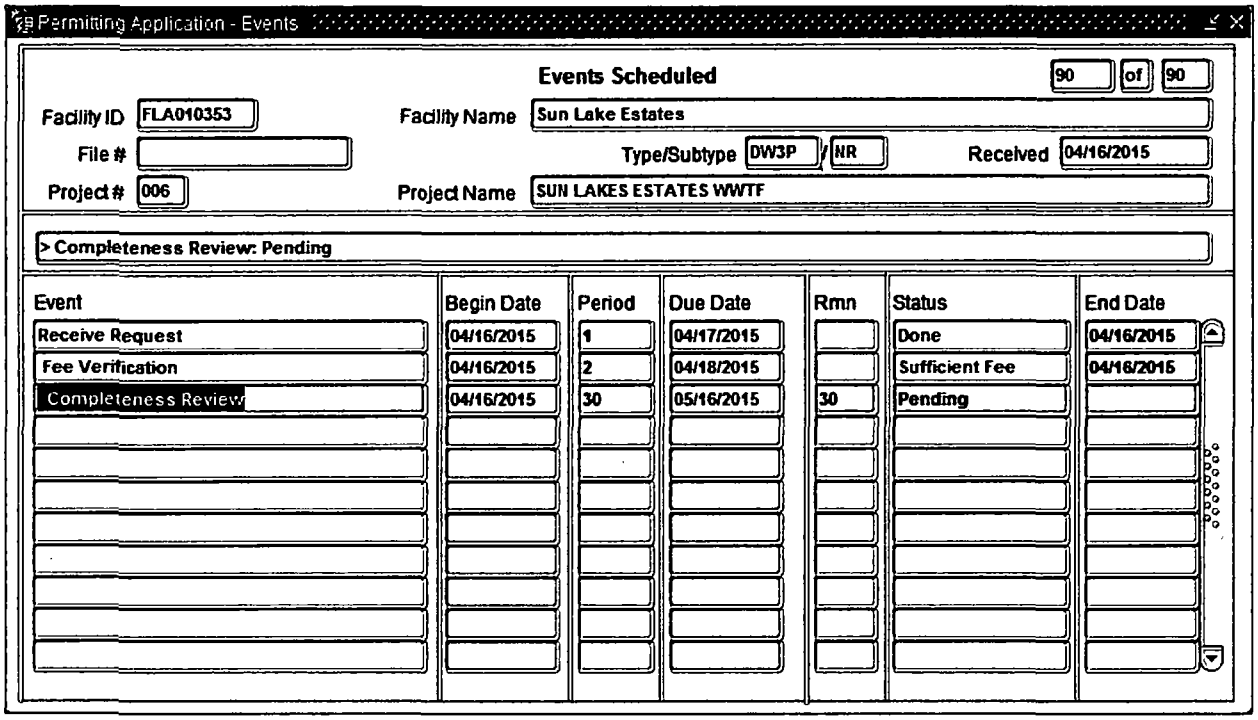
General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	0.85		0.10	0.10	%			07/12/12 14:45	1
Nitrogen, Kjeldahl	760		49	30	mg/Kg		07/16/12 08:35	07/17/12 13:59	1
Phosphorus	36000		2300	1300	mg/Kg	☼	07/16/12 08:35	07/17/12 16:05	1
pH	6.92		1.00	1.00	SU			07/13/12 15:15	1
Nitrogen, Total	1600		45	45	mg/Kg			07/20/12 09:04	1

General Chemistry - Soluble

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1100		230	64	mg/Kg	☼		07/19/12 18:00	1
Nitrite as N	23	U	120	23	mg/Kg	☼		07/19/12 18:00	1
Nitrate Nitrite as N	1100		230	64	mg/Kg	☼		07/19/12 18:00	1

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Permitting Application - Events
Events Scheduled
90 of 90
Facility ID FLA010353
Facility Name Sun Lake Estates
File #
Type/Subtype DW3P / NR
Received 04/16/2015
Project # 006
Project Name SUN LAKES ESTATES WWTF
> Completeness Review: Pending
Event
Begin Date
Period
Due Date
Rmn
Status
End Date
Receive Request 04/16/2015 1 04/17/2015 Done 04/16/2015
Fee Verification 04/16/2015 2 04/18/2015 Sufficient Fee 04/16/2015
Completeness Review 04/16/2015 30 05/16/2015 30 Pending

DEP Central District

PERMIT HISTORY DATA FORM

Date Received:	04-16-15			Check Number:		1632	
Please select Appropriate Box	Modification	☐	**FEES**	Correct Fee: $		1000.00	
	New	☐		Amount Submitted: $		**1000.00**	
	Renewal	☑		Amount to Refund: $			
	Exempt	☐		Amount Due: $			
SITE# WAFR# AIR#:	FLA010353-006	TYPE CODE:	DW3P	SUBCODE:	NR	WACS#:	
SITE/ WAFR/ FACILITY NAME:	SUN LAKE ESTATES WWTF						
PROJECT NAME:							
PROJECT DESCRIPTION:							

Applicant Notified ☐ Notification Date:

PROCESSOR:			
AIR Management	Wilmott Brown	Drinking Water	
Solid Waste	ERP		

DATE	TIME	COMMENTS	INITIALS
04-16-15	30	ENTERED	KT
TOTAL TIME			

Attachment VII – Other Compliance Materials

CLASS "C"

WATER AND/OR WASTEWATER UTILITIES

(Gross Revenue of Less Than $200,000 Each)

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DIVISION OF
ACCOUNTING & FINANCE

ANNUAL REPORT

OF

SU942-17-AR

TKCB, INC.

Exact Legal Name of Respondent

562-S

Certificate Number(s)

Submitted To The

STATE OF FLORIDA

RECEIVED
FLORIDA PUBLIC SERVICE
COMMISSION
DIVISION OF
ACCOUNTING & FINANCE

FOR THE

YEAR ENDED DECEMBER 31, 2017

GENERAL INSTRUCTIONS

1. Prepare this report in conformity with the 1996 National Association of Regulatory Utility Commissioners (NARUC) Uniform System of Accounts for Water and Wastewater Utilities as adopted by Rule 25-30.115 (1), Florida Administrative Code.

2. Interpret all accounting words and phrases in accordance with the Uniform System of Accounts (USOA). Commission Rules and the definitions on next page.

3. Complete each question fully and accurately, even if it has been answered in a previous annual report. Enter the word "None" where it truly and completely states the fact.

4. For any question, section, or page which is not applicable to the respondent enter the words "Not Applicable." Do not omit any pages.

5. Where dates are called for, the month and day should be stated as well as the year.

6. All schedules requiring dollar entries should be rounded to the nearest dollar.

7. Complete this report by means which result in a permanent record. You may use permanent ink or a typewriter. Do not use a pencil.

8. If there is not enough room on any schedule, an additional page or pages may be added provided the format of the added schedule matches the format of the schedule in the report. Additional pages should reference the appropriate schedules, state the name of the utility, and state the year of the report.

9. If it is necessary or desirable to insert additional statements for the purpose of further explanation of schedules, such statements should be made at the bottom of the page or on an additional page. Any additional pages should state the name of the utility and the year of the report, and reference the appropriate schedule.

10. The utility shall file the original and two copies of the report with the Commission at the address below, and keep a copy for itself. Pursuant to Rule 25-30.110 (3), Florida Administrative Code, the utility must submit the report by March 31 for the preceeding year ending December 31.

    Florida Public Service Commission
    Division of Accounting and Finance
    2540 Shumard Oak Boulevard
    Tallahassee, Florida 32399-0850

11. Pursuant to Rule 25-30.110 (7) (a), Florida Administrative Code, any utility that fails to file its annual report or extension on or before March 31, or within the time specified by any extension approved in writing by the Division of Accounting and Finance, shall be subject to a penalty. The penalty shall be based on the number of calendar days elapsed from March 31, or from an approved extended filing date, until the date of filing. The date of filing shall be included in the days elapsed.

GENERAL DEFINITIONS

ADVANCES FOR CONSTRUCTION - This account shall include advances by or in behalf of customers for construction which are to be refunded either wholly or in part. (USOA)

ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC) - This account shall include concurrent credits for allowance for funds used during construction based upon the net cost of funds used for construction purposes and a reasonable rate upon other funds when so used. Appropriate regulatory approval shall be obtained for "a reasonable rate". (USOA)

AMORTIZATION - The gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. (USOA)

CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC) - Any amount or item of money, services, or property received by a utility, from any person or governmental agency, any portion of which is provided at no cost to the utility, which represents an addition or transfer to the capital of the utility, and which is utilized to offset the acquisition, improvement, or construction costs of the utility's property, facilities, or equipment used to provide utility services to the public. (Section 367.021 (3), Florida Statutes)

CONSTRUCTION WORK IN PROGRESS (CWIP) - This account shall include the cost of water or wastewater plant in process of construction, but not yet ready for services. (USOA)

DEPRECIATION - The loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in the current operation and against which the utility is not protected by insurance. (Rule 25-30.140 (i), Florida Administrative Code)

EFFLUENT REUSE - The use of wastewater after the treatment process, generally for reuse as irrigation water or for in plant use. (Section 367.021 (6), Florida Statutes)

EQUIVALENT RESIDENTIAL CONNECTION (ERC) - (WATER) - (Rule 25-30.515 (8), Florida Administrative Code.)

(a) 350 gallons per day;
(b) The number of gallons a utility demonstrates in the average daily flow for a single family unit; or
(c) The number of gallons which has been approved by the DEP for a single family residential unit.

EQUIVALENT RESIDENTIAL CONNECTION (ERC) - (WASTEWATER) - Industry standard of 80% of Water ERC or 280 gallons per day for residential use.

GUARANTEED REVENUE CHARGE - A charge designed to cover the utility's costs including, but not limited to the cost of the operation, maintenance, depreciation, and any taxes, and to provide a reasonable return to the utility for facilities, a portion of which may not be used and useful to the utility or its existing customers. (Rule 25-30.515 (9), Florida Administrative Code)

LONG TERM DEBT - All Notes, Conditional Sales Contracts, or other evidences of indebtedness payable more than one year from date of issue. (USOA)

PROPRIETARY CAPITAL (For proprietorships and partnerships only) - The investment of a sole proprietor, or partners, in an unincorporated utility. (USOA)

RETAINED EARNINGS - This account reflects corporate earnings retained in the business. Credits would include net income or accounting adjustments associated with correction of errors attributable to a prior period. Charges to this account would include net losses, accounting adjustments associated with correction of errors attributable to a prior period or dividends. (USOA)

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FINANCIAL SECTION

REPORT OF

TKCB

Exact Name of Utility

5600 North Cocoa Blvd. Cocoa, FL 32927 Mailing Address	616 Emerald Lake Dr. Cocoa, FL 32927 Street Address
321-639-1124 Telephone Number	matlantisinvest@cfl.rr.com E-Mail Address
321-639-1134 Facsimile Number	1983 Date Utility First Organized
KC2135 Sunshine One Call of Fla. Member #	Brevard County of Operation

Type of business entity as filed with Internal revenue Service. (check one)

☐ Individual ☐ S-Corp. ☑ 1120 Corp. ☐ Partnership ☐ Other

Same as mailing address above

Name, phone and address of utility records if different then above.

Sun Lake Estates

Name of subdivision where utility services are provided.

UTILITY CONTACTS

Name	Title
Thad Terry Person to send correspondence	Owner/Officer
Same as above Business Address	Same as above Telephone Number
Jeffery Small Person who prepared this report	Regulatory Consultant Title
9525 Graystoke Lane Orl, FL 32817 Business Address	407-377-5400 Telephone Number

List of all Officers & Managers:	Title	Address	Utility Salary
Thad Terry	Pres/Dir	same as above	$6,804

List all entities/persons owning/holding directly/indirectly > or = 5% of voting securities of utility.

TKCB
INCOME STATEMENT
DECEMBER 31, 2017

Account Name		Water	Wastewater	Other	Total Company
Gross Revenue:					
Residential			$ 82,793	$ -	$ 82,793
Commercial			$ -	$ -	$ -
Industrial			$ -	$ -	$ -
Multiple Family			$ -	$ -	$ -
Guaranteed Revenues			$ -	$ -	$ -
Other (Specify)			$ -	$ -	$ -
Total Gross Revenue			$ 82,793	$ -	$ 82,793
Operation Expense	W-3 S-3		$ 69,800	$ -	$ 69,800
Depreciation Expense	F-5		$ 577	$ -	$ 577
CIAC Amortization Expense	F-8		$ -	$ -	$ -
Taxes Other Than Income	F-7		$ 4,990	$ -	$ 4,990
Income Taxes	F-7		$ -	$ -	$ -
Total Operating Expense			$ 75,366	$ -	$ 75,366
Net Operating Income (Loss)			$ 7,427	$ -	$ 7,427
Other Income:					
Nonutility Income			$ -	$ -	$ -
			$ -	$ -	$ -
Other Deductions:					
Misc. Nonutility Expense			$ (1,728)	$ -	$ (1,728)
Expenses			$ -	$ -	$ -
Interest Expense			$ -	$ -	$ -
			$ -	$ -	$ -
Total Other Net Income			$ (1,728)	$ -	$ (1,728)
Net Income (Loss)			$ 5,698	$ -	$ 5,698

Must tie to amount on page indicated.

TKCB
COMPARATIVE BALANCE SHEET
DECEMBER 31, 2017

Acct#	Account Name		Year End Current	Year End Previous
	Assets and Other Debits			
101	Utility Plant in Service	F-5	$ 47,440	$ 46,438
105	Construction Work in Process	F-5	$ -	$ -
108	Accumulated Depreciation and Amortization	F-5	$ (653)	$ (1,537)
	Net Utility Plant		$ 46,787	$ 44,901
131	Cash		$ 56	$ 56
141	Customer Accounts Receivable		$ 12,922	$ 2,907
186	Misc. Deferred Assets (Net)		$ 483	$ 1,610
	Other Assets (Specify):			
			$ -	$ -
			$ -	$ -
			$ -	$ -
	Total Assets and Other Debits		$ 60,248	$ 49,473
	Must tie to amount on page indicated.			
	Liabilities and Capital Equity			
201	Common Stock Issued	F-6	$ 100	$ 100
204	Preferred Stock Issued	F-6	$ -	$ -
211	Other Paid in Capital		$ 17,842	$ 17,842
215	Retained Earnings	F-6	$ 28,512	$ 23,633
218	Propietary Capital (Proprietary & Patnership)	F-6	$ -	$ -
	Total Capital		$ 46,454	$ 41,575
224	Long Term Debt	F-6	$ -	$ -
231	Accounts Payable		$ -	$ 2,790
232	Notes Payable		$ -	$ -
235	Customer Deposits		$ -	$ -
236	Accrued Taxes		$ -	$ 5,108
	Other Liabilities (Specify)			
	Advance from Owners		$ 13,795	$ -
			$ -	$ -
			$ -	$ -
252	Advances for Construction		$ -	$ -
271	Contributions in Aid of Construction		$ -	$ -
272	Accumulated Amortization of CIAC	F-8	$ -	$ -
	Total Liabilities and Capital		$ 60,248	$ 49,473
	Must tie to amount on page indicated.			

TKCB
UTILITY PLANT IN SERVICE & ACCUMULATED DEPRECIATION
DECEMBER 31, 2017

Gross Utility Plant					
Plant Accounts: (101 - 107) inclusive		**Water**	**Wastewater**	**Other Plant**	**Total**
Utility Plant in Service	W-1 S-1		$ 47,440	$ -	$ 47,440
Construction Work in Progress			$ -	$ -	$ -
Other (Specify):					
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Utility Plant			$ 47,440	$ -	$ 47,440
Must tie to amount on page indicated.					
Accumulated Depreciation (A/D) and Amotization of Utility Plant					
Reserve Accounts: Account 108		**Water**	**Wastewater**	**Other Plant**	**Total**
Balance First of Year	W-2 S-2		$ (1,537)	$ -	$ (1,537)
Add Credits During Year:					
Depreciation Accruals			$ (577)	$ -	$ (577)
Salvage			$ -	$ -	$ -
Other Credits (specify):					
Retirements			$ 1,460	$ -	$ 1,460
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Credits			$ (653)	$ -	$ (653)
Deduct Debits During Year:					
Book cost of plant retired			$ -	$ -	$ -
Cost of removal			$ -	$ -	$ -
Other debits (specify)					
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Debits			$ -	$ -	$ -
Total Acc. Depreciation	W-2 S-2		$ (653)	$ -	$ (653)
Must tie to amount on page indicated.					

TKCB
STOCKHOLDERS EQUITY
DECEMBER 31, 2017

Capital Stock (201 - 204)		
	Common Stock	**Preferred Stock**
Par or stated value per share	$1	None
Shares authorized	100	
Shares issued and outstanding	100	
Total par value of stock issued	$100	
Dividends declared per share for year	$0	

Retained Earnings (215)		
	Appropriated	**Un-Appropriated**
Balance first of year	$ -	$ 23,633
Changes during the year (Specify):		
Prior year correction to AccDep	$ -	$ (651)
Prior year correction to RE	$ -	$ (168)
Current Year Earnings	$ -	$ 5,698
Balance end of year	$ -	$ 28,512

Proprietary Capital (218)		
	Proprietor Or Partner	**Partner**
Balance first of year	$ -	$ -
Changes during the year (Specify):		
	$ -	$ -
	$ -	$ -
Balance end of year	$ -	$ -

Long Term Debt (224)			
Description of Obligation Include Date of Issue and Maturity	**Interest Rate**	**No. of Payments**	**Outstanding Principal**
			$ -
			$ -
			$ -
			$ -
Total Long Term Debt			$ -

TKCB
TAX EXPENSE
DECEMBER 31, 2017

	Water	Wastewater	Other	Total
Income Taxes:				
Federal income tax		$ -	$ -	$ -
State income tax		$ -	$ -	$ -
Taxes Other Than Income:		$ -	$ -	$ -
State ad valorem tax		$ 482	$ -	$ 482
Local property tax		$ -	$ -	$ -
Regulatory assessment fee		$ 3,726	$ -	$ 3,726
Other (Specify)				
		$ -	$ -	$ -
Allocated Payroll Taxes		$ 782	$ -	$ 782
		$ -	$ -	$ -
Total Tax Expense		$ 4,990	$ -	$ 4,990

Not applicable

Professional Services

Report all information concerning outside rate, management, construction, advertising, labor relations, public relations, or other similiar professional services rendered the respondent for which aggregate payments during the year to any corporation, partnership, individual, or organization of any kind whatever amounting to $500 or more.

Name of Recipient	*Description of Service*	*Water Amount*	*Wastewater Amount*
Jerry Padrick	Plant Operator & maintenance		$ 19,544
Harrell Development	Perc Pond Maintenance		$ 4,800
City of Cocoa	Customer Billing Services		$ 3,531
Test America	W/Water testing service		$ 3,862
All Service Sanitation	Sludge Hauling		$ 1,600
OCBOA Counsulting, LLC	RAF & Price Index filings		$ 1,316
	2016 AR & Acct. support.		$ -
			$ -
			$ -
			$ -
			$ -

TKCB
CONTRIBUTIONS IN AID OF CONSTRUCTION (271)
DECEMBER 31, 2017

Contributions In Aid Of Construction (Net)			
	Water	***Wastewater***	***Total***
Balance first of year	Not applicable	$ -	$ -
Add credits during year		$ -	$ -
Total		$ -	$ -
Deduct charges during the year		$ -	$ -
Balance end of year		$ -	$ -
Less Accumulated Amortization		$ -	$ -
Net CIAC end of year		$ -	$ -

Additions To Contributions In Aid Of Construction During Year (Credits)			
Report below all developers or contractors agreements from which cash or property was received during the year.			
Identify and Indicate	***Cash/Property***	***Water***	***Wastewater***
	Not applicable	$ -	$ -
		$ -	$ -
		$ -	$ -
Total		$ -	$ -

Report below all capacity charges, main extension charges and customer connection charges received during the year.

Description of Charge	***Number of Connections***	***Charge per Connection***	***Total Collected***
	Not applicable	$ -	$ -
		$ -	$ -
		$ -	$ -
Total water credits during year			$ -
	None	$ -	$ -
		$ -	$ -
		$ -	$ -
Total wastewater credits during year			$ -

Accumulated Amortization of CIAC (272)			
	Water	***Wastewater***	***Total***
Balance first of year	Not applicable	$ -	$ -
Add debits during year		$ -	$ -
Deduct credits during year		$ -	$ -
Balance end of year		$ -	$ -

TKCB

DECEMBER 31, 2017

** Completion of schedule required only if AFUDC was charged during year **

SCHEDULE "A"

Schedule Of Cost Of Capital Used For AFUDC Calculation

Must be calculated using the same methodology used to calculate AFUDC rate approved by the Commission

Class of Capital *(a)*	*Dollar Amount* *(b)*	*Percentage of Capital* *(c)*	*Actual Cost Rates* *(d)*	*Weighted Cost [c x d]* *(e)*
Common Equity	$ -	#DIV/0!	0.00%	#DIV/0!
Preferred Stock	$ -	#DIV/0!	0.00%	#DIV/0!
Long Term Debt	$ -	#DIV/0!	0.00%	#DIV/0!
Customer Deposits	$ -	#DIV/0!	0.00%	#DIV/0!
Tax Credits - Zero Cost	$ -	#DIV/0!	0.00%	#DIV/0!
Tax Credits - Weighted Cost	$ -	#DIV/0!	0.00%	#DIV/0!
Deferred Income Taxes	$ -	#DIV/0!	0.00%	#DIV/0!
Other (Explain)	$ -	#DIV/0!	0.00%	#DIV/0!
Total	$ -	#DIV/0!		#DIV/0!

APPROVED AFUDC RATE

Current Commission approved AFUDC rate: 0.00%

Commission Order approving AFUDC rate: _____

Not applicable

TKCB

DECEMBER 31, 2017

** Completion of schedule required only if AFUDC was charged during year **

SCHEDULE "B"

Schedule Of Capital Structure Adjustments

Class of Capital	*Per Book Balance*	*Non-utility Adjustments*	*Non-juris. Adjustments*	*Other (1) Adjustments*	*Capital Structure Used for AFUDC Calculation*
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Common Equity	$ -	$ -	$ -	$ -	$ -
Preferred Stock	$ -	$ -	$ -	$ -	$ -
Long Term Debt	$ -	$ -	$ -	$ -	$ -
Customer Deposits	$ -	$ -	$ -	$ -	$ -
Tax Credits-Zero Cost	$ -	$ -	$ -	$ -	$ -
Tax Credits-Weighted	$ -	$ -	$ -	$ -	$ -
Cost of Capital	$ -	$ -	$ -	$ -	$ -
Deferred Income Taxes	$ -	$ -	$ -	$ -	$ -
Other (Explain)	$ -	$ -	$ -	$ -	$ -
Total	$ -	$ -	$ -	$ -	$ -

Explain below all adjustments made in Column (e):

Not applicable

WATER

OPERATING

SECTION

TKCB IS A WASTEWATER OPERATION ONLY

WASTEWATER OPERATING SECTION

TKCB
WASTEWATER UTILITY PLANT IS SERVICE
DECEMBER 31, 2017

Acct. No.	Account Name	Previous Year	Additions	Retirement	Current Year
(a)	(b)	(c)	(d)	(e)	(f)
351	Organization	$ -	$ -	$ -	$ -
352	Franchise	$ -	$ -	$ -	$ -
353	Land and Land Rights	$ 36,203	$ -	$ -	$ 36,203
354	Structures and Improvements	$ 1,982	$ -	$ -	$ 1,982
355	Power Generation Equipment	$ -	$ -	$ -	$ -
360	Collection Sewers - Force	$ -	$ -	$ -	$ -
361	Collection Sewers - Gravity	$ -	$ -	$ -	$ -
362	Special Collecting Structures	$ -	$ -	$ -	$ -
363	Services to Customers	$ -	$ -	$ -	$ -
364	Flow Measuring Devices	$ -	$ -	$ -	$ -
365	Flow Measuring Installations	$ -	$ -	$ -	$ -
370	Receiving Wells	$ 4,519	$ 515	$ -	$ 5,034
371	Pumping Equipment	$ -	$ -	$ -	$ -
380	Treatment and Disposal Equipment	$ 3,734	$ 1,947	$ (1,460)	$ 4,221
381	Plant Sewers	$ -	$ -	$ -	$ -
382	Outfall Sewer Lines	$ -	$ -	$ -	$ -
389	Other Plant and Misc. Equipment	$ -	$ -	$ -	$ -
390	Office Furniture and Equipment	$ -	$ -	$ -	$ -
391	Transportation Equipment	$ -	$ -	$ -	$ -
392	Stores Equipment	$ -	$ -	$ -	$ -
393	Tools, Shop and Garage Equipment	$ -	$ -	$ -	$ -
394	Laboratory Equipment	$ -	$ -	$ -	$ -
395	Power Operated Equipment	$ -	$ -	$ -	$ -
396	Communication Equipment	$ -	$ -	$ -	$ -
397	Miscellaneous Equipment	$ -	$ -	$ -	$ -
398	Other Tangible Plant	$ -	$ -	$ -	$ -
	Total Wastewater Plant	**$ 46,438**	**$ 2,463**	**$ (1,460)**	**$ 47,440**

TKCB

ANALYSIS OF ACCUMULATED DEPRECIATION BY PRIMARY ACCOUNT - WASTEWATER

DECEMBER 31, 2017

Acct. No.	Account	Average Service Years	Salvage Percent	Depr. Rate	Acc. Dep. Balance Beg of Year	Debits	Credits	Acc. Dep. Balance End of Year
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
351	Organization	40		2.50%	$ -	$ -	$ -	$ -
352	Franchises	40		2.50%	$ -	$ -	$ -	$ -
354	Structures and Improvements	27		3.70%	$ 238	$ 73	$ -	$ 310
355	Power Generation Equipment	17		5.88%	$ -	$ -	$ -	$ -
360	Collection Sewers - Force	27		3.70%	$ -	$ -	$ -	$ -
361	Collection Sewers - Gravity	40		2.50%	$ -	$ -	$ -	$ -
362	Special Collecting Structures	37		2.70%	$ -	$ -	$ -	$ -
363	Services to Customers	35		2.86%	$ -	$ -	$ -	$ -
364	Flow Measuring Devices	5		20.00%	$ -	$ -	$ -	$ -
365	Flow Measuring Installations	35		2.86%	$ -	$ -	$ -	$ -
370	Receiving Wells	25		4.00%	$ 113	$ 239	$ -	$ 352
371	Pumping Equipment	15		6.67%	$ -	$ -	$ -	$ -
380	Treatment and Disposal Equipment	15		6.67%	$ 1,186	$ 265	$ (1,460)	$ (9)
381	Plant Sewers	32		3.13%	$ -	$ -	$ -	$ -
382	Outfall Sewer Lines	30		3.33%	$ -	$ -	$ -	$ -
389	Other Plant and Misc. Equipment	15		6.67%	$ -	$ -	$ -	$ -
390	Office Furniture and Equipment	10		10.00%	$ -	$ -	$ -	$ -
391	Transportation Equipment	6		16.67%	$ -	$ -	$ -	$ -
392	Stores Equipment	14		7.14%	$ -	$ -	$ -	$ -
393	Tools, Shop and Garage Equipment	15		6.67%	$ -	$ -	$ -	$ -
394	Laboratory Equipment	15		6.67%	$ -	$ -	$ -	$ -
395	Power Operated Equipment	10		10.00%	$ -	$ -	$ -	$ -
396	Communication Equipment	10		10.00%	$ -	$ -	$ -	$ -
397	Miscellaneous Equipment	15		6.67%	$ -	$ -	$ -	$ -
398	Other Tangible Plant	10		10.00%	$ -	$ -	$ -	$ -
	Total Accumulated Depreciation				**$ 1,537**	**$ 577**	**$ (1,460)**	**$ 653**

TKCB

WASTEWATER OPERATION AND MAINTENANCE EXPENSE

DECEMBER 31, 2017

Acct.	*Account Name*		*Amount*
701	Salaries and Wages - Employees	$	3,240
703	Salaries and Wages - Officers, Directors, and Stockholders	$	6,804
704	Employee Pensions and Benefits	$	-
710	Purchased Wastewater Treatment	$	-
711	Sludge Removal Expense	$	1,600
715	Purchased Power	$	9,556
716	Fuel for Power Production	$	-
718	Chemicals	$	430
720	Materials and Supplies	$	710
730	Contractual Services-Billing	$	3,531
731	Contractual Services-Professional	$	1,521
732	Contractual Services-Accounting	$	-
735	Contractual Services-Testing	$	3,862
736	Contractual Services-Other	$	22,225
740	Rents	$	12,000
750	Transportation Expense	$	-
755	Insurance Expense	$	501
765	Regulatory Commission Expenses (Rate Case Expense)	$	162
770	Bad Debt Expense	$	1,818
775	Miscellaneous Expenses	$	1,841
Total Water Operation And Maintenance Expense (Must tie to F-3)		**$**	**69,800**

WASTEWATER CUSTOMERS

Meter Size	*Type of Meter***	*ERC Factor*	*Number of Active Customers* Start of Year	*Number of Active Customers* End of Year	*Total ERC*
X					
All meter sizes			267	283	283
General Service					
5/8"	D	1.0	0	0	0
3/4"	D	1.5	0	0	0
1"	D	2.5	0	0	0
1 1/2"	D,T	5.0	0	0	0
2"	D,C,T	8.0	0	0	0
3"	D	15.0	0	0	0
3"	C	16.0	0	0	0
3"	T	17.5	0	0	0
Unmetered Customers			0	0	0
Other (Specify)			0	0	0
	Total		267	283	283

** D = Displacement
C = Compound
T = Turbine

TKCB
WASTEWATER SYSTEM
DECEMBER 31, 2017

PUMPING EQUIPMENT			
Lift Station Number	#1	#2	
Make/Type and nameplate data on pump	Peabody/Barnes	Hypomatic	
_____			
_____			
Year installed	1993	2003	
Rated capacity	10hp	10hp	
Size			
Power:			
Electric	220 volt	220 volt	
Mechanical			
Nameplate data of motor			

SERVICE CONNECTIONS					
Size (inches)	4"				
Type (PVC, VCP, etc.)	PVC				
Average length					
Number of active service connections					
Beginning of year	295				
Added during year	0				
Retired during year	0				
End of year	295				
Give full particulars concerning inactive connections					

COLLECTING AND FORCE MAINS						
	Collecting Mains			Force Mains		
Size (inches)	8"					
Type of Main	gravity					
Length of main (feet)						
Beginning of year	6,975					
Added during year	0					
Retired during year	0					
End of year	6,975					

MANHOLES						
Size (inches)	23"					
Type of Manhole						
Number of Manholes:						
Beginning of year	23					
Added during year	0					
Retired during year	0					
End of Year	23					

TKCB
WASTEWATER SYSTEM
DECEMBER 31, 2017

TREATMENT PLANT			
Manufacturer	Marlof		
Make/Type			
Steel or Concrete	Concrete		
Total Permitted Capacity	0.135		
Average Daily Flow	1.386		
Method of Effluent Disposal	Peculation Ponds		
Permitted Capacity of Disposal	0.135		
Total Gallons of W/Water Treated	0.506		

MASTER LIFT STATION PUMPS						
Manufacturer						
Capacity (GPM)						
Motor						
Manufacturer						
Horsepower						
Power (Electric/Mechanical)						

PUMPING WASTEWATER STATISTICS			
Month	Gallons of Treated Wastewater	Effluent Reuse Gallons to Customers	Effluent Gallons Disposed of on Site
January	0.855		
February	0.465		
March	0.599		
April	0.603		
May	0.704		
June	0.806		
July	0.726		
August	0.872		
September	1.125		
October	2.678		
November	0.593		
December	0.455		
Total for Year	10.481		
Average Daily Flow	0.029		
Million gallons per day (MGD)			

If wastewater treatment is purchased, indicate the vendor _____

TKCB
GENERAL WATER SYSTEM INFORMATION
DECEMBER 31, 2017

Furnish the information below for each system. A separate page should be supplied where necessary.

1. Present number of ERC's * now being serve.	295
2. Maximum number of ERCs * which can be served.	300
3. Present system connection capacity (in ERCs *) using existing lines.	300
4.	300
5. Estimated annual increase in ERCs *.	0

6. Describe any plans and estimated completion dates for any enlargements or improvements of this system.

None

7. If the utility uses reuse as a means of effluent disposal, provide a list of the reuse end users and the amount of reuse provided to each, if known.

Not applicable

8. If the utility does not engage in reuse, has a reuse feasibility study been completed?

Yes _____ No _____ If so, when? _____

9. Has the utility been required by the DEP or water management district to implement reuse?

Yes _____ No _____ If so, what are the utility's plans to comply with this requirement?

If so, what are the utility's plans to comply with this requirement?

Not applicable

10. When did the company last file a capacity analysis report with the DEP? _____

11. If the present system does not meet the requirements of DEP rules, submit the following:

a. Attach a description of the plant upgrade necessary to meet the DEP rules.	Not Applicable
b. Have these plans been approved by DEP?	Not Applicable
c. When will construction begin?	Not Applicable
d. Attach plans for funding the required upgrading.	Not Applicable
e. Is this system under any Consent Order with DEP?	No

12. Department of Environmental Protection ID#.	FLA010353-006

* An ERC is determined based on one of the following methods:

a. If actual flow data are available from the proceeding 12 months:

Divide the total annual single family residence (SFR) gallons sold by the average number of single family residents (SFR) gallons sold by the average number of single family residence customers for the same period and divide the result by 365 days.

b. If no historical flow data are available use:

ERC = (Total SFR gallons sold (omit 000/365 days/350 gallons per day).

TKCB
GENERAL WATER SYSTEM INFORMATION
DECEMBER 31, 2017

CERTIFICATION OF ANNUAL REPORT

I HEREBY CERTIFY, to the best of my knowledge and belief:

YES	NO		
X		1.	The utility is in substantial compliance with the Uniform System of Accounts prescribed by the Florida Public Service Commission in Rule 25-30.115 (1), Florida Administrative Code.
X		2.	The utility is in substantial compliance with all applicable rules and orders of the Florida Public Service Commission.
X		3.	There have been no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices that could have a material effect on the financial statement of the utility.
X		4.	The annual report fairly represents the financial condition and results of operations of the respondent for the period presented and other information and statements presented in the report as to the business affairs of the respondent are true, correct, and complete for the period for which it represents.

Items Certified

1.	2.	3.	4.	
X	X	X	X	(signature of chief executive officer of the utility)
				Date: 3-20-2018
				(signature of chief financial officer of the utility)
				Date:

Notice: Each of the four items must be certified YES or NO. Each item need not be certified by both officers. The items being certified by the officer should be indicated in the appropriate area to the left of the signature.

Section 837.06, Florida Statutes, provides that any person who knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his duty shall be guilty of a misdemeanor of the second degree.

Reconciliation of Revenue to Regulatory Assessment Fee Revenue

Wastewater Operations

Class C

Company:

For the Year Ended December 31, _____

(a) Accounts	(b) Gross Wastewater Revenues Per Sch. F-3	(c) Gross Wastewater Revenues Per RAF Return	(d) Difference (b) - (c)
Gross Revenue:			
Residential	$ 82793	$ 82793	$ -0-
Commercial			
Industrial			
Multiple Family			
Guaranteed Revenues			
Other			
Total Wastewater Operating Revenue	$ 82793	$ 82793	$ -0-
LESS: Expense for Purchased Wastewater from FPSC-Regulated Utility			
Net Wastewater Operating Revenues	$ 82793	$ 82793	$ -0-

Explanations:

Instructions:

For the current year, reconcile the gross wastewater revenues reported on Schedule F-3 with the gross wastewater revenues reported on the company's regulatory assessment fee return. Explain any differences reported in column (d).

CLASS "C"

WATER AND/OR WASTEWATER UTILITIES

(Gross Revenue of Less Than $200,000 Each)

ANNUAL REPORT

OFFICIAL COPY
Public Service Commission
Do Not Remove From This Office

OF

SU942-18-AR
Thad A. Terry

TKCB, INC.

Exact Legal Name of Respondent

562-S

Certificate Number(s)

Submitted To The

STATE OF FLORIDA

FOR THE

YEAR ENDED DECEMBER 31, 2018

DIVISION OF ACCOUNTING & FINANCE
2019 APR 16 PM 3:
FLORIDA PUBLIC SERVICE COMMISSION

GENERAL INSTRUCTIONS

1. Prepare this report in conformity with the 1996 National Association of Regulatory Utility Commissioners (NARUC) Uniform System of Accounts for Water and Wastewater Utilities as adopted by Rule 25-30.115 (1), Florida Administrative Code.

2. Interpret all accounting words and phrases in accordance with the Uniform System of Accounts (USOA). Commission Rules and the definitions on next page.

3. Complete each question fully and accurately, even if it has been answered in a previous annual report. Enter the word "None" where it truly and completely states the fact.

4. For any question, section, or page which is not applicable to the respondent enter the words "Not Applicable." Do not omit any pages.

5. Where dates are called for, the month and day should be stated as well as the year.

6. All schedules requiring dollar entries should be rounded to the nearest dollar.

7. Complete this report by means which result in a permanent record. You may use permanent ink or a typewriter. Do not use a pencil.

8. If there is not enough room on any schedule, an additional page or pages may be added provided the format of the added schedule matches the format of the schedule in the report. Additional pages should reference the appropriate schedules, state the name of the utility, and state the year of the report.

9. If it is necessary or desirable to insert additional statements for the purpose of further explanation of schedules, such statements should be made at the bottom of the page or on an additional page. Any additional pages should state the name of the utility and the year of the report, and reference the appropriate schedule.

10. The utility shall file the original and two copies of the report with the Commission at the address below, and keep a copy for itself. Pursuant to Rule 25-30.110 (3), Florida Administrative Code, the utility must submit the report by March 31 for the preceeding year ending December 31.

    Florida Public Service Commission
    Division of Accounting and Finance
    2540 Shumard Oak Boulevard
    Tallahassee, Florida 32399-0850

11. Pursuant to Rule 25-30.110 (7) (a), Florida Administrative Code, any utility that fails to file its annual report or extension on or before March 31, or within the time specified by any extension approved in writing by the Division of Accounting and Finance, shall be subject to a penalty. The penalty shall be based on the number of calendar days elapsed from March 31, or from an approved extended filing date, until the date of filing. The date of filing shall be included in the days elapsed.

GENERAL DEFINITIONS

ADVANCES FOR CONSTRUCTION - This account shall include advances by or in behalf of customers for construction which are to be refunded either wholly or in part. (USOA)

ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC) - This account shall include concurrent credits for allowance for funds used during construction based upon the net cost of funds used for construction purposes and a reasonable rate upon other funds when so used. Appropriate regulatory approval shall be obtained for "a reasonable rate". (USOA)

AMORTIZATION - The gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. (USOA)

CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC) - Any amount or item of money, services, or property received by a utility, from any person or governmental agency, any portion of which is provided at no cost to the utility, which represents an addition or transfer to the capital of the utility, and which is utilized to offset the acquisition, improvement, or construction costs of the utility's property, facilities, or equipment used to provide utility services to the public. (Section 367.021 (3), Florida Statutes)

CONSTRUCTION WORK IN PROGRESS (CWIP) - This account shall include the cost of water or wastewater plant in process of construction, but not yet ready for services. (USOA)

DEPRECIATION - The loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in the current operation and against which the utility is not protected by insurance. (Rule 25-30.140 (i), Florida Administrative Code)

EFFLUENT REUSE - The use of wastewater after the treatment process, generally for reuse as irrigation water or for in plant use. (Section 367.021 (6), Florida Statutes)

EQUIVALENT RESIDENTIAL CONNECTION (ERC) - (WATER) - (Rule 25-30.515 (8), Florida Administrative Code.)

(a) 350 gallons per day;
(b) The number of gallons a utility demonstrates in the average daily flow for a single family unit; or
(c) The number of gallons which has been approved by the DEP for a single family residential unit.

EQUIVALENT RESIDENTIAL CONNECTION (ERC) - (WASTEWATER) - Industry standard of 80% of Water ERC or 280 gallons per day for residential use.

GUARANTEED REVENUE CHARGE - A charge designed to cover the utility's costs including, but not limited to the cost of the operation, maintenance, depreciation, and any taxes, and to provide a reasonable return to the utility for facilities, a portion of which may not be used and useful to the utility or its existing customers. (Rule 25-30.515 (9), Florida Administrative Code)

LONG TERM DEBT - All Notes, Conditional Sales Contracts, or other evidences of indebtedness payable more than one year from date of issue. (USOA)

PROPRIETARY CAPITAL (For proprietorships and partnerships only) - The investment of a sole proprietor, or partners, in an unincorporated utility. (USOA)

RETAINED EARNINGS - This account reflects corporate earnings retained in the business. Credits would include net income or accounting adjustments associated with correction of errors attributable to a prior period. Charges to this account would include net losses, accounting adjustments associated with correction of errors attributable to a prior period or dividends. (USOA)

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FINANCIAL SECTION

REPORT OF

TKCB

Exact Name of Utility

5600 North Cocoa Blvd. Cocoa, FL 32927 Mailing Address	616 Emerald Lake Dr. Cocoa, FL 32927 Street Address
321-639-1124 Telephone Number	matlantisinvest@cfl.rr.com E-Mail Address
321-639-1134 Facsimile Number	1983 Date Utility First Organized
KC2135 Sunshine One Call of Fla. Member #	Brevard County of Operation

Type of business entity as filed with Internal revenue Service. (check one)

☐ Individual ☐ S-Corp. ☑ 1120 Corp. ☐ Partnership ☐ Other

Same as mailing address above

Name, phone and address of utility records if different then above.

Sun Lake Estates

Name of subdivision where utility services are provided.

UTILITY CONTACTS

Name	Title
Thad Terry Person to send correspondence	Owner/Officer
Same as above Business Address	Same as above Telephone Number
Jeffery Small Person who prepared this report	Regulatory Consultant Title
9525 Graystoke Lane Orl, FL 32817 Business Address	407-377-5400 Telephone Number

List of all Officers & Managers:	Title	Address	Utility Salary
Thad Terry	Pres	same as above	$6,912

List all entities/persons owning/holding directly/indirectly > or = 5% of voting securities of utility.

Thad Terry, Jr	Dir	same as above	$0

TKCB
INCOME STATEMENT
DECEMBER 31, 2018

Account Name		Water	Wastewater	Other	Total Company
Gross Revenue:					
Residential			$ 84,270	$ -	$ 84,270
Commercial			$ -	$ -	$ -
Industrial			$ -	$ -	$ -
Multiple Family			$ -	$ -	$ -
Guaranteed Revenues			$ -	$ -	$ -
Other (Specify)			$ -	$ -	$ -
Total Gross Revenue			$ 84,270	$ -	$ 84,270
Operation Expense	W-3 S-3		$ 66,619	$ -	$ 66,619
Depreciation Expense	F-5		$ 752	$ -	$ 752
CIAC Amortization Expense	F-8		$ -	$ -	$ -
Taxes Other Than Income	F-7		$ 8,144	$ -	$ 8,144
Income Taxes	F-7		$ -	$ -	$ -
Total Operating Expense			$ 75,515	$ -	$ 75,515
Net Operating Income (Loss)			$ 8,755	$ -	$ 8,755
Other Income:					
Nonutility Income			$ -	$ -	$ -
			$ -	$ -	$ -
Other Deductions:					
Misc. Nonutility Expense			$ (3,648)	$ -	$ (3,648)
Expenses			$ -	$ -	$ -
Interest Expense			$ -	$ -	$ -
			$ -	$ -	$ -
Total Other Net Income			$ (3,648)	$ -	$ (3,648)
Net Income (Loss)			$ 5,106	$ -	$ 5,106

Must tie to amount on page indicated.

TKCB
COMPARATIVE BALANCE SHEET
DECEMBER 31, 2018

Acct#	Account Name		Year End Current	Year End Previous
	Assets and Other Debits			
101	Utility Plant in Service	F-5	$ 53,261	$ 47,440
105	Construction Work in Process	F-5	$ -	$ -
108	Accumulated Depreciation and Amortization	F-5	$ (1,405)	$ (653)
	Net Utility Plant		$ 51,856	$ 46,787
131	Cash		$ 1,628	$ 56
141	Customer Accounts Receivable		$ 13,043	$ 12,922
186	Misc. Deferred Assets (Net)		$ 1,000	$ 483
	Other Assets (Specify):			
			$ -	$ -
			$ -	$ -
			$ -	$ -
	Total Assets and Other Debits		$ 67,527	$ 60,248
	Must tie to amount on page indicated.			
	Liabilities and Capital Equity			
201	Common Stock Issued	F-6	$ 100	$ 100
204	Preferred Stock Issued	F-6	$ -	$ -
211	Other Paid in Capital		$ 17,842	$ 17,842
215	Retained Earnings	F-6	$ 27,148	$ 28,512
218	Propietary Capital (Proprietary & Patnership)	F-6	$ -	$ -
	Total Capital		$ 45,090	$ 46,454
224	Long Term Debt	F-6	$ -	$ -
231	Accounts Payable		$ 9,062	$ -
232	Notes Payable		$ -	$ -
235	Customer Deposits		$ -	$ -
236	Accrued Taxes		$ -	$ -
	Other Liabilities (Specify)			
	Advance from Owners		$ 6,949	$ 13,795
	Property Tax Payable		$ 6,426	$ -
			$ -	$ -
252	Advances for Construction		$ -	$ -
271	Contributions in Aid of Construction		$ -	$ -
272	Accumulated Amortization of CIAC	F-8	$ -	$ -
	Total Liabilities and Capital		$ 67,527	$ 60,248
	Must tie to amount on page indicated.			

TKCB
UTILITY PLANT IN SERVICE & ACCUMULATED DEPRECIATION
DECEMBER 31, 2018

Gross Utility Plant					
Plant Accounts: (101 - 107) inclusive		**Water**	**Wastewater**	**Other Plant**	**Total**
Utility Plant in Service	W-1 S-1		$ 53,261	$ -	$ 53,261
Construction Work in Progress			$ -	$ -	$ -
Other (Specify):					
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Utility Plant			$ 53,261	$ -	$ 53,261
Must tie to amount on page indicated.					
Accumulated Depreciation (A/D) and Amotization of Utility Plant					
Reserve Accounts: Account 108		**Water**	**Wastewater**	**Other Plant**	**Total**
Balance First of Year	W-2 S-2		$ (653)	$ -	$ (653)
Add Credits During Year:					
Depreciation Accruals			$ (752)	$ -	$ (752)
Salvage			$ -	$ -	$ -
Other Credits (specify):					
Retirements			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Credits			$ (1,405)	$ -	$ (1,405)
Deduct Debits During Year:					
Book cost of plant retired			$ -	$ -	$ -
Cost of removal			$ -	$ -	$ -
Other debits (specify)					
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Debits			$ -	$ -	$ -
Total Acc. Depreciation	W-2 S-2		$ (1,405)	$ -	$ (1,405)
Must tie to amount on page indicated.					

TKCB
STOCKHOLDERS EQUITY
DECEMBER 31, 2018

Capital Stock (201 - 204)		
	Common Stock	**Preferred Stock**
Par or stated value per share	$1	None
Shares authorized	100	
Shares issued and outstanding	100	
Total par value of stock issued	$100	
Dividends declared per share for year	$0	

Retained Earnings (215)		
	Appropriated	**Un-Appropriated**
Balance first of year	$ -	$ 28,512
Changes during the year (Specify):		
PP Adj to reclassify Advance from Owner	$ -	$ (13,795)
PP Adj to record property tax liability	$ -	$ 7,325
Current Year Earnings	$ -	$ 5,106
Balance end of year	$ -	$ 27,148.25

Proprietary Capital (218)		
	Proprietor Or Partner	**Partner**
Balance first of year	$ -	$ -
Changes during the year (Specify):		
	$ -	$ -
	$ -	$ -
Balance end of year	$ -	$ -

Long Term Debt (224)			
Description of Obligation Include Date of Issue and Maturity	**Interest Rate**	**No. of Payments**	**Outstanding Principal**
			$ -
			$ -
			$ -
			$ -
Total Long Term Debt			$ -

TKCB
TAX EXPENSE
DECEMBER 31, 2018

	Water	Wastewater	Other	Total
Income Taxes:				
Federal income tax		$ -	$ -	$ -
State income tax		$ -	$ -	$ -
Taxes Other Than Income:		$ -	$ -	$ -
State ad valorem tax		$ 3,115	$ -	$ 3,115
Local property tax		$ -	$ -	$ -
Regulatory assessment fee	Not applicable	$ 3,792	$ -	$ 3,792
Other (Specify)				
Allocated Payroll tax		$ 1,237	$ -	$ 1,237
		$ -	$ -	$ -
		$ -	$ -	$ -
Total Tax Expense		$ 8,144	$ -	$ 8,144

Professional Services

Report all information concerning outside rate, management, construction, advertising, labor relations, public relations, or other similiar professional services rendered the respondent for which aggregate payments during the year to any corporation, partnership, individual, or organization of any kind whatever amounting to $500 or more.

Name of Recipient	*Description of Service*	*Water Amount*	*Wastewater Amount*
Jerry Padrick	Plant Operator & maintenance		$ 20,654
Harrell Development	Perc Pond Maintenance		$ 4,800
City of Cocoa	Customer Billing Services		$ 3,653
Test America	W/Water testing service		$ 3,641
All Service Sanitation	Sludge Hauling		$ 800
OCBOA Counsulting, LLC	RAF & Price Index filings		$ 1,928
	2016 AR & Acct. support.		$ -
			$ -
			$ -
			$ -
			$ -

TKCB
CONTRIBUTIONS IN AID OF CONSTRUCTION (271)
DECEMBER 31, 2018

Contributions In Aid Of Construction (Net)			
	Water	***Wastewater***	***Total***
Balance first of year	Not applicable	$ -	$ -
Add credits during year		$ -	$ -
Total		$ -	$ -
Deduct charges during the year		$ -	$ -
Balance end of year		$ -	$ -
Less Accumulated Amortization		$ -	$ -
Net CIAC end of year		$ -	$ -

Additions To Contributions In Aid Of Construction During Year (Credits)			
Report below all developers or contractors agreements from which cash or property was received during the year.			
Identify and Indicate	***Cash/Property***	***Water***	***Wastewater***
	Not applicable	$ -	$ -
		$ -	$ -
		$ -	$ -
Total		$ -	$ -

Report below all capacity charges, main extension charges and customer connection charges received during the year.			
Description of Charge	***Number of Connections***	***Charge per Connection***	***Total Collected***
	Not applicable	$ -	$ -
		$ -	$ -
		$ -	$ -
Total water credits during year			$ -
	None	$ -	$ -
		$ -	$ -
		$ -	$ -
Total wastewater credits during year			$ -

Accumulated Amortization of CIAC (272)			
	Water	***Wastewater***	***Total***
Balance first of year	Not applicable	$ -	$ -
Add debits during year		$ -	$ -
Deduct credits during year		$ -	$ -
Balance end of year		$ -	$ -

TKCB

DECEMBER 31, 2018

** Completion of schedule required only if AFUDC was charged during year **

SCHEDULE "A"

Schedule Of Cost Of Capital Used For AFUDC Calculation

Must be calculated using the same methodology used to calculate AFUDC rate approved by the Commission

Class of Capital *(a)*	*Dollar Amount* *(b)*	*Percentage of Capital* *(c)*	*Actual Cost Rates* *(d)*	*Weighted Cost [c x d]* *(e)*
Common Equity	$ -	#DIV/0!	0.00%	#DIV/0!
Preferred Stock	$ -	#DIV/0!	0.00%	#DIV/0!
Long Term Debt	$ -	#DIV/0!	0.00%	#DIV/0!
Customer Deposits	$ -	#DIV/0!	0.00%	#DIV/0!
Tax Credits - Zero Cost	$ -	#DIV/0!	0.00%	#DIV/0!
Tax Credits - Weighted Cost	$ -	#DIV/0!	0.00%	#DIV/0!
Deferred Income Taxes	$ -	#DIV/0!	0.00%	#DIV/0!
Other (Explain)	$ -	#DIV/0!	0.00%	#DIV/0!
Total	$ -	#DIV/0!		#DIV/0!

APPROVED AFUDC RATE

Current Commission approved AFUDC rate: 0.00%

Commission Order approving AFUDC rate: _____

Not applicable

TKCB

DECEMBER 31, 2018

** Completion of schedule required only if AFUDC was charged during year **

SCHEDULE "B"

Schedule Of Capital Structure Adjustments

Class of Capital	*Per Book Balance*	*Non-utility Adjustments*	*Non-juris. Adjustments*	*Other (1) Adjustments*	*Capital Structure Used for AFUDC Calculation*
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Common Equity	$ -	$ -	$ -	$ -	$ -
Preferred Stock	$ -	$ -	$ -	$ -	$ -
Long Term Debt	$ -	$ -	$ -	$ -	$ -
Customer Deposits	$ -	$ -	$ -	$ -	$ -
Tax Credits-Zero Cost	$ -	$ -	$ -	$ -	$ -
Tax Credits-Weighted	$ -	$ -	$ -	$ -	$ -
Cost of Capital	$ -	$ -	$ -	$ -	$ -
Deferred Income Taxes	$ -	$ -	$ -	$ -	$ -
Other (Explain)	$ -	$ -	$ -	$ -	$ -
Total	$ -	$ -	$ -	$ -	$ -

Explain below all adjustments made in Column (e):

Not applicable

WATER

OPERATING

SECTION

TKCB IS A WASTEWATER OPERATION ONLY

WASTEWATER OPERATING SECTION

TKCB
WASTEWATER UTILITY PLANT IS SERVICE
DECEMBER 31, 2018

Acct. No.	Account Name	Previous Year	Additions	Retirement	Current Year
(a)	(b)	(c)	(d)	(e)	(f)
351	Organization	$ -	$ -	$ -	$ -
352	Franchise	$ -	$ -	$ -	$ -
353	Land and Land Rights	$ 36,203	$ -	$ -	$ 36,203
354	Structures and Improvements	$ 1,982	$ -	$ -	$ 1,982
355	Power Generation Equipment	$ -	$ -	$ -	$ -
360	Collection Sewers - Force	$ -	$ -	$ -	$ -
361	Collection Sewers - Gravity	$ -	$ 2,000	$ -	$ 2,000
362	Special Collecting Structures	$ -	$ -	$ -	$ -
363	Services to Customers	$ -	$ -	$ -	$ -
364	Flow Measuring Devices	$ -	$ -	$ -	$ -
365	Flow Measuring Installations	$ -	$ -	$ -	$ -
370	Receiving Wells	$ 5,034	$ 844	$ -	$ 5,879
371	Pumping Equipment	$ -	$ -	$ -	$ -
380	Treatment and Disposal Equipment	$ 4,221	$ 2,976	$ -	$ 7,197
381	Plant Sewers	$ -	$ -	$ -	$ -
382	Outfall Sewer Lines	$ -	$ -	$ -	$ -
389	Other Plant and Misc. Equipment	$ -	$ -	$ -	$ -
390	Office Furniture and Equipment	$ -	$ -	$ -	$ -
391	Transportation Equipment	$ -	$ -	$ -	$ -
392	Stores Equipment	$ -	$ -	$ -	$ -
393	Tools, Shop and Garage Equipment	$ -	$ -	$ -	$ -
394	Laboratory Equipment	$ -	$ -	$ -	$ -
395	Power Operated Equipment	$ -	$ -	$ -	$ -
396	Communication Equipment	$ -	$ -	$ -	$ -
397	Miscellaneous Equipment	$ -	$ -	$ -	$ -
398	Other Tangible Plant	$ -	$ -	$ -	$ -
	Total Wastewater Plant	**$ 47,440**	**$ 5,821**	**$ -**	**$ 53,261**

TKCB
ANALYSIS OF ACCUMULATED DEPRECIATION BY PRIMARY ACCOUNT - WASTEWATER
DECEMBER 31, 2018

Acct. No.	Account	Average Service Years	Salvage Percent	Depr. Rate	Acc. Dep. Balance Beg of Year	Debits	Credits	Acc. Dep. Balance End of Year
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
351	Organization	40		2.50%	$ -	$ -	$ -	$ -
352	Franchises	40		2.50%	$ -	$ -	$ -	$ -
354	Structures and Improvements	27		3.70%	$ 310	$ 0	$ 73	$ 383
355	Power Generation Equipment	17		5.88%	$ -	$ -	$ -	$ -
360	Collection Sewers - Force	27		3.70%	$ -	$ -	$ -	$ -
361	Collection Sewers - Gravity	40		2.50%	$ -	$ -	$ 25	$ 25
362	Special Collecting Structures	37		2.70%	$ -	$ -	$ -	$ -
363	Services to Customers	35		2.86%	$ -	$ -	$ -	$ -
364	Flow Measuring Devices	5		20.00%	$ -	$ -	$ -	$ -
365	Flow Measuring Installations	35		2.86%	$ -	$ -	$ -	$ -
370	Receiving Wells	25		4.00%	$ 352	$ (0)	$ 273	$ 625
371	Pumping Equipment	15		6.67%	$ -	$ -	$ -	$ -
380	Treatment and Disposal Equipment	15		6.67%	$ (9)	$ (0)	$ 381	$ 371
381	Plant Sewers	32		3.13%	$ -	$ -	$ -	$ -
382	Outfall Sewer Lines	30		3.33%	$ -	$ -	$ -	$ -
389	Other Plant and Misc. Equipment	15		6.67%	$ -	$ -	$ -	$ -
390	Office Furniture and Equipment	10		10.00%	$ -	$ -	$ -	$ -
391	Transportation Equipment	6		16.67%	$ -	$ -	$ -	$ -
392	Stores Equipment	14		7.14%	$ -	$ -	$ -	$ -
393	Tools, Shop and Garage Equipment	15		6.67%	$ -	$ -	$ -	$ -
394	Laboratory Equipment	15		6.67%	$ -	$ -	$ -	$ -
395	Power Operated Equipment	10		10.00%	$ -	$ -	$ -	$ -
396	Communication Equipment	10		10.00%	$ -	$ -	$ -	$ -
397	Miscellaneous Equipment	15		6.67%	$ -	$ -	$ -	$ -
398	Other Tangible Plant	10		10.00%	$ -	$ -	$ -	$ -
	Total Accumulated Depreciation				**$ 653**	**$ (0)**	**$ 752**	**$ 1,405**

TKCB
WASTEWATER OPERATION AND MAINTENANCE EXPENSE
DECEMBER 31, 2018

Acct.	*Account Name*		*Amount*
701	Salaries and Wages - Employees	$	3,286
703	Salaries and Wages - Officers, Directors, and Stockholders	$	6,912
704	Employee Pensions and Benefits	$	-
710	Purchased Wastewater Treatment	$	-
711	Sludge Removal Expense	$	800
715	Purchased Power	$	9,436
716	Fuel for Power Production	$	-
718	Chemicals	$	482
720	Materials and Supplies	$	666
730	Contractual Services-Billing	$	3,653
731	Contractual Services-Professional	$	2,528
732	Contractual Services-Accounting	$	-
735	Contractual Services-Testing	$	3,641
736	Contractual Services-Other	$	20,430
740	Rents	$	12,000
750	Transportation Expense	$	501
755	Insurance Expense	$	-
765	Regulatory Commission Expenses (Rate Case Expense)	$	483
770	Bad Debt Expense	$	844
775	Miscellaneous Expenses	$	960
Total Water Operation And Maintenance Expense (Must tie to F-3)		**$**	**66,619**

WASTEWATER CUSTOMERS

Meter Size	*Type of Meter***	*ERC Factor*	*Number of Active Customers* Start of Year	*Number of Active Customers* End of Year	*Total ERC*
X					
All meter sizes			283	286	286
General Service					
5/8"	D	1.0	0	0	0
3/4"	D	1.5	0	0	0
1"	D	2.5	0	0	0
1 1/2"	D,T	5.0	0	0	0
2"	D,C,T	8.0	0	0	0
3"	D	15.0	0	0	0
3"	C	16.0	0	0	0
3"	T	17.5	0	0	0
Unmetered Customers			0	0	0
Other (Specify)			0	0	0
		Total	283	286	286

** D = Displacement
C = Compound
T = Turbine

TKCB
WASTEWATER SYSTEM
DECEMBER 31, 2018

PUMPING EQUIPMENT			
Lift Station Number	#1	#2	
Make/Type and nameplate data on pump	Peabody/Barnes	Hypomatic	
_____			
_____			
Year installed	1993	2003	
Rated capacity	10hp	10hp	
Size			
Power:			
Electric	220 volt	220 volt	
Mechanical			
Nameplate data of motor			

SERVICE CONNECTIONS					
Size (inches)	4"				
Type (PVC, VCP, etc.)	PVC				
Average length					
Number of active service connections					
Beginning of year	295				
Added during year	0				
Retired during year	0				
End of year	295				
Give full particulars concerning inactive connections					

COLLECTING AND FORCE MAINS						
	Collecting Mains			Force Mains		
Size (inches)	8"					
Type of Main	gravity					
Length of main (feet)						
Beginning of year	6,975					
Added during year	0					
Retired during year	0					
End of year	6,975					

MANHOLES						
Size (inches)	23"					
Type of Manhole						
Number of Manholes:						
Beginning of year	23					
Added during year	0					
Retired during year	0					
End of Year	23					

TKCB
WASTEWATER SYSTEM
DECEMBER 31, 2018

TREATMENT PLANT			
Manufacturer	Marlof		
Make/Type			
Steel or Concrete	Concrete		
Total Permitted Capacity	0.135		
Average Daily Flow	1.386		
Method of Effluent Disposal	Peculation Ponds		
Permitted Capacity of Disposal	0.135		
Total Gallons of W/Water Treated	0.506		

MASTER LIFT STATION PUMPS						
Manufacturer						
Capacity (GPM)						
Motor						
Manufacturer						
Horsepower						
Power (Electric/Mechanical)						

PUMPING WASTEWATER STATISTICS			
Month	Gallons of Treated Wastewater	Effluent Reuse Gallons to Customers	Effluent Gallons Disposed of on Site
January	0.855		
February	0.465		
March	0.599		
April	0.603		
May	0.704		
June	0.806		
July	0.726		
August	0.872		
September	1.125		
October	2.678		
November	0.593		
December	0.455		
Total for Year	10.481		
Average Daily Flow	0.029		
Million gallons per day (MGD)			

If wastewater treatment is purchased, indicate the vendor _____

TKCB
GENERAL WATER SYSTEM INFORMATION
DECEMBER 31, 2018

Furnish the information below for each system. A separate page should be supplied where necessary.

1. Present number of ERC's * now being serve.	295
2. Maximum number of ERCs * which can be served.	300
3. Present system connection capacity (in ERCs *) using existing lines.	300
4.	300
5. Estimated annual increase in ERCs *.	0

6. Describe any plans and estimated completion dates for any enlargements or improvements of this system.

None

7. If the utility uses reuse as a means of effluent disposal, provide a list of the reuse end users and the amount of reuse provided to each, if known.

Not applicable

8. If the utility does not engage in reuse, has a reuse feasibility study been completed?

Yes _____ No _____ If so, when? _____

9. Has the utility been required by the DEP or water management district to implement reuse?

Yes _____ No _____ If so, what are the utility's plans to comply with this requirement?

If so, what are the utility's plans to comply with this requirement?

Not applicable

10. When did the company last file a capacity analysis report with the DEP? _____

11. If the present system does not meet the requirements of DEP rules, submit the following:

a. Attach a description of the plant upgrade necessary to meet the DEP rules.	Not Applicable
b. Have these plans been approved by DEP?	Not Applicable
c. When will construction begin?	Not Applicable
d. Attach plans for funding the required upgrading.	Not Applicable
e. Is this system under any Consent Order with DEP?	No
12. Department of Environmental Protection ID#.	FLA010353-006

* An ERC is determined based on one of the following methods:

a. If actual flow data are available from the proceeding 12 months:

Divide the total annual single family residence (SFR) gallons sold by the average number of single family residents (SFR) gallons sold by the average number of single family residence customers for the same period and divide the result by 365 days.

b. If no historical flow data are available use:

ERC = (Total SFR gallons sold (omit 000/365 days/350 gallons per day).

TKCB
GENERAL WATER SYSTEM INFORMATION
DECEMBER 31, 2018

CERTIFICATION OF ANNUAL REPORT

I HEREBY CERTIFY, to the best of my knowledge and belief:

YES	NO		
X		1.	The utility is in substantial compliance with the Uniform System of Accounts prescribed by the Florida Public Service Commission in Rule 25-30.115 (1), Florida Administrative Code.
X		2.	The utility is in substantial compliance with all applicable rules and orders of the Florida Public Service Commission.
X		3.	There have been no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices that could have a material effect on the financial statement of the utility.
X		4.	The annual report fairly represents the financial condition and results of operations of the respondent for the period presented and other information and statements presented in the report as to the business affairs of the respondent are true, correct, and complete for the period for which it represents.

Items Certified

1.	2.	3.	4.	
X	X	X	X	_____ (signature of chief executive officer of the utility)
				Date: _____
1.	2.	3.	4.	
				_____ (signature of chief financial officer of the utility)
				Date: 3-14-19

Notice: Each of the four items must be certified YES or NO. Each item need not be certified by both officers. The items being certified by the officer should be indicated in the appropriate area to the left of the signature.

Section 837.06, Florida Statutes, provides that any person who knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his duty shall be guilty of a misdemeanor of the second degree.

Reconciliation of Revenues to
Regulatory Assessment Fee Return
Water & Wastewater Operations
Class C
Company: TKCB, Inc,
For the Year Ended: December 31, 2018

(a)	(b)	(c)	(d)
Accounts	**Gross Water Revenues per Sch. F-3**	**Gross Water Revenues per RAF Return**	**Difference (b) - (c)**
Gross Revenue			
Residential	$ -	$ -	$ -
Commercial	$ -	$ -	$ -
Industrial	$ -	$ -	$ -
Multiple Family	$ -	$ -	$ -
Guaranteed Revenues	$ -	$ -	$ -
Other	$ -	$ -	$ -
Total Water Operating Revenue	$ -	$ -	$ -
Less: Expense for Purchased Water from PSC Regulated Utility	$ -	$ -	$ -
Net Water Operating Revenues	$ -	$ -	$ -

Accounts	**Gross Sewer Revenues per Sch. F-3**	**Gross Sewer Revenues per RAF Return**	**Difference (b) - (c)**
Gross Revenue			
Residential	$ 84,270	$ 84,270	$ -
Commercial	$ -	$ -	$ -
Industrial	$ -	$ -	$ -
Multiple Family	$ -	$ -	$ -
Guaranteed Revenues	$ -	$ -	$ -
Other	$ -	$ -	$ -
Total Wastewater Operating Revenue	$ 84,270	$ 84,270	$ -
Less: Expense for Purchased Wastewater from PSC Regulated Utility	$ -	$ -	$ -
Net Wastewater Operating Revenues	$ 84,270	$ 84,270	$ -

Explanations:

Instuctions:
For current year, reconcile the gross water & wastewater revenues reported on Schedule F-3 with the gross water & wastewater revenues reported on the company's regulatory assessment fee returns. Explain any differences reported in column (d)

CLASS "C"

WATER AND/OR WASTEWATER UTILITIES

(Gross Revenue of Less Than $200,000 Each)

ANNUAL REPORT

RECEIVED
FLORIDA PUBLIC SERVICE
COMMISSION
2022 APR 13 AM 9:13
DIVISION OF
ACCOUNTING & FINANCE

OF

SU942-21-AR
Thad A. Terry

TKCB, INC.

Exact Legal Name of Respondent

562-S

Certificate Number(s)

Submitted To The

STATE OF FLORIDA

PUBLIC SERVICE COMMISSION

FOR THE

YEAR ENDED DECEMBER 31, 2021

Form PSC/AFD 006-W (Rev 12/99)

OFFICIAL COPY
Public Service Commission
Do Not Remove From This Office

GENERAL INSTRUCTIONS

1. Prepare this report in conformity with the 1996 National Association of Regulatory Utility Commissioners (NARUC) Uniform System of Accounts for Water and Wastewater Utilities as adopted by Rule 25-30.115 (1), Florida Administrative Code.

2. Interpret all accounting words and phrases in accordance with the Uniform System of Accounts (USOA). Commission Rules and the definitions on next page.

3. Complete each question fully and accurately, even if it has been answered in a previous annual report. Enter the word "None" where it truly and completely states the fact.

4. For any question, section, or page which is not applicable to the respondent enter the words "Not Applicable." Do not omit any pages.

5. Where dates are called for, the month and day should be stated as well as the year.

6. All schedules requiring dollar entries should be rounded to the nearest dollar.

7. Complete this report by means which result in a permanent record. You may use permanent ink or a typewriter. Do not use a pencil.

8. If there is not enough room on any schedule, an additional page or pages may be added provided the format of the added schedule matches the format of the schedule in the report. Additional pages should reference the appropriate schedules, state the name of the utility, and state the year of the report.

9. If it is necessary or desirable to insert additional statements for the purpose of further explanation of schedules, such statements should be made at the bottom of the page or on an additional page. Any additional pages should state the name of the utility and the year of the report, and reference the appropriate schedule.

10. The utility shall file the original and two copies of the report with the Commission at the address below, and keep a copy for itself. Pursuant to Rule 25-30.110 (3), Florida Administrative Code, the utility must submit the report by March 31 for the preceeding year ending December 31.

    Florida Public Service Commission
    Division of Accounting and Finance
    2540 Shumard Oak Boulevard
    Tallahassee, Florida 32399-0850

11. Pursuant to Rule 25-30.110 (7) (a), Florida Administrative Code, any utility that fails to file its annual report or extension on or before March 31, or within the time specified by any extension approved in writing by the Division of Accounting and Finance, shall be subject to a penalty. The penalty shall be based on the number of calendar days elapsed from March 31, or from an approved extended filing date, until the date of filing. The date of filing shall be included in the days elapsed.

GENERAL DEFINITIONS

ADVANCES FOR CONSTRUCTION - This account shall include advances by or in behalf of customers for construction which are to be refunded either wholly or in part. (USOA)

ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC) - This account shall include concurrent credits for allowance for funds used during construction based upon the net cost of funds used for construction purposes and a reasonable rate upon other funds when so used. Appropriate regulatory approval shall be obtained for "a reasonable rate". (USOA)

AMORTIZATION - The gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. (USOA)

CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC) - Any amount or item of money, services, or property received by a utility, from any person or governmental agency, any portion of which is provided at no cost to the utility, which represents an addition or transfer to the capital of the utility, and which is utilized to offset the acquisition, improvement, or construction costs of the utility's property, facilities, or equipment used to provide utility services to the public. (Section 367.021 (3), Florida Statutes)

CONSTRUCTION WORK IN PROGRESS (CWIP) - This account shall include the cost of water or wastewater plant in process of construction, but not yet ready for services. (USOA)

DEPRECIATION - The loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in the current operation and against which the utility is not protected by insurance. (Rule 25-30.140 (i), Florida Administrative Code)

EFFLUENT REUSE - The use of wastewater after the treatment process, generally for reuse as irrigation water or for in plant use. (Section 367.021 (6), Florida Statutes)

EQUIVALENT RESIDENTIAL CONNECTION (ERC) - (WATER) - (Rule 25-30.515 (8), Florida Administrative Code.)

(a) 350 gallons per day;
(b) The number of gallons a utility demonstrates in the average daily flow for a single family unit; or
(c) The number of gallons which has been approved by the DEP for a single family residential unit.

EQUIVALENT RESIDENTIAL CONNECTION (ERC) - (WASTEWATER) - Industry standard of 80% of Water ERC or 280 gallons per day for residential use.

GUARANTEED REVENUE CHARGE - A charge designed to cover the utility's costs including, but not limited to the cost of the operation, maintenance, depreciation, and any taxes, and to provide a reasonable return to the utility for facilities, a portion of which may not be used and useful to the utility or its existing customers. (Rule 25-30.515 (9), Florida Administrative Code)

LONG TERM DEBT - All Notes, Conditional Sales Contracts, or other evidences of indebtedness payable more than one year from date of issue. (USOA)

PROPRIETARY CAPITAL (For proprietorships and partnerships only) - The investment of a sole proprietor, or partners, in an unincorporated utility. (USOA)

RETAINED EARNINGS - This account reflects corporate earnings retained in the business. Credits would include net income or accounting adjustments associated with correction of errors attributable to a prior period. Charges to this account would include net losses, accounting adjustments associated with correction of errors attributable to a prior period or dividends. (USOA)

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FINANCIAL SECTION

REPORT OF

TKCB, INC.

Exact Name of Utility

5600 North Cocoa Blvd. Cocoa, FL 32927 Mailing Address	616 Emerald Lake Dr. Cocoa, FL 32927 Street Address
321-639-1124 Telephone Number	matlantisinvest@cfl.rr.com E-Mail Address
321-639-1134 Facsimile Number	1983 Date Utility First Organized
KC2135 Sunshine One Call of Fla. Member #	Brevard County of Operation

Type of business entity as filed with Internal revenue Service. (check one)

☐ Individual ☐ S-Corp. ☑ 1120 Corp. ☐ Partnership ☐ Other

Same as mailing address above

Name, phone and address of utility records if different then above.

Sun Lake Estates

Name of subdivision where utility services are provided.

UTILITY CONTACTS

Name	Title
Thad Terry Person to send correspondence	Owner/Officer
Same as above Business Address	Same as above Telephone Number
Jeffery Small Person who prepared this report	Regulatory Consultant Title
P.O Box 424, Goldenrod, FL 32733 Business Address	407-377-5400 Telephone Number

List of all Officers & Managers:	Title	Address	Utility Salary
Thad Terry - Officer	Pres	same as above	$17,024

List all entities/persons owning/holding directly/indirectly > or = 5% of voting securities of utility.

Thad Terry, Jr	Dir	same as above	$0

TKCB, INC.
INCOME STATEMENT
DECEMBER 31, 2021

Account Name		Water	Wastewater	Other	Total Company
Gross Revenue:					
Residential			$ 97,362	$ -	$ 97,362
Commercial			$ -	$ -	$ -
Industrial			$ -	$ -	$ -
Multiple Family			$ -	$ -	$ -
Guaranteed Revenues			$ -	$ -	$ -
Other (Specify)			$ -	$ -	$ -
Total Gross Revenue			$ 97,362	$ -	$ 97,362
Operation Expense	W-3 S-3		$ 108,231	$ -	$ 108,231
Depreciation Expense	F-5		$ 1,679	$ -	$ 1,679
CIAC Amortization Expense	F-8		$ -	$ -	$ -
Taxes Other Than Income	F-7		$ 9,514	$ -	$ 9,514
Income Taxes	F-7		$ -	$ -	$ -
Total Operating Expense			$ 119,424	$ -	$ 119,424
Net Operating Income (Loss)			$ (22,062)	$ -	$ (22,062)
Other Income:					
Nonutility Income			$ -	$ -	$ -
			$ -	$ -	$ -
Other Deductions:					
Misc. Nonutility Expense			$ 639	$ -	$ 639
Expenses			$ -	$ -	$ -
Interest Expense			$ -	$ -	$ -
			$ -	$ -	$ -
Total Other Net Income			$ 639	$ -	$ 639
Net Income (Loss)			$ (22,702)	$ -	$ (22,702)

Must tie to amount on page indicated.

TKCB, INC.
COMPARATIVE BALANCE SHEET
DECEMBER 31, 2021

Acct#	Account Name		Year End Current	Year End Previous
	Assets and Other Debits			
101	Utility Plant in Service	F-5	$ 82,875	$ 52,636
105	Construction Work in Process	F-5	$ -	$ -
108	Accumulated Depreciation and Amortization	F-5	$ (4,570)	$ (2,891)
	Net Utility Plant		$ 78,305	$ 49,745
131	Cash		$ 8	$ 3,773
141	Customer Accounts Receivable		$ 13,080	$ 14,736
186	Misc. Deferred Assets (Net)		$ 8,712	$ 7,661
	Other Assets (Specify):			
			$ -	$ -
			$ -	$ -
			$ -	$ -
	Total Assets and Other Debits		$ 100,105	$ 75,914
	Must tie to amount on page indicated			
	Liabilities and Capital Equity			
201	Common Stock Issued	F-6	$ 100	$ 100
204	Preferred Stock Issued	F-6	$ -	$ -
211	Other Paid in Capital		$ 17,842	$ 17,842
215	Retained Earnings	F-6	$ 18,394	$ 34,085
218	Propietary Capital (Proprietary & Patnership)	F-6	$ -	$ -
	Total Capital		$ 36,336	$ 52,027
224	Long Term Debt	F-6	$ -	$ -
231	Accounts Payable		$ 5,253	$ 10,401
232	Notes Payable		$ -	$ -
	Advance from Owners		$ 51,223	$ 2,472
235	Customer Deposits		$ -	$ -
236	Accrued Taxes		$ -	$ -
	Other Liabilities (Specify)		$ -	$ -
	Property Tax Payable		$ 2,912	$ 6,584
238	Accrued Liabilities		$ 4,381	$ 4,430
252	Advances for Construction		$ -	$ -
271	Contributions in Aid of Construction		$ -	$ -
272	Accumulated Amortization of CIAC	F-8	$ -	$ -
	Total Liabilities and Capital		$ 100,105	$ 75,914
	Must tie to amount on page indicated			

TKCB, INC.
UTILITY PLANT IN SERVICE & ACCUMULATED DEPRECIATION
DECEMBER 31, 2021

Gross Utility Plant					
Plant Accounts: (101 - 107) inclusive		**Water**	**Wastewater**	**Other Plant**	**Total**
Utility Plant in Service	W-1 S-1		$ 82,875	$ -	$ 82,875
Construction Work in Progress			$ -	$ -	$ -
Other (Specify):					
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Utility Plant			$ 82,875	$ -	$ 82,875
Must tie to amount on page indicated.					
Accumulated Depreciation (A/D) and Amotization of Utility Plant					
Reserve Accounts: Account 108		**Water**	**Wastewater**	**Other Plant**	**Total**
Balance First of Year	W-2 S-2		$ (2,891)	$ -	$ (2,891)
Add Credits During Year:					
Depreciation Accruals			$ (1,679)	$ -	$ (1,679)
Salvage			$ -	$ -	$ -
Other Credits (specify):					
Retirements			$ -	$ -	$ -
_____			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Credits			$ (4,570)	$ -	$ (4,570)
Deduct Debits During Year:					
Book cost of plant retired			$ -	$ -	$ -
Cost of removal			$ -	$ -	$ -
Other debits (specify)			$ -		
Adj. to Order			$ -	$ -	$ -
_____			$ -	$ -	$ -
Total Debits			$ -	$ -	$ -
Total Acc. Depreciation	W-2 S-2		$ (4,570)	$ -	$ (4,570)
Must tie to amount on page indicated.					

TKCB, INC.
STOCKHOLDERS EQUITY
DECEMBER 31, 2021

Capital Stock (201 - 204)		
	Common Stock	**Preferred Stock**
Par or stated value per share	$1	None
Shares authorized	100	
Shares issued and outstanding	100	
Total par value of stock issued	$100	
Dividends declared per share for year	$0	

Retained Earnings (215)		
	Appropriated	**Un-Appropriated**
Balance first of year	$ -	$ 34,085
Changes during the year (Specify):		
Adj to correct Beg Balances	$ -	$ 7,010
	$ -	
Current Year Earnings	$ -	$ (22,702)
Balance end of year	$ -	$ 18,394

Proprietary Capital (218)		
	Proprietor Or Partner	**Partner**
Balance first of year	$ -	$ -
Changes during the year (Specify):		
	$ -	$ -
	$ -	$ -
Balance end of year	$ -	$ -

Long Term Debt (224)			
Description of Obligation Include Date of Issue and Maturity	**Interest Rate**	**No. of Payments**	**Outstanding Principal**
			$ -
			$ -
			$ -
			$ -
Total Long Term Debt			$ -

TKCB, INC.
TAX EXPENSE
DECEMBER 31, 2021

	Water	Wastewater	Other	Total
Income Taxes:				
Federal income tax		$ -	$ -	$ -
State income tax		$ -	$ -	$ -
Taxes Other Than Income:		$ -	$ -	$ -
State ad valorem tax		$ -	$ -	$ -
Local property tax		$ 2,912	$ -	$ 2,912
Regulatory assessment fee		$ 4,381	$ -	$ 4,381
Other (Specify)		$ -	$ -	$ -
Allocated Payroll tax		$ 2,221	$ -	$ 2,221
		$ -	$ -	$ -
		$ -	$ -	$ -
Total Tax Expense		$ 9,514	$ -	$ 9,514

Not applicable

Professional Services

Report all information concerning outside rate, management, construction, advertising, labor relations, public relations, or other similiar professional services rendered the respondent for which aggregate payments during the year to any corporation, partnership, individual, or organization of any kind whatever amounting to $500 or more.

Name of Recipient	*Description of Service*	*Water Amount*	*Wastewater Amount*
Accurate Utilities, Inc.	Plant Operator & Main.		$ 64,069
Harrell Development	Perc Pond Maintenance		$ 2,400
City of Cocoa	Customer Billing Services		$ 3,517
Herb Weems	Sludge Hauling		$ 14,775
Palm Bay Septic	Sludge Hauling		$ 2,585
OCBOA Counsulting, LLC	RAF & Price Index filings AR & Acct. support.		$ 2,664
			$ -
John Aitkin	Tax Return		$ 600

TKCB, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION (271)
DECEMBER 31, 2021

Contributions In Aid Of Construction (Net)			
	Water	***Wastewater***	***Total***
Balance first of year	Not applicable	$ -	$ -
Add credits during year		$ -	$ -
Total		$ -	$ -
Deduct charges during the year		$ -	$ -
Balance end of year		$ -	$ -
Less Accumulated Amortization		$ -	$ -
Net CIAC end of year		$ -	$ -

Additions To Contributions In Aid Of Construction During Year (Credits)			
Report below all developers or contractors agreements from which cash or property was received during the year.			
Identify and Indicate	***Cash/Property***	***Water***	***Wastewater***
	Not applicable	$ -	$ -
		$ -	$ -
		$ -	$ -
Total		$ -	$ -

Report below all capacity charges, main extension charges and customer connection charges received during the year.

Description of Charge	***Number of Connections***	***Charge per Connection***	***Total Collected***
	Not applicable	$ -	$ -
		$ -	$ -
		$ -	$ -
Total water credits during year			$ -
	None	$ -	$ -
		$ -	$ -
		$ -	$ -
Total wastewater credits during year			$ -

Accumulated Amortization of CIAC (272)			
	Water	***Wastewater***	***Total***
Balance first of year	Not applicable	$ -	$ -
Add debits during year		$ -	$ -
Deduct credits during year		$ -	$ -
Balance end of year		$ -	$ -

TKCB, INC.

DECEMBER 31, 2021

** Completion of schedule required only if AFUDC was charged during year **

SCHEDULE "A"

Schedule Of Cost Of Capital Used For AFUDC Calculation

Must be calculated using the same methodology used to calculate AFUDC rate approved by the Commission

Class of Capital (a)	*Dollar Amount (b)*	*Percentage of Capital (c)*	*Actual Cost Rates (d)*	*Weighted Cost [c x d] (e)*
Common Equity	$ -	#DIV/0!	0.00%	#DIV/0!
Preferred Stock	$ -	#DIV/0!	0.00%	#DIV/0!
Long Term Debt	$ -	#DIV/0!	0.00%	#DIV/0!
Customer Deposits	$ -	#DIV/0!	0.00%	#DIV/0!
Tax Credits - Zero Cost	$ -	#DIV/0!	0.00%	#DIV/0!
Tax Credits - Weighted Cost	$ -	#DIV/0!	0.00%	#DIV/0!
Deferred Income Taxes	$ -	#DIV/0!	0.00%	#DIV/0!
Other (Explain)	$ -	#DIV/0!	0.00%	#DIV/0!
Total	$ -	#DIV/0!		#DIV/0!

APPROVED AFUDC RATE

Current Commission approved AFUDC rate: 0.00%

Commission Order approving AFUDC rate: _____

Not applicable

TKCB, INC.

DECEMBER 31, 2021

** Completion of schedule required only if AFUDC was charged during year **

SCHEDULE "B"

Schedule Of Capital Structure Adjustments

Class of Capital	*Per Book Balance*	*Non-utility Adjustments*	*Non-juris. Adjustments*	*Other (1) Adjustments*	*Capital Structure Used for AFUDC Calculation*
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Common Equity	$ -	$ -	$ -	$ -	$ -
Preferred Stock	$ -	$ -	$ -	$ -	$ -
Long Term Debt	$ -	$ -	$ -	$ -	$ -
Customer Deposits	$ -	$ -	$ -	$ -	$ -
Tax Credits-Zero Cost	$ -	$ -	$ -	$ -	$ -
Tax Credits-Weighted	$ -	$ -	$ -	$ -	$ -
Cost of Capital	$ -	$ -	$ -	$ -	$ -
Deferred Income Taxes	$ -	$ -	$ -	$ -	$ -
Other (Explain)	$ -	$ -	$ -	$ -	$ -
Total	$ -	$ -	$ -	$ -	$ -

Explain below all adjustments made in Column (e):

Not applicable

WATER

OPERATING

SECTION

TKCB IS A WASTEWATER OPERATION ONLY

WASTEWATER OPERATING SECTION

TKCB, INC.
WASTEWATER UTILITY PLANT IS SERVICE
DECEMBER 31, 2021

Acct. No.	Account Name	Previous Year	Additions	Retirement	Current Year
(a)	(b)	(c)	(d)	(e)	(f)
351	Organization	$ -	$ -	$ -	$ -
352	Franchise	$ -	$ -	$ -	$ -
353	Land and Land Rights	$ 36,203	$ -	$ -	$ 36,203
354	Structures and Improvements	$ 1,324	$ 4,879	$ -	$ 6,203
355	Power Generation Equipment	$ -	$ -	$ -	$ -
360	Collection Sewers - Force	$ -	$ -	$ -	$ -
361	Collection Sewers - Gravity	$ 2,000	$ -	$ -	$ 2,000
362	Special Collecting Structures	$ -	$ -	$ -	$ -
363	Services to Customers	$ -	$ -	$ -	$ -
364	Flow Measuring Devices	$ -	$ -	$ -	$ -
365	Flow Measuring Installations	$ -	$ -	$ -	$ -
370	Receiving Wells	$ 5,878	$ 15,810	$ -	$ 21,688
371	Pumping Equipment	$ -	$ -	$ -	$ -
380	Treatment and Disposal Equipment	$ 7,230	$ 9,550	$ -	$ 16,780
381	Plant Sewers	$ -	$ -	$ -	$ -
382	Outfall Sewer Lines	$ -	$ -	$ -	$ -
389	Other Plant and Misc. Equipment	$ -	$ -	$ -	$ -
390	Office Furniture and Equipment	$ -	$ -	$ -	$ -
391	Transportation Equipment	$ -	$ -	$ -	$ -
392	Stores Equipment	$ -	$ -	$ -	$ -
393	Tools, Shop and Garage Equipment	$ -	$ -	$ -	$ -
394	Laboratory Equipment	$ -	$ -	$ -	$ -
395	Power Operated Equipment	$ -	$ -	$ -	$ -
396	Communication Equipment	$ -	$ -	$ -	$ -
397	Miscellaneous Equipment	$ -	$ -	$ -	$ -
398	Other Tangible Plant	$ -	$ -	$ -	$ -
	Total Wastewater Plant	**$ 52,636**	**$ 30,239**	**$ -**	**$ 82,875**

TKCB, INC.
ANALYSIS OF ACCUMULATED DEPRECIATION BY PRIMARY ACCOUNT - WASTEWATER
DECEMBER 31, 2021

Acct. No.	Account	Average Service Years	Salvage Percent	Depr. Rate	Acc. Dep. Balance Beg of Year	Debits	Credits	Acc. Dep. Balance End of Year
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
351	Organization	40		2.50%	$ -	$ -	$ -	$ -
352	Franchises	40		2.50%	$ -	$ -	$ -	$ -
354	Structures and Improvements	27		3.70%	$ 380	$ 139	$ -	$ 519
355	Power Generation Equipment	17		5.88%	$ -	$ -	$ -	$ -
360	Collection Sewers - Force	27		3.70%	$ -	$ -	$ -	$ -
361	Collection Sewers - Gravity	40		2.50%	$ 125	$ 50	$ -	$ 175
362	Special Collecting Structures	37		2.70%	$ -	$ -	$ -	$ -
363	Services to Customers	35		2.86%	$ -	$ -	$ -	$ -
364	Flow Measuring Devices	5		20.00%	$ -	$ -	$ -	$ -
365	Flow Measuring Installations	35		2.86%	$ -	$ -	$ -	$ -
370	Receiving Wells	25		4.00%	$ 1,090	$ 689	$ -	$ 1,779
371	Pumping Equipment	15		6.67%	$ -	$ -	$ -	$ -
380	Treatment and Disposal Equipment	15		6.67%	$ 1,296	$ 800	$ -	$ 2,096
381	Plant Sewers	32		3.13%	$ -	$ -	$ -	$ -
382	Outfall Sewer Lines	30		3.33%	$ -	$ -	$ -	$ -
389	Other Plant and Misc. Equipment	15		6.67%	$ -	$ -	$ -	$ -
390	Office Furniture and Equipment	10		10.00%	$ -	$ -	$ -	$ -
391	Transportation Equipment	6		16.67%	$ -	$ -	$ -	$ -
392	Stores Equipment	14		7.14%	$ -	$ -	$ -	$ -
393	Tools, Shop and Garage Equipment	15		6.67%	$ -	$ -	$ -	$ -
394	Laboratory Equipment	15		6.67%	$ -	$ -	$ -	$ -
395	Power Operated Equipment	10		10.00%	$ -	$ -	$ -	$ -
396	Communication Equipment	10		10.00%	$ -	$ -	$ -	$ -
397	Miscellaneous Equipment	15		6.67%	$ -	$ -	$ -	$ -
398	Other Tangible Plant	10		10.00%	$ -	$ -	$ -	$ -
	Total Accumulated Depreciation				**$ 2,891**	**$ 1,679**	**$ -**	**$ 4,570**

TKCB, INC.
WASTEWATER OPERATION AND MAINTENANCE EXPENSE
DECEMBER 31, 2021

Acct.	*Account Name*		*Amount*
701	Salaries and Wages - Employees	$	6,503
703	Salaries and Wages - Officers, Directors, and Stockholders	$	17,024
704	Employee Pensions and Benefits	$	-
710	Purchased Wastewater Treatment	$	-
711	Sludge Removal Expense	$	17,034
715	Purchased Power	$	10,026
716	Fuel for Power Production	$	-
718	Chemicals	$	3,836
720	Materials and Supplies	$	3,348
730	Contractual Services-Billing	$	3,875
731	Contractual Services-Professional	$	2,545
732	Contractual Services-Accounting	$	-
735	Contractual Services-Testing	$	5,013
736	Contractual Services-Other	$	26,203
740	Rents	$	9,019
750	Transportation Expense	$	-
755	Insurance Expense	$	-
765	Regulatory Commission Expenses (Rate Case Expense)	$	1,884
770	Bad Debt Expense	$	1,622
775	Miscellaneous Expenses	$	300
Total Water Operation And Maintenance Expense (Must tie to F-3)		**$**	**108,231**

WASTEWATER CUSTOMERS

Meter Size	*Type of Meter***	*ERC Factor*	*Number of Active Customers Start of Year*	*Number of Active Customers End of Year*	*Total ERC*
X					
All meter sizes			273	288	288
General Service					
5/8"	D	1.0	0	0	0
3/4"	D	1.5	0	0	0
1"	D	2.5	0	0	0
1 1/2"	D,T	5.0	0	0	0
2"	D,C,T	8.0	0	0	0
3"	D	15.0	0	0	0
3"	C	16.0	0	0	0
3"	T	17.5	0	0	0
Unmetered Customers			0	0	0
Other (Specify)			0	0	0
	Total		273	288	288

** D = Displacement
C = Compound
T = Turbine

TKCB, INC.
WASTEWATER SYSTEM
DECEMBER 31, 2021

PUMPING EQUIPMENT			
Lift Station Number	#1	#2	
Make/Type and nameplate data on pump	Peabody/Barnes	Hypomatic	
Year installed	1993	2003	
Rated capacity	10hp	10hp	
Size			
Power:			
Electric	220 volt	220 volt	
Mechanical			
Nameplate data of motor			

SERVICE CONNECTIONS					
Size (inches)	4"				
Type (PVC, VCP, etc.)	PVC				
Average length					
Number of active service connections					
Beginning of year	295				
Added during year	0				
Retired during year	0				
End of year	295				
Give full particulars concerning inactive connections					

COLLECTING AND FORCE MAINS						
	Collecting Mains			Force Mains		
Size (inches)	8"					
Type of Main	gravity					
Length of main (feet)						
Beginning of year	6,975					
Added during year	0					
Retired during year	0					
End of year	6,975					

MANHOLES						
Size (inches)	23"					
Type of Manhole						
Number of Manholes:						
Beginning of year	23					
Added during year	0					
Retired during year	0					
End of Year	23					

TKCB, INC.
WASTEWATER SYSTEM
DECEMBER 31, 2021

TREATMENT PLANT			
Manufacturer	Marlof		
Make/Type			
Steel or Concrete	Concrete		
Total Permitted Capacity	0.135		
Average Daily Flow	0.028		
Method of Effluent Disposal	Peculation Ponds		
Permitted Capacity of Disposal	0.135		
Total Gallons of W/Water Treated	0.028		

MASTER LIFT STATION PUMPS						
Manufacturer						
Capacity (GPM)						
Motor						
Manufacturer						
Horsepower						
Power (Electric/Mechanical)						

PUMPING WASTEWATER STATISTICS			
Month	Gallons of Treated Wastewater	Effluent Reuse Gallons to Customers	Effluent Gallons Disposed of on Site
January	1.109		
February	1.221		
March	0.971		
April	0.994		
May	1.001		
June	0.675		
July	0.675		
August	0.801		
September	0.717		
October	0.699		
November	0.693		
December	0.777		
Total for Year	10.333		
Average Daily Flow	0.028		
Million gallons per day (MGD)			

If wastewater treatment is purchased, indicate the vendor _____

TKCB, INC.
GENERAL WATER SYSTEM INFORMATION
1DECEMBER 31, 2021

Furnish the information below for each system. A separate page should be supplied where necessary.

1. Present number of ERC's * now being serve.	295
2. Maximum number of ERCs * which can be served.	300
3. Present system connection capacity (in ERCs *) using existing lines.	300
4.	300
5. Estimated annual increase in ERCs *.	0

6. Describe any plans and estimated completion dates for any enlargements or improvements of this system.
   None

7. If the utility uses reuse as a means of effluent disposal, provide a list of the reuse end users and the amount of reuse provided to each, if known.
   Not applicable

8. If the utility does not engage in reuse, has a reuse feasibility study been completed?
   Yes _____ No _____ If so, when? _____

9. Has the utility been required by the DEP or water management district to implement reuse?
   Yes _____ No _____ If so, what are the utility's plans to comply with this requirement?
   If so, what are the utility's plans to comply with this requirement?
   Not applicable

10. When did the company last file a capacity analysis report with the DEP? _____

11. If the present system does not meet the requirements of DEP rules, submit the following:

a. Attach a description of the plant upgrade necessary to meet the DEP rules.	Not Applicable
b. Have these plans been approved by DEP?	Not Applicable
c. When will construction begin?	Not Applicable
d. Attach plans for funding the required upgrading.	Not Applicable
e. Is this system under any Consent Order with DEP?	No

12. Department of Environmental Protection ID#. FLA010353-006

* An ERC is determined based on one of the following methods:

a. If actual flow data are available from the proceeding 12 months:

Divide the total annual single family residence (SFR) gallons sold by the average number of single family residents (SFR) gallons sold by the average number of single family residence customers for the same period and divide the result by 365 days.

b. If no historical flow data are available use:

ERC = (Total SFR gallons sold (omit 000/365 days/350 gallons per day).

TKCB, INC.
GENERAL WATER SYSTEM INFORMATION
DECEMBER 31, 2021

CERTIFICATION OF ANNUAL REPORT

I HEREBY CERTIFY, to the best of my knowledge and belief:

YES	NO		
X		1.	The utility is in substantial compliance with the Uniform System of Accounts prescribed by the Florida Public Service Commission in Rule 25-30.115 (1), Florida Administrative Code.
X		2.	The utility is in substantial compliance with all applicable rules and orders of the Florida Public Service Commission.
X		3.	There have been no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices that could have a material effect on the financial statement of the utility.
X		4.	The annual report fairly represents the financial condition and results of operations of the respondent for the period presented and other information and statements presented in the report as to the business affairs of the respondent are true, correct, and complete for the period for which it represents.

Items Certified

1.	2.	3.	4.	
X	X	X	X	_____ (signature of chief executive officer of the utility)
				Date: _____
1.	2.	3.	4.	
				_____ (signature of chief financial officer of the utility)
				Date: 04/06/2022

Notice: Each of the four items must be certified YES or NO. Each item need not be certified by both officers. The items being certified by the officer should be indicated in the appropriate area to the left of the signature.

Section 837.06, Florida Statutes, provides that any person who knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his duty shall be guilty of a misdemeanor of the second degree.

Reconciliation of Revenues to
Regulatory Assessment Fee Return
Water & Wastewater Operations
Class C
Company: TKCB, Inc.
For the Year Ended: December 31, 2021

(a)	(b)	(c)	(d)
Accounts	**Gross Water Revenues per Sch. F-3**	**Gross Water Revenues per RAF Return**	**Difference (b) - (c)**
Gross Revenue			
Residential	$ -	$ -	$ -
Commercial	$ -	$ -	$ -
Industrial	$ -	$ -	$ -
Multiple Family	$ -	$ -	$ -
Guaranteed Revenues	$ -	$ -	$ -
Other	$ -	$ -	$ -
Total Water Operating Revenue	$ -	$ -	$ -
Less: Expense for Purchased Water from PSC Regulated Utility	$ -	$ -	$ -
Net Water Operating Revenues	$ -	$ -	$ -

Accounts	**Gross Sewer Revenues per Sch. F-3**	**Gross Sewer Revenues per RAF Return**	**Difference (b) - (c)**
Gross Revenue			
Residential	$ 97,362	$ 97,362	$ -
Commercial	$ -	$ -	$ -
Industrial	$ -	$ -	$ -
Multiple Family	$ -	$ -	$ -
Guaranteed Revenues	$ -	$ -	$ -
Other	$ -	$ -	$ -
Total Wastewater Operating Revenue	$ 97,362	$ 97,362	$ -
Less: Expense for Purchased Wastewater from PSC Regulated Utility	$ -	$ -	$ -
Net Wastewater Operating Revenues	$ 97,362	$ 97,362	$ -

Explanations:

Instructions:
For current year, reconcile the gross water & wastewater revenues reported on Schedule F-3 with the gross water & wastewater revenues reported on the company's regulatory assessment fee returns.
Explain any differences reported in column (d)

RECEIVED
MAR 29 2011
DEP Central Dist.

TO: Florida Department of Environmental Protection
(Clarence Anderson)
RE: Compliance response for Sunlake Estates Permit #FLA010353
DATE: March 28, 2011

Dear Mr. Anderson,

The following deficiencies will be addressed in order of noncompliance.

1. The purchase of influent and effluent composite samplers have been priced at a cost of $6500.00 each for new. I currently have a system that does not backflush the old sample from the tubing and I am asking for some time to locate and purchase reconditioned compliant samplers. This would be greatly appreciated as the owner, Mr. Terry, has given me the approval to buy those systems. Six months to locate and purchase would be greatly appreciated.
2. The nitrate reported for 06/2010 exceeded limits and this may be a lab error or a very heavy thunderstorm may have pushed a slug through. After operating for 11 years this site, this is the first failed sample.
3. A. Qualifiers to the quarterly monitoring well reports will be added in future reports as required.
   B. All the monitoring wells have been repaired and approved as acceptable by Marsha Johnson via through e-mailing pictures of each well. She also confirmed through e-mail a thank you letter of completion prior to 12/01/2010.

Thank you,

Should you have any questions or concerns please call me at 321-508-4714

Sincerely,
Jerry Padrick

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

SENT VIA EMAIL TO: matlantisinvest@cfl.rr.com

March 23, 2011

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA, FLORIDA 32926

OCD-C-WW-11-0206

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On February 16, 2011, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. Please note the items listed below which need to be addressed:

1. The influent and effluent composite samplers were not programmed to collect flow-proportioned composite samples. Samples are to be collected in accordance with the Department's Standard Operating Procedures FS 2400 2.28 Wastewater Sampling.

2. The Nitrate result reported on the Discharge Monitoring Report (DMR) for June 2010 was 18.0 milligrams per Liter (mg/L), which exceeded the nitrate limit of 12.0 mg/L.

3. A review of the groundwater files for this facility indicates the following deficiencies:

a. Analysis results for nitrate and fecal coliform were reported without the qualifier U or a less than symbol (<) on groundwater monitoring reports for the fourth quarter

E-filed

of 2009 and first, second and third quarters of 2010. On all future submittals, if qualifiers are provided as part of the results, the results and qualifiers must be reported on the groundwater monitoring report forms.

b. Part VI, Schedules, and Part III B 14 of the current permit require the permittee to install a new concrete pad for intermediate well MW-2 and to repair or replace the broken hinges on all monitoring wells. In addition locking caps are to be installed on all wells. This work was to be completed within 30 days of issuance of the permit or by December 1, 2010. Once completed the permittee was to provide photographs of the work completed to the Groundwater Section. The Groundwater Section has not received confirmation that these items have been completed. Complete these items as soon as possible and submit photographs of the work completed.

The Department requests a written response addressing the items listed above within 14 days from the date of this letter. Your response should include an explanation of any corrective actions that either been taken or that you plan to take. Please note that this letter and report, being part of the Departments investigation, is preliminary to agency action in accordance with Section 120.57(5), Florida Statutes. Please direct ground water questions to Marsha Johnson at (407) 893-3308, EXT. 2275. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence Anderson

Clarence Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

CA/tp/ar

Enclosure: Inspection Report

cc: Anil Desai, Program Manager, FDEP Ground Water Section

E-filed

COMET ENTRY DATE
__ / __ / __

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	2/16/2011 10:45
SHARPES LAKE BLVD		Phone	@ Exit Date/Time
SHARPES, FL.		321/639-0370	2/16/2011 11:45

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type: [C] [E] [I] [ ] Samples Taken(Y/N): @ Sample ID#: Samples Split (Y/N):

☒ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log book Volume : @ Page

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT DISPOSAL
IC	1. ♦Permit	IC	3. Laboratory	IC	6. Facility Site Review	NC	9. ♦Effluent Quality
NC	2. ♦Compliance Schedules	NC	4. Sampling	IC	7. Flow Measurement	IC	10. ♦Effluent Disposal
		IC	5. ♦Records & Reports	IC	8. ♦Operation & Maintenance	IC	11. Residuals/Sludge
						NE	12. Groundwater
	14. Other:					NA	13. ♦SSO Survey

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)893-3313	March 14, 2011
@ Signature of Reviewer	District Office/Phone Number	Date
CLARENCE ANDERSON Clarence Anderson	Central (407)893-7876	3/22/11

Single Event Violation Code(s):

_____, _____, _____, _____, _____

E-Filed

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 issued 11/1/2010 expires 10/27/2015.

COMPLIANCE SCHEDULES: **Out of compliance.**

1.	Repair leaks to tank walls.	January 31, 2011
2.	**Install a concrete pad (at least 2 feet x 2 feet x 4 inches) at intermediate well MWI-2, repair/replace broken hinges on the monitoring wells and secure all wells with locking caps. After the repairs are completed, provide photographs of all retrofitted wells to the Department.**	Part VI, Schedules, and Part III B 14

RECORDS AND REPORTS: In compliance.
Bound logbook on-site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on-site. Discharge Monitoring Reports (DMRs), lab results and chains of custody are to be stored on site for Department review. DMRs have correct information submitted. Operations to correct DMRs reporting percent capacity and qualifiers. Corrections to be resubmitted to the Department.

LABORATORY: In compliance.
PACE Laboratory. Department of Health certified.

SAMPLING: **Out of compliance.**
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).
The influent and effluent composite samplers were not programmed to collect flow-proportioned composite samples. Samples are to be collected in accordance with the Department's Standard Operating Procedures FS 2400 2.28 Wastewater Sampling.

FACILITY SITE REVIEW: In compliance.
Access: Locked gate with fence.
Signs posted.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight earthy odor. Aerobic digester.
Clarifier: Chlorine added to weirs for algae control.
CCC: Hypochlorination. Effluent clear in chamber.
Well water utilized for cleanup.

FLOW MEASUREMENT: In compliance.
Stevens flow meter with chart recorder. Chart recorder not being utilized due to low flows.
Documentation of calibration for the flow meter was performed on 1/2011.

OPERATION AND MAINTENANCE: In compliance.
Continue to seal/repair seepage noted on the east wall of the digester and chlorine contact chamber.

EFFLUENT: **Out of compliance.**
Clear. Minor. Review of the DMRs from by Orlando staff from 4/2010 to 1/2011 indicated:
The Nitrate result reported on the Discharge Monitoring Report (DMR) for June 2010 was 18.0 milligrams per Liter (mg/L), which exceeded the nitrate limit of 12.0 mg/L.
TRC was 0.5 mg/L.

E-filed

EFFLUENT DISPOSAL: In compliance.
0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds. Saturation in ponds is excellent. 4 feet freeboard noted.

GROUND WATER: **Out of compliance.**
A review of the ground water files for this facility indicates the following deficiencies:
Analysis results for nitrate and fecal coliform were reported without the qualifier U or a less than symbol (<) on ground water monitoring reports for the fourth quarter of 2009 and first, second and third quarters of 2010. On all future submittals, if qualifiers are provided as part of the results, the results and qualifiers must be reported on the ground water monitoring report forms.

Part VI, Schedules, and Part III B 14 of the current permit require the permittee to install a new concrete pad for intermediate well MW-2 and to repair or replace the broken hinges on all monitoring wells. In addition locking caps are to be installed on all wells. This work was to be completed within 30 days of issuance of the permit or by December 1, 2010. Once completed the permittee was to provide photographs of the work completed to the Ground Water Section. The Ground Water Section has not received confirmation that these items have been completed. Please complete these items as soon as possible and submit photographs of the work completed.

RESIDUALS MANAGEMENT: In compliance.
Solids disposed of by American Bio-clean.

OTHER:

E-filed

Brevard County
Sun Lakes Estates WW TF
ATT Marsha Johnson

CA 11/30
TP 11/30
SE 1/4/11

RECEIVED-DEP
CENTRAL DISTRICT OFFICE
2010 NOV 30 PM 12:25

Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

ANNUAL REUSE REPORT

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy (including all attachments) to each of the following three addresses:

   a. DEP Water Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system. For purposes of this form, "reuse system" means a network of pipes, pumping facilities, storage facilities, and appurtenances designed to convey and distribute reclaimed water from one or more domestic wastewater treatment facilities to one or more users of reclaimed water.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part X on pages 8 and 9 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

RECEIVED-DEP
CENTRAL DISTRICT OFFICE
2010 NOV 30 PM 12:25

Part II - General Information

1. Reporting Period: October 1, 2009 through September 30, 2010
2. Date Submitted 11-29-10
3. Person Completing This Form
   Name Jerry Podrick
   Title Operator
   Organization Sunlake Homeowners ASSC.
   Mailing Address 4865 Lake Ontario Dr.
   City/State/Zip Code Cocoa FL 32927
   Telephone (321) 639-1124
   E-mail
4. Reuse System Name Sunlake Estates
5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System
   a. Location of Facilities
      City Cocoa County Brevard

DEP District (check one):

- ☐ Northwest (Pensacola)
- ☐ Northeast (Jacksonville)
- ☐ Southwest (Tampa)
- ☒ Central (Orlando)
- ☐ Southeast (West Palm Beach)
- ☐ South (Ft. Myers)

Water Management District (check one):

- ☐ Northwest Florida (Havana)
- ☐ Suwannee River (Live Oak)
- ☐ Southwest Florida (Brooksville)
- ☒ St. Johns River (Palatka)
- ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
Sunlake Estates	3005P00317	BA	.135	.033
	FLA010353			
Total Treated Wastewater				.033

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.
FT = Full treatment disinfection, as described in Rule 62-610.563(3)(b), F.A.C.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	.033
Supplemental Water Supplies (Enter the flow for each supplemental water source added by the utility)	
Surface Water	
Stormwater	
Ground Water	
Drinking Water	
Demineralization Concentrate (Blended with final reclaimed water only)	
Water Recovered from ASR [b]	
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	.033

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III		N	
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part X of this form.)	III		A	
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	.135	.033	8
	Surface Water Augmentation (Discharge to Class I Waters)	V		N A	
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII		N	
	At Other Facilities	VII		A	
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			.135	.033	8

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters	A	
Deep Well Disposal			
Other (specify)		A	
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]			

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. **Reuse** (From bottom of Part IV of this form)	.135
2. **Effluent Disposal** (From bottom of Part V)	
3. **Flow Stored in ASR** (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	.135

0.033 SC

0.033 SC.

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII – Reuse Activities, Numbers of Customers, and Backup Discharges

1. How many single-family residences have reclaimed water service? none
2. How many golf courses are irrigated using reclaimed water? none
3. How many parks or playgrounds are irrigated using reclaimed water? none
4. How many schools are irrigated using reclaimed water? none
5. Is reclaimed water used to flush toilets? ☐ Yes ☒ No If yes, list locations where reclaimed water is used for toilet flushing. _____
6. Is reclaimed water used for fire protection? ☒ No ☐ Yes, in sprinkler systems
   ☐ Yes, in fire hydrants ☐ Yes, other (please describe) _____
7. How many cooling towers use reclaimed water from this reuse system? none
8. List or describe any unique or unusual uses of reclaimed water. none
9. Is there a surface water discharge that serves as a backup discharge for the reuse system?
   ☒ No ☐ Yes, a Limited Wet Weather Discharge permitted under Rule 62-610.860, F.A.C.
   ☐ Yes, permitted under the APRICOT Act [Section 403.086(7), F.S.]
   ☐ Yes, permitted under other rules governing surface water discharges
10. Do you require construction of reclaimed water piping in new residential or other developments?
    ☐ Yes ☒ No
11. Do you require connection to the reclaimed water system when reclaimed water service becomes available?
    ☐ Yes ☒ No

Part VIII – Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required. For purposes of this form, "cross-connection" means a pipe-to-pipe connection between drinking water pipes and reclaimed water pipes.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☐ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☐ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? _____

   How many of these cross-connections have been eliminated? _____

   Please, attach a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? _____

   How many of the new reclaimed water connections were inspected at the time of initial connection? _____

4. How often are the reclaimed water connections of existing residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

   How often are the reclaimed water connections of existing non-residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

5. In addition to the number of new connections inspected in Item 3 above, how many existing connections were inspected during the reporting period? _____

Part IX - Rates Charged for the Use of Reclaimed Water

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) _____

   Gallonage charge (cents/1000 gal.) _____

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

Flat rate ($/month/connection) _____

Gallonage charge (cents/1000 gal.) _____

Part X - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.
h. Volume of each storage tank/pond and the total storage volume of all storage tanks and ponds (in units of million gallons).

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☐ **Summary of Metering and Rate Structure** – As noted in 403.064(16), Florida Statutes, utilities implementing reuse projects are encouraged to meter use of reclaimed water by all end users and to charge for the use of reclaimed water based on the actual volume used when such metering and charges can be shown to encourage water conservation. Metering and the use of volume-based rates are effective water management tools for the following reuse activities: residential irrigation, agricultural irrigation, industrial uses, landscape irrigation, irrigation of other public access areas, commercial and institutional uses such as toilet flushing, and transfers to other reclaimed water utilities. As required by 403.064(16), F.S., if this reuse system provides reclaimed water for any of the uses listed above, attach a summary of the utility's metering activities and the rate structure that the utility currently employs or plans to employ. The summary shall include the following:

a. Number of meters employed to monitor volume of reclaimed water used by customers.
b. If information is available, please provide per capita reclaimed water use for areas that meter and for unmetered areas. If available, please provide historical per capita usage data for before and after the utility began metering reclaimed water.
c. Provide information on the type of rate structure (i.e., inclining or declining block rates) for reclaimed water employed by the utility.
d. Provide a description of the utility's use of master meters (i.e., for a subdivision) or the use of individual meters (i.e., for single-family residential customers).
e. Provide a summary of the utility's plans for metering reclaimed water customers.

☒ **None of these items are required for this reuse system.**

Part XI - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: 11-29-10 _____
Signature

Phone: (321) 639-1273 Jerry Padrick
Name and Title (please print/type)

Company Name: Sunlake Estates

Address: 4865 Lake Ontario

City/State/Zip Code: Cocoa FL 32927

E-Mail: _____

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

SENT VIA E-MAIL TO: matlantisinvest@cfl.rr.com

July 30, 2010

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA, FLORIDA 32926

OCD-C-WW-10-0521

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On May 27, 2010, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. Upon reviewing the Ground Water Monitoring files, the following items listed below need to be addressed:

1. The Department has not received the groundwater monitoring reports for the fourth quarter of 2009 and first quarter of 2010. These reports were due by the end of October 2009 and the end of April 2010 respectively. Submit these reports as soon as possible.

2. Fecal coliform results were reported above the primary standard of 4 fecal coliform colonies per 100 milliliters (fcc/100mL) in the groundwater samples from all wells for the third quarter of 2009 at 10 fcc/100mL. Determine the cause of these concentrations and report this to the Department. If the groundwater samples were analyzed using less than 25 mL of sample, Report what changes the laboratory will make to meet the primary groundwater standard requirement.

The Department requests a written response addressing the items listed above within 14 days from the date of this letter. Your response should include an explanation of any corrective actions that either have been taken or that you plan to take. Please note that this letter and report, being part of the Departments investigation, is preliminary to agency action in accordance with Section 120.57(5), Florida Statutes. Please direct ground water questions to Marsha Johnson at (407) 893-3308, EXT. 2275. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence Anderson

E-filed

Clarence Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

CA/tp/ar

Enclosure: Inspection Report

cc: Anil Desai, FDEP Ground Water Section, anil.desai@dep.state.fl.us

COMET ENTRY DATE
__ / __ / __

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	5/27/2010 9:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	5/27/2010 10:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type: C E I [ ] Samples Taken(Y/N): @ Sample ID#: Samples Split (Y/N):

☒ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log book Volume : @ Page

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance: NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "◆"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		OTHER PROGRAM
IC	1.◆Permit	IC	3. Laboratory	NC	6. Facility Site Review	IC	9. ◆Effluent Quality
IC	2.◆Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10.◆Effluent Disposal
		IC	5.◆Records & Reports	IC	8.◆Operation & Maintenance	IC	11. Residuals/Sludge
	13. Other:					NC	12. Groundwater

Facility and/or Order Compliance Status: ☒ In-Compliance ☐ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions:

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)893-3313	June 30.2010
@ Signature of Reviewer	District Office/Phone Number	Date
CLARENCE ANDERSON Clarence Anderson	Central (407)893-7876	7/19/10

E-filed

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 issued 10/6/05 expires 10/1/2010.

RECORDS AND REPORTS: In compliance.
Bound logbook on-site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on-site. Discharge Monitoring Reports (DMRs), lab results and chains of custody are to be stored on site for Department review. DMRs have correct information submitted. Operations to correct DMRs reporting regarding percent capacity and qualifiers. Corrections to be resubmitted to the Department.

LABORATORY: In compliance.
PACE Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates; Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: In compliance.
Access: Locked gate with fence.
Signs posted.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight earthy odor. Aerobic digester.
Clarifier: Continuing to repair slight leakage noted on the east wall of the digester. Chlorine added to weirs for algae control.
CCC: Hypochlorination. Operations continue to seal slight leakage on outer walls of the CCC.
Well water utilized for cleanup.

FLOW MEASUREMENT: In compliance.
Stevens flow meter with chart recorder. Chart recorder not being utilized due to low flows.
Documentation of calibration for the flow meter was performed on 5/4/2010.

OPERATION AND MAINTENANCE: Facility maintained.

EFFLUENT: Clear. Minor. Review of the DMRs from by Orlando staff indicate from 1/09 to 3/10 the facility was in compliance.
TRC was 2.7 mg/L.

EFFLUENT DISPOSAL: In compliance.
0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds.
Saturation in ponds is excellent. 5 feet freeboard noted.

GROUND WATER: **Out of compliance.** E-filed
A review of the ground water files for this facility indicates the following deficiencies:
The Department has not received the groundwater monitoring reports for the fourth quarter of 2009 and first quarter of 2010. These reports were due by the end of October 2009 and the end of April 2010 respectively. Submit these reports as soon as possible.
Fecal coliform results were reported above the primary standard of 4 fecal coliform colonies per 100 milliliters (fcc/100mL) in the groundwater samples from all wells for the third quarter of 2009 at 10 fcc/100mL. Determine the cause of these concentrations and report this to the Department. If the groundwater samples were analyzed using

less than 25 mL of sample, report what changes the laboratory will make to meet the primary groundwater standard requirement.

RESIDUALS MANAGEMENT: In compliance.
Solids disposed of by American Bio-clean.

OTHER:

E-filed

AR3111

6 3/17
CA 3/16
TP 3/23

DOMESTIC WASTE
MALFUNCTION REPORT FORM
TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN , NOT TYPED)

DATE: 3/11/10 TIME: 9:33am (AM/PM) RECEIVED BY: Trudy Williams

REPORTED BY: David Harris w/ General Utilities

NAME OF PLANT/SYSTEM: Sunlake Estates COUNTY: Brevard

ADDRESS: _____

_____

TELEPHONE: ( ) _____

OWNER: _____

DATE & TIME OF FAILURE: _____

NATURE OF PROBLEM: minor spill due to a blockage in piping (Digester), less than 25gal

_____

CORRECTIVE ACTION TAKEN: _____

_____

_____

EXPECTED BACK IN SERVICE BY: (DATE & TIME) _____

REMARKS: _____

_____

_____

_____

_____

_____

FOLLOW-UP IN WRITING: (Y/N) _____

REVISED JUNE 6, 1989

Brevard
Sunlake ES WWTF

Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

RECEIVED
DEC 30 2009
DEP Central Dist.

DS 12/31
CA 1/4/10
TP
DS
SC 1/7/10

ANNUAL REUSE REPORT

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy (including all attachments) to each of the following three addresses:

   a. DEP Water Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system. For purposes of this form, "reuse system" means a network of pipes, pumping facilities, storage facilities, and appurtenances designed to convey and distribute reclaimed water from one or more domestic wastewater treatment facilities to one or more users of reclaimed water.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part X on pages 8 and 9 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

Part II - General Information

1. Reporting Period: October 1, 08 through September 30, 09
2. Date Submitted 12-28-09
3. Person Completing This Form

   Name Jerry Padrick

   Title operator

   Organization SunLake Homeowners Assc.

   Mailing Address 4865 Lake Ontario Dr.

   City/State/Zip Code Cocoa FL 32926

   Telephone (321) 639-1124

   E-mail

4. Reuse System Name SunLake Estates
5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

   City Cocoa County Brevard

DEP District (check one):

- ☐ Northwest (Pensacola)
- ☐ Northeast (Jacksonville)
- ☐ Southwest (Tampa)
- ☒ Central (Orlando)
- ☐ Southeast (West Palm Beach)
- ☐ South (Ft. Myers)

Water Management District (check one):

- ☐ Northwest Florida (Havana)
- ☐ Suwannee River (Live Oak)
- ☐ Southwest Florida (Brooksville)
- ☒ St. Johns River (Palatka)
- ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
SunLake Estates	3025900311	BA	.135	.037
Total Treated Wastewater				.037

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.
FT = Full treatment disinfection, as described in Rule 62-610.563(3)(b), F.A.C.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	.037
Supplemental Water Supplies (Enter the flow for each supplemental water source added by the utility)	
Surface Water	
Stormwater	
Ground Water	
Drinking Water	
Demineralization Concentrate (Blended with final reclaimed water only)	
Water Recovered from ASR [b]	
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	.037

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III		N	
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part X of this form.)	III		A	
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	.135	.037	8
	Surface Water Augmentation (Discharge to Class I Waters)	V	N	A	
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII		N	
	At Other Facilities	VII		A	
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			.135	.037	8

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]			

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. **Reuse** (From bottom of Part IV of this form)	.135
2. **Effluent Disposal** (From bottom of Part V)	
3. **Flow Stored in ASR** (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	.135

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII – Reuse Activities, Numbers of Customers, and Backup Discharges

1. How many single-family residences have reclaimed water service? None
2. How many golf courses are irrigated using reclaimed water? None
3. How many parks or playgrounds are irrigated using reclaimed water? None
4. How many schools are irrigated using reclaimed water? None
5. Is reclaimed water used to flush toilets? ☐ Yes ☒ No If yes, list locations where reclaimed water is used for toilet flushing. _____
6. Is reclaimed water used for fire protection? ☒ No ☐ Yes, in sprinkler systems
   ☐ Yes, in fire hydrants ☐ Yes, other (please describe) _____
7. How many cooling towers use reclaimed water from this reuse system? None
8. List or describe any unique or unusual uses of reclaimed water. None
9. Is there a surface water discharge that serves as a backup discharge for the reuse system?
   ☒ No ☐ Yes, a Limited Wet Weather Discharge permitted under Rule 62-610.860, F.A.C.
   ☐ Yes, permitted under the APRICOT Act [Section 403.086(7), F.S.]
   ☐ Yes, permitted under other rules governing surface water discharges
10. Do you require construction of reclaimed water piping in new residential or other developments?
    ☐ Yes ☒ No
11. Do you require connection to the reclaimed water system when reclaimed water service becomes available?
    ☐ Yes ☒ No

Part VIII – Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required. For purposes of this form, "cross-connection" means a pipe-to-pipe connection between drinking water pipes and reclaimed water pipes.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☐ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☐ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? _____

   How many of these cross-connections have been eliminated? _____

   Please, attach a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? _____

   How many of the new reclaimed water connections were inspected at the time of initial connection? _____

4. How often are the reclaimed water connections of existing residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

   How often are the reclaimed water connections of existing non-residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

5. In addition to the number of new connections inspected in Item 3 above, how many existing connections were inspected during the reporting period? _____

Part IX - Rates Charged for the Use of Reclaimed Water

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) _____

   Gallonage charge (cents/1000 gal.) _____

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

Flat rate ($/month/connection) _____

Gallonage charge (cents/1000 gal.) _____

Part X - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.
h. Volume of each storage tank/pond and the total storage volume of all storage tanks and ponds (in units of million gallons).

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☐ **Summary of Metering and Rate Structure** – As noted in 403.064(16), Florida Statutes, utilities implementing reuse projects are encouraged to meter use of reclaimed water by all end users and to charge for the use of reclaimed water based on the actual volume used when such metering and charges can be shown to encourage water conservation. Metering and the use of volume-based rates are effective water management tools for the following reuse activities: residential irrigation, agricultural irrigation, industrial uses, landscape irrigation, irrigation of other public access areas, commercial and institutional uses such as toilet flushing, and transfers to other reclaimed water utilities. As required by 403.064(16), F.S., if this reuse system provides reclaimed water for any of the uses listed above, attach a summary of the utility's metering activities and the rate structure that the utility currently employs or plans to employ. The summary shall include the following:

a. Number of meters employed to monitor volume of reclaimed water used by customers.
b. If information is available, please provide per capita reclaimed water use for areas that meter and for unmetered areas. If available, please provide historical per capita usage data for before and after the utility began metering reclaimed water.
c. Provide information on the type of rate structure (i.e., inclining or declining block rates) for reclaimed water employed by the utility.
d. Provide a description of the utility's use of master meters (i.e., for a subdivision) or the use of individual meters (i.e., for single-family residential customers).
e. Provide a summary of the utility's plans for metering reclaimed water customers.

☒ **None of these items are required for this reuse system.**

Part XI - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: 12-28-09

Signature

Phone: (321) 639-1273

Jerry Sadrick operator

Name and Title (please print/type)

Company Name: SunLake Homeowners Assc.

Address: 4865 Lake Ontario DR

City/State/Zip Code: Cocoa FL 32926

E-Mail:

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

SENT VIA E-MAIL TO: matlantisinvest@cfl.rr.com

December 16, 2009

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FLORIDA 32926

OCD-C-WW-09-0945

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Notice of Permit Expiration
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353

Dear Mr. Terry:

A review of our records indicates that the Wastewater Permit for the above-referenced facility will expire on October 1, 2010.

In accordance with Rule 62-620.335, Florida Administrative Code (F.A.C.), a permittee shall submit an application to renew an existing permit at least 180 days before the expiration date. **The renewal application is due on or before April 1, 2010.** If the renewal application is submitted on or prior to this date, the effectiveness of the current permit will be extended until the Department takes final action on the renewal application. Operation of a pollution source without a valid permit from the Department of Environmental Protection constitutes a violation of Rule 62-4.030, F.A.C., and Chapter 403.161, Florida Statutes.

The appropriate forms for renewing the wastewater permit are available at http://www.dep.state.fl.us/water/wastewater/forms.htm. The application must be prepared, signed and sealed by a professional engineer registered in the State of Florida and be accompanied by the appropriate permit application fee.

You are requested to advise the Department of your intent to submit a Wastewater Permit Application within fourteen (14) days of the date of this letter. If you have any questions, please contact Clarence Anderson or Daniel Hall at (407) 893-3313 or via e-mail at daniel.k.hall@dep.state.fl.us.

Sincerely,

Gary P. Miller
Program Manager
Wastewater Compliance/Enforcement

GM/dkh/ca

cc: DW Permitting Section

AR 4-13
6 4/17
AR 4/22
CA 4/23

TO: Florida Department of Environmental Protection

CO: Clarence Anderson

FROM: Jerry Padrick

RE: Sunlake Estates (OCD-C WW-09-0217)

DATE: April 13, 2009

RECEIVED
APR 14 2009
DEP Central Dist.

Mr. Anderson,

This letter is in response to an inspection by compliance officer Tom Powers on 02/17/2009.

The following items have been addressed:

1. Slight leakage was noted in East wall of digester. It was repaired on 04/10/2009.

2. The broken down trailer was removed as of 04/08/2009.

3.
A. Both of the ground water report have been completed and submitted as of 04/13/2009.
B. After talking to Marsha Johnson, I will write a summary table to her to attach to those reports about the ground water elevations on 04/13/2009.
C. After contacting Flowers Lab, they have noted an error by their department and will be sending a letter of explanation ASAP on 04/13/2009.

In summary, thank you for the extra time that you and Mr. Powers allowed me in addressing these issues.

Should you have any further questions please call me at 321-508-4714.

Thank you,

Jerry Padrick

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

SENT VIA E-MAIL TO: matlantisinvest@cfl.rr.com

March 20, 2009

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FLORIDA 32926

OCD-C-WW-09-0217

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On February 17, 2009, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following deficiencies were noted:

1. Slight leakage was noted on the east wall of the digester.

2. Remove the broken down vacant trailer from area of the wastewater treatment plant.

3. A review of the ground water files for this facility indicates the following deficiencies:

   a. The Department has not received the ground water monitoring reports for the second and third quarters of 2008. Submit these reports as soon as possible.

   b. Depth to water measurements were reported instead of ground water elevations for all well locations for the fourth quarter of 2007 and first quarter of 2008. In table format please provide the ground water elevations for all well locations for these quarters.

   c. For the third quarter of 2007 total dissolved solids (TDS) results were reported to be less than the chloride results. This appears to be a recording error or a laboratory error since TDS results should not be less than chloride results. Verify to the Department if these results were reported incorrectly or if this was laboratory error. If the results were reported incorrectly, provide the correct results.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Ground water questions should be addressed to Marsha Johnson at (407) 893-3308, Ext.2275. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence Anderson

Clarence Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

CA/tp/ar

Enclosure: Inspection Report

cc: Anil Desai, FDEP Ground Water Section, anil.desai@dep.state.fl.us
Dennise Judy, FDEP Domestic Waste Permitting Section, dennise.judy@dep.state.fl.us

COMET ENTRY DATE
__ / __ / __

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	2/17/09 1:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	2/17/09 2:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): N	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1.♦Permit	IC	3. Laboratory	NC	6. Facility Site Review	IC	9. ♦Effluent Quality
IC	2.♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10.♦Effluent Disposal
		IC	5.♦Records & Reports	IC	8.♦Operation & Maintenance	IC	11. Residuals/Sludge
	13. Other:					NC	12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)893-3313	March 15, 2009
@ Signature of Reviewer CLARENCE ANDERSON Clarence Anderson	District Office/Phone Number Central (407)893-3313	Date 3/19/09

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program
Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal
Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 issued 10/6/05 expires 10/1/2010.

RECORDS AND REPORTS: In compliance.
Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site. DMRs lab results and chains of custody are to be stored on site for Department review.

LABORATORY: In compliance.
PACE Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: **Out of compliance.**
Access: Locked gate with fence.
Signs posted.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight earthy odor. Aerobic digester.
Clarifier: **Slight leakage was noted on the east wall of the digester.** Chlorine added to weirs for algae control.
CCC: Hypochlorination. Reduced Pressure Zone Preventer (RPZ) calibrated and documented on 3/11/09.
CCC tank is under repair for slight leakage. Operations continue to seal slight leakage on outer walls of the CCC.
Remove the broken down vacant trailer from area of the wastewater treatment plant.

FLOW MEASUREMENT: In compliance.
Stevens flow meter with chart recorder.
Documentation of calibration for the flow meter was performed on 12/08.

OPERATION AND MAINTENANCE: Facility maintained.

EFFLUENT: Clear. Minor. Review of the DMRs, by Orlando staff, from 1/08 to 11/08 indicates the facility was in compliance.
TRC was 0.60 mg/L.

EFFLUENT DISPOSAL: In compliance.
0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds.
Saturation in ponds is excellent. 4 feet freeboard noted.

GROUND WATER: **Out of compliance.**
A review of the ground water files for this facility indicates the following deficiencies:
The Department has not received the ground water monitoring reports for the second and third quarters of 2008. Submit these reports as soon as possible.
Depth to water measurements were reported instead of ground water elevations for all well locations for the fourth quarter of 2007 and first quarter of 2008. In table format please provide the ground water elevations for all well locations for these quarters.
For the third quarter of 2007 total dissolved solids (TDS) results were reported to be less than the chloride results. This appears to be a recording error or a laboratory error since TDS results should not be less than chloride results. Verify to the Department if these results were reported incorrectly or if this was laboratory error. If the results were reported incorrectly provide the correct results.

RESIDUALS MANAGEMENT: In compliance.
Solids disposed of by American Bio-clean.

OTHER:

Close | Add Comment | Show docs related to...

Incident #: SWP080820 - 6552

SWP 416 on 08/20 at 10:23 AM

Last Modified: 08/20 at 10:28 AM

County: Brevard

Sludge Release (FAY)

Incident Details

Incident Type:	Wastewater
Incident Status:	Closed
Incident Severity:	Level 2
	2- Any release between 1,000 and 25,000 gallons contained on-site, or releases between 1,000 and 5,000 gallons not contained on-site
Incident Occurred Date/Time:	08/20/2008 08:30 AM EDT
Caller: Caller Address:	Jerry Patrick
Callback #:	321 639-1273 Time of Call: 08/20/2008 10:23 AM EDT
Caller Represents:	Sun Lake Estates

Comments

Caller with Sun Lake Estates advised that approximately 5,000 gallons of sludge spilled from sludge tank due to heavy rains from Tropical Storm Fay. No waterways were affected. Material was vacuumed up and lime was applied.

Incident Location

On Scene Contact:	
On-Scene Phone #:	
Facility Name:	
Facility Address:	616 Emerald Lake Dr.
Facility City:	Cocoa

Number Injured:	
Number of Fatalities:	
Number Missing:	
Evacuations/Shelters:	
Damage:	
File Attachment:	

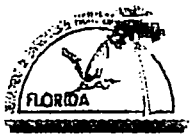
Responsible Party Information:

Name:	Sun Lake Estates	Phone Number	
Address:			

Incident Details:

Date Of Discharge:	08/20/2008	Status:	Ceased
Wastewater Characteristics:	Untreated	Domestic Wastewater	
Source Of Discharge:	Sludge tank	Estimated Amount Of Discharge:	5,000 gallons
Has Discharge Been Contained:	Yes	Clean-up Actions To Date:	Vacuumed up and lime applied.
Is State Or Emergency Response Requested:	No		

Brevard/Holiday Sunlake Estates
Sunlake



Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

RECEIVED
FEB 0 2 2009
DEP Central Dist.

ANNUAL REUSE REPORT

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy (including all attachments) to each of the following three addresses:

   a. DEP Water Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system. For purposes of this form, "reuse system" means a network of pipes, pumping facilities, storage facilities, and appurtenances designed to convey and distribute reclaimed water from one or more domestic wastewater treatment facilities to one or more users of reclaimed water.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part X on pages 8 and 9 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

Part II - General Information

1. Reporting Period: October 1, 2007 through September 30, 2008
2. Date Submitted 1-28-09
3. Person Completing This Form

   Name Jerry Padrick

   Title operator

   Organization N/A

   Mailing Address 4220 Temple St

   City/State/Zip Code Cocoa FL 32926

   Telephone (321) 639-1273

   E-mail JPadrick67@BellSouth.net
4. Reuse System Name Sunlake Estates
5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

   City Cocoa County Brevard

DEP District (check one):

- ☐ Northwest (Pensacola)
- ☐ Northeast (Jacksonville)
- ☐ Southwest (Tampa)
- ☒ Central (Orlando)
- ☐ Southeast (West Palm Beach)
- ☐ South (Ft. Myers)

Water Management District (check one):

- ☐ Northwest Florida (Havana)
- ☐ Suwannee River (Live Oak)
- ☐ Southwest Florida (Brooksville)
- ☐ St. Johns River (Palatka)
- ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
Sunlake Estates	3005P0037M	BA	.135	.044
Total Treated Wastewater				.044

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.
FT = Full treatment disinfection, as described in Rule 62-610.563(3)(b), F.A.C.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	.044
Supplemental Water Supplies (Enter the flow for each supplemental water source added by the utility)	
Surface Water	
Stormwater	
Ground Water	
Drinking Water	
Demineralization Concentrate (Blended with final reclaimed water only)	
Water Recovered from ASR [b]	
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	.044

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III			
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part X of this form.)	III			
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	.135	.044	8
	Surface Water Augmentation (Discharge to Class I Waters)	V			
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII			
	At Other Facilities	VII			
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			.135	.044	8

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]			

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. **Reuse** (From bottom of Part IV of this form)	.044
2. **Effluent Disposal** (From bottom of Part V)	
3. **Flow Stored in ASR** (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	.044

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.

☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII – Reuse Activities, Numbers of Customers, and Backup Discharges

1. How many single-family residences have reclaimed water service? None
2. How many golf courses are irrigated using reclaimed water? None
3. How many parks or playgrounds are irrigated using reclaimed water? None
4. How many schools are irrigated using reclaimed water? None
5. Is reclaimed water used to flush toilets? ☐ Yes ☒ No If yes, list locations where reclaimed water is used for toilet flushing. _____
6. Is reclaimed water used for fire protection? ☒ No ☐ Yes, in sprinkler systems
   ☐ Yes, in fire hydrants ☐ Yes, other (please describe) _____
7. How many cooling towers use reclaimed water from this reuse system? None
8. List or describe any unique or unusual uses of reclaimed water. None
9. Is there a surface water discharge that serves as a backup discharge for the reuse system?
   ☒ No ☐ Yes, a Limited Wet Weather Discharge permitted under Rule 62-610.860, F.A.C.
   ☐ Yes, permitted under the APRICOT Act [Section 403.086(7), F.S.]
   ☐ Yes, permitted under other rules governing surface water discharges
10. Do you require construction of reclaimed water piping in new residential or other developments?
    ☐ Yes ☒ No
11. Do you require connection to the reclaimed water system when reclaimed water service becomes available?
    ☐ Yes ☒ No

Part VIII – Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required. For purposes of this form, "cross-connection" means a pipe-to-pipe connection between drinking water pipes and reclaimed water pipes.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☐ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☐ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? _____

   How many of these cross-connections have been eliminated? _____

   Please, attach a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? _____

   How many of the new reclaimed water connections were inspected at the time of initial connection? _____

4. How often are the reclaimed water connections of existing residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

   How often are the reclaimed water connections of existing non-residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

5. In addition to the number of new connections inspected in Item 3 above, how many existing connections were inspected during the reporting period? _____

Part IX – Rates Charged for the Use of Reclaimed Water

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) _____

   Gallonage charge (cents/1000 gal.) _____

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

Flat rate ($/month/connection) N/A

Gallonage charge (cents/1000 gal.) N/A

Part X - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.
h. Volume of each storage tank/pond and the total storage volume of all storage tanks and ponds (in units of million gallons).

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☐ **Summary of Metering and Rate Structure** – As noted in 403.064(16), Florida Statutes, utilities implementing reuse projects are encouraged to meter use of reclaimed water by all end users and to charge for the use of reclaimed water based on the actual volume used when such metering and charges can be shown to encourage water conservation. Metering and the use of volume-based rates are effective water management tools for the following reuse activities: residential irrigation, agricultural irrigation, industrial uses, landscape irrigation, irrigation of other public access areas, commercial and institutional uses such as toilet flushing, and transfers to other reclaimed water utilities. As required by 403.064(16), F.S., if this reuse system provides reclaimed water for any of the uses listed above, attach a summary of the utility's metering activities and the rate structure that the utility currently employs or plans to employ. The summary shall include the following:

a. Number of meters employed to monitor volume of reclaimed water used by customers.
b. If information is available, please provide per capita reclaimed water use for areas that meter and for unmetered areas. If available, please provide historical per capita usage data for before and after the utility began metering reclaimed water.
c. Provide information on the type of rate structure (i.e., inclining or declining block rates) for reclaimed water employed by the utility.
d. Provide a description of the utility's use of master meters (i.e., for a subdivision) or the use of individual meters (i.e., for single-family residential customers).
e. Provide a summary of the utility's plans for metering reclaimed water customers.

☒ **None of these items are required for this reuse system.**

Part XI - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: 1-28-09 _____
Signature

Phone: (321) 639-1273 Jerry Padrick
Name and Title (please print/type)

Company Name: Sun Lake Homeowners Assc.

Address: 5600 N US 1

City/State/Zip Code: Cocoa FL 32927

E-Mail: MAtlantisInvest@CFL.RR.Com

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

July 10, 2008

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FLORIDA 32926

OCD-C-WW-08-0554

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On June 9, 2008, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following deficiencies were noted:

1. Fence located on the east perimeter of the disposal ponds is in disrepair.

2. Slight leakage noted on the east wall of the clarifier.

3. The Department has not received the annual test certification documentation for the Reduced Pressure Zone Preventer (RPZ) that is located on-site.

4. A review of the ground water files for this facility indicates the following deficiencies:

   a. Depth to water measurements were reported instead of ground water elevations for all well locations for the fourth quarter of 2007 and first quarter of 2008. In table format please provide the ground water elevations for all well locations for these quarters.

   b. For the third quarter of 2007 total dissolved solids (TDS) results were reported to be less than the chloride results. This appears to be a recording error or a laboratory error since TDS results should not be less than chloride results. Please verify to the Department if these results were reported incorrectly or if this was laboratory error. If the results were reported incorrectly please provide the correct results.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Ground water questions should be addressed to Marsha Johnson at (407) 893-3308, Ext.2275. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence Anderson

Clarence Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

CA/tp/ar

Enclosure: Inspection Report

cc: Anil Desai, FDEP Ground Water Section, anil.desai@dep.state.fl.us

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	6/9/08 10:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	6/9/08 12:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	*OWNER*		*216/871-6445*
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): N	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦"

PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL	
IC	1. ♦Permit	IC	3. Laboratory	NC	6. Facility Site Review	IC	9. ♦Effluent Quality
IC	2. ♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10. ♦Effluent Disposal
		IC	5. ♦Records & Reports	IC	8. ♦Operation & Maintenance	IC	11. Residuals/Sludge
	13. Other:					NC	12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)893-3313	July 1, 2008
@ Signature of Reviewer	District Office/Phone Number	Date
CLARENCE ANDERSON Clarence Anderson	Central (407)893-7876	7/9/08

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program
Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal
Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 expires 7/20/07. Application for renewal permit submitted to FDEP/Orlando Domestic Waste Section.

RECORDS AND REPORTS: In compliance.
Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site. DMRs lab results and chains of custody are to be stored on site for Department review.

LABORATORY: In compliance.
Test America Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: **Out of compliance.**
Access: Locked gate with fence. **Fence located on the east perimeter of the disposal ponds is in disrepair.**
Signs posted.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight earthy odor. Aerobic digestor.
Clarifier: **Slight leakage noted on the east wall of the clarifier.** Chlorine added to weirs for algae control.
CCC: Hypochlorination. **The Department has not received the annual test certification documentation for the Reduced Pressure Zone Preventer (RPZ) is located on-site.**
CCC tank is under repair for slight leakage. Operations continue to seal slight leakage on outer walls of the CCC.

FLOW MEASUREMENT: In compliance.
Stevens flow meter with chart recorder.
Documentation of calibration for the flow meter was performed on 10/17/07.

OPERATION AND MAINTENANCE: Facility maintained.

EFFLUENT: Clear. Minor. Review of the DMRs from by Orlando staff indicate from 5/07 to 4/08 the facility was in compliance.
TRC was 0.50 mg/L.

EFFLUENT DISPOSAL: In compliance.
0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds.
Saturation in ponds is excellent. 4 feet freeboard noted.

GROUND WATER: **Out of compliance.**
A review of the ground water files for this facility indicates the following deficiencies:
Depth to water measurements were reported instead of ground water elevations for all well locations for the fourth quarter of 2007 and first quarter of 2008. In table format please provide the ground water elevations for all well locations for these quarters.
For the third quarter of 2007 total dissolved solids (TDS) results were reported to be less than the chloride results. This appears to be a recording error or a laboratory error since TDS results should not be less than chloride results. Please verify to the Department if these results were reported incorrectly or if this was laboratory error. If the results were reported incorrectly please provide the correct results.

RESIDUALS MANAGEMENT: In compliance.
Solids disposed of by American Bio-clean.

OTHER:

5/21

DATE: May 20, 2008

TO: DEP

FROM: Jerry Padrick

RE: Sunlake Estates Mobile Home Park WWTP

On 05/19/2008 I got a call about a malfunction at Sunlake Estates wastewater plant and that the electricity had been cutting off and on in the park at least 3 times. When I arrived I found the surge pump coupler came loose from the distribution box as a result of water hammer. Water was shooting 15 feet in the air and going into my digester. After my digester was full it overflowed onto the ground. I repaired the coupler and treated the spill with lime. I also informed Tom Powers who then informed me to notify state hazardous spill office. It is estimated that approximately 2 to 3 thousand gallons of digester sludge was lost in the spill. No receiving waters were affected. If you have any questions please contact me at 321-508-4714.

Thank you,

Jerry Patrick (wastewater plant operator)

6 5/20 CA 5/20 11 5/20

Close | Add Comment | Show docs related to...

Incident #: SWP080519 - 3465

SWP 417 on 05/19 at 02:42 PM

Last Modified: 05/19 at 02:42 PM

County: Brevard

Sludge Spill

Incident Details

Incident Type:	Wastewater
Incident Status:	Closed
Incident Severity:	Level 2
	2- Any release between 1,000 and 25,000 gallons contained on-site, or releases between 1,000 and 5,000 gallons not contained on-site
Incident Occurred Date/Time:	05/19/2008 12:30 PM EDT
Caller: Caller Address:	Jerry Padrick
Callback #:	321-508-4714 Time of Call: 05/19/2008 02:42 PM EDT
Caller Represents:	Sun Lake Home Owner's Association

Comments

Approximately 2000-3000 gallons of sludge spilled due to equipment failure. No waterways affected. Lime was laid down on the material.

Incident Location

On Scene Contact:	
On-Scene Phone #:	
Facility Name:	
Facility Address:	616 Emerald lake Dr.
Facility City:	Cocoa

Number Injured:	
Number of Fatalities:	
Number Missing:	
Evacuations/Shelters:	
Damage:	
File Attachment:	

Responsible Party Information:

Name:	Sun Lake Home Owner's Association	Phone Number	
Address:			

Incident Details:

Date Of Discharge:	05/19/2008	Status:	Ceased
Wastewater Characteristics:			
Source Of Discharge:	equipment failure	Estimated Amount Of Discharge:	2000-3000 gallons
Has Discharge Been Contained:		Clean-up Actions To Date:	
Is State Or Emergency Response Requested:			

Ray, Amber Brevard Co.

KW 1/2/08
CA 1/7/08
TP 1/7

From: jpadrick67@bellsouth.net
Sent: Wednesday, January 02, 2008 9:36 PM
To: Ray, Amber
Subject: Sunlake Estates washout

Amber,

On 01/01/2008 I found both of my return lines closed by the valve. This was a result of vandalism. As per Tom Powers, I am following up with this e-mail. I have corrected and increased my Cl2 to dissinfect better.

Thank you, Jerry Padrick.

If you have any questions please call at 321-508-4714.

Ward, Wanda

From: jpadrick67@bellsouth.net
Sent: Tuesday, October 25, 2005 8:05 PM
To: Ward, Wanda
Cc: jpadrick67@bellsouth.net
Subject: Sunlake Estates (#fla010353)

Wanda,

Due to Hurricane Wilma, Sunlake Estates wastewater plant washed out an undetermined amount of solids. I have increased the chlorine to try to help dissinfect.

Thank you,

Jerry Padrick



Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

RECEIVED
SEP 12 2007
DEP Central Dist.

ANNUAL REUSE REPORT

RECEIVED
SEP 12 2007
DEP Central Dist.

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy (including all attachments) to each of the following three addresses:

   a. DEP Water Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system. For purposes of this form, "reuse system" means a network of pipes, pumping facilities, storage facilities, and appurtenances designed to convey and distribute reclaimed water from one or more domestic wastewater treatment facilities to one or more users of reclaimed water.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part X on pages 8 and 9 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

Part II - General Information

1. Reporting Period: October 1, 2005 through September 30, 2006
2. Date Submitted 9-10-07
3. Person Completing This Form

   Name Jerry Padrick

   Title Waste Water operator

   Organization Sun Lake Homeowners Assc.

   Mailing Address 4865 Lake Ontario Dr.

   City/State/Zip Code Cocoa FL 32926

   Telephone (321) 639-1273

   E-mail
4. Reuse System Name Sun Lake Estates
5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

   City Cocoa County Brevard

DEP District (check one):

- ☐ Northwest (Pensacola)
- ☐ Northeast (Jacksonville)
- ☐ Southwest (Tampa)
- ☒ Central (Orlando)
- ☐ Southeast (West Palm Beach)
- ☐ South (Ft. Myers)

Water Management District (check one):

- ☐ Northwest Florida (Havana)
- ☐ Suwannee River (Live Oak)
- ☐ Southwest Florida (Brooksville)
- ☒ St. Johns River (Palatka)
- ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
Sunlake Estates	3005 P00377	BA	.135	.060
Total Treated Wastewater				.060

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.
FT = Full treatment disinfection, as described in Rule 62-610.563(3)(b), F.A.C.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	.060
Supplemental Water Supplies (Enter the flow for each supplemental water source added by the utility)	
Surface Water	ϕ
Stormwater	ϕ
Ground Water	ϕ
Drinking Water	ϕ
Demineralization Concentrate (Blended with final reclaimed water only)	ϕ
Water Recovered from ASR [b]	ϕ
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	.060

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III			
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part X of this form.)	III	A	A	
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	.135	.060	8
	Surface Water Augmentation (Discharge to Class I Waters)	V			
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII			
	At Other Facilities	VII			
Toilet Flushing		III			
Fire Protection		III	A		
Wetlands				A	
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			.135	.060	8

[c] To be considered "reuse," either of the following conditions must exist:

- There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
- Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]			

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. **Reuse** (From bottom of Part IV of this form)	.060
2. **Effluent Disposal** (From bottom of Part V)	
3. **Flow Stored in ASR** (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	.060

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII – Reuse Activities, Numbers of Customers, and Backup Discharges

1. How many single-family residences have reclaimed water service? _____
2. How many golf courses are irrigated using reclaimed water? _____
3. How many parks or playgrounds are irrigated using reclaimed water? _____
4. How many schools are irrigated using reclaimed water? _____
5. Is reclaimed water used to flush toilets? ☐ Yes ☐ No If yes, list locations where reclaimed water is used for toilet flushing. _____
6. Is reclaimed water used for fire protection? ☐ No ☐ Yes, in sprinkler systems
   ☐ Yes, in fire hydrants ☐ Yes, other (please describe) _____
7. How many cooling towers use reclaimed water from this reuse system? _____
8. List or describe any unique or unusual uses of reclaimed water. _____
9. Is there a surface water discharge that serves as a backup discharge for the reuse system?
   ☒ No ☐ Yes, a Limited Wet Weather Discharge permitted under Rule 62-610.860, F.A.C.
   ☐ Yes, permitted under the APRICOT Act [Section 403.086(7), F.S.]
   ☐ Yes, permitted under other rules governing surface water discharges
10. Do you require construction of reclaimed water piping in new residential or other developments?
    ☐ Yes ☒ No
11. Do you require connection to the reclaimed water system when reclaimed water service becomes available?
    ☐ Yes ☒ No

Part VIII – Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required. For purposes of this form, "cross-connection" means a pipe-to-pipe connection between drinking water pipes and reclaimed water pipes.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☐ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☐ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? _____

   How many of these cross-connections have been eliminated? _____

   Please, attach a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? _____

   How many of the new reclaimed water connections were inspected at the time of initial connection? _____

4. How often are the reclaimed water connections of existing residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

   How often are the reclaimed water connections of existing non-residential reclaimed water customers inspected (i.e., daily, weekly, monthly, annually)? _____

5. In addition to the number of new connections inspected in Item 3 above, how many existing connections were inspected during the reporting period? _____

Part IX - Rates Charged for the Use of Reclaimed Water

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) _____

   Gallonage charge (cents/1000 gal.) _____

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

Flat rate ($/month/connection) _____

Gallonage charge (cents/1000 gal.) _____

Part X - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.
h. Volume of each storage tank/pond and the total storage volume of all storage tanks and ponds (in units of million gallons).

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☐ **Summary of Metering and Rate Structure** – As noted in 403.064(16), Florida Statutes, utilities implementing reuse projects are encouraged to meter use of reclaimed water by all end users and to charge for the use of reclaimed water based on the actual volume used when such metering and charges can be shown to encourage water conservation. Metering and the use of volume-based rates are effective water management tools for the following reuse activities: residential irrigation, agricultural irrigation, industrial uses, landscape irrigation, irrigation of other public access areas, commercial and institutional uses such as toilet flushing, and transfers to other reclaimed water utilities. As required by 403.064(16),

F.S., if this reuse system provides reclaimed water for any of the uses listed above, attach a summary of the utility's metering activities and the rate structure that the utility currently employs or plans to employ. The summary shall include the following:

a. Number of meters employed to monitor volume of reclaimed water used by customers.
b. If information is available, please provide per capita reclaimed water use for areas that meter and for unmetered areas. If available, please provide historical per capita usage data for before and after the utility began metering reclaimed water.
c. Provide information on the type of rate structure (i.e., inclining or declining block rates) for reclaimed water employed by the utility.
d. Provide a description of the utility's use of master meters (i.e., for a subdivision) or the use of individual meters (i.e., for single-family residential customers).
e. Provide a summary of the utility's plans for metering reclaimed water customers.

☐ **None of these items are required for this reuse system.**

Part XI - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: 9-10-07 _____
Signature

Phone: (321) 639-1273 Jerry Padrick operator
Name and Title (please print/type)

Company Name: Sunlake Estates / Aerobic Biomass Chemistry

Address: 4220 Temple St.

City/State/Zip Code: Cocoa FL. 32926

E-Mail: _____

Department of
Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Colleen M. Castille
Secretary

June 12, 2006

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FLORIDA 32926

OCD-C-WW-06-0474

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On April 4, 2006, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following deficiencies were noted:

1. The Department has not received a reclaimed water or effluent analysis report that is required annually. A certification, stating that no new non-domestic wastewater discharges have been added to the collection system since the last reclaimed water or effluent analysis was conducted, may be submitted in lieu of the report.

2. A review of the ground water files for this facility indicates the following deficiencies:

   b. The Department does not have on file the ground water monitoring report for the first quarter of 2005. Please submit this report.

   c. Results were not reported for background well MW-1 for the second quarter of 2005. Please submit these results. Depth to water measurements were reported instead of ground water elevations for the third and fourth quarters of 2004 and second, third and fourth quarters of 2005. This deficiency has appeared in previous non-compliance letters. Please calculate the ground water elevations and submit revised reports to the Department.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Ground water questions should be addressed to Hitesh Barde at (407) 893-3308. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence Anderson

Clarence Anderson
Supervisor
Wastewater Compliance/Enforcement

CA/tp/ww
Enclosure: Inspection Report

cc: Anil Desai, Program Manager, Ground Water Section, anil.desai@dep.state.fl.us

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	4/4/06 12:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	4/4/06 1:30

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): N	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1. ♦Permit	IC	3. Laboratory	IC	6. Facility Site Review	IC	9. ♦Effluent Quality
IC	2. ♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10. ♦Effluent Disposal
		NC	5. ♦Records & Reports	IC	8. ♦Operation & Maintenance	IC	11. Residuals/Sludge
	13. Other:					NC	12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)893-3313	6/7/06
@ Signature of Reviewer CLARENCE ANDERSON Clarence Anderson	District Office/Phone Number Central (407)893-3313	Date 6/9/06

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program
Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal
Every other field is self explanatory

INSPECTION COMMENTS

This facility is an existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 expires 7/20/07.

RECORDS AND REPORTS: **Out of compliance.**
Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site. DMRs lab results and chains of custody are to be stored on site for Department review.

The Department has not received a reclaimed water or effluent analysis report that is required annually. A certification, stating that no new non-domestic wastewater discharges have been added to the collection system since the last reclaimed water or effluent analysis was conducted, may be submitted in lieu of the report.

LABORATORY: In compliance.
Test America Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: In compliance.
Access: Locked gate with fence. Fence is being repaired. Signs posted.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight odor. Aerobic digestor.
Clarifier: Chlorine added to weirs for algae control.
CCC: Hypochlorination. RPZ noted.
CCC tank is under repair for slight leakage. Operations continue to seal slight leakage on outer walls of the CCC.

FLOW MEASUREMENT: In compliance.
Stevens flow meter with chart recorder.
Documentation of calibration for the flow meter was performed on 8/15/05.

OPERATION AND MAINTENANCE: Facility maintained.

EFFLUENT: Clear. Minor. Review of the DMRs from by Orlando staff indicate from 11/04 to 3/06 the facility was in compliance.
TRC was 1.4 mg/L.

EFFLUENT DISPOSAL: In compliance.
0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds. Saturation in ponds is excellent. 4 feet freeboard noted.

GROUND WATER: **Out of compliance.**
A review of the ground water files for this facility indicates the following deficiencies:
The Department does not have on file the ground water monitoring report for the first quarter of 2005. Please submit this report.
Results were not reported for background well MW-1 for the second quarter of 2005. Please submit these results.
Depth to water measurements were reported instead of ground water elevations for the third and fourth quarters of 2004 and second, third and fourth quarters of 2005. This deficiency has appeared in previous non-compliance letters. Please calculate the ground water elevations and submit revised reports to the Department.

RESIDUALS MANAGEMENT: American Bio-clean.
Solids to be cleaned up from a malfunction form the digestor, which occurred on 3/28/06.

OTHER: Air pack on site.

Jerry Padrick
4220 Temple Street
Cocoa, FL 32926 PHONE: 321-508-4714

Aerobicbiomass Clarifying

Gr 3/31
CA 4/3
T 4/18

Fax

To:	DEP (Wanda)	**From:**	JERRY PADRICK
Fax:	1-407-893-3166	**Pages:**	one
Phone:		**Date:**	3/30/2006
Re:	Sunlake Estates	**CC:**	

x **Urgent** x **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

• **Comments:** Wanda, on 03/29/2006, at 6:30 p.m. I received a call saying there was some problem at Sunlake Estates. I went to the site and found sludge had overflowed from my digester tank due to waste valve was not closed properly (maybe rags or just did not seal properly). I applied lime for stabilization and proceeded with the cleanup. I put dirt as an absorbent and will go back today to remove the dirt. No solids reached any receiving waters. If you have any further questions give me a call.

Thank you, Jerry Padrick (321-508-4714)

Left message on Tom Powers Machine 3/29/06.

RECEIVED
DEC 28 2005
Central Dist. - DEP

KW 12/30
CA 1/3
TP 1/4

Part II - General Information

1. Reporting Period: October 1, 2004 through September 30, 2005
2. Date Submitted 12-27-05
3. Person Completing This Form
   - Name Jerry Padrick
   - Title Waste Water operator
   - Organization Sunlake Estates Homeowners Assc.
   - Number and Street 4865 Lake Ontario Dr.
   - City/State/Zip Code Cocoa FL 32926
   - Telephone 321-639-1273
4. Reuse System Name Sunlake Estates
5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System
   a. Location of Facilities
      City Cocoa County Brevard

DEP District (check one):

- ☐ Northwest (Pensacola)
- ☐ Northeast (Jacksonville)
- ☐ Southwest (Tampa)
- ☒ Central (Orlando)
- ☐ Southeast (West Palm Beach)
- ☐ South (Ft. Myers)

Water Management District (check one):

- ☐ Northwest Florida (Havana)
- ☐ Suwannee River (Live Oak)
- ☐ Southwest Florida (Brooksville)
- ☒ St. Johns River (Palatka)
- ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
Sunlake Estates	3005P00377	BA	.135	.050
Total Treated Wastewater				.050

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	.050
Supplemental Water Supplies (Circle types of water used - Enter total flow)	¢
Surface Water Ground Water	
Stormwater Drinking Water	
Water Recovered from ASR [b]	¢
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	.050

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III		A	
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part IX of this form.)	III	A	A	
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV	.135	.050	8
	Absorption Fields [c]	IV			
	Surface Water Augmentation (Discharge to Class I Waters)	V			
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII	A		
	At Other Facilities	VII		A	
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			.135	.050	8

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]			

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. Reuse (From bottom of Part IV of this form)	
2. Effluent Disposal (From bottom of Part V)	.135
3. Flow Stored in ASR (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	.135

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII - Public Access Reuse Systems

A. Number of Customers

1. How many single-family residences have reclaimed water service? None
2. How many golf courses are irrigated using reclaimed water? None
3. How many parks or playgrounds are irrigated using reclaimed water? None
4. How many schools are irrigated using reclaimed water? None
5. List or describe any unique or unusual uses of reclaimed water. None

B. Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☐ Yes ☒ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☐ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? 0

   How many of these cross-connections have been eliminated? _____

   Please, attached a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? 0

   How many inspections of new reclaimed water connections were made at the time of initial connection? _____

4. How often are the reclaimed water facilities owned/operated by existing reclaimed water customers inspected? N/A

5. In addition to the new customer inspections reported in Item 3 above, how many routine or periodic inspections of existing customers were conducted during the reporting period? N/A

Part VIII - Charges for the Use of Reclaimed Water (Optional)

Completion of this part of the form is optional. Data on charges for the use of reclaimed water is valuable to utilities and agencies involved in reuse. This type of information is particularly valuable to utilities that are in the process of developing reuse programs. It is hoped that you will share your experience with others by completing this part.

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) _____ A

   Gallonage charge (cents/1000 gal.) _____ A

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

   Flat rate ($/month/connection) _____ A

   Gallonage charge (cents/1000 gal.) _____ A

Part IX - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

A

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☐ **None of these items are required for this reuse system.**

Part X - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date 12-1-05 _____
Signature

Phone: 321-639-1273 Jerry Podeszk operator
Name and Title (please type)

Company Sunlake Homeowners ASSC.

Address 4865 Lake Ontario Dr.

City/State/Zip Cocoa FL 32926

6m 8/16
CA 8/16
T 8/31

RECEIVED
AUG 16 2005
Central Dist. - DEP

DATE: August 13, 2005

TO: DEP

FROM: JERRY PADRICK

RE: SUNLAKE ESTATES MHP (FLA101353)

This letter is a follow-up to a malfunction on 08/11/05. In the AM of 08/11/05 Sunlake Estates received 4 ½ inches of rain and a loss of power due to a severe electrical storm. When inspecting the treatment facility, I found solids on the ground and on the pavement in front of the sewer plant. I treated the area with lime immediately. I then found the blower timer had been off for two hours. I reset the time and notified Wanda with DEP. The estimated amount of spill was 200 gallons or less. If you have any questions please do not hesitate to contact me (321-508-4714).

Sincerely,

Jerry Padrick

RECEIVED SEP 14 2005

Brevard 8/11
CA 8/11
JH

DOMESTIC WASTE
MALFUNCTION REPORT FORM
TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN , NOT TYPED)

DATE: 8/11/05 TIME: 12:43 (AM/PM) RECEIVED BY: Wanda

REPORTED BY: Jerry Padrick

NAME OF PLANT/SYSTEM: Sun Lake Estates COUNTY: Brevard

ADDRESS: _____

TELEPHONE: ( ) _____

OWNER: _____

DATE & TIME OF FAILURE: 8/10/05 5:30 PM

NATURE OF PROBLEM: Main power outage due to storm w/o power 5-6 hours 200 gal. Sludge spilled from effluent Well area of station

CORRECTIVE ACTION TAKEN: Reset Power to everything once power to main Plant was restored - limed area - checked for any other problems

EXPECTED BACK IN SERVICE BY: (DATE & TIME) ~~ASAP~~ twice daily

REMARKS: Made found no other problems. System is running okay.

RECEIVED SEP 14 2005

FOLLOW-UP IN WRITING: (Y/N) _____

REVISED JUNE 6, 1989

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Colleen Castille
Secretary

May 2, 2005

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FL 32926

OCD-C-WW-05-0336

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On February 24, 2005, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following deficiencies were noted:

1. The Department has not received the annual reuse reports for 2003 and 2004. This report should be submitted by January 1 of each year.
2. A review of the ground water files for this facility indicates the following deficiencies:
   a. The Department does not have the ground water monitoring reports for the third quarter of 2003 and third and fourth quarters of 2004 on file. Please submit these reports as soon as possible.
   b. Depth to ground water measurements instead of ground water elevations were reported for all quarters of data reviewed. Please calculate the ground water elevations for all quarters of incorrect data. Please submit a table of the correct data to the Department.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Ground water questions should be addressed to Marsha Johnson at (407) 893-3301. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence Anderson

Clarence Anderson
Supervisor
Wastewater Compliance/Enforcement

CA/tp/ww
Enclosure: Inspection Report
cc: Anil Desai, Program Manager, Ground Water Section, anil.desai@dep.state.fl.us

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	2/24/05 9:30
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	2/24/05 10:30

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): N	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1.♦Permit	IC	3. Laboratory	IC	6. Facility Site Review	IC	9. ♦Effluent Quality
IC	2.♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10.♦Effluent Disposal
		IC	5.♦Records & Reports	IC	8.♦Operation & Maintenance	IC	11. Residuals/Sludge
	13. Other:					IC	12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)893-3313	03/29/05
@ Signature of Reviewer CLARENCE ANDERSON Clarence Anderson	District Office/Phone Number Central (407)893-3313	Date 4/5/05

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program
Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal
Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 issued 7/21/00 expires 7/20/05.

RECORDS AND REPORTS: In compliance.
Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site. DMRs lab results and chains of custody are to be stored on site for Department review.

LABORATORY: In compliance.
Test America Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8 hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: In compliance.
Access: Locked gate with fence. Sins posted.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight odor. Aerobic digestor.
Clarifier: Chlorine added to weirs for algae control.
CCC: Hypochlorination. RPZ noted.
CCC tank is under repair for slight leakage.

FLOW MEASUREMENT: In compliance.
Stevens flow meter with chart recorder.
Documentation of calibration for the flow meter was performed on 11/04.

OPERATION AND MAINTENANCE: Facility maintained.

EFFLUENT: Clear. Minor. Review of the DMRs from 6/03 to 10/04 by Orlando staff indicate on 11/03 and 12/03 sampling data was missing for nitrates. Operations will submit a letter explaining this deficiency. Annual averages to be calculated correctly as explained to operations.
TRC was 1.2 mg/L.

EFFLUENT DISPOSAL: In compliance.
0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds. Saturation in ponds is excellent. 4 feet freeboard noted.

GROUND WATER: **Out of Compliance.**

A review of the ground water files for this facility indicates the following deficiencies:

The Department does not have the ground water monitoring reports for the third quarter of 2003 and third and fourth quarters of 2004 on file. Please submit these reports as soon as possible.

Depth to ground water measurements instead of ground water elevations were reported for all quarters of data reviewed. Please calculate the ground water elevations for all quarters of incorrect data. Please submit a table of the correct data to the Department.

RESIDUALS MANAGEMENT: Aquatech Inc.

OTHER: Air pack on site.

Interoffice Memo

Date: March 17, 2005

To: Tom Powers

Through: Anil Desai, PG

From: Marsha Johnson

Subject: Sun Lake Estates - DW,
Brevard County, GMS # 3005P00377;
Ground Water Quality Monitoring Review

Priority: Routine

Per your request, the following review summarizes ground water quality monitoring issues at the above-referenced facility:

SUMMARY

- Permit Number FLA010353 was issued on July 21, 2000 and will expire on July 20, 2005.
- The facility was constructed in 1993. The permit contained a ground water monitoring plan, but the monitoring wells were not installed until August 1995. The first sampling event was completed in December 1995, but ground water monitoring was not completed for the first and second quarters of 1996 due to miscommunication between the Homeowners Association, the operator and Sheffield Engineering.
- The ground water monitoring plan for the facility includes three (3) monitoring wells as follows:

  Monitoring well MW-1 is the background well; monitoring well MW-2 is the intermediate well; and monitoring well MW-3 is the compliance well. All wells are located near 4 dual-cell percolation ponds.

- The following comments pertain to ground water monitoring reports submitted by the facility for the fourth quarter of 2002 and first and second quarters of 2003:

  A fecal coliform concentration was reported at 2 CFU/100 mL (B) for intermediate well MW-2 for the first quarter of 2003. Data qualifier code "B" indicates that results are based upon colony counts outside the acceptable range. The ground water monitoring report for the fourth quarter of 2002 noted that the well cap for MW-2 was missing.

  TDS concentrations above the secondary standard of 500 mg/L were reported from compliance well MW-3 for the fourth quarter of 2002 and first and second quarters of 2003. Elevated TDS levels are not enforceable because another Maximum Contaminant Level was not exceeded.

  The ground water monitoring report for the fourth quarter of 2002 stated that monitoring well MW-2 was missing, the well was cut off at grade by maintenance equipment, and the owner has been notified about repairs. These problems were

noted on the reports for the second and third quarters of 2002. These reports stated that the well caps were missing for monitoring wells MW-1 and MW-3. All wells were repaired on March 7, 2003. The repairs consisted of securing the wells with 1 ½ inch steel pipe, 10 feet long, painted fluorescent orange, and locked with new master locks. Damaged well MW-2 was repaired and the well cap was replaced for MW-3. The new top of casing elevation for well MW-2 was reported.

- The following comments pertain to ground water monitoring reports submitted by the facility for the fourth quarter of 2003 and first and second quarters of 2004:

  The Department does not have the ground water monitoring reports for the third quarter of 2003 and third and fourth quarters of 2004 on file.

  TDS concentrations were reported above the secondary standard of 500 mg/L for ground water samples from compliance well MW-3 for the fourth quarter of 2003 and second quarter of 2004. No other MCLs were exceeded.

  Turbidity measurements above the guidance limit of 20 NTUs were reported for ground water samples from compliance well MW-3 for the third quarter of 2003 and first and second quarters of 2004. This may have affected analysis requirements.

  Samples for nitrate analysis were not collected for the fourth quarter of 2003. An explanation was provided that new sampling personnel at TestAmerica did not collect the samples for nitrate analysis. Nitrate results were reported for the first and second quarters of 2004.

  Depth to ground water measurements instead of ground water elevations were reported for all quarters of data reviewed.

CONCLUSIONS

Out of Compliance.

A review of the ground water files for this facility indicates the following deficiencies:

The Department does not have the ground water monitoring reports for the third quarter of 2003 and third and fourth quarters of 2004 on file. Please submit these reports as soon as possible.

Depth to ground water measurements instead of ground water elevations were reported for all quarters of data reviewed. Please calculate the ground water elevations for all quarters of incorrect data. Please submit a table of the correct data to the Department.

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Colleen Castille
Secretary

January 31, 2005

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FLORIDA 32926

OCD-C-WW-05-0079

ATTENTION THAD TERRY
PRESIDENT

Brevard County - DW
Second Notice of Permit Expiration
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353

Dear Mr. Terry:

On October 4, 2004, the Department notified you that Wastewater Permit Number FLA010353 would expire on **July 20, 2005,** and that an application must be submitted no later than **January 20, 2005, 180 days** prior to the expiration date of the referenced permit. As of this date, the Department has not received the required application. **Every effort should be made to submit the application and make it complete prior to the expiration date, July 20, 2005.**

Rule 62-620.335(4), Florida Administrative Code (F.A.C.), states "The late submittal of a renewal application shall be considered timely and sufficient for the purpose of extending the effectiveness of the expiring permit only if it is submitted and made complete before the expiration date".

Failure to comply with the requirements of Rule 62-620.335, F.A.C., will result in the facility operating without a valid permit issued by the Department which constitutes a violation of Chapter 403.161, Florida Statutes, and Rule 62-4.030, F.A.C., and will result in initiation of enforcement action.

If you have any questions, please do not hesitate to call Clarence Anderson or Dana Bean at (407) 893-3313 or e-mail at dana.bean@dep.state.fl.us.

Sincerely,

Gary P. Miller
Program Manager
Wastewater Compliance/ Enforcement

GM/db
cc: DW Permitting Section

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Colleen Castille
Secretary

October 4, 2004

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DR
COCOA FL 32926

OCD-C-WW-04-0975

ATTENTION THAD TERRY
PRESIDENT

Brevard County - DW
Notice of Permit Expiration
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353

Dear Mr. Terry:

A review of our records indicates that the Wastewater Permit for the above-referenced facility will expire on **July 20, 2005**.

In accordance with Rule 62-620.335, Florida Administrative Code (F.A.C.), a permittee shall submit an application to renew an existing permit at least 180 days before the expiration date of the existing permit. **The renewal application is due on or before January 20, 2005.** If the renewal application is submitted on or prior to this date, the effectiveness of the current permit will be extended until the Department takes final action on the renewal application. Operation of a pollution source without a valid permit from the Department of Environmental Protection constitutes a violation of Rule 62-4.030, F.A.C., and Chapter 403.161, Florida Statutes.

The appropriate forms for renewing the wastewater permit are available on the Internet at http://www.dep.state.fl.us/water/wastewater/forms.htm. The application must be prepared, signed and sealed by a professional engineer registered in the State of Florida and be accompanied by the appropriate permit application fee.

You are requested to advise the Department, in writing, of your intent to submit a Wastewater Permit Application within fourteen (14) days of the date of this letter. If you have any questions, please contact Clarence Anderson or Dana Bean at (407) 893-3313 or via e-mail at dana.bean@dep.state.fl.us.

Sincerely,

Gary P. Miller
Program Manager
Wastewater Compliance/Enforcement

GM/db
c: DW Permitting Section File

6/18
CAP 6/18
TP 6/29

DATE: June 16, 2004

TO: Tom Powers (DEP)

FROM: Jerry Padrick

RE: Sunlake Estates WWTP

Dear Tom,

At 6:45 Wednesday morning, June 16, I received a phone call from the Ms. Sheffield who lives next to the Sunlake Estates WWTP. She said that there was what looked like water, coming overflowing from the plant. I immediately left my home and arrived at the plant at 7:00 AM. What I found was a broken potable water valve which had ran into the digester and overflowed it on to the surrounding plant area. I immediately repaired the potable water line and proceeded with cleanup. I disinfected the area with lime and covered with dirt. At no time did the spill come in contact with any receiving water. It was contained within the surrounding plant area.

If you have any questions, please feel free to call me at 321-508-4714.

Thank you,

Jerry Padrick

Tom Kaiser
Wanda Please give Tom this info
THANKS JP

CA 1/26
TP 2/22

FLORIDA RURAL WATER ASSOCIATION
2970 Wellington Circle West, Suite 101
Tallahassee, FL 32308

WEIR OR FLUME CALIBRATION
Flow Values Obtained by Using a Weir or Flume

FACILITY NAME & ID #: Sun Lake Estates / FLA010353

FACILITY LOCATION: Canaveral Groves

PRIMARY DEVICE

V-NOTCH WEIR	PARSHALL FLUME	RECTANGULAR WEIR
DEGREE OF V-NOTCH	WIDTH OF THROAT (FT)	CREST LENGTH (FT)
45	N/A	N/A

Gauge setting comparison using yardstick or centers rule: NO GAGE ☐Satisfactory ☐Unsatisfactory

Physical inspection of primary device approach device and discharge: ☑Satisfactory ☐Unsatisfactory

SECONDARY DEVICE

TYPE: Mechanical Float

MAKE/MODEL/SERIAL#: Stevens/61R / #11138-84

	LOW FLOW	MODERATE FLOW	HIGH FLOW
STAFF GAGE READING (FT)	.29	.31	.35
ACTUAL FLOW (MGD)	.0303	.0358	.0485
TOTALIZER OR RECORDER READING(MGD)	.030	.035	.05
PERCENT DIFFERENCE (%)	1 %	2 %	3 %

Physical Inspection of Secondary Device: ☑Satisfactory ☐Unsatisfactory
Totalizer Accuracy Check Using Stopwatch: ☑Satisfactory ☐Unsatisfactory

COMMENTS:

I hereby certify that the above test was performed in accordance with the best available technology

TECHNICIAN SIGNATURE: _____ **DATE:** 8/7/03

Tom Stringer (54) 872-5207

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

January 30, 2004

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FL 32926

OCD-C-WW-04-0103

ATTENTION THAD TERRY
PRESIDENT

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353

Dear Mr. Terry:

On December 22, 2003, Department personnel conducted a routine inspection of your wastewater facility. At the time of the inspection, the overall operation of your facility was found to be in substantial compliance with the terms and conditions in Permit Number FLA010353. A copy of the inspection report is enclosed for your review.

Your continued cooperation with our wastewater program is appreciated. If you have any questions, please contact me at the above address or at (407) 893-3313.

Sincerely,

T. Powers

Tom Powers
Environmental Specialist
Wastewater Compliance/Enforcement

TP/ea
Enclosure

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	12/22/03 12:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	12/22/03 1:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): Y	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Minor; U=Unsatisfactory; Blank=Not Evaluated

Significant Non-Compliance Criteria Should be Reviewed when Unsatisfactory Ratings Are Given in Areas Marked by a "♦ "

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
S	1. ♦Permit	S	3. Laboratory	S	6. Facility Site Review	S	9. ♦Effluent Quality
	2. ♦Compliance Schedules	S	4. Sampling	S	7. Flow Measurement	S	10. ♦Effluent Disposal
		S	5. ♦Records & Reports	S	8. ♦Operation & Maintenance	S	11. Residuals Management
	13. Other:					S	12. Groundwater

Facility and/or Order Compliance Status: ☒ In-Compliance ☐ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions:

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Orlando 407/893-3313	1/29/04
@ Signature of Reviewer CLARENCE ANDERSON Clarence Anderson	District Office/Phone Number Orlando 407/893-3313	Date 1/29/04

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI

Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program

Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal

Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: FLA010353 issued 7/21/00 expires 7/20/05.

RECORDS AND REPORTS: Satisfactory. Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site.
DMRs lab results and chains of custody are to be stored on site for Department review.

LABORATORY: Test America Laboratory. Department of Health certified.

SAMPLING: Grab samples are being taken for the influent and effluent. An 8 hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: Satisfactory.
Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight odor. Aerobic digestor.
Clarifier: Chlorine added to weirs for algae control.
CCC: Hypochlorination. RPZ noted.
CCC tank is under repair for slight leakage.

FLOW MEASUREMENT: Satisfactory. Stevens flow meter
Documentation of calibration for the flow meter was performed on 8/7/03.

OPERATION AND MAINTENANCE: Satisfactory.

EFFLUENT: Clear. Minor. Review of the DMRs from 9/02 to 5/03 by Orlando staff indicate on 5/03 sampling data was missing. Operations will submit a letter explaining this deficiency. Annual averages to be calculated correctly as explained to operations.
TRC was 1.5 mg/L.

EFFLUENT DISPOSAL: Satisfactory.

GROUND WATER: Satisfactory.

RESIDUALS MANAGEMENT: Indian River County RMF facility.

OTHER: Air pack on site.

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

January 30, 2004

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FL 32926

OCD-C-WW-04-0103

ATTENTION THAD TERRY
PRESIDENT

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353

Dear Mr. Terry:

On December 22, 2003, Department personnel conducted a routine inspection of your wastewater facility. At the time of the inspection, the overall operation of your facility was found to be in substantial compliance with the terms and conditions in Permit Number FLA010353. A copy of the inspection report is enclosed for your review.

Your continued cooperation with our wastewater program is appreciated. If you have any questions, please contact me at the above address or at (407) 893-3313.

Sincerely,

T. Powers

Tom Powers
Environmental Specialist
Wastewater Compliance/Enforcement

TP/ww
Enclosure

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	12/22/03 12:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	12/22/03 1:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): Y	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Minor; U=Unsatisfactory; Blank=Not Evaluated

Significant Non-Compliance Criteria Should be Reviewed when Unsatisfactory Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
S	1.♦Permit	S	3. Laboratory	S	6. Facility Site Review	S	9. ♦Effluent Quality
	2.♦Compliance Schedules	S	4. Sampling	S	7. Flow Measurement	S	10.♦Effluent Disposal
		S	5.♦Records & Reports	S	8.♦Operation & Maintenance	S	11. Residuals Management
	13. Other:					S	12. Groundwater

Facility and/or Order Compliance Status: ☒ In-Compliance ☐ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions:

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Orlando 407/893-3313	1/29/04
@ Signature of Reviewer CLARENCE ANDERSON Clarence Anderson	District Office/Phone Number Orlando 407/893-3313	Date 1/29/04

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
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ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI

Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program

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INSPECTION COMMENTS

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PERMIT: FLA010353 issued 7/21/00 expires 7/20/05.

RECORDS AND REPORTS: Satisfactory. Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site.
DMRs lab results and chains of custody are to be stored on site for Department review.

LABORATORY: Test America Laboratory. Department of Health certified.

SAMPLING: Grab samples are being taken for the influent and effluent. An 8 hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: Satisfactory.
Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
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Clarifier: Chlorine added to weirs for algae control.
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CCC tank is under repair for slight leakage.

FLOW MEASUREMENT: Satisfactory. Stevens flow meter
Documentation of calibration for the flow meter was performed on 8/7/03.

OPERATION AND MAINTENANCE: Satisfactory.

EFFLUENT: Clear. Minor. Review of the DMRs from 9/02 to 5/03 by Orlando staff indicate on 5/03 sampling data was missing. Operations will submit a letter explaining this deficiency. Annual averages to be calculated correctly as explained to operations.
TRC was 1.5 mg/L.

EFFLUENT DISPOSAL: Satisfactory.

GROUND WATER: Satisfactory.

RESIDUALS MANAGEMENT: Indian River County RMF facility.

OTHER: Air pack on site.

DEP COMPLIANCE LETTER

RECEIVED
MAR 18 2003
Central Dist. - DEP

March 15, 2003

TO: Clarence Anderson

FROM: Jerry Padrick (representing Sunlake Estates)

1. Solids were noted in the chlorine contact chamber.
   Response: Due to two air diffusers being clogged, this increased the RAS which caused disturbance of the blanket. After cleaning the diffusers, problem was resolved and contact chamber was cleaned with pump, and pumped into surge tank for retreatment.
2. Solids were noted in the clarifier.
   Response: I assume this was caused as a result of number one and blanket being high.
3. The containment box for the return lines was in need of repair.
   Response: Diamondback is manufacturing an aluminum cover for 150 dollars, and will be installed upon completion.
4. Discharge monitoring reports are now being completed above all shaded areas.
5. Enclosed are the DMRs for the months of April and May 2002. I do not know why they were not received by your office.
6. Chart recorder has paper now and did not have it during the inspection due to clogging in the mechanism. After careful review, I found a frog inside the containment box. I have now sealed the unit to prevent this.
7. Documentation for calibration of the flow meter was faxed to Wanda, domestic wastewater secretary.
8. An overgrowth of dense vegetation in the percolating ponds has now been cut at 50 dollars per hour by Hank's Tractor Service.
9. A review of the DMRs for this facility indicates the following violation of part one of the wastewater permit.
   Response:
   (a) After careful review of my records of DMRs from October of 2001 to November of 2002, I found I was within limits of the permit specifications. CBOD of the effluent did not exceeded a single sample of 60; however, annual average carried over to be high from previous months.
   (b) TSS was only high in April above a single sample of 60 maximum to be 76.5 due to diffusers clogging and therefore increasing the RAS; however, the annual average carried over to be high from previous months.
10. A review of groundwater files for this facility indicates the following: On 03/07 the wells were repaired by myself after talking to Ms. Lucas. I have also secured the sampling wells with 1 ½ inch steel pipe, 10 feet long, painted fluorescent orange, and locked with new master locks. Ms. Lucas said this would be

acceptable. Also I have repaired the damaged monitoring well number two and replaced monitoring well number three well cap. I believe, according to our engineer, this is sufficient for passing DEP requirements.

I hope this is sufficient, and if you have any further questions please do not hesitate to call me at 321-508-4714.

Sincerely,

Jerry Padrick

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FL 32926

OCD-C-WW-03-0086

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility Permit Number: FLA010353
Noncompliance Letter

Dear Mr. Terry:

On November 7, 2002, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following deficiencies were noted:

1. Solids were noted in the chlorine contact chamber.
2. Solids were noted in the clarifier.
3. The containment box for the return lines was in need of repair.
4. Part A of the Discharge Monitoring Reports (DMRs) is not being filled out completely. All of the blocks above the shaded areas containing monitoring instructions including sample measurements, units, frequency of analysis, sample type, number of exceedances (No. Ex), average, maximum, and minimum must be completed.
5. The DMRs for the months of April and May 2002 were not received. DMRs must be submitted monthly.
6. The chart recorder was not functioning.
7. Documentation of calibration for the flow meter was not available on-site. Flow measuring devices must be calibrated at least annually.
8. An overgrowth of dense vegetation prohibited safe access to the percolation pond(s). The entire perimeter of the percolation pond berm must be accessible.
9. A review of the DMRs for this facility indicated the following violations of Part I of Wastewater Permit Number FLA010353:
   a. On numerous occasions, the Annual Average for Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) as computed from the Discharge Monitoring Reports (DMRs) exceeded 20.0 milligram per Liter.

b. On numerous occasions, the Annual Average for Total Suspended Solids (TSS) as computed from the Discharge Monitoring Reports (DMRs) exceeded 20.0 milligram per Liter.

10. A review of the ground water files for this facility indicates the following deficiencies:

a. According to the ground water monitoring report for the third quarter of 2002, it appears that monitoring wells MW-2 and MW-3 have not been repaired. The Department initially received written notification of the damage to both wells on the ground water monitoring report for the second quarter of 2002.

In the comment section of the report for the third quarter of 2002 for MW-2, it was noted that the "well" is "missing" and the well was "cut off at grade by maintenance equipment". As a result, ground water samples were not collected from MW-2 and analytical results do not exist for the well. In addition, in the comment section for compliance well MW-3, it stated that the "well cap" was "missing" for the same quarter. In the cover letter of the report, it was noted that the owner was notified and repairs for MW-2 were being initiated.

b. According to Part III 9 of the current permit, "the permittee shall notify the Department with a written report within 7 days detailing the circumstances and remedial measures taken or proposed". As of December 2002, the Department has not received a written report stating the remedial actions that will occur to repair monitoring wells MW-2 and MW-3. If the two wells have not been repaired, then please repair the wells immediately. If a replacement well is necessary, then please obtain the Department's written approval. Once the wells have been repaired, please have a Florida Registered Surveyor resurvey the two wells to acquire and submit the new top of casing and ground surface elevations (in feet NGVD). Also, please submit what repairs have occurred to each well. Furthermore, please ensure that locks will be placed on each well casing and that protective bollards will be placed around each well to prevent future damage from vandalism or maintenance crew.

c. Fecal coliform concentrations were reported above the primary standard of 4 fecal coliform colonies per 100 milliliters (fcc/100mL) in the ground water from compliance well MW-3 at 21 B CFU/100 mL for the third quarter of 2002. The data qualifier code "B", which was reported with the numerical value for MW-3, is defined on the report as a qualifier that "indicates results based upon colony counts outside the acceptable range". However, during this quarter, it was noted for MW-3 that the well cap was missing. The missing cap could have influenced the elevated fecal coliform colonies at this monitoring well. As a result, please sample the ground water at compliance well MW-3 immediately after this well has been successfully repaired in order to verify the water quality.

d. Total Dissolved Solids (TDS) concentrations above the Secondary Drinking Water Standard of 500 milligrams per liter (mg/L) were reported in the ground water from compliance well MW-3 for the first, second, and third quarters of 2002. Please determine the cause of the elevated TDS concentrations and propose a plan to reduce the concentrations to below the Secondary Drinking Water Standard.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Ground water questions should be addressed to Lynn Lukacs at (407) 893-3308, Ext.2233. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence Anderson

Clarence Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

Date: FEBRUARY 11, 2003

CCA/tp/ww

Enclosures

cc: FDEP, Ground Water Section

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	11/7/02 11:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	11/7/02 12:30

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): Y	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Minor; U=Unsatisfactory; Blank=Not Evaluated

Significant Non-Compliance Criteria Should be Reviewed when Unsatisfactory Ratings Are Given in Areas Marked by a "♦ "

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
S	1.♦Permit	S	3. Laboratory	M	6. Facility Site Review	M	9. ♦Effluent Quality
	2.♦Compliance Schedules	S	4. Sampling	S	7. Flow Measurement	S	10.♦Effluent Disposal
		M	5.♦Records & Reports	S	8.♦Operation & Maintenance	S	11. Residuals Management
	13. Other:					M	12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER.

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Orlando 407/893-3313	1/29/03
@ Signature of Reviewer CLARENCE ANDERSON Clarence Anderson	District Office/Phone Number Orlando 407/893-3313	Date 2/11/03

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI

Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program

Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal

Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: FLA010353 issued 7/21/00 expires 7/20/05.

RECORDS AND REPORTS: **Minor.** Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site.
DMRs lab results and chains of custody are to be stored on site for Department review.
Part A of the Discharge Monitoring Reports (DMRs) is not being filled out completely. All of the blocks above the shaded areas containing monitoring instructions including sample measurements, units, frequency of analysis, sample type, number of exceedances (NoEx), average, maximum, and minimum must be completed.
The Discharge Monitoring Report (DMR) for the months of April and May 2002 were not received. DMRs must be submitted monthly.

LABORATORY: Test America Laboratory. Department of Health certified.

SAMPLING: Grab samples are being taken for the influent and effluent. An 8 hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: **Minor.**
Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight odor. Aerobic digestor.
Clarifier: **Sludge was noted in tank.** Chlorine added to weirs for algae control.
CCC: Gas chlorine 150 pound cylinders with dual switch over. RPZ noted.
The containment box for the return lines were in need of repair.

FLOW MEASUREMENT: **Minor.** Stevens flow meter
The chart recorder was not functioning.

Documentation of calibration for the flow meter was not available on-site. Flow measuring devices must be calibrated at least annually.

OPERATION AND MAINTENANCE: **Solids were noted in the chlorine contact chamber.**

EFFLUENT: Clear. **Minor. Review of the DMRs from 12/01 to 8/02 by Orlando staff indicate: On numerous occasions, the Annual Average For Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) as computed from the Discharge Monitoring Reports (DMRs) exceeded 20.0 milligram per Liter.**
12/01(46.4), 1/02(40.8), 2/02(38.0) and 3/02(35.8)
On numerous occasions, the Annual Average for Total Suspended Solids (TSS) as computed from the Discharge Monitoring Reports (DMRs) exceeded 20.0 milligram per Liter.
12/01(22.4), 1/02(20.6) and 3/02(23.0)
TRC was not taken from the CCC due to depth of lift station.

EFFLUENT DISPOSAL: **Minor. An overgrowth of dense vegetation prohibited safe access to the percolation pond(s). The entire perimeter of the percolation pond berm must be accessible.**

GROUND WATER: **Minor.**

1. **A review of the ground water files for this facility indicates the following deficiencies:**

a) **According to the ground water monitoring report for the third quarter of 2002, it appears that monitoring wells MW-2 and MW-3 have not been repaired. The Department initially received written notification of the damage to both wells on the ground water monitoring report for the second quarter of 2002.**
In the comment section of the report for the third quarter of 2002 for MW-2, it was noted that the "well" is "missing" and the well was "cut off at grade by maintenance equipment". As a result, ground water samples were not collected from MW-2 and analytical results do not exist for the well. In addition, in the comment section for compliance well MW-3, it stated that the "well cap" was "missing" for the same quarter. In the cover letter of the report, it was noted that the owner was notified and repairs for MW-2 were being initiated. According to Part III 9 of the current permit, "the permittee shall notify the Department with a written report within 7 days detailing the circumstances and remedial measures taken or proposed". As of December 2002, the Department has not received a written report stating the remedial actions that will occur to repair monitoring wells MW-2 and MW-3. If the two wells have not been repaired, then please repair the wells immediately. If a replacement well is necessary, then please obtain the Department's written approval. Once the wells have been repaired, please have a Florida Registered Surveyor resurvey the two wells to acquire and submit the new top of casing and ground surface elevations (in feet NGVD). Also, please submit what repairs have occurred to each well. Furthermore, please ensure that locks will be placed on each well casing and that protective bollards will be placed around each well to prevent future damage from vandalism or maintenance crew.

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c) **Total Dissolved Solids (TDS) concentrations above the Secondary Drinking Water Standard of 500 milligrams per liter (mg/L) were reported in the ground water from compliance well MW-3 for the first, second, and third quarters of 2002. Please determine the cause of the elevated TDS concentrations and propose a plan to reduce the concentrations to below the Secondary Drinking Water Standard.**

RESIDUALS MANAGEMENT: Indian River County RMF facility.

OTHER: Air pack on site.

Florida Department of

Memorandum **Environmental Protection**

CENTRAL DISTRICT

TO: Tom Powers

FROM: Tara Urbanik

DATE: 11/4/02

File Review Checklist

PERMIT FILE

1. Facility name: Sun Lake Estates
2. County: Brevard
3. Program: DW
4. Permit number: FLA 010353
5. Expiration date: July 20, 2005
6. Last noncompliance letter: March 8, 2002
7. Response received: March 27, 2002
8. Groundwater: **Request sent 11/4/02**
9. Compliance Schedule: NA
   - ✓ Date of Notification of Completion of Construction: NA
   - ✓ Date of Notification of Availability of Record Drawings: NA
     (should be received within 6 months after a completion of construction)
10. Date Sludge Collected (if applicable): NA
    - ✓ Date of last Agricultural Use Plan update
      (applicable when permit was issued before March 30, 1998 and facility was permitted to apply the residuals to sites/ranches): NA
    - ✓ Date of last Residuals Annual Summary
      (has to be submitted by February 19 of each year, applicable when permit was issued after March 30, 1998 and facility was permitted to apply the residuals to sites/ranches): **Account with IRC RDF**
11. Date of last Effluent Analysis Report (Reclaimed Water) :
    Last report found Oct 1, 1997-Sept 30, 1998
    or a certification stating that no new non-domestic ww discharges have been added (every facility with permitted capacity 0.1 MG or bigger)

✓ Any of the Drinking Water Standards listed on the Effluent Analysis Report exceeded: NA

12. Date of last Annual Reuse Report: **Oct 1, 2000-Sept 30, 2001**
(every facility with permitted capacity 0.1 MG or bigger, due January 1 of each year, effective August 99):

13. Date of last Pathogen Monitoring: NA
Applicable to all facilities with slow- rate, public access reuse and ground water recharge and indirect potable reuse facilities if permit or major modification was issued after 08/09/99.
Frequency of Monitoring for Giardia and Cryptosporidium.
(a) For treatment plants having capacities of 1.0 mgd or larger, the permittee shall sample the reclaimed water for Cryptosporidium and Giardia one time during each two-year period. Intervals between sampling shall not be greater than two years.
(b) For treatment plants having capacities less than 1.0 mgd, the permittee shall sample the reclaimed water for Cryptosporidium and Giardia one time during each five-year period. Intervals between sampling shall not be greater than five years.

14. Number of malfunction reports (at least last 12 months): **1**
✓ Spills: 0
✓ Solids going over the weir: 0
✓ Number and type of permit limit exceedances: 0
✓ Operational malfunctions: **1**
1. 4/23/02 – Plant wash out ~500-600 gal to ponds in restricted area, 6" pipe blew, increased Cl level, repairing pipe.

DMR FILE

1. DMR review for the period: 12/01-8/02
2. DMR missing for: **4/02 and 5/02**
3. Appropriate DMR form submitted: **Yes, but photocopies of DMR forms are extremely difficult to read.**
4. Original DMR's submitted: **6/02 photocopy**
5. Signed by an authorized person: yes
6. Correction fluid: none
7. Part B completed for the operator information: yes

Permit limits exceeded Part A and/or Part B:

- Monthly Flow: Part A: OK
  Part B: OK
- Three consecutive months exceeded 50% of Annual Flow:
- Annual Flow (calculation checked if monthly flow is exceeded):
- pH: Part A: OK
  Part B: OK
- TRC: Part A: OK
  Part B: OK

- TSS: Part A: **3/02 exceeded an avg of 20.0 by an avg of 23.0; mo avg of 23.2; and max of 41.5**
  1/02 exceeded an avg by 20.6
  12/01 exceeded an avg by 22.4
  Part B: **see above**
- $CBOD_5$: Part A: **3/02 exceeded an avg of 20.0 by 35.8**
  2/02 exceeded an avg by 38.0
  1/02 exceeded an avg by 40.8
  12/01 exceeded an avg by 46.4
  Part B: **see above**
- Fecal Coliform Bacteria: Part A: OK
  Part B: OK
- Nitrate: Part A: OK
  Part B: OK

Results of analysis and measurements reported as often as required:

- Flow: Part A: OK
  Part B: OK
- pH: Part A: OK
  Part B: OK
- TRC: Part A: OK
  Part B: OK
- TSS: Part A: **12/01 max not recorded**
  Part B: OK
- TSS INF: Part A: OK
  Part B: OK
- $CBOD_5$: Part A: **12/01 max not recorded**
  Part B: OK
- $CBOD_5$ INF: Part A: OK
  Part B: OK
- Fecal Coliform Bacteria: Part A: **7/02, 3/02, 2/02, 12/01 max not recorded**
  6/02 an avg and max not recorded
  Part B: OK
- Nitrate: Part A: OK
  Part B: OK

Reported:

1. Units OK
2. Frequency of Analysis OK
3. Number of Exceedances OK
4. Sample Type OK

Notes:

1. **Many exceedances.**

Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

6 oil 8 CA 1/14/13

Sun Lake Estates

RECEIVED
JAN 0 6 2003
Central Dist. - DEP

ANNUAL REUSE REPORT

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy to each of the following three addresses:

   a. DEP Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part IX on pages 7 and 8 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

Part II - General Information

1. Reporting Period: October 1, 2001 through September 30, 2002

2. Date Submitted 12/31/02

3. Person Completing This Form

   Name John G. Craig

   Title Senior Project Manager

   Organization Sheffield Engineering & Associates, Inc.

   Number and Street 4322 Anderson Road

   City/State/Zip Code Orlando, FL 32812

   Telephone 407-658-0512

4. Reuse System Name Sun Lake Estates WWTF

5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

      City Sharpes County Brevard

DEP District (check one):

- ☐ Northwest (Pensacola)
- ☐ Northeast (Jacksonville)
- ☐ Southwest (Tampa)
- ☒ Central (Orlando)
- ☐ Southeast (West Palm Beach)
- ☐ South (Ft. Myers)

Water Management District (check one):

- ☐ Northwest Florida (Havana)
- ☐ Suwannee River (Live Oak)
- ☐ Southwest Florida (Brooksville)
- ☒ St. Johns River (Palatka)
- ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
Sun Lake Estates	3005P00377	BA	0.135	0.054
Total Treated Wastewater			0.135	0.054

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	0.054
Supplemental Water Supplies (Circle types of water used - Enter total flow) Surface Water Ground Water Stormwater Drinking Water	
Water Recovered from ASR [b]	
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	0.054

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III			
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part IX of this form.)	III			
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	0.206	0.054	6.81
	Surface Water Augmentation (Discharge to Class I Waters)	V			
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII			
	At Other Facilities	VII			
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			0.206	0.054	6.81

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed **[Enter total flow on Line 2 in Part VI of this form.]**			N/A

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. **Reuse** (From bottom of Part IV of this form)	0.054
2. **Effluent Disposal** (From bottom of Part V)	
3. **Flow Stored in ASR** (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	0.054

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII - Public Access Reuse Systems

A. Number of Customers

1. How many single-family residences have reclaimed water service? N/A
2. How many golf courses are irrigated using reclaimed water? N/A
3. How many parks or playgrounds are irrigated using reclaimed water? N/A
4. How many schools are irrigated using reclaimed water? N/A
5. List or describe any unique or unusual uses of reclaimed water. N/A

B. Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☒ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☒ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? 0

   How many of these cross-connections have been eliminated? N/A

   Please, attached a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? 0

   How many inspections of new reclaimed water connections were made at the time of initial connection? N/A

4. How often are the reclaimed water facilities owned/operated by existing reclaimed water customers inspected? N/A

5. In addition to the new customer inspections reported in Item 3 above, how many routine or periodic inspections of existing customers were conducted during the reporting period? N/A

Part VIII - Charges for the Use of Reclaimed Water (Optional)

Completion of this part of the form is optional. Data on charges for the use of reclaimed water is valuable to utilities and agencies involved in reuse. This type of information is particularly valuable to utilities that are in the process of developing reuse programs. It is hoped that you will share your experience with others by completing this part.

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

Part IX - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☒ **None of these items are required for this reuse system.**

Part X - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date 12/31/02 _____ Signature

Phone: 407-658-0512 John G. Craig
Name and Title (please type)

Company Sheffield Engineering & Associates, Inc.

Address 4322 Anderson Road

City/State/Zip Orlando, FL 32812

CA 12/19/02
TP 1/6/03

ATTN: Tom Powers

FLORIDA RURAL WATER ASSOCIATION
2970 Wellington Circle West Suite 101
Tallahassee, FL 32309

WEIR OR FLUME CALIBRATION
Flow Values Obtained by Using a Weir or Flume

FACILITY NAME & ID #: Sun Lake Estates / FLA010353

FACILITY LOCATION: Sharpes, FL

PRIMARY DEVICE

V-NOTCH WEIR	PARSHALL FLUME	RECTANGULAR WEIR
DEGREE OF V-NOTCH	WIDTH OF THROAT (I	CREST LENGTH (FT)
45	N/A	N/A

Gauge setting comparison using yardstick or calipers rule: ☑Satisfactory ☐Unsatisfactory

Physical inspection of primary device approach, device and discharge: ☑Satisfactory ☐Unsatisfactory

SECONDARY DEVICE

TYPE: Stevens Mechanical Float

MAKE/MODEL/SERIAL#: 61R / #113038-84

DATE OF LAST CALIBRATION: 8/17/01

	LOW FLOW	MODERATE FLOW	HIGH FLOW
STAFF GAGE READING (FT)	.36	.37	.38
ACTUAL FLOW (MGD)	.052	.0557	.059
TOTALIZER OR RECORDER READING(MGD)	.0525	.055	.057
PERCENT DIFFERENCE (%)	1 %	1 %	3 %

Physical Inspection of Secondary Device: ☑Satisfactory ☐Unsatisfactory
Totalizer Accuracy Check Using Stopwatch: ☑Satisfactory ☐Unsatisfactory

COMMENTS:

I hereby certify that the above test was performed in accordance with the best available technology.

TECHNICIAN SIGNATURE: Tom Wirtzinger DATE: 12/19/02

Tom Wirtzinger
(800) 342-8207

2P 7/18

DATE: April 26, 2002

TO: Tom Powers

RE: Sun Lake Estates washout

Mr. Powers,

I reported to Wanda Ward a washout that happened on 04/23. The cause of the washout was due to an air leak on the main manifold six inch line. I contacted SOS the same day and asked them to repair, on warranty, what they were supposed to have fixed last week. Last week I temporarily fixed it until they arrived to repair. Their repair totally failed and they were asked to come out immediately to repair it again. Due to the malfunction, an estimate of washout was around 500-800 gallons. I immediately increased the Cl2 for added dissinfection. As of 04/25, the repair seems to be holding. Failure has been due to excessive heat on schedule 40 six inch line. It may be necessary in the future to run six inch galv. pipe. If you have any questions please call 639-1273.

Thank you,

Jerry Padrick

CA 4/23
TP 4/25

DOMESTIC WASTE
MALFUNCTION REPORT FORM
TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN , NOT TYPED)

DATE: 4/23/02 TIME: 2:25 (AM)(PM) RECEIVED BY: Wanda

REPORTED BY: Jerry Patrick

NAME OF PLANT/SYSTEM: Sun Lake Estates COUNTY: Brevard

ADDRESS: _____

TELEPHONE: ( ) 321-749-1564

OWNER: _____

DATE & TIME OF FAILURE: 4/22/02

NATURE OF PROBLEM: Plant washout appox 500-600 gallons loss to ponds in restricted Area - Caused by mechanical failure - defused Air - 6" pipe blew

CORRECTIVE ACTION TAKEN: Called repair to fix pipe - on site now.

EXPECTED BACK IN SERVICE BY: (DATE & TIME) today

REMARKS: _____

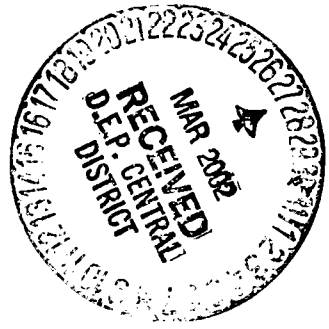
FOLLOW-UP IN WRITING: (Y/N) Via FAX

REVISED JUNE 6, 1989

Sheffield Engineering & Associates, Inc.

CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
4322 ANDERSON ROAD • ORLANDO, FLORIDA 32812
PHONE: 407-658-0512 • 1-800-443-8860 • FAX: 407-482-5691

3/28
4/1



March 26, 2002

Mr. Anil Desai
Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

SUBJECT: **Sun Lake Estates, WWTF**
Facility ID: 3005P00377
Permit Number: FLA010353

Dear Mr. Desai:

Reference is made to Mr. Clarence Anderson's letter dated March 8, 2002 addressed to Thad Terry concerning the above subject project. The following responses correspond to the groundwater monitoring portion of this letter (item 9) and are as follows:

Comment a.

Turbidity measurements were reported at "0.00 NTU" for the groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 for the fourth quarter of 2001. An explanation was not provided on the groundwater monitoring reports. Please explain why a turbidity measurement of "0.00 NTU" was reported for all three monitoring wells.

Response a.

Due to the slow purge rates used for these wells, the turbidity values at the time of sampling were 0.00 NTU for all wells. This is the method of sampling taught by FDEP and observed in our Tallahassee based SOP classes in September of 2001.

Comment b.

The abbreviation "NA" was marked for if the well was purged before sampling for intermediate well MW-2 in the first quarter of 2001. An explanation was not provided in the comment section of the report. Please provide an explanation for why "NA" was noted.

Response b.

Please be advised this was an error and that 5 well volumes were purged (3.92 gallons) at well MW-2 in the first quarter of 2001.

Comment c.

An incorrect sample period was recorded for all three monitoring wells on the groundwater monitoring reports for all four quarters of 2001. Please note the following sample periods for each quarter:

1st Quarter – January through March
2nd Quarter – April through June
3rd Quarter – July through September
4th Quarter – October through December

Response c.

Please note that future reports shall indicate the correct above listed samples periods.

Comment d.

A certification form was not submitted with the groundwater monitoring reports for the first, second, third and fourth quarters of 2001. A new Certification form is enclosed, which shall be completed with each quarterly groundwater monitoring report. This form was also submitted with the Groundwater review. The authorized representative of the facility must sign the certification form.

Response d.

Please be advised that all future reports shall contain the above mentioned signed Certification Form.

If you have any questions or require any additional information, please contact.

Sincerely,

John G. Craig

JC/jb

C: Clarence Anderson, FDEP
Tom Powers, FDEP
Thad Terry, Owner

March 25, 2002

Dear Mr. Anderson,

This letter is in response to the noncompliance letter by Tom Powers for the facility of Sun Lake Estates, permit #FLA010353.

1. The slight leaks of the infrastructure of the aeration basin and chlorine contact chamber is scheduled to be repaired within 60 days.
2. Solids in the chlorine contact chamber have been pumped out by All Service Sanitation.
3. Heavy solids in the clarifier is due to an upset condition caused by air leaks to the main header and improper wasting without my knowledge on how it was occurring. I have since discovered a gate valve had malfunctioned and was repaired.
4. Hydraulic oil will be cleaned up and disposed of properly within the next ten days.
5. CBOD5 from November to August 2001 was due to previous operator's lack of attendance. Plant was seriously under aerated. Air has been increased and breakers have been upsized to handle larger motors.
6. In response to the TSS exceeding 20 mg/liter from December to June 2001 is also related to number 5 and the air problem. This has been resolved as stated in number 5.
7. Percolation ponds have been scheduled for herbicide treatment through ECOR of Melbourne. Waiting for final price. (note – herbicide safe for pond application).
8. Calibration of the flow meter was my first objective and was calibrated in August of 2001 (see attached).
9. Sheffield Engineering will be completing the necessary form and is attached.

Thank you for your cooperation and the extension that Tom Powers gave until the 29th of March. If there are any other questions, please do not hesitate to call (321-6391273).

Sincerely,

Jerry Padrick

cc: Thad Terry



FLORIDA RURAL WATER ASSOCIATION
2970 Wellington Circle West, Suite 101
Tallahassee, FL 32308
850-668-2746

MAR 2002 RECEIVED D.E.P. CENTRAL DISTRICT

WEIR OR FLUME CALIBRATION
Flow Values Obtained by Using a Weir or Flume

FACILITY NAME & ID #: Sun Lake Estates FLA010353

FACILITY LOCATION: Sharpes, FL

PRIMARY DEVICE

V-NOTCH WEIR	PARSHALL FLUME	RECTANGULAR WEIR
DEGREE OF V-NOTCH	WIDTH OF THROAT (IN)	CREST LENGTH (FT)
45°	/	/

Gauge setting comparison using yardstick or carpenters rule: ☑ Satisfactory ☐ Unsatisfactory

Physical inspection of primary device approach, device and discharge: ☑ Satisfactory ☐ Unsatisfactory

SECONDARY DEVICE

MANUFACTURER & TYPE: Stevens mechanical Float

MODEL & SERIAL #: 61R # 123038-84

DATE OF LAST CALIBRATION:

	LOW FLOW	MODERATE FLOW	HIGH FLOW
STAFF GAGE READING (FT)	.27	.30	.32
ACTUAL FLOW ~~(GPM)~~ MGD	.0253	.0330	.0387
TOTALIZER OR RECORDER READING ~~(GPM)~~ MGD	.025	.030	.035
PERCENT DIFFERENCE (%)	1%	9%	10%

Physical Inspection of Secondary Device: ☑ Satisfactory ☐ Unsatisfactory

Totalizer Accuracy Check Using Stopwatch: ☑ Satisfactory ☐ Unsatisfactory

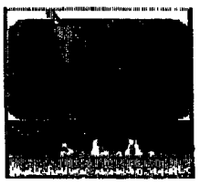
COMMENTS:

I hereby certify that the above test was performed in accordance with the best available technology.

TECHNICIAN SIGNATURE: Tom Stirtzinger **DATE:** 8/17/01

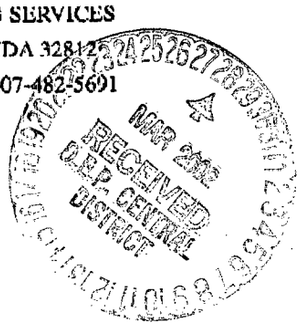
(800) 872-8207

Thomas Stirtzinger



Sheffield Engineering & Associates, Inc.

CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
4322 ANDERSON ROAD • ORLANDO, FLORIDA 32812
PHONE: 407-658-0512 • 1-800-443-8860 • FAX: 407-482-5691



March 26, 2002

Mr. Anil Desai
Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

SUBJECT: **Sun Lake Estates, WWTF**
Facility ID: 3005P00377
Permit Number: FLA010353

Dear Mr. Desai:

Reference is made to Mr. Clarence Anderson's letter dated March 8, 2002 addressed to Thad Terry concerning the above subject project. The following responses correspond to the groundwater monitoring portion of this letter (item 9) and are as follows:

Comment a.

Turbidity measurements were reported at "0.00 NTU" for the groundwater samples collected from monitoring wells MW-1, MW-2 and MW-3 for the fourth quarter of 2001. An explanation was not provided on the groundwater monitoring reports. Please explain why a turbidity measurement of "0.00 NTU" was reported for all three monitoring wells.

Response a.

Due to the slow purge rates used for these wells, the turbidity values at the time of sampling were 0.00 NTU for all wells. This is the method of sampling taught by FDEP and observed in our Tallahassee based SOP classes in September of 2001.

Comment b.

The abbreviation "NA" was marked for if the well was purged before sampling for intermediate well MW-2 in the first quarter of 2001. An explanation was not provided in the comment section of the report. Please provide an explanation for why "NA" was noted.

Response b.

Please be advised this was an error and that 5 well volumes were purged (3.92 gallons) at well MW-2 in the first quarter of 2001.

Comment c.

An incorrect sample period was recorded for all three monitoring wells on the groundwater monitoring reports for all four quarters of 2001. Please note the following sample periods for each quarter:

1st Quarter – January through March
2nd Quarter – April through June
3rd Quarter – July through September
4th Quarter – October through December

Response c.

Please note that future reports shall indicate the correct above listed samples periods.

Comment d.

A certification form was not submitted with the groundwater monitoring reports for the first, second, third and fourth quarters of 2001. A new Certification form is enclosed, which shall be completed with each quarterly groundwater monitoring report. This form was also submitted with the Groundwater review. The authorized representative of the facility must sign the certification form.

Response d.

Please be advised that all future reports shall contain the above mentioned signed Certification Form.

If you have any questions or require any additional information, please contact.

Sincerely,

John G. Craig

JC/jb

C: Clarence Anderson, FDEP
Tom Powers, FDEP
Thad Terry, Owner

Draft of DEC + draft GW sent to WW 3/5

Florida Department of Environmental Protection

Memorandum

CENTRAL DISTRICT

TO: Tom Powers

FROM: Christian Popoli

DATE: 1/28/02

File Review Checklist

PERMIT FILE

Facility name: Sun Lake Estates

County: Brevard

Program: DW

Permit number: FLA 010353

Expiration date: July 20, 2005

Last noncompliance letter: Feb 14, 2001

Response received: March 28, 2001

Groundwater: **Requested**

Date Sludge Collected (if applicable):

Date of last Agricultural Use Plan update
(applicable when permit was issued before March 30, 1998 and facility was permitted to apply the residuals to sites/ranches): NA

Date of last Residuals Annual Summary
(has to be submitted by February 19 of each year, applicable when permit was issued after March 30, 1998 and facility was permitted to apply the residuals to sited/ranches): Account with Indian River County RMF

Date of last Effluent Analysis Report (Reclaimed Water)
or a certification stating that no new non-domestic ww discharges have been added
(every facility with permitted capacity 0.1 MG or bigger): NA

Any of the Drinking Water Standards listed on the
Effluent Analysis Report exceeded: NA

Date of last Annual Reuse Report
(every facility with permitted capacity 0.1 MG or bigger, due January 1 of each year,
effective August 99): NA

DMR FILE

DMR review for the period: 12/00-11/01

DMR missing for: 12/00

Appropriate DMR form submitted: OK

Original DMR's submitted: OK

Signed by an authorized person: OK

Correction fluid: OK

Part B completed for the operator information: OK

Permit limits exceeded Part A and/or Part B:

- Monthly Flow: Part A: OK
  Part B: OK
- Three consecutive months exceeded 50% of Annual Flow:
- Annual Flow (calculation checked if monthly flow is exceeded):
- pH: Part A: OK
  Part B: OK
- TRC: Part A: **8/01 0.0 (min .5)**
  Part B: OK
- TSS: Part A: **12/01-6/01, 2/01, 1/01 All Exceed TSS Limit (20.0 annual ave.)**
  Part B: OK
- $CBOD_5$: Part A: **11/01-8/01, 6/01 All Exceed CBOD Limit (20.0 annual ave.)**
  Part B: OK
- Fecal Coliform Bacteria: Part A: **6/01, 5/01 Exceed Permit Limits**
  Part B: OK
- Nitrate: Part A: OK
  Part B: OK

7507.3 annual

7508.2 annual

7 30006 MO
600
mean

Results of analysis and measurements reported as often as required:

- Flow: Part A: OK
  Part B: OK
- pH: Part A: OK
  Part B: OK
- TRC: Part A: **7/01 Nothing recorded on Part A**
  Part B: OK
- TSS: Part A: OK
  Part B: OK
- TSS INF: Part A: OK
  Part B: OK
- $CBOD_5$: Part A: OK
  Part B: OK
- $CBOD_5$ INF: Part A: OK
  Part B: OK
- Fecal Coliform Bacteria: Part A: OK
  Part B: OK
- Nitrate: Part A: OK
  Part B: OK

Reported

Units: OK

Frequency of Analysis: OK

Number of Exceedances: OK

Sample Type: OK

Notes:

- **TRC, TSS, CBOD, and Fecal all have exceedances**

Department of
Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA FL 32926

OCD-C-WW-02-0240

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit Number No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On January 7, 2002, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following unsatisfactory conditions were noted:

1. The inspection noted slight leaks on the infrastructure of the aeration basin and chlorine contact chamber. Please provide the Department with a schedule of corrective action concerning the repairing of these leaks.

2. Solids were noted in the chlorine contact chamber.

3. Heavy solids were noted in clarifier. Floc noted going over weirs.

4. Hydraulic oil was noted discharging from the blowers to ground surface. The used oil should be cleaned up and disposed of properly. It is recommended that a drip pan be utilized under the blowers to catch excess oil spillage.

5. Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) as computed from the Discharge Monitoring Reports (DMRs) from November to August 2001 exceeded 20.0 mg/L

6. The Annual Average for Total Suspended Solids (TSS) as computed from the Discharge Monitoring Reports (DMRs) from December to June 2001 exceeded 20.0 mg/L.

7. The percolation pond contained excessive solids and vegetation. The area around the effluent disposal system was overgrown with vegetation to the extent that it prohibits safe access.

8. Documentation of calibration for the flow meter was not available on-site. Flow measuring devices must be calibrated at least annually.

9. A review of the ground water files for this facility indicates the following deficiencies:

   a. Turbidity measurements were reported at "0.00 NTU" for the ground water samples collected from monitoring wells MW-1, MW-2, and MW-3 for the fourth quarter of 2001. An explanation was not provided on the ground water monitoring reports. Please explain why a turbidity measurement of "0.00 NTU" was reported for all three monitoring wells.

   b. The abbreviation "NA" was marked for if the well was purged before sampling for intermediate well MW-2 in the first quarter of 2001. An explanation was not provided in the comment section of the report. Please provide an explanation for why "NA" was noted.

   c. An incorrect sample period was recorded for all three monitoring wells on the ground water monitoring reports for all four quarters of 2001. Please note the following sample periods for each quarter:

1st Quarter	-	January through March
2nd Quarter	-	April through June
3rd Quarter	-	July through September
4th Quarter	-	October through December

   d. A certification form was not submitted with the ground water monitoring reports for the first, second, third, and fourth quarters of 2001. A new Certification Form is enclosed, which shall be completed and submitted with each quarterly ground water monitoring report. This form was also submitted with the previous Ground Water Review. The authorized representative of the facility must sign the Certification Form.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Ground water questions should be addressed to Lynn Lukacs at (407) 893-3308, Ext.2233. Any other questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence C. Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

Date: March 8, 2002

CCA/tp/ww
Enclosuresc:
FDEP, Ground Water Section

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	1/7/02 9:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	1/9/01 10:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430 .			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): Y	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Minor; U=Unsatisfactory; Blank=Not Evaluated

Significant Non-Compliance Criteria Should be Reviewed when Unsatisfactory Ratings Are Given in Areas Marked by a "♦ "

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
S	1.♦Permit	S	3. Laboratory	M	6. Facility Site Review	M	9. ♦Effluent Quality
	2.♦Compliance Schedules	S	4. Sampling	S	7. Flow Measurement	S	10.♦Effluent Disposal
		M	5.♦Records & Reports	S	8.♦Operation & Maintenance	S	11. Residuals Management
	13. Other:					M	12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER.

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Orlando 407/893-3313	March 5, 2002
@ Signature of Reviewer CLARENCE ANDERSON Clarence Anderson	District Office/Phone Number Orlando 407/893-3313	Date 3/6/02

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI

Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program

Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal

Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: FLA010353 issued 7/21/00 expires 7/20/05.

RECORDS AND REPORTS: Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site.
DMRs, lab results and chains of custody are to be stored on site for Department review.

LABORATORY: Test America Laboratory. Department of Health certified.

SAMPLING: Grab samples are being taken for the influent and effluent. An 8 hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW:

Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight odor. Aerobic digestor.
Clarifier: **Heavy solids were noted in clarifier. Floc noted going over weirs.** Chlorine added to weirs for algae control.
CCC: Gas chlorine 150 pound cylinders with dual switch over. **The inspection noted slight leaks on the infrastructure of the aeration basin and chlorine contact chamber. Please provide the Department with a schedule of corrective action concerning the repairing of these leaks.**
RPZ noted.

FLOW MEASUREMENT: Stevens flow meter. **Graph not operating. Last calibration not indicated.**

OPERATION AND MAINTENANCE: **Solids were noted in the chlorine contact chamber.**
Hydraulic oil was noted discharging from the blowers to ground surface. The used oil should be cleaned up and disposed of properly.

EFFLUENT: Clear. **Review of the DMRs from 12/00 to 11/01 by Orlando staff indicate: The Annual Average For Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) as computed from the Discharge Monitoring Reports (DMRs) from November to August 2001 exceeded 20.0 milligram per Liter.**
The Annual Average for Total Suspended Solids (TSS) as computed from the Discharge Monitoring Reports (DMRs) from December to June 2001 exceeded 20.0 milligram per Liter.

GROUND WATER Minor.

1. **A review of the ground water files for this facility indicates the following deficiencies:**

a) **Turbidity measurements were reported at "0.00 NTU" for the ground water samples collected from monitoring wells MW-1, MW-2, and MW-3 for the fourth quarter of 2001. An explanation was not provided on the ground water monitoring reports. Please explain why a turbidity measurement of "0.00 NTU" was reported for all three monitoring wells.**

b) **The abbreviation "NA" was marked for if the well was purged before sampling for intermediate well MW-2 in the first quarter of 2001. An explanation was not provided in the comment section of the report. Please provide an explanation for why "NA" was noted.**

c) **An incorrect sample period was recorded for all three monitoring wells on the ground water monitoring reports for all four quarters of 2001. Please note the following sample periods for each quarter:**

1st Quarter - January through March
2nd Quarter - April through June
3rd Quarter - July through September
4th Quarter - October through December

d) A certification form was not submitted with the ground water monitoring reports for the first, second, third, and fourth quarters of 2001. A new Certification Form is enclosed, which shall be completed and submitted with each quarterly ground water monitoring report. This form was also submitted with the previous Ground Water Review. The authorized representative of the facility must sign the Certification Form.

DISPOSAL METHOD: An existing 0.206 MGD AADF permitted capacity rapid rate restricted access reuse system (R001) consisting of four (4) dual-cell percolation ponds (297,000) square feet total wetted area. Ponds were dry.
The percolation pond contained excessive solids and vegetation. The area around the effluent disposal system was overgrown with vegetation to the extent that it prohibits safe access.

RESIDUALS MANAGEMENT: Indian River County RMF facility.

OTHER: Air pack on site.

Florida Department of Environmental Protection

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

DEP Form # 62-522.900(2)

Form Title Ground Water Monitoring Report

Effective Date

DEP Application No.

GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

PART I GENERAL INFORMATION

(1) Facility Name Sun Lakes Estates WWTF

Address

City Brevard Zip

Telephone Number ( )

(2) The GMS Identification Number 3005P00377

(3) DEP Permit Number FLA010353

(4) Authorized Representative Name

Address

City Zip

Telephone Number ( )

(5) Type of Discharge

(6) Method of Discharge

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date:

Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sample Organization Comp QAP #

Analytical Lab Comp QAP # /HRS Certification #

*Comp QAP # /HRS Certification #

Lab Name

Address

Phone Number ( )

Interoffice Memo

Date: February 28, 2002

To: Tom Powers

Through: Anil Desai, PG

From: Lynn Lukacs

Subject: Sun Lake Estates - DW,
Brevard County, GMS # 3005P00377;
Ground Water Quality Monitoring Review

Priority: Routine

Per your request, the following review summarizes ground water quality monitoring issues at the above-referenced facility:

SUMMARY

- Permit Number FLA010353 was issued on July 21, 2000 and will expire on July 20, 2005.
- The current facility was constructed in 1993. The permit contained a ground water monitoring plan, but the required ground water monitoring wells were not installed until August 1995. The first sampling event was completed in December 1995, but ground water monitoring was not completed for the first and second quarters of 1996 due to miscommunication between the Homeowners Association, the operator and Sheffield Engineering.
- The ground water monitoring plan for the facility includes three (3) monitoring wells as follows:

  Monitoring well MW-1 is the background well; monitoring well MW-2 is the intermediate well; and monitoring well MW-3 is the compliance well.
- The previous review dated February 26, 2001 summarized data from the fourth quarter of 1999 and all quarters of 2000.

  The Department received on March 2, 2001 a response letter from the facility that replied to the previous non-compliance letter. All responses were sufficient.
- The following comments pertain to ground water monitoring reports submitted by the facility for all four quarters of 2001:

  Turbidity measurements were reported at "0.00 NTU" for the ground water samples collected from monitoring wells MW-1, MW-2, and MW-3 for the fourth quarter of 2001. An explanation was not provided on the ground water monitoring reports.

  Total Dissolved Solids (TDS) concentrations above the secondary standard of 500 milligrams per liter (mg/L) were reported in the ground water from compliance well MW-3 for the first and second quarters of 2001. **Since the third quarter of 2001, TDS concentrations were reported below the secondary standard. Also, this**

standard is not enforceable unless another Maximum Contaminant Level is exceeded.

The abbreviation "NA" was marked for if the well was purged before sampling for intermediate well MW-2 in the first quarter of 2001. An explanation was not provided in the comment section of the report.

For the fourth quarter of 2001, a top of casing (TOC) elevation was reported in the comment section of the ground water monitoring report for each monitoring well. The top of casing elevations were the same as those recorded on the FDEP Monitoring Well Completion Reports for the wells.

In the second quarter of 2001, a data qualifier code of "B" was reported with the numerical result for fecal coliform for background well MW-1. It was noted in the comment section that this code referred to "results based on colony counts outside the acceptable range".

An incorrect sample period was recorded for all three monitoring wells on the ground water monitoring reports for all four quarters of 2001.

A certification form was not submitted with the ground water monitoring reports for the first, second, third, and fourth quarters of 2001.

QUESTIONS FOR THE FACILITY

Minor.

1. A review of the ground water files for this facility indicates the following deficiencies:

a) Turbidity measurements were reported at "0.00 NTU" for the ground water samples collected from monitoring wells MW-1, MW-2, and MW-3 for the fourth quarter of 2001. An explanation was not provided on the ground water monitoring reports. **Please explain why a turbidity measurement of "0.00 NTU" was reported for all three monitoring wells.**

b) The abbreviation "NA" was marked for if the well was purged before sampling for intermediate well MW-2 in the first quarter of 2001. An explanation was not provided in the comment section of the report. **Please provide an explanation for why "NA" was noted.**

c) An incorrect sample period was recorded for all three monitoring wells on the ground water monitoring reports for all four quarters of 2001. **Please note the following sample periods for each quarter:**

1st Quarter - January through March

2nd Quarter - April through June

3rd Quarter - July through September

4th Quarter - October through December

d) **A certification form was not submitted with the ground water monitoring reports for the first, second, third, and fourth quarters of 2001. A new Certification Form is enclosed**, which shall be completed and submitted with each quarterly ground water monitoring report. This form was also submitted with the

previous Ground Water Review. The authorized representative of the facility must sign the Certification Form.

Enclosures

New Certification Form with Comprehensive Quality Assurance Plan

Sun Lake Estates

Florida Department of Environmental Protection

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



ANNUAL REUSE REPORT

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy to each of the following three addresses:

   a. DEP Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part IX on pages 7 and 8 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

Part II - General Information

1. Reporting Period: October 1, 2000 through September 30, 2001

2. Date Submitted 12/31/01

3. Person Completing This Form

   Name John G. Craig

   Title Senior Project Manager

   Organization Sheffield Engineering & Associates, Inc.

   Number and Street 4322 Anderson Road

   City/State/Zip Code Orlando, FL 32812

   Telephone 407-658-0512

4. Reuse System Name Sun Lake Estates WWTF

5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

      City Sharpes County Brevard

      DEP District (check one):

      - ☐ Northwest (Pensacola)
      - ☐ Northeast (Jacksonville)
      - ☐ Southwest (Tampa)
      - ☒ Central (Orlando)
      - ☐ Southeast (West Palm Beach)
      - ☐ South (Ft. Myers)

      Water Management District (check one):

      - ☐ Northwest Florida (Havana)
      - ☐ Suwannee River (Live Oak)
      - ☐ Southwest Florida (Brooksville)
      - ☐ St. Johns River (Palatka)
      - ☒ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
Sun Lake Estates	3005P00377	BA	0.135	0.057
Total Treated Wastewater			0.135	0.057

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	0.057
Supplemental Water Supplies (Circle types of water used - Enter total flow)	
Surface Water Ground Water	
Stormwater Drinking Water	
Water Recovered from ASR [b]	
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	0.057

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III			
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part IX of this form.)	III			
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	0.206	0.057	6.81
	Surface Water Augmentation (Discharge to Class I Waters)	V			
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII			
	At Other Facilities	VII			
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			0.206	0.057	6.81

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]			**N/A**

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. Reuse (From bottom of Part IV of this form)	0.057
2. Effluent Disposal (From bottom of Part V)	
3. Flow Stored in ASR (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	0.057

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII - Public Access Reuse Systems

A. Number of Customers

1. How many single-family residences have reclaimed water service? N/A

2. How many golf courses are irrigated using reclaimed N/A

3. How many parks or playgrounds are irrigated using reclaimed water? N/A

4. How many schools are irrigated using reclaimed water? N/A

5. List or describe any unique or unusual uses of reclaimed water. N/A

B. Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☒ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☒ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? 0

   How many of these cross-connections have been eliminated? N/A

   Please, attached a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? 0

   How many inspections of new reclaimed water connections were made at the time of initial connection? N/A

4. How often are the reclaimed water facilities owned/operated by existing reclaimed water customers inspected? N/A

5. In addition to the new customer inspections reported in Item 3 above, how many routine or periodic inspections of existing customers were conducted during the reporting period? N/A

Part VIII - Charges for the Use of Reclaimed Water (Optional)

Completion of this part of the form is optional. Data on charges for the use of reclaimed water is valuable to utilities and agencies involved in reuse. This type of information is particularly valuable to utilities that are in the process of developing reuse programs. It is hoped that you will share your experience with others by completing this part.

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

Part IX - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☒ **None of these items are required for this reuse system.**

Part X - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: 12/31/01 _____ Signature

Phone: 407-658-0512 John G. Craig
Name and Title (please type)

Company Name: Sheffield Engineering & Associates, Inc.

Address: 4322 Anderson Road

City/State/Zip Orlando, FL 32812

for 11/15
11/15
LA
TF

10/5-01

To D.E.P.
from Jerry Padrick
Regarding D.M.R. Reporting Sunlake Estates

Dear Sir I would like To begin By saying it is unfortunate the D.M.R's were not in as Required. But In the owner's defense the owners Lost his Secretary Paula when he sold the park and he wasn't aware of this matter.

In June of this year when he became aware of the failure of lab Results he began to investigate and found the operator MR. Willie Gaudry was failing to do the work he was hired ~~to~~ To do. Mr. Terry Then Started to Search for a Replacement. After contacting Myself and upon acceptance Mr Gaudry was Terminated.

The following Reports were All that I could gather from Records on hand. In the future you can be Assured the Reports will be in on Time.

Thank you Jerry Padrick



Sheffield Engineering & Associates, Inc.

CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
4322 ANDERSON ROAD • ORLANDO, FLORIDA 32812
PHONE 407-658-0512 FAX 407-482-5691

6-4/16
CA 4/6
TP 4/11



March 28, 2001

Mr. Clarence Anderson
Florida Department of Environmental Protection
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

SUBJECT: **Sun Lake Estates WWTF Flow Corrections (9814)**
Facility I.D. No.: 3005P00377

Dear Mr. Anderson:

This letter is to advise you of the inaccurate flows reported for the Sun Lake Estates Wastewater Treatment Facility in the past months. It has been determined that the operator has been using a flow factor of 100 instead of 50 for the totalizer at this facility. This has subsequently created false readings for the past several months by a factor of 2 (see attached "Table of Corrected Flows"). In Addition the flow meter was noted to be in need of minor repairs (counterweight and chain replacement), which could have also had an affect on the recent flow readings at this facility. This was brought to our attention recently when investigating the capacity at this facility for potential expansion of the subdivision.

This has been discussed with the operator and the flow meter checked for calibration on a bi-weekly basis. In addition, the flow meter at this facility is being updated with preventative maintenance (cable replaced, lubricated, counterweight replaced, ect.) to assure that proper flows will be recorded in the future. The parts have been ordered and should be in by mid April for replacement.

If you have any questions or require any additional information, please do not hesitate to contact my office at 407-658-0512.

Sincerely,

John G. Craig
Senior Project Manager

c: Mr. Tom Powers, FDEP
Mr. Thad Terry, Owner

JC/jab

SUN LAKE ESTATES WWTF
TABLE OF CORRECTED FLOWS

MONTH	AVERAGE MONTHLY FLOW	MAX. FLOW	CORRECTION FACTOR	ADJUSTED AVERAGE MONTHLY FLOW	ADJUSTED MAX. FLOW	UNITS
OCT.10,1999	0.086	0.099	0.5	0.043	0.0495	MGD
NOV.6,1999	0.091	0.099	0.5	0.0455	0.0495	MGD
DEC.12,1999	0.081	0.098	0.5	0.0405	0.049	MGD
JAN.12,2000	0.085	0.099	0.5	0.0425	0.0495	MGD
FEB.5,2000	0.088	0.099	0.5	0.044	0.0495	MGD
MAR.4,2000	0.09	0.099	0.5	0.045	0.0495	MGD
APR.5,2000	0.085	0.099	0.5	0.0425	0.0495	MGD
MAY 6,2000	0.083	0.095	0.5	0.0415	0.0475	MGD
JUN.7,2000	0.08	0.099	0.5	0.04	0.0495	MGD
JUL.6,2000	0.076	0.098	0.5	0.038	0.049	MGD
AUG.3,2000	0.08	0.099	0.5	0.04	0.0495	MGD
SEPT.7,2000	0.07	0.085	0.5	0.035	0.0425	MGD
OCT.7,2000	0.075	0.095	0.5	0.0375	0.0475	MGD
NOV.5,2000	0.067	0.098	0.5	0.0335	0.049	MGD

Sheffield Engineering & Associates, Inc.

CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
4322 ANDERSON ROAD • ORLANDO, FLORIDA 32812
PHONE 407-658-0512 FAX 407-382-5691

RECEIVED
APR 2001
F.D.E.P. CENTRAL DISTRICT

March 28, 2001

Mr. Clarence Anderson
Florida Department of Environmental Protection
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

SUBJECT: **Sun Lake Estates WWTF Flow Corrections (9814)**
Facility I.D. No.: 3005P00377

Dear Mr. Anderson:

This letter is to advise you of the inaccurate flows reported for the Sun Lake Estates Wastewater Treatment Facility in the past months. It has been determined that the operator has been using a flow factor of 100 instead of 50 for the totalizer at this facility. This has subsequently created false readings for the past several months by a factor of 2 (see attached "Table of Corrected Flows"). In Addition the flow meter was noted to be in need of minor repairs (counterweight and chain replacement), which could have also had an affect on the recent flow readings at this facility. This was brought to our attention recently when investigating the capacity at this facility for potential expansion of the subdivision.

This has been discussed with the operator and the flow meter checked for calibration on a bi-weekly basis. In addition, the flow meter at this facility is being updated with preventative maintenance (cable replaced, lubricated, counterweight replaced, ect.) to assure that proper flows will be recorded in the future. The parts have been ordered and should be in by mid April for replacement.

If you have any questions or require any additional information, please do not hesitate to contact my office at 407-658-0512.

Sincerely,

John G. Craig
Senior Project Manager

c: Mr. Tom Powers, FDEP
Mr. Thad Terry, Owner

JC/jab

SUN LAKE ESTATES WWTF
TABLE OF CORRECTED FLOWS

MONTH	AVERAGE MONTHLY FLOW	MAX. FLOW	CORRECTION FACTOR	ADJUSTED AVERAGE MONTHLY FLOW	ADJUSTED MAX. FLOW	UNITS
OCT.10,1999	0.086	0.099	0.5	0.043	0.0495	MGD
NOV.6,1999	0.091	0.099	0.5	0.0455	0.0495	MGD
DEC.12,1999	0.081	0.098	0.5	0.0405	0.049	MGD
JAN.12,2000	0.085	0.099	0.5	0.0425	0.0495	MGD
FEB.5,2000	0.088	0.099	0.5	0.044	0.0495	MGD
MAR.4,2000	0.09	0.099	0.5	0.045	0.0495	MGD
APR.5,2000	0.085	0.099	0.5	0.0425	0.0495	MGD
MAY 6,2000	0.083	0.095	0.5	0.0415	0.0475	MGD
JUN.7,2000	0.08	0.099	0.5	0.04	0.0495	MGD
JUL.6,2000	0.076	0.098	0.5	0.038	0.049	MGD
AUG.3,2000	0.08	0.099	0.5	0.04	0.0495	MGD
SEPT.7,2000	0.07	0.085	0.5	0.035	0.0425	MGD
OCT.7,2000	0.075	0.095	0.5	0.0375	0.0475	MGD
NOV.5,2000	0.067	0.098	0.5	0.0335	0.049	MGD

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION OCD-C-WW-01-0152
4865 LAKE ONTARIO DRIVE
COCOA FLORIDA 32926

ATTENTION THAD TERRY
PRESIDENT/OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On January 9, 2001, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following unsatisfactory conditions were noted:

1. The effluent lift station dual discharge pipes were leaking effluent wastewater to ground surface. Any operational difficulty resulting in noncompliance with permit conditions or State regulations must be reported to the Department of Environmental Protection within 24 hours of occurrence.
2. Heavy solids were noted in clarifier. Floc noted going over weirs.
3. Hydraulic oil was noted discharging from the blowers to ground surface. The used oil should be cleaned up and disposed of properly. Second notice.
4. Influent and effluent Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Total Suspended Solids (TSS), Fecal Coliform and Nitrates were not reported on the Discharge Monitoring Reports (DMRs) for January, February and March 2000.
5. Part A of the DMRs is not filled out completely. All the blocks above the shaded areas containing monitoring including sample measurements, units, frequency of analysis, sample type, number of exceedances (NO. Ex.), average, maximum and minimum must be completed.
6. The Department has not received an Annual Reuse Report. This report should be submitted by January 1 of each year using Form 62-610.300(4)(a)2, which is enclosed.
7. Documentation of calibration for the flow meter was not available on-site. Flow measuring devices must be calibrated at least annually.
8. Promote best management practices in the area of the wastewater treatment facility. Various used tires were being stored in the area of the wastewater treatment facility. Please remove and dispose the tires properly.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Any questions should be addressed to Tom Powers at (407) 893-3313.

Sincerely,

Clarence C. Anderson

Clarence C. Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

Date: FEB. 14, 2001

CCA/tp/ww

Enclosures

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	1/9/01 12:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	1/9/01 1:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430.			
SHARPES, FL 32959			

Inspection Type: C | E | I — Samples Taken(Y/N): N — @ Sample ID#: — Samples Split (Y/N): N

☒ Domestic ☐ Industrial — Were Photos Taken(Y/N): Y — @ Log book Volume: — @ Page

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Minor; U=Unsatisfactory; Blank=Not Evaluated

Significant Non-Compliance Criteria Should be Reviewed when Unsatisfactory Ratings Are Given in Areas Marked by a "♦"

	PERMITTING/OTHER		COMPLIANCE/ENFORCEMENT PROGRAM		FACILITY/OPERATIONS		FIELD/LABORATORY
S	1. ♦Permit	S	3. Laboratory	M	6. Facility Site Review	M	9. ♦Effluent Quality
	2. ♦Compliance Schedules	S	4. Sampling	S	7. Flow Measurement	S	10. ♦Effluent Disposal
		M	5. ♦Records & Reports	S	8. ♦Operation & Maintenance	S	11. Residuals Management
	13. Other:						12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER.

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Orlando 407/893-3313	2/13/01
@ Signature of Reviewer: Clarence Anderson	District Office/Phone Number: Orlando 407/893-3313	Date: 2/13/01

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI

Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program

Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal

Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: FLA010353 issued 7/21/00 expires 7/20/05.

RECORDS AND REPORTS: Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site.
DMRs lab results and chains of custody are to be stored on site for Department review.
Influent and effluent Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Total Suspended Solids (TSS), Fecal Coliform and Nitrates were not reported on the Discharge Monitoring Reports (DMRs) for January, February and March 2000.
Part A of the DMRs is not filled out completely. All the blocks above the shaded areas containing monitoring including sample measurements, units, frequency of analysis, sample type, number of exceedances (NO. Ex.), average, maximum and minimum must be completed.
The Department has not received an Annual Reuse Report. This report should be submitted by January 1 of each year using Form 62-610.300(4)(a)2, which is enclosed.

LABORATORY: Test America Laboratory. Department of Health certified.

SAMPLING: Grab samples are being taken for the influent and effluent. An 8 hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW:

Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers. **Hydraulic oil was noted discharging from the blowers to ground surface. The used oil should be cleaned up and disposed of properly. Second notice.**
Brown foam noted. Slight odor. Aerobic digestor
Clarifier: **Heavy solids were noted in clarifier. Floc noted going over weirs.** Chlorine added to weirs for algae control.
CCC: Gas chlorine 150 pound cylinders with dual switch over. **All gas chlorine cylinders are not chained in place.**
The effluent lift station dual discharge pipes were leaking effluent wastewater to ground surface. Any operational difficulty resulting in noncompliance with permit conditions or State regulations must be reported to the Department of Environmental Protection within 24 hours of occurrence.
RPZ noted.

FLOW MEASUREMENT: Stevens flow meter. **Graph not operating. Last calibration not indicated.**

EFFLUENT: Clear. Review of the DMRs on from 10/99 to 11/00 by Orlando staff indicate: Nitrates were 19.3 mg/L on 12/99. Operator submitted explanation for the exceeded value.

GROUND WATER: Groundwater data was not reviewed at this time.

DISPOSAL METHOD: An existing 0.206 MGD AADF permitted capacity rapid rate restricted access reuse system (R001) consisting of four (4) dual-cell percolation ponds (297,000 □) square feet total wetted area. Ponds were dry.

RESIDUALS MANAGEMENT: Indian River County RMF facility.

OTHER: **Promote best management practices in the area of the wastewater treatment facility. Various used tires were being stored in the area of the wastewater treatment facility. Please remove and dispose the tires properly.** Air pack on site.

Sheffield Engineering & Associates, Inc.

CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
4322 ANDERSON ROAD • ORLANDO, FLORIDA 32812
PHONE 407-658-0512 FAX 407-482-5691

6r 2/9
KW 2/12

February 1, 2001

Florida Department of Environmental Protection
Domestic Wastewater Program
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

SUBJECT: **Sun Lake Estates WWTF Annual Reuse Report (9814)**
Facility I.D. No.: 3005P00377

To Whom It May Concern:

Enclosed is the Annual Reuse Report concerning the above subject project. We apologize for the tardiness of this report. This was due to the inability of my office to locate the certified DEP Discharge Monitoring Reports for the time period in question. We have since corrected this problem and have contacted the Operator so as to not let this happen in the future.

If you have any questions or require any additional information, please contact.

Sincerely,

John G. Craig
Senior Project Manager

C: Thad Terry, Owner



Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

ANNUAL REUSE REPORT

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy to each of the following three addresses:

   a. DEP Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part IX on pages 7 and 8 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

Part II - General Information

1. Reporting Period: October 1, 1999 through September 30, 2000

2. Date Submitted 01/15/01

3. Person Completing This Form

   Name JOHN CRAIG

   Title SENIOR PROJECT MANAGER

   Organization SHEFFIELD ENGINEERING & ASSOCIATES, INC.

   Number and Street 4322 ANDERSON ROAD

   City/State/Zip Code ORLANDO, FLORIDA 32812

   Telephone 407-658-0512

4. Reuse System Name SUN LAKE ESTATES WWTF

5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

      City SHARPES County BREVARD

      DEP District (check one):

      - ☐ Northwest (Pensacola)
      - ☐ Northeast (Jacksonville)
      - ☐ Southwest (Tampa)
      - ☒ Central (Orlando)
      - ☐ Southeast (West Palm Beach)
      - ☐ South (Ft. Myers)

      Water Management District (check one):

      - ☐ Northwest Florida (Havana)
      - ☐ Suwannee River (Live Oak)
      - ☐ Southwest Florida (Brooksville)
      - ☐ St. Johns River (Palatka)
      - ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
SUN LAKE ESTATES	3005P00377	BA	0.135	0.100
Total Treated Wastewater				0.984

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	0.984
Supplemental Water Supplies (Circle types of water used - Enter total flow)	
Surface Water Ground Water	
Stormwater Drinking Water	
Water Recovered from ASR [b]	
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	0.984

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III			
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part IX of this form.)	III			
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	0.206	0.984	6.81
	Surface Water Augmentation (Discharge to Class I Waters)	V			
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII			
	At Other Facilities	VII			
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			0.206	0.984	6.81

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]			N/A

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. Reuse (From bottom of Part IV of this form)	0.984
2. Effluent Disposal (From bottom of Part V)	
3. Flow Stored in ASR (See note [b] on ASR in Part III.)	
Total (Should equal the total in Part III of this form.) [d]	0.984

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII - Public Access Reuse Systems

A. Number of Customers

1. How many single-family residences have reclaimed water service? N/A
2. How many golf courses are irrigated using reclaimed N/A
3. How many parks or playgrounds are irrigated using reclaimed water? N/A
4. How many schools are irrigated using reclaimed water? N/A
5. List or describe any unique or unusual uses of reclaimed water. N/A

B. Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☒ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☒ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? 0

   How many of these cross-connections have been eliminated? N/A

   Please, attached a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? 0

   How many inspections of new reclaimed water connections were made at the time of initial connection? N/A

4. How often are the reclaimed water facilities owned/operated by existing reclaimed water customers inspected? N/A

5. In addition to the new customer inspections reported in Item 3 above, how many routine or periodic inspections of existing customers were conducted during the reporting period? N/A

Part VIII - Charges for the Use of Reclaimed Water (Optional)

Completion of this part of the form is optional. Data on charges for the use of reclaimed water is valuable to utilities and agencies involved in reuse. This type of information is particularly valuable to utilities that are in the process of developing reuse programs. It is hoped that you will share your experience with others by completing this part.

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

Part IX - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.

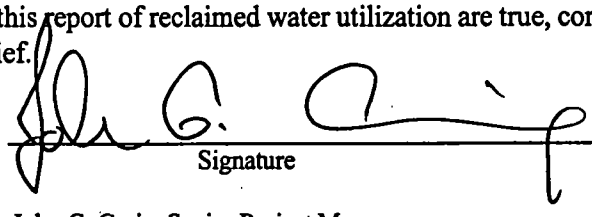
☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☒ **None of these items are required for this reuse system.**

Part X - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: 02/01/01  Signature

Phone: 407-658-0512 John G. Craig, Senior Project Manager
Name and Title (please type)

Company Name: Sheffield Engineering & Associates, Inc.

Address: 4322 Anderson Road

City/State/Zip Orlando, Florida 32812

TP 2/13/01

Sheffield Engineering & Associates, Inc.

CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
4322 ANDERSON ROAD • ORLANDO, FLORIDA 32812
PHONE 407-658-0512 FAX 407-482-5691

January 16, 2001



Mr. Tom Powers
Florida Department of Environmental Protection
905-A Palm Springs Blvd.
Indian Harbor Beach, Florida 32937

SUBJECT: **Sun Lake Estates, WWTF**

Dear Mr. Powers:

Attached are the DMR's as promised by Ms. Paula Wells of Sun Lake Estates concerning the above subject project. It is my understanding that Mr. Willie Condry will be supplying the remaining DMR's required.

If you have any questions or require any additional information, please contact.

Sincerely,

John G. Craig

Enclosures

JC/jab

Sheffield Engineering & Associates, Inc.

CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
4322 ANDERSON ROAD • ORLANDO, FLORIDA 32812
PHONE 407-658-0512 FAX 407-482-5691

G 2/14
CA 2/22



February 17, 2000

Mr. Gary P. Miller
Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

RE: Brevard County – DW
Notice of Permit Expiration
Sun Lake Estates
Waste Facility – Permit # FLA010353

Dear Mr. Miller

This letter is to advice you that we are planning to renew the above referenced permit. The required information will be forwarded to your office within the next 30 days.

If you have additional questions please feel free to contact me at the above numbers.

Sincerely

Michael Paul Bahor, P.E.
President

MPB:jab

C: Kelly Barnes

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
POST OFFICE BOX 430
SHARPS FL 32959

OCD-C-WW-00-0089

ATTENTION KELLY BARNES
PRESIDENT

Brevard County - DW
Notice of Permit Expiration
Sun Lake Estates
Wastewater Facility - Permit No. FLA010353

Dear Mr. Barnes:

A review of our files has disclosed that your Wastewater Permit Number FLA010353 will expire on **September 25, 2000.**

In accordance with Chapter 62-620, Florida Administrative Code (F.A.C.), the Department is authorized to issue a Wastewater Permit for the operation and/or construction of treatment and disposal facilities. A Wastewater Permit Application (Forms 1 and 2A) must be submitted no later than **March 25, 2000, 180 days** prior to the expiration date of the referenced permit. The permit application must be prepared, signed and sealed by a professional engineer registered in the State of Florida.

Operation of a pollution source without a valid permit from the Department of Environmental Protection constitutes a violation of Rule 62-4.03, Florida Administrative Code, and Chapter 403.161, Florida Statutes.

You are requested to advise the Department, in writing, of your intent to submit Wastewater Permit Application within fourteen (14) days of the date of this letter.

Please address any questions to Clarence Anderson, Wastewater Compliance/Enforcement Section at (407) 893-3313.

Sincerely,

Gary P. Miller
Program Manager
Wastewater Compliance/Enforcement

Date: February 11, 2000

GM/ca

cc: DEP/Melbourne
DW Permitting Section

"More Protection, Less Process"

o:\anderson\expiring\do\created\sun lake estates.doc

Printed on recycled paper.

12/27 RW

Brev. Co.
"Sun Lake Estates"

Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

DEC 1999
RECEIVED
D.E.P. CENTRAL DISTRICT

ANNUAL REUSE REPORT

Part I - Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy to each of the following three addresses:

   a. DEP Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   b. The appropriate DEP district office (attention Domestic Wastewater Program).

   c. The appropriate water management district.

3. Please type or print legibly. Submit all pages of this form.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed annually for each separate reuse system.

5. Use the units specified in the form. For flows, show annual average flows (in mgd). This can be obtained by averaging daily flows over a 365-day period, dividing the total annual volume by 365, or by averaging the 12 monthly average flow values.

6. Be sure to submit the required attachments (see Part IX on pages 7 and 8 of this form).

7. The cover sheet of your permit will identify portions of your project classified as "reuse" and portions classified as "effluent disposal." Rule 62-610.810, F.A.C., lists the criteria for classifying projects (or portions of projects) as "reuse" or "effluent disposal."

Part II - General Information

1. Reporting Period: October 1, 1998 through September 30, 1999

2. Date Submitted December 21, 1999

3. Person Completing This Form

   Name John Craig

   Title Engineering Technicion

   Organization Sheffield Engineering & Assoc., Inc.

   Number and Street 4322 Anderson Road

   City/State/Zip Code Orlando, Florida 32812

   Telephone (407) 658-0512

4. Reuse System Name Sun Lake Estates WWTF

5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

      City Sharpes County Brevard

DEP District (check one):

- ☐ Northwest (Pensacola)
- ☐ Northeast (Jacksonville)
- ☐ Southwest (Tampa)
- ☒ Central (Orlando)
- ☐ Southeast (West Palm Beach)
- ☐ South (Ft. Myers)

Water Management District (check one):

- ☐ Northwest Florida (Havana)
- ☐ Suwannee River (Live Oak)
- ☐ Southwest Florida (Brooksville)
- ☐ St. Johns River (Palatka)
- ☐ South Florida (West Palm Beach)

b. Domestic Wastewater Treatment Facility Information

Enter the name of the facility, the DEP identification number, disinfection level,[a] permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system.

Facility Name	DEP Identification Number	Disinfection Level [a]	Permitted Capacity (mgd)	Average Flow (mgd)
Sun Lake Estates WWTF	3005P00377	BA	0.135	0.100
Total Treated Wastewater				0.100

[a] Enter one of the following codes for disinfection level for each treatment facility:
HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.
HB = High-level disinfection & basic disinfection for portions of the treated flow.

Part III - Reclaimed Water and/or Effluent Available for Reuse or Disposal

Source of Water	Average Flow (mgd)
Treated Wastewater [Enter the total from bottom of table in Part II]	0.100
Supplemental Water Supplies (Circle types of water used - Enter total flow) Surface Water Ground Water Stormwater Drinking Water	
Water Recovered from ASR [b]	
Total Water Available for Reuse or Disposal [Should equal the total in Part VI of this form]	0.063

[b] Aquifer Storage and Recovery (ASR) - This activity is described in Rule 62-610.466, F.A.C. If you have an ASR system included in your permit for the reuse system, please make separate entries in both Part III (for the total average flow withdrawn from the ASR well) and in Part VI (for the total average flow injected into the ASR well).

Part IV - Reuse

For each reuse activity, enter the permitted capacity, average flows, and acreage. Do not duplicate any of these entries in Part V of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Make discrete entries (do not show ranges). Show totals at the bottom of the table.

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III			
Agricultural Irrigation & Sprayfields	Edible Crops (Be sure to attach the inventory of edible crop irrigation. See Part IX of this form.)	III			
	Grass, Pasture, Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins (Including Some Perc Ponds) [c]	IV			
	Absorption Fields [c]	IV	0.206	0.100	6.81
	Surface Water Augmentation (Discharge to Class I Waters)	V			
	Injection to Potable Aquifers	V			
Industrial	At Treatment Plant	VII			
	At Other Facilities	VII			
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other (Specify)					
Total Reuse [Enter total flow on Line 1 in Part VI of this form.]			0.206	0.100	6.81

[c] To be considered "reuse," either of the following conditions must exist:

* There are multiple basins or absorption fields that are routinely wetted, dried, and maintained in accord with Part IV of Chapter 62-610, F.A.C., or
* Continuously-loaded ponds must meet the higher treatment/disinfection requirements in Rule 62-610.525, F.A.C.

If neither condition is met, the perc pond or absorption field is "effluent disposal" and should be recorded in Part V in this form (under "Other").

Part V - Effluent Disposal

For each effluent disposal activity, enter the permitted capacity and average flow. Do not duplicate any of these entries in Part IV of this form. Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the effluent disposal types listed in this part. Make discrete entries (do not show ranges) for capacity and flow. Show totals at the bottom of the table.

Disposal Type	Disposal Sub-Type	Permitted Capacity (mgd)	Average Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal			
Other (specify)			
Total Flow Disposed [Enter total flow on Line 2 in Part VI of this form.]		N/A	N/A

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Average Flow (mgd)
1. Reuse (From bottom of Part IV of this form)	0.100
2. Effluent Disposal (From bottom of Part V)	N/A
3. Flow Stored in ASR (See note [b] on ASR in Part III.)	N/A
Total (Should equal the total in Part III of this form.) [d]	0.100

[d] The totals in Parts III and VI will not be equal if one of the following conditions exists (check as appropriate):

- ☐ The reuse system includes an ASR system and the amounts injected and withdrawn during the year differ.
- ☐ The reuse system includes one or more reuse activities in which reclaimed water is returned to the treatment facility after its use, where it is then available for reuse or disposal.

Part VII - Public Access Reuse Systems

A. Number of Customers

1. How many single-family residences have reclaimed water service? N/A
2. How many golf courses are irrigated using reclaimed water? N/A
3. How many parks or playgrounds are irrigated using reclaimed water? N/A
4. How many schools are irrigated using reclaimed water? N/A
5. List or describe any unique or unusual uses of reclaimed water. N/A

B. Cross-Connection Control Activities

Rule 62-610.469, F.A.C., imposes cross-connection control requirements on reuse systems permitted under Part III of Chapter 62-610, F.A.C. This includes requirements for the implementation of cross-connection control programs by all public water supply systems serving areas that are within the general reclaimed water service area. Color-coding, labeling, and separation distance requirements are included. In addition, inspections within the reclaimed water service area are required.

1. Are all public water supply systems serving areas that are within the general reuse service area actively implementing and enforcing their cross-connection control programs? ☒ Yes ☐ No

   Have all of these cross-connection control programs been accepted by the DEP or the approved county health department? ☒ Yes ☐ No

2. How many illegal cross-connections have been identified during the reporting period? 0

   How many of these cross-connections have been eliminated? N/A

   Please, attached a description of identified cross-connections and efforts taken to eliminate them.

3. How many new connections were made to the reclaimed water system during the reporting period? 0

   How many inspections of new reclaimed water connections were made at the time of initial connection? N/A

4. How often are the reclaimed water facilities owned/operated by existing reclaimed water customers inspected? N/A

5. In addition to the new customer inspections reported in Item 3 above, how many routine or periodic inspections of existing customers were conducted during the reporting period? N/A

Part VIII - Charges for the Use of Reclaimed Water (Optional)

Completion of this part of the form is optional. Data on charges for the use of reclaimed water is valuable to utilities and agencies involved in reuse. This type of information is particularly valuable to utilities that are in the process of developing reuse programs. It is hoped that you will share your experience with others by completing this part.

Please, list the fees charged for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces. Make all entries in the units shown.

1. How much do you charge a single-family residential customer (assume a 0.2-acre lot) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

2. How much do you charge non-residential customers, such as golf courses, (assume 0.1 mgd on a 50-acre site) for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

Part IX - Required Attachments

Check, as appropriate, and attach the required documentation.

☐ **Inventory of Edible Crop Irrigation** - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name of the agricultural operation.
b. Name and telephone number of the owner or operator of the agricultural operation.
c. Address of the agricultural operation.
d. Edible crops irrigated using reclaimed water.
e. Type of application (irrigation) method used.
f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

☐ **Inventory of Storage Facilities** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a copy of the current inventory of storage facilities, as required by Rules 62-610.464, 62-610.830, and 62-610.870, F.A.C. The inventory shall include the following information:

a. Name or identifier for the storage system.
b. Location.
c. Function of the storage system (system storage or reject storage).
d. Type of facility (covered tank, uncovered tank, lined pond, unlined pond).
e. Indication of whether or not the storage facility is a water of the state or discharges to a water of the state.
f. Distance to the nearest public water supply well.
g. Distance to the nearest potable water supply well, which is not a public water supply well.

☐ **Summary of Public Notification Program** - If this reuse system was permitted under Part III of Chapter 62-610, F.A.C., attach a summary of the public notification program activities during the reporting period, as required by Rule 62-610.468(6), F.A.C. The summary shall include the following:

a. Details of written public notification activities (include copies of written notices).
b. Summary of activities involving the news media.
c. Use of advisory signs.
d. Other public notification activities.

☒ **None of these items are required for this reuse system.**

Part X - Permittee's Certification

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: December 21, 1999 — Signature

Phone: (407) 658-0512 — John Craig, Eng. Tech. (Name and Title (please type))

Company Name: Sheffield Enginerring & Associates Inc.

Address: 4322 Anderson Road

City/State/Zip Code: Orlando, Florida 32812

Central District
Melbourne Office
13 East Melbourne Ave.
Melbourne, Fl. 32901

Re: Sun Lake Estates/Inspection 10/7/98

Attn: Tom Powers

Dear Tom,

* note: At the time of the inspection, this facility was being operated by John Lockhart, Lockhart Environmental Concerns, Inc. who had not serviced the wastewater facility for 10/2/98 through 10/12/98. We started servicing the facility on 10/12/98.

1. The clarifier was wasted approximately 3,000 to 4,000 gallons. The clarifier was then hosed and brushed.

2. Solids in the clarifier effluent was do to the poor operating condition the facility was left in from the previous operator. Solids were pumped from the CCC (500 gallons).

3. The thick crust of floatables was also due to poor operations. The clarifier stilling well has been cleaned.

4. Grab sampling for parameters is now being taken by composite sampling.

5. The peculation pond excessive vegetation was due to mowing and weed whacking down to the water line. We are checking in to using a herbicide in pond.

6. The flow meter has been checked and replaced, the motor needs to be replaced.

7. Nitrates not being reported is due again, to John Lockhart, the previous operator.

* Ground water Monitoring files: The questions can be answered by the Facility Engineer.

Sincerely,

Willie Condry

Willie Condry

RECEIVED
NOV 1998
DEP-CENTRAL DISTRICT

DW

Department of Environmental Protection

Jeb Bush
Governor

CENTRAL DISTRICT
Melbourne Office
13 East Melbourne Avenue
Melbourne, FL 32901

David B. Struhs
Secretary

October 12, 1999

MNCL-WW-99-145

CERTIFIED
P 403 790 726

Kelly Barnes, President
Sun Lake Estates Home Owners Association
Post Office Box 430
Sharpes, FL 32959



Brevard - DW
Sun Lake Estates, WWTF

Dear Mr. Barnes:

On August 18, 1999, Department personnel conducted a routine inspection of you wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following unsatisfactory conditions were noted:

1. Hydraulic oil was noted discharging from the aeration blowers to ground surface.

2. The last calibration date recorded on the flowmeter was 12/18/97. Flow measuring devices must be calibrated annually. **Second notice.**

3. Various debris such as PVC pipe and other equipment were noted around the facility. Please provide better housekeeping in these areas.

4. Please provide lids for trash receptacles.

5. Upon reviewing the Ground Water Monitoring files, the following deficiencies were noted:

a. Preservatives were not entered on the groundwater monitoring reports for the parameters of Total Dissolved Solids, Fecal Coliform, and Turbidity. Ice is considered a preservative to cool samples to 4 degrees Centigrade even though it is not added to the samples. This can be noted by entering "Cool 4 ^{0}C" in the "Preservatives Added' column on the groundwater monitoring reports. Please make this notation on future submittals.

b. Units were not entered for pH on the groundwater monitoring reports. Please enter "Standard Units" which can be abbreviated SU on future submittals.

c. Depth to groundwater measurements were reported instead of groundwater elevations on the groundwater monitoring reports for the first quarter of 1998. Please submit a revised groundwater monitoring report for the first quarter of 1998 containing the correct information for groundwater elevations.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Your reply and any questions should be addressed to Tom Powers at the above address.

Sincerely,

Deborah Valin
Environmental Manager
Melbourne Office

DV/tp

Enclosure

cc: Domestic Waste Section - FDEP/Orlando
Groundwater Section – FDEP/Orlando

COMET ENTRY DATE

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	8/18/99 10:00
SHARPES BLVD.		Phone	@ Exit Date/Time
SHARPES, FL			8/18/99 11:00

Name(s) of Field Representatives(s)	Title	Phone
PAULA JOHNSON	MANAGER	407/639-0370

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION		407/639-0370	
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N): N
☒ Domestic ☐ Industrial				Were Photos Taken(Y/N): N	@ Log book Volume :	@ Page

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Minor; U=Unsatisfactory; Blank=Not Evaluated

Unsatisfactory Ratings in Areas Marked by a "Diamond (♦)" Will Always put the Facility Status in Significant Non-Compliance

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
S	1.♦Permit FLA010353	S	3. Laboratory	M	6. Facility Site Review	S	9. ♦Effluent
	2.♦Compliance Schedules	S	4. Sampling	S	7. Flow Measurement	S	10.♦Disposal
		S	5.♦Records & Reports	S	8.♦Operation & Maintenance	S	11. Residuals Mgmt
	13. Other:					M	12. Groundwater

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Minor-Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions NON COMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Tom Powers T. Powers	Central (407) 893-3313	8/25/99
@ Signature of Reviewer	District Office/Phone Number	Date
	Central (407) 893-3313	

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code		NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
N	5			1	2	3

ADDITIONAL NPDES COMMENTS

Inspection Type (Field 1) A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI

Inspection Code (Field 2): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local Program

Facility Type (Field 3): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal

Every other field is self explanatory

Revised

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: FLA010353 issued 10/03/95 expires 09/05/00.

RECORDS AND REPORTS: : Bound logbook on site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site.
DMRs lab results and chains of custody were on site for Department review.

LABORATORY: Test America Laboratory. Department of Health certified.

SAMPLING: Grab samples are being taken for the influent and effluent. An 8 hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand (CBOD5) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW:

Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers. **Hydraulic oil was noted discharging from the blowers to ground surface. The used oil should be cleaned up and disposed of properly disposed of.**
Brown foam noted. Slight odor. Aerobic digestor. **Heavy sludge noted in aerator.**
Clarifier: Effluent clear over weirs. Chlorine added to weirs for algae control.
CCC: Gas chlorine 150 pound cylinders with dual switch over. Locked door, did not inspect chlorine room.
RPZ noted.

FLOW MEASUREMENT: Stevens flow meter. **Graph not operating. Last calibration was 12/18/97.**

EFFLUENT: Clear. Review of the DMRs on WAC from 6/98 to 12/98 by the Melbourne staff are satisfactory. No DMR results were indicated on WAFR.

GROUND WATER: **See attached comments.**

DISPOSAL METHOD: An existing 0.206 MGD AADF permitted capacity rapid rate restricted access reuse system (R001) consisting of four (4) dual-cell percolation ponds (297,000 □) square feet total wetted area.

RESIDUALS MANAGEMENT: Environmental Services Residuals Management, Orlando.

OTHER: **Provide lids for trash receptacles.** Promote best management practices in the area of the wastewater treatment facility. **Various debris such as PVC pipes and old equipment should be removed from area.** Air pack on site.

639-0370

ccford

Florida Department of Environmental Protection
Central District / Melbourne Office

COMPLAINT RECEIPT / INITIAL INSPECTION FORM

LIZ

COMPLAINT #: 99-005	DATE: 4/9/99
COMET #: 223700	TIME: 1:30 ☐ AM ☑ PM

PROGRAM (Check applicable area(s)):
☐ DF ☐ SL ☐ MA ☐ BS
☐ IW ☑ DW ☐ PW
☐ HW ☐ SW
☐ CU ☐ ER ☐ AP

COUNTY: ☑ Brevard ☐ Indian River

☑ Anonymous Complaint

Complainant's Name: THROUGH HEALTH DEPT. (BC) Phone #: ( ) 633-2055

Address: City: State: Zip Code

Reason for Complaint: SEWAGE IN PONDS OFF LAKE ONTARIO AVE DR
DISCHARGE TO DITCH ALONG PROPERTY LINE

Complaint Location: SUN LAKE ESTATES City: SHARPES/COCOA Zip Code

Time violation has existed: ✓ Day(s) Week(s) Month(s) Year(s) ☐ Unknown

Directions to site:

Responsible Party: ☐ Owner ☐ Contractor ☑ Facility Representative ☐ Other:

Name: PAULA JOHNSON	Name: SUN LAKE ESTATES
Address: 4865 LAKE ONTARIO DR	Address:
City: COCOA State: Zip Code:	City: State: Zip Code:
Phone#: ( ) 639-0370	Phone#: ( )

Complaint received by: ☐ CM ☐ SM ☐ BP ☑ TP ☐ DV ☐ Secretary ☐ Other

Supervisor acknowledgement: [signature]

Person designated to investigate: ☐ CM ☐ SM ☐ BP ☑ TP ☐ DV ☐ Other _____

or Agency to which violation has been referred: ☐ Orlando DEP ☐ SJRWMD ☐ FMP ☐ ACOE

☐ Brevard _____ ☐ Indian River County _____ ☐ City _____ ☐ Other _____

FAXED ON: / / and/or MAILED ON: / /

Remarks: GATES ORDERED TO CEASE PEOPLE FROM ENTERING PERC POND AREAS. (6 PONDS) SIGNS POSTED NO TRESPASSING

Site Visit Date: 4/9/99 4/30/99

Facts Discovered: 4-WHEEL DRIVE TRUCKS WERE PULLING GATES OFF CANADERAC GRAVEL AREA. TO GET IN AREA TO "MUD RUN" THE VEHICLES.
4/30/99. MRS JOHNSON, MANAGER OF SUN LAKE ESTATES, STATED THAT A DISCHARGE DID OCCUR OUT OF THE SOUTHEAST PERC POND. THIS WAS

Outcome: DUE TO THE POND OVERFLOWING WHEN THE OPERATOR FORGOT TO SWITCH PONDS FOR DISPOSAL (EFFLUENT) THE DISCHARGE FLOWED EAST TO A DITCH LOCATED ALONG THE PERC POND. THE PERCOLATION POND IS NOW BEING TILLED AND CLEANOUT. AND THE DISCHARGE FLOWS TO A SECOND POND LOCATED NORTH OF THE FACILITY. THERE ARE (6) PERCOLATION PONDS FOR THIS FACILITY. HTH WAS SPREAD IN THE AREA WHERE THE DISCHARGE OCCURRED

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION IMMEDIATELY
CLEARLY HANDWRITTEN, NOT TYPED

DATE: 4/9/99 - compliant 4/27/99 TIME: 8:30AM RECEIVED BY: T Powers

REPORTED BY: Paula Johnson

NAME OF PLANT/SYSTEM: SUN LAKE ESTATES

COUNTY: BREVARD

ADDRESS:

PHONE NO.: 639-0370

OWNER:

DATE AND TIME OF FAILURE: 4/9/99

NATURE OF PROBLEM: Ponds effluent back up to ditch. Drying and berming up area where discharge occurred.

CORRECTIVE ACTION TAKEN: Spread HTH-Lime Bermed up ditch and pond.

DATE AND TIME EXPECTED BACK IN SERVICE: 4/23/99

REMARKS: Operator aware of discharge to ponds. Paula stated that she would have the area mowed. More later...

REVISED JUNE 24, 1997

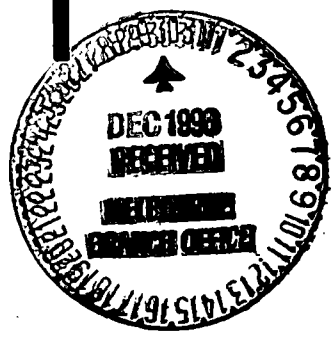
Brevard Co.

SHEFFIELD ENGINEERING

4322 ANDERSON RD. • ORLANDO, FL. • 32812

C. W. SHEFFIELD, P.E.
President

(407) 658-0512



December 29, 1998

Florida Department of Environmental Protection
Domestic Wastewater Program
13 East Melbourne Avenue
Melbourne, Florida 32901

SUBJECT: **Annual Reclaimed Water Utilization Report (9814)**
Sun Lake Estates WWTF
DEP Identification Number: 3005P00377

To whom it may concern:

Enclosed is the completed Annual Reclaimed Water Utilization Report as required by Rule 62-610.870, F.A.C.

If you have any questions or require any additional information, please contact.

Sincerely,

John G. Craig

c: Thad Terry, Owner

Florida Department of Environmental Protection
Twin Towers Office Bldg., 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

ANNUAL RECLAIMED WATER UTILIZATION REPORT

Part I - Instructions

General Instructions

1. This form is to be submitted on or before January 1 following the completion of each fiscal year (October 1 through September 30). Submittal is required by Rule 62-610.870, F.A.C. This report will be used to develop and maintain a reuse inventory. It will not be used for determination of compliance with permit limitations, other than requirements to submit this report. If flow monitoring information is not available for individual reuse types or types of users, please provide your best estimates of flows allocated to individual reuse types or types of users.

2. Submit one copy to each of the following addresses:

   a. The appropriate DEP district office (attention Domestic Wastewater Program).

   b. DEP Reuse Coordinator
   Mail Station 3540
   2600 Blair Stone Road
   Tallahassee, Florida 32399-2400

   c. The appropriate water management district.

3. Please type or print legibly.

4. Completion of this report is required for all domestic wastewater facilities having permitted capacities of 0.1 mgd or larger which contribute reclaimed water to one or more reuse systems permitted under Chapter 62-610, F.A.C. This form is to be completed for each separate reuse system.

5. Inventory of edible crop irrigation - If reclaimed water is used to irrigate edible crops at commercial agricultural sites, attach a copy of the current edible crop irrigation inventory as required by Rules 62-610.475 and 62-610.870, F.A.C. The inventory shall include the following information:

   a. Name of the agricultural operation.
   b. Name and telephone number of the owner or operator of the agricultural operation.
   c. Address of the agricultural operation.
   d. Edible crops irrigated using reclaimed water.
   e. Type of application (irrigation) method used.
   f. Approximate area (acres) under irrigation using reclaimed water on which edible crops are grown.

Instructions for Part II - General Information

1. Reporting Period - Enter the years associated with the beginning and end of the fiscal year covered by this report.

2. Date Submitted - Enter the date that this form was completed and submitted to DEP and the water management district.

3. Reuse System Name - Enter the name most commonly used to identify this reuse system. A reuse system may include several different reuse types or sites.

4. Treatment Facility Information:

   a. Location - Enter the name of the city and county in which the domestic wastewater treatment facility(ies) are located.

   b. Facility Information - Enter the name of the facility, the DEP identification number, disinfection level, permitted capacity, and annual average flow for each treatment facility providing reclaimed water to this reuse system. Enter one of the following codes for disinfection level for each treatment facility:

      HI = High-level disinfection, as described in Rule 62-600.440(5), F.A.C.
      IM = Intermediate disinfection, as described in Rule 62-600.440(6), F.A.C.
      BA = Basic disinfection, as described in Rule 62-600.440(4), F.A.C.
      LL = Low-level disinfection, as described in Rule 62-600.440(7), F.A.C.

      The permitted capacity of the entire treatment facility is to be entered in mgd. Please enter the annual average flow for each treatment facility. This may be calculated by summing the total volume (in millions of gallons) discharged during each day of the year and dividing by 365 or by summing the average monthly flows (in mgd) from the DMRs for each month during the reporting year and dividing by 12. Finally, enter the totals of the permitted capacities and average flows for all treatment facilities listed on the bottom line.

Instructions for Part III - Reclaimed Water Supplies

List the annual average of the total flows tributary to the reuse and disposal systems which are served by the domestic wastewater treatment facilities listed in Item 5b in Part II of this form. The reclaimed water flow should be taken from the total shown at the bottom of Item 5b in Part II. The annual averages for other supplemental water supplies are calculated by dividing the total amounts used (in million gallons) from each source by 365 days. Enter the total annual average flow recovered from a permitted aquifer storage and recovery system (ASR). This flow recovered from ASR is to be the gross flow recovered. Do not subtract the volume or flow introduced to storage in the ASR system during the year (flows stored will be reported in Part VI of this form). Finally, enter the total flows for all water sources at the bottom of the table in Part III.

Instructions for Part IV - Reclaimed Water Utilization

Using available flow records, other available information, and your best judgment, please allocate the average flows for all treatment facilities among the reuse types listed in this part. Enter the permitted capacity associated with each reuse activity. Enter the known or estimated annual average flow in mgd allocated to each reuse activity. Enter the known or estimated area associated with each reuse activity. Individual rows are to be completed for each reuse activity. Finally enter the total capacities, total flows, and total areas for all reuse activities on the row labeled "Total Reuse."

Instructions for Part V - Effluent Disposal Summary

Using available flow records, other available information, and your best judgment, please allocate the average flows for all domestic wastewater treatment facilities, which provide reclaimed water to this reuse system, among the effluent disposal types listed in Part V. This section should include information on disposal methods used as backup to reuse activities as well as disposal methods used for primary means of effluent disposal. Finally, enter the total capacities and total flows for all disposal methods used at these treatment facilities on the "Totals" line.

Instructions for Part VI - Summary of Reuse and Disposal

1. For "reuse," enter the total flow from Part IV on this line.

2. For "effluent disposal," enter the total flow from Part V on this line.

3. Aquifer Storage and Recovery (ASR) - The annual average flow introduced into storage in a permitted ASR system is to be entered. This is calculated by dividing the total quantity introduced into the ASR for storage during the year (in million gallons) by 365 days. Do not make any adjustment for flows withdrawn from ASR storage (flows withdrawn will be reported in Part III of this form).

4. The total average flows for reuse, disposal, and storage in ASR should be added together and entered on the "Total" line. The total average flow should equal the total average flow shown in Part III of this form.

Instructions for Part VII - Charges for the Use of Reclaimed Water (Optional)

1. Completion of this part of the form is optional. Data on charges for the use of reclaimed water is valuable to utilities and agencies involved in reuse. This type of information is particularly valuable to utilities that are in the process of developing reuse programs. It is hoped that you will share your experience with others by completing this part.

2. Please, list the fees charged for a typical single-family residential connection (assume a 0.2-acre lot) for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces.

3. Please, list the fees charged for a typical non-residential connection (assume an average use of 0.1 mgd) for the use of reclaimed water. Please do not enter wastewater or sewer charges. If reclaimed water is provided at no cost, enter zeroes in both blanks. If the fee structure includes both flat rate and gallonage charge components, make a positive entry in both spaces.

Instructions for Part VIII - Public Access Systems

Please enter the numbers of single-family residences, golf courses, parks/playgrounds, and schools irrigated with reclaimed water. Also, please note any unique or unusual uses for reclaimed water in your reuse system.

Part II - General Information

1. Reporting Period: October 1, 1997 through September 30, 1998

2. Date Submitted DECEMBER 30, 1998

3. Person Completing This Form

   a. Name JOHN G. CRAIG

      Title ENGINEERING TECH.

      Organization SHEFFIELD ENGINEERING & ASSOCIATES

      Number and Street 4322 ANDERSON ROAD

      City/State/Zip Code ORLANDO, FLORIDA 32812

      Telephone (407) 658-0512

4. Reuse System Name SUN LAKE ESTATES WWTF

   DEP Identification Number 3005P00377

5. Domestic Wastewater Treatment Facilities Providing Reclaimed Water to This Reuse System

   a. Location of Facilities

      City SHARPES County BREVARD

b. Domestic Wastewater Treatment Facility Information

Facility Name	DEP Identification Number	Disinfection Level	Capacity (mgd)	Average Flow (mgd)
SUN LAKE ESTATES WWTF	3005P00377	BA	0.135	0.063
Total			0.135	0.063

Part III - Reclaimed Water Supplies

Source of Water	Flow (mgd)
Reclaimed Water (From Part II of this form)	0.063
Supplemental Water Supplies	
Surface Water	N/A
Stormwater	N/A
Ground Water	N/A
Drinking Water	N/A
Water Recovered from ASR	N/A
Total	0.063

Part IV - Reclaimed Water Utilization

Reuse Type	Reuse Sub-Type	Part	Capacity (mgd)	Flow (mgd)	Area (acres)
Public Access Areas & Landscape Irrigation	Golf Course Irrigation	III			
	Residential Irrigation	III			
	Other Public Access Areas	III			
Agricultural Irrigation	Edible Crops	III			
	Other Crops	II			
Ground Water Recharge & Indirect Potable Reuse	Rapid Infiltration Basins 4 DUAL CELLED PERC PONDS	IV	0.206	0.063	6.81
	Absorption Fields	IV			
	Surface Water Augmentation	V			
	Injection	V			
Industrial	At Treatment Plant	VII			
	At Other Facilities	VII			
Toilet Flushing		III			
Fire Protection		III			
Wetlands					
Other, Specify					
Total Reuse			0.206	0.063	6.81

Part V - Effluent Disposal Summary

Disposal Type	Disposal Sub-Type	Capacity (mgd)	Flow (mgd)
Surface Water Discharges	Ocean Outfall		
	To Coastal or Estuarine Waters		
	To Wetlands		
	To Other Surface Waters		
Deep Well Disposal		-	
Other (specify)			
Totals		N/A	N/A

Part VI - Summary of Reuse and Disposal

Reuse or Disposal Activity	Flow (mgd)
Reuse (From Part IV of this form)	0.063
Effluent Disposal (From Part V of this form)	N/A
Flow Stored in ASR	N/A
Total (Should equal the total in Part III of this form)	0.063

Part VII - Charges for the Use of Reclaimed Water (Optional)

1. How much do you charge a single-family residential customer for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

2. How much do you charge non-residential customers, such as golf courses, for the use of reclaimed water?

   Flat rate ($/month/connection) N/A

   Gallonage charge (cents/1000 gal.) N/A

Part VIII - Public Access Reuse Systems

1. How many single-family residences have reclaimed water service? N/A
2. How many golf courses are irrigated using reclaimed water? N/A
3. How many parks or playgrounds are irrigated using reclaimed water? N/A
4. How many schools are irrigated using reclaimed water? N/A
5. Unique or unusual uses of reclaimed water N/A

Part VIII - Certification

A. Permittee

I certify that the statements made in this report of reclaimed water utilization are true, correct, and complete to the best of my knowledge and belief.

Date: 12-28-98 _____
Signature of the Applicant

Phone: (407) 658-0512 JOHN G. CRAIG, ENGINEERING TECH.
Name and Title (please type)

Company Name: SHEFFIELD ENGINEERING & ASSOCIATES

Address: 4322 ANDERSON ROAD

City/State/Zip Code: ORLANDO, FLORIDA 32812

Department of Environmental Protection

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

CENTRAL DISTRICT
Melbourne Office
13 East Melbourne Avenue
Melbourne, FL 32901

RECEIVED
NOV 1998
D.E.P. CENTRAL DISTRICT

November 13, 1998

MNCL-WW-98-215

CERTIFIED
P 403 790 654

Kelly Barnes, President
Sun Lake Estates Home Owners Association
Post Office Box 430
Sharpes, FL 32959

Brevard - DW
Sun Lake Estates, WWTF

Dear Mr. Barnes:

On October 7, 1998, Department personnel conducted a routine inspection of you wastewater facility. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following unsatisfactory conditions were noted:

1. The clarifier surface was covered by a layer of sludge.

2. Solids were present in the clarifier effluent.

3. A thick crust of floatables and other material was noted behind the clarifier stilling well baffle.

4. Grab sampling is being performed on the influent and effluent for Carbonaceous Biochemical Oxygen Demand ($CBOD_5$); Total Suspended Solids (TSS) and Nitrates. An 8-hour composite sample, once every two weeks, is required for these parameters.

5. The percolation pond contained excessive vegetation.

6. Facilities with a design capacity of 0.100 million gallons per day (MGD) or greater are required to have a flow meter with a chart recorder.

7. A review of the Discharge Monitoring Reports (DMRs) for this facility indicates the following violations of Permit Condition 1A of Operating Permit Number FLA010353:

Nitrates were not reported from February, 1998 to May, 1998.

Upon reviewing the Ground Water Monitoring files, the following deficiencies were noted:

1. Please explain high turbidity levels in all monitoring wells. Please propose a course of action to reduce the turbidity levels to less than 20 NTU's.

2. Please ensure that the quarterly monitoring reports are completed in full with the correct information and that a signed letter of certification is included with each report.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Your reply and any questions should be addressed to Tom Powers at the above address.

Sincerely,

Deborah Valin
Section Manager
Melbourne Office

DV/tp

Enclosure

cc: Domestic Waste Section - Orlando

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = OPTIONAL

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES STP CANAVERAL BLVD SHARPES, FL	3005P00377	Brevard Phone	9/22/95 11:00 @ Exit Time/Date 12:00

Name(s) of Field Representatives(s)	Title	Phone
PAULA JOHNSON	MANAGER	639-0370

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator
Certification #:			

Inspection Type: C E I	Samples Taken(Y/N): N	@ Sample ID#: —	Samples Split (Y/N): N
☑ Domestic ☐ Industria	Were Photos Taken(Y/N): N	@ Log Book Volume: 5	@ Page: 175

In Compliance With Permit Conditions (Y/N): N

Recommended Actions: Non-compliance letter

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
[signature]	MELBOURNE/984-4800	10/17/95

@ Signature of Reviewer	District Office/Phone Number	Date

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

S	1. Permit		6. Sampling		11. Effluent
	2. Compliance Schedules		7. Self-Monitoring Program		12. Groundwater
	3. Pretreatment	M	8. Facility Site Review	S	13. Disposal Method
	4. Records & Reports	S	9. Flow Measurement		14. Residuals Management
	5. Laboratory	U	10. Operation & Maintenance		15. Other

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code | NPDES NUMBER | YR/MO/DA

1 | 2 5 | 3 | 11 12 | 17 | 18 | 19 | 20

Remarks

21 66

Inspection Type (Field 18): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspector Code (Field 19): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local
Facility Type (Field 20): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3=Agricultural, 4=Federal
Every other field is self explanatory.

FACILITY DIAGRAM @

ACCESS CONTROL: FENCE

INSPECTION COMMENTS

LOG:

C OPERATION on site. 1/2 per day 5 days a week w/ 1 weekend visit

aeration: .0135 MGD extended w/ large control aerobic digestor. MLSS chocolate brown 2 blowers slight odor

Clarifier: effluent clear over weirs multi screens not employed

CCC: Gas 150LB Cl2 - * leak in unit w/ scale corroded.
RPZ noted
effluent flowmeter w/ graph

Disposal: 4 dual cell perc ponds vegetation noted
3 MW intact - Residuals disposed by - Brownies.

MM: AK

jr 8/3
cc-TP

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 8/3/95 TIME: 11:07 (AM)/PM) RECEIVED BY: Ilia Herrera

REPORTED BY: Paula Johnson

NAME OF PLANT/SYSTEM: Sun Lake Estates COUNTY: Brevard

ADDRESS: _____

_____

PHONE: (407) 639-0370

OWNER: _____

_____

DATE & TIME OF FAILURE: 8/2/95 4:00 pm

NATURE OF PROBLEM: Solids washed out to perc ponds due to excessive rains (9 inches).

_____

CORRECTIVE ACTION TAKEN: Plant upset back to normal @ 10:00 pm 8/2/95. Will clean ponds after drying.

EXPECTED BACK IN SERVICE BY (DATE & TIME): 8/2/95 10:00 pm.

REMARKS: _____

_____

_____

_____

FOLLOW-UP IN WRITING: (Y/N)_____

Revised June 6, 1989

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	3005P03114	BREVARD	10/7/98 11:00
SHARPES BLVD		Phone	@ Exit Time/Date
SHARPES, FL			12:00 10/7/98

Name(s) of Field Representatives(s)	Title	Phone
PAULA JOHNSON	MANAGER	407/639-0370

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE EST HOME OWNERS ASSOC		407/639-0370	
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type [C] [E] [I] Samples Taken(Y/N): N @ Sample ID#: ---- Samples Split (Y/N): N

☒ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log book Volume : 9 @ Page 48

In Compliance With Permit Conditions (Y/N): N

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Tom Powers T. Powers	Central/(407) 984-4800	10/13/98
@ Signature of Reviewer	District Office/Phone Number	Date
	Central/(407) 984-4800	

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

S	1. Permit	S	6. Sampling	M	11. Effluent
	2. Compliance Schedule		7. Self-Monitoring Program	S	12. Groundwater
	3. Pretreatment	M	8. Facility Site Review	M	13. Disposal Method
M	4. Records and Reports	S	9. Flow Measurement	S	14. Residuals Management
S	5. Laboratory	S	10. Operation and Maintenance	M	15. Other

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, PAI, XSI, RI)

Transaction Code | NPDES Number | YR/MO/DA | Insp Type | Inspector | Fac Type

1 [ ] 2 [ ] 3 [ ] [ ] [ ] [ ] [ ] [ ] [ ] 11 12 [ ] [ ] [ ] [ ] [ ] [ ] 17 18 [ ] 19 [ ] 20 [ ]

Remarks

21 66

Inspection Type (Field 18) A=PAI, B=CBI, S=CSI, X=XSI, R=RI
Inspection Code (Field 19) S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead
Facility Type (Field 20): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal
Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: FLA010353 issued 10/03/95 expires 09/05/00.

RECORDS AND REPORTS: : Bound logbook on site. C operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on site.
DMRs/MORs, lab results and chains of custody were not on site for Department review.

LABORATORY: Tri-tech Laboratory. Department of Health certified.

SAMPLING: Grab samples are being taken for the influent and effluent. **An 8 hour composite sample of influent and effluent is required for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).**

FACILITY SITE REVIEW:

Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers. Brown foam noted. Slight odor. Aerobic digestor full of solids.
Clarifier: **Heavy Sludge noted in clarifier. Stilling well area needs to be cleaned.** Effluent clear over weirs. Chlorine added to weirs for algae control.
CCC: Gas chlorine 150 pound cylinders with dual switch over. Locked door, did not inspect chlorine room. RPZ noted.

FLOW MEASUREMENT: Stevens flow meter. **Graph not operating. Last calibration was 12/18/97.**

EFFLUENT: Clear. **Review of the MOR's from 2/97 to 5/98 by the Melbourne staff on GMS indicate that nitrates were not reported on the DMR's from 2/98 to 5/98.**

GROUND WATER: **See attached comments.**

DISPOSAL METHOD: An existing 0.206 MGD AADF permitted capacity rapid rate restricted access reuse system (R001) consisting of four (4) dual-cell percolation ponds (297,000 ±) square feet total wetted area. **Vegetation noted in and around percolation ponds.**

RESIDUALS MANAGEMENT: Environmental Services Residuals Management, Orlando.

OTHER: **Provide lids for trash receptacles.**
Air pack on site.

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

December 19, 1997

SUN LAKE ESTATES HOME OWNERS ASSOCIATION
POST OFFICE BOX 430
SHARPES FL 32959

OCD-DW-97-0972

ATTENTION KELLY BARNES
PRESIDENT

Brevard County - DW
Generator: Sun Lake Estates WWTF
Permit Number FLA010353
Agreement with American Pipe & Tank, Inc. RMF (D/B/A Central Process)

Dear M. Barnes:

The Agreement with American Pipe & Tank, Inc. RMF (D/B/A Central Process) is hereby approved. This approval will remain in effect as long as the Agreement is active. If the Agreement is to be terminated the Department shall be notified sixty (60) days prior to termination and another Agreement or an Agricultural Use Plan shall be submitted for review and approval.

This agreement shall pre-empt any previously approved or received AUPs.

The current operating permit for this facility indicates residuals generated by this facility are transported to Brownies Environmental Services RMF for final stabilization and subsequent landspreading. We are assuming that residuals from this facility will no longer be transported to Brownies Environmental Services RMF. Please advise if this is not correct.

Domestic residuals (sludge) shall be analyzed annually, in accordance with Chapter 62-640 (former Rule 17-640), F.A.C., and a copy of the analysis maintained at the facility for review during Department inspections.

Pursuant to Rule 62-640.300(3), F.A.C., American Pipe & Tank, Inc. RMF (D/B/A Central Process) shall be responsible for proper disposal of the residuals it receives.

If you have any questions regarding these comments, you may contact me or Cary Padell at (407) 893-3315.

Sincerely,

H. Lee Miller
Section Supervisor
Domestic Waste Permitting

HLM/cp/cs

DW-section

Department of Environmental Protection

Lawton Chiles
Governor



Please respond to:
Melbourne Office
[illegible] East Melbourne Avenue
Melbourne, FL 32901

Virginia B. Wetherell
Secretary

MCD-WW-97-0203

CERTIFIED
Z 026 390 977

Kelly Barnes, President
Sun Lake Estates Home Owners Association
Post Office Box 430
Sharpes, FL 32959

Brevard - DW
Sun Lake Estates, STP
Permit Number FLA010353

Dear Mr. Barnes:

On November 13, 1997, Department personnel conducted a routine inspection of your wastewater treatment plant. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following unsatisfactory conditions were noted:

1. No maintenance and operation logbook was found on-site. The certified operator shall maintain an operation and maintenance logbook for each plant, in a location accessible to 24 hour inspection. The logbook, at a minimum, shall include: identification of the plant; the signature and certification number of the operator; date and time in and out; specific operation and maintenance performed; tests performed, samples taken and major repairs made.

2. A crack was noted on the chlorine contact chamber.

3. A thick crust of floatables and other material was noted behind the clarifier stilling well baffle.

4. All gas chlorine cylinders were not chained in place.

5. Facilities with a design capacity of 0.100 million gallons per day (MGD) or greater are required to have a flow meter with a chart recorder.

6. Flow meter was last calibrated on May 23, 1994. At least an annual calibration of the flow meter is required.

7. The nitrate results reported on the Monthly Operating Reports (MORs) on February, 1997, was 32.4 mg/L; April, 1997, was 23.2 mg/L; and May, 1997, was 16.4 mg/L, which exceeds the nitrate standard of 12 mg/L.

8. The percolation pond contained excessive vegetation.

9. An overgrowth of dense vegetation prohibits safe access to the percolation pond(s). The entire perimeter of the percolation pond berm must be accessible.

10. Provide lids for trash receptacles.

Upon reviewing the Ground Water Monitoring files, the following deficiencies were noted:

1. The Department has not received the 2nd and 4th Quarter 1997, as well as the 1st and 2nd Quarter 1996, Groundwater Monitoring Reports. Please submit these reports.. Please ensure that the quarterly groundwater monitoring reports are submitted in a timely manner.

2. Please provide the Department with a detailed explanation of the field procedures used to collect samples from the groundwater monitoring wells.

3. The water level elevations are reported as depth to water from the top of the well casing. Please ensure that the groundwater levels for each monitoring well is calculated and reported as feet National Geodetic Vertical Datum (NGVD) on the quarterly reports. Additionally, please provide a summary of the groundwater elevation data in a tabular format for the last (8) quarters. At a minimum, the table will include each monitoring well's top of casing in feet NGVD, ground surface elevation in feet NGVD, depth to groundwater in feet, and water level elevation in feet NGVD. Accuracy of the elevation data shall be to 0.10 feet.

4. The monitoring well GMS numbers are incorrect on the Parameter Monitoring Reports. Also, a statement of data certification is not included with the quarterly reports. Please ensure that the quarterly monitoring reports are completed in full with the correct information and that a signed letter of certification is included with each report.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Your reply and any questions should be addressed to Tom Powers at the above address.

Sincerely,

Deborah Valin
Section Manager
Melbourne Office

Date: 12/5/97

DV/tp/tg
Enclosure
cc: Domestic Waste Section - Orlando

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	3005P03114	BREVARD	10/31/97 8:00
SHARPES BLVD		Phone	@ Exit Time/Date
SHARPES, FL			10/31/97 9:00

Name(s) of Field Representatives(s)	Title	Phone
PAULA JOHNSON	MANAGER	407/639-0370

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE EST HOME OWNERS ASSOC		407/639-0370	
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type: C | E | I — Samples Taken(Y/N): N — @ Sample ID#: — — Samples Split (Y/N): N

☒ Domestic ☐ Industrial — Were Photos Taken(Y/N): N — @ Log book Volume : 7 — @ Page 127

In Compliance With Permit Conditions (Y/N): N

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Tom Powers T. Powers	Central/(407) 984-4800	11/18/97
@ Signature of Reviewer	District Office/Phone Number	Date
	Central/(407) 984-4800	

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

S	1. Permit	S	6. Sampling	M	11. Effluent
	2. Compliance Schedule		7. Self-Monitoring Program	S	12. Groundwater
	3. Pretreatment	M	8. Facility Site Review	M	13. Disposal Method
	4. Records and Reports	S	9. Flow Measurement	S	14. Residuals Management
S	5. Laboratory	S	10. Operation and Maintenance		15. Other

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, PAI, XSI, RI)

Transaction Code (1) | NPDES Number (2–11) | YR/MC/DA (12–17) | Insp Type (18) | Inspector (19) | Fac Type (20)

Remarks (21–66)

Inspection Type (Field 18) A=PAI, B=CBI, S=CSI, X=XSI, R=RI

Inspection Code (Field 19): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead

Facility Type (Field 20): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3= Agricultural, 4=Federal

Every other field is self explanatory

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: DO05240526 issued 10/03/95 expires 09/05/00. FLA010353

RECORDS AND REPORTS: **No log book found on site.**

LABORATORY: Tri-tech Laboratory, HRS certified.

SAMPLING: All required sampling parameters are sampled by the operator.

FACILITY SITE REVIEW:

Access: Locked gate with fence.
Aeration: Bar screen. Marloff system with surge control. Two blowers. Brown foam noted. Slight odor. Aerobic digestor.
Clarifier: **Stilling well area needs to be cleaned.** Effluent clear over weirs. Chlorine added to weirs for algae control.
CCC: Gas CL2 150 pound cylinders with dual switch over. **Cylinders needs to be chained. Repair crack on CCC unit.**
RPZ noted.

FLOW MEASUREMENT: Stevens flow meter. **Graph not operating. Flow meter needs to be calibrated. Last calibration was 5/23/94.**

EFFLUENT: **Review of the MOR's from 8/96 to 9/97 by the Melbourne staff on GMS indicate that Nitrates exceeded 12.0 mg/L on 2/97 (32.4 mg/L) , 4/97 (23.2 mg/L) and 5/97 (16.4 mg/L).**

GROUND WATER: **See attached comments.**

DISPOSAL METHOD: An existing 0.206 MGD AADF permitted capacity rapid rate restricted access reuse system (R001) consisting of four (4) dual-cell percolation ponds (297,000 ±) square feet total wetted area. **Vegetation noted in and around percolation ponds.**

RESIDUALS MANAGEMENT: Environmental Services Residuals Management, Orlando.

OTHER: **Provide lids for trash receptacles.**

LOCKHART ENVIRONMENTAL CONCERNS, INC.

Janet Lockhart, President
John Lockhart, Vice President
Carol Sackett, Business Manager



August 26, 1996

Department Of Environmental Protection
13 East Melbourne Ave.
Melbourne, Florida 32901

Attn: Tom Powers

Re: Sunlake Estates

Dear Mr. Powers,

In response to the routine inspection of Sunlake Estates dated July 25, 1996, the following corrective action has been taken on the unsatisfactory conditions found.

1. Our log book is bound and has 12 months worth of log sheets.

2. The chart recorder is being fixed.

3. The exhaust fan and light have been fixed.

4. Overgrowth by percolation pond has been mowed and cleaned.

If you should have any further questions, please feel free to call me at the office.

Sincerely,

Carol Sackett
Business Manager

cc: file
Sunlake Estates

Department of Environmental Protection

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

Please respond to the:
Melbourne Office
13 East Melbourne Avenue
Melbourne, Florida 32901

August 2, 1996

CERTIFIED
P 489 096 562

Kelly Barnes, President
Sun Lake Estates Home Owners Association
Post Office Box 430
Sharpes, Florida 32959

MCD-DW-C-96-0109

Brevard County - DW
Sun Lake Estates, STP
Permit Number: FLA010353

Dear Mr. Barnes:

On July 25, 1996, Department personnel conducted a routine inspection of your sewage treatment plant. A copy of the inspection report is enclosed for your review. During the course of the inspection, and/or determined from records on file in this office, the following unsatisfactory conditions were noted:

1. The maintenance and operation log book should be in a bound ledger.

2. Facilities with a design capacity of 0.100 million gallons per day (MGD) or greater are required to have a flow meter with a chart recorder.

3. A ground level exhaust fan (for forced ventilation) and a light must be provided in the gas chlorine enclosure. The switch for this equipment should be located outside the enclosure.

4. An overgrowth of dense vegetation prohibits safe access to the percolation pond(s). The entire perimeter of the percolation pond berm must be accessible.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Your reply and any questions should be addressed to Tom Powers at the Melbourne office address or telephone 407/984-4800.

Sincerely,

Deborah Valin
Section Manager
Melbourne Office

DV:tph
Enc.
cc: Domestic Waste Section, FDEP-Orlando

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = OPTIONAL

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF SHARPES BLVD SHARPES	3005F00577	BREVARD Phone	7/25/96 9:00 @ Exit Time/Date 10:00

Name(s) of Field Representatives(s)	Title	Phone
Paula Johnson	MANAGER	

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #:
P.O. Box 430 SHARPES, FL 32959			

Inspection Type: C E I Samples Taken(Y/N): N @ Sample ID#: — Samples Split (Y/N): N

☑ Domestic ☐ Industria Were Photos Taken(Y/N): @ Log Book Volume: 6 @ Page:

In Compliance With Permit Conditions (Y/N): N

Recommended Actions: NOV - COMPLIANCE

Name (s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Thomas L Powers	MELBOURNE / 407-984-4800	7/29/96

@ Signature of Reviewer	District Office/Phone Number	Date

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

S	1. Permit DC0524026	/	6. Sampling	/	11. Effluent
/	2. Compliance Schedules	S	7. Self-Monitoring Program	/	12. Groundwater
/	3. Pretreatment	M	8. Facility Site Review	S	13. Disposal Method
/	4. Records & Reports	M	9. Flow Measurement	U	14. Residuals Management
/	5. Laboratory	M	10. Operation & Maintenance	/	15. Other

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code | NPDES NUMBER | YR/MO/DA

1 [ ] 2 [5] 3 [ ] 11 12 [ ] 17 18 [ ] 19 [ ] 20 [ ]

Remarks

21 66

Inspection Type (Field 18): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspector Code (Field 19): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead, L=Local
Facility Type (Field 20): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3=Agricultural, 4=Federal
Every other field is self explanatory.

FACILITY DIAGRAM @

*LOG NEEDS BOUND LEDGER

INSPECTION COMMENTS

*FLOW METER (EFFLUENT) GRAPH NOT FUNCTIONAL

BAR SCREEN

AERATION: .0135 MGD EXTENDED w/ FLOW EQUALIZATION - 2 BLOWERS

AEROBIC DIGESTOR MLSS - BROWN

CLARIFIER: EFFLUENT CLEAR OVER WEIRS

MULTI - SCREEN NOT OPERATING

CCC: GAS Cl_2 W/SCALES DUAL SWITCHOVER

* FAN/LIGHT NOT OPERATING

EFFLUENT DISPOSAL: 4 DUAL CELL PERC PONDS - *VEGETATION NOTED IN AND AROUND PONDS.

VMW(3) - AVP NEEDS UPDATED

MORS: OK

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

December 12, 1995

SHEFFIELD ENGINEERING
4322 ANDERSON ROAD
ORLANDO FL 32812

OCD-CE-GW-95-1112

Attention: C. W. SHEFFIELD

Brevard County - GW
Sun Lake Estates
Initial Sampling Results

Dear Mr. Sheffield:

The Ground Water Section has reviewed your recent submittal dated November 17, 1995 regarding the initial sampling analysis results and provides the following comments:

1. The following parameters were analyzed with a Practical Quantitation Limit (PQL) higher than the Maximum Contamination Level (MCL) for all the monitoring wells. The parameter, the reported PQL (same for all the wells) and the MCL are given below :

PARAMETER	PQL	MCL
Bromodichloromethane (ug/l)	1	0.6
1, 2-Dibromoethane (ug/l)	1	0.02
Isopropylbenzene	1	0.8
1, 1, 2, 2-Tetrachloroethane	1	0.2

   Please analyze these parameters with a PQL less than the MCL and submit the results to Department for review.

2. In addition the analysis result for Toluene was not reported for MW-2. Please submit this data.

Any questions should be addressed to Anil Desai, P.G. at (407) 893-3305.

Sincerely,

Al Castro, P.E.
Program Manager
Domestic Waste

AC/psk/jb

cc: Domestic Waste Permitting

Department of Environmental Protection

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

Please respond to the:
Melbourne Office
13 East Melbourne Avenue
Melbourne, Florida 32901

October 25, 1995

CERTIFIED
Z 026 390 789

Kelly Barnes, President
Sun Lake Estates Home Owners Association
Post Office Box 430
Sharpes, Florida 32959

MCD-DW-C-95-0173

Brevard County - DW
Sun Lake Estates, STP
Permit Number: FLA010353

Dear Mr. Barnes:

On September 22, 1995, Department personnel conducted a routine inspection of your sewage treatment plant. During the course of the inspection, and/or determined from records on file in this office, the following unsatisfactory condition was noted:

The gas chlorination equipment is not adequate.

Dual cylinders with an automatic switchover or suitable scales are required for gas chlorination.

Please respond to this item, in writing, with a schedule of corrective action. Pursuant to Rule 62-4.100(2), F.A.C., failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Your reply and any questions should be addressed to Tom Powers at the Melbourne office address or telephone 407/984-4800.

Sincerely,

Deborah Valin, Section Manager
Melbourne Satellite Office

DV:tph

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

CERTIFIED MAIL
Z 187 183 055

June 26, 1995

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
POST OFFICE BOX 430
SHARPES FL 39959

OCD-DW-95-0715

Brevard County - DW
Sun Lake Estates
Wastewater Treatment Plant
File No.: 240526

Z 187 183 055

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	7/26/95

PS Form 3800, 93

Dear Mr. Barnes:

On October 20, 1994 you were notified that your applica permit was incomplete. The required information neces application was noted on our letter (copy enclosed).

When a permit application is incomplete, all processing suspended. Pursuant to Section 120.60, Florida Statutes, t a permit application if the applicant, after receiving correct errors, omissions, or supply additional informati period of time.

The operation of a sewage treatment plant without a valid of Rule 62-600.730(1) Florida Administrative Code. Fai fifteen (15) days of receipt of this letter will result referred for formal enforcement.

Our records indicate that C. W. Sheffield, P.E. is the this project. If there has been any change, please notif

It has been 280 days since we notified you of the application. Please remember that a permit must b Department for the continued operation of your wastewater facilities.

Sincerely,

H. Lee Miller
Section Supervisor
Domestic Waste Permitting

HLM/ca/dv

Enclosure: Letter of October 20, 1994

cc: Sheffield Engineering, Attn: C.W. Sheffield, P.E.

PLEASE ADVISE US IF:

( ) You wish to withdraw your application.

( ) You need additional time to obtain the required information and we will receive the information in approximately 30 days.

( ) You have questions about your request and you wish to discuss your application with us.

Please sign and return this sheet to us within 15 days of the day you receive it.

Application Number: 240526

_____
Signature

DER Form 17-1.201(3) Effective November 30, 1982

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = OPTIONAL

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES STP SHARPES BLVD SHARPES, FL	3005P00377	Brevard Phone	9/23/94 1:00 @ Exit Time/Date 9/23/94 2:15

Name(s) of Field Representatives(s)	Title	Phone

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator
Certification #:			

Inspection Type: C E I Samples Taken(Y/N): N @ Sample ID#: — Samples Split (Y/N): N

☑ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log Book Volume: 4 @ Page: 155

In Compliance With Permit Conditions (Y/N): N

Recommended Actions — Non-compliance Letter

Name (s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Thomas A Power	Melbourne	9/28/94
@ Signature of Reviewer	District Office/Phone Number	Date

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

S	1. Permit		6. Sampling	S	11. Effluent
	2. Compliance Schedules		7. Self-Monitoring Program		12. Groundwater
	3. Pretreatment	N	8. Facility Site Review	S	13. Disposal Method
N	4. Records & Reports	S	9. Flow Measurement		14. Residuals Management
	5. Laboratory	S	10. Operation & Maintenance	S	15. Other RPZ

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code	NPDES Number	YR/MO/DA	Insp Type	Inspector	Fac Type
1	2 5 3	11 12	17 18	19	20

Remarks

21 66

Inspection Type (Field 18): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI

Inspector Code (Field 19): S=State, J=Joint EPA/State EPA Lead, T=Joint State/EPA State Lead, L=Local

Facility Type (Field 20): 1=Municipal (Publicly Owned), 2=Industrial and Privately Owned Domestic, 3=Agricultural, 4=Federal

Every other field is self explanatory.

FACILITY DIAGRAM @

Time lapse flow meter
Access control / Adequate

INSPECTION COMMENTS

Log - Line in/out hard to define
aeration: extended w/ surge control 2 blowers
MLSS chocolate brown
No odor Digester

Clarifier: Effluent clear over weirs Cl2 tablets
employed for algae control
screen unit being by-passed

CCC: Cl2 being administered - Gas - *Broken feed
line

Disposal: 4 dual cell perc pond - dry
RPZ noted

NOR'S: ✓ NO3 7/93 TO 10/93 NO3 spread 12.0 mg/L -

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = OPTIONAL

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES, STP CANAVERAL BLVD SHARPES	3005F00377	BREVARD	8/6/93
		Phone	@ Exit Time/Date 8/6/93

Name(s) of Field Representatives(s)	Title	Phone
THAD	MANAGER	

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #:

Inspection Type: CEI Samples Taken(Y/N): N @ Sample ID#: — Samples Split (Y/N): N

☑ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log Book Volume: 3 @ Page: 34

In Compliance With Permit Conditions (Y/N): N

Recommended Actions - NON-COMPLIANCE LETTER

Name (s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Thomas A. Panuo	MELBOURNE/984-4800	8/10/93
@ Signature of Reviewer	District Office/Phone Number	Date

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

S	1. Permit: #		6. Sampling	S	11. Effluent
	2. Compliance Schedule		7. Self-Monitoring Program		12. Groundwater
	3. Pretreatment	S	8. Facility Site Review	M	13. Disposal Method
S	4. Records & Reports	S	9. Flow Measurement		14. Residuals Management
	5. Laboratory	M	10. Operation & Maintenance		15. Other

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI - RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5 3	3 11	12 17	18	19	20

Remarks

21 66

Inspection Type (Field 18): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspector Code (Field 19): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead
Facility Type (Field 20): 1=Municipal (Publicly Owned), 2= Industrial and Privately Owned Domestic, 3=Agricultural, 4=Federal
Every other field is self explanatory.

@ FACILITY DIAGRAM

— JOHN LOCKHART: OPERATOR

INSPECTION COMMENTS

ACCESS CONTROL: ADEQUATE

LOG ON SITE / OK

AERATION: SURGE TANK SPLINTER BOX

EXTENDED AERATION MLSS CHOC. BROWN

2 BLOWERS NO ODOR.

CLARIFIER: STILLING WELL EFFLUENT CLEAR OVER WEIR.

FINE SCREEN UNIT EMPLOYED.

CC: GAS Cl_2 150

*FAN + LIGHT NOT OPERATING

COVER Cl_2 CYLINDERS

RPZ NOTED — STEVENS EFFLUENT FLOW METER

DISPOSAL: 4 PERC PONDS (DUAL CELL)

SOME VEGETATION NOTED

EXPANSION COMPLETE MAY / 93.

MARK. AK

Florida Department of Environmental Regulation
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DER Form # 17-600.910(3)
Form Title Notification that a Domestic Wastewater Facility Will Be Placed Into Operation
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

Notification that a Domestic Wastewater Facility Will Be Placed Into Operation

MAY 1993 Central Florida District

Part I - Instructions

(1) All applicable items must be completed in full in order to avoid delay in processing of this form. Where attached sheets (or other technical documentation) are utilized in lieu of the blank space provided, indicate appropriate cross-references in the space and provide copies to the Department in accordance with (3) below. Note that if part(s) of this application do not apply, those part(s) of the form need not be executed.
(2) All information is to be typed or printed in ink.
(3) Four (4) copies of this application (with supporting information) shall be submitted to the appropriate district office or approved local program.
(4) Attach an 8½" x 11" copy of a USGS map showing site locations. Be sure to include the map name and date on the USGS map provided.
(5) Submission of this form is required by Rule 17-600.725, F.A.C., before placing a wastewater facility into operation under a construction permit for any purpose, other than testing for leaks and equipment operation.
(6) Where requested on this form, enter location in both latitude/longitude and section/township/range formats.
(7) Dates are to be entered in MM/DD/YR format.
(8) In Part II/Question (3), if the treatment plant is the same as the project/facility described in Question (2), enter "Same."

Part II - General Information

(1) Applicant/Responsible Authority: Name Sun Lake Estates Homeowners Association
Address P.O. Box 430
City Sharpes State FL Zip 32959
Telephone Number (407) 639-0370

(2) Project/Facility Name: Sun Lake Estates Wastewater Treatment Plant
Street Sharpes Blvd.
City Sharpes Zip FL County Brevard
Latitude 28 ° 25 ' 33 "N Longitude 80 ° 46 ' 08 "W Section 3 Township 24 Range 24
Telephone Number (407) 639-0370
The facility's DER identification number (also known as the GMS identification number) D005-117304 3005P00377

(3) Treatment Plant: Name Sun Lake Estates Wastewater Treatment Plant
Address Sharpes Blvd.
City Sharpes Zip FL County Brevard
Latitude 28 ° 25 ' 33 "N Longitude 80 ° 46 ' 08 "W Section 3 Township 24 Range 24
Telephone Number (407) 639-0370
The facility's DER identification number (also known as the GMS identification number) D005-117304 3005P00377

(4) Construction Permit Number: DT05-202996 (T.O.P.)
(5) Indicate EPA-NPDES permit, effective date and expiration date:
Permit No. FL: _____ Issue Date / / Expiration Date / /
(6) Start of construction (date): 2 / 1 / 93

DEPARTMENT OF ENVIRONMENTAL REGULATION
PROJECT Sun Lake Estates
D005-117304 3005P00377
DT05-202996 (T.O.P.)
DATE May 28, 1993
BY
CLEARED FOR USE

Northwest District 160 Governmental Center Pensacola, Florida 32501-5794 904-436-8300
Northeast District 7825 Baymeadows, Suite B200 Jacksonville, Florida 32256-7577 904-448-4300
Central District 3319 Maguire Blvd. Suite 232 Orlando, Florida 32803-3767 407-894-7555
Southwest District 4520 Oak Fair Blvd Tampa, Florida 33610-7347 813-623-5561
South District 2269 Bay St Fort Myers, Florida 33901-2896 813-332-6975
Southeast District 1900 S. Congress Ave., Suite A West Palm Beach, Florida 33406 407-433-2650

DER Form # 17-600.910(3)
Form Title Notification that a Domestic Wastewater Facility Will Be Placed into Operation
Effective Date July 1, 1991
DER Application No. (Filled in by DER)

(7) Describe facilities that have been constructed to the point of being functionally complete: Surge tank, aeration tanks, settling facilities, chlorine contact chamber, aerobic sludge digester, screening, lift station and percolation ponds. Total plant capacity - 135,000 gallons per day.

(8) Date on which construction on these facilities reached the point of where the facilities are functionally complete: 5 / 10 / 93

(9) These facilities will be operated for 6 months under the construction permit.

Note: This may not exceed six (6) months.

Date on which this operation period will end: 12 / 3 / 93

(10) Expiration date of the ~~construction~~ T.O.P. permit: 6 / 1 / 93

Note: If the end date of the operation period is after the expiration date of the construction permit, the construction permit must be extended.

(11) I hereby apply for an extension of this construction permit to: / /

(12) Date on which an application for an operation permit will be filed: 9 / 3 / 93

Note: An application for an operation permit must be filed at least 60 days before expiration of the construction permit.

(13) Does this project involve discharge of reclaimed water or effluent onto property not owned or under the direct control of the permittee?

☐ Yes ☒ No If the response is yes, attach documentation required by Rule 17-600.725(2)(c), F.A.C.

Part III - Certifications

A. Applicant

I certify that the statements made in this notification are true, correct and complete to the best of my knowledge and belief. I agree to operate and maintain the wastewater facilities in such a manner as to comply with the provisions of Chapter 403, F.S., Chapter 17-600, F.A.C., and all other applicable rules of the Department. Further, I have provided an appropriate draft operation and maintenance manual which has been examined by a professional engineer as certified below. I agree to maintain a copy of the draft manual and attest that such draft operation and maintenance manual is available and located at _____ and can be submitted upon request as part of the permit procedure.

Date: 5-17-93

Kelly R. Barnes Pres
Signature of the Applicant

Phone: (407) 639-0370

Kelly Barnes, President, Homeowners Association
Name and Title (please type)

DER Form # 17-600.910(3)
Form Title Notification that a Domestic Wastewater Facility Will Be Placed Into Operation
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

B. Professional Engineer Registered in Florida (where required by Chapter 471, F.S.) as to Wastewater Treatment, Reuse and Disposal System.

I certify that the facilities listed above have been completed to the point where the facilities are functionally complete. I further certify that construction on these facilities has proceeded substantially in accordance with the construction permit and the approved preliminary design report and application materials, or that deviations noted below will not prevent the system from functioning in compliance with the requirements of Chapter 17-600, F.A.C., when properly operated and maintained. These determinations have been based upon on-site observation of construction, scheduled and conducted by me or by a project representative under my direct supervision, for the purpose of determining if the work proceeded in compliance with the construction permit and the approved preliminary design report and application materials.

Signature of Engineer

(Affix Seal)

C.W. Sheffield — 6690
Name (Please type) — Florida Registration No.

Sheffield Engineering & Associates
Company Name

4322 Anderson Road
Company Address

Orlando, Florida 32812

Date: 5/12/93 Telephone No. (407) 658-0512

Substantial deviations from the construction permit and the approved preliminary design report and application materials (attach additional sheets if necessary):

C. Professional Engineer Registered in Florida (where required by Chapter 471, F.S.) as to Operation and Maintenance Manual.

I certify that the draft operation and maintenance manual for these wastewater facilities has been prepared or examined by me or by individual(s) under my direct supervision and that there is reasonable assurance, in my professional judgment, that the facilities, when properly maintained and operated in accordance with this manual, will comply with all applicable statutes of the State of Florida and rules of the Department.

Signature of Engineer

(Affix Seal)

C.W. Sheffield — 6690
Name (Please type) — Florida Registration No.

Sheffield Engineering & Associates
Company Name

4322 Anderson Road
Company Address

Orlando, FL 32812

Date: 5/12/93 Telephone No. (407) 658-0512

file

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

June 1, 1993

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
POST OFFICE BOX 430
SHARPES FL 32959

OCD-DW-93-0418

ATTENTION KELLY BARNES
PRESIDENT

Brevard County - DW
Sun Lake Estates WWTP - 0.085 MGD Addition
Notification to Place Into Operation

Dear Ms. Barnes:

Attached is the Department's acknowledgement of the above referenced notification to place into operation.

During the inspection it was noted that the fence surrounding the percolation ponds has been destroyed at the south end of the access road. This has allowed unauthorized persons and animals access to the area, resulting in dumping in the west cell of perc pond No. 1. Please have this fence/gate replaced immediately, remove the materials dumped and repair the berm that was damaged. Also, the east cell of perc pond No. 3 is completely overgrown with cattails and must be cleaned out and the bottom scraped to remove crusted deposits.

If you have any questions regarding this letter, you may contact me or Dennise Judy at (407) 894-7555.

Sincerely,

H. Lee Miller
Section Supervisor
Domestic Waste Permitting

HLM/dj/dv

cc: Melbourne, DER
C.W. Sheffield
Thad Terry

Recycled Paper

SHEFFIELD ENGINEERING
4322 ANDERSON RD. • ORLANDO, FL. • 32812

C. W. SHEFFIELD, P.E.
President
(407) 658-0512



May 13, 1993

Florida Department of Environmental Regulation
Wastewater Permitting Section
3319 Maguire Blvd.
Orlando, FL 32803

ATTN: Christianne Ferraro, P.E.

SUBJECT: Sun Lake Estates 85,000 GPD Addition As-Built (9205)

Dear Chris:

Enclosed is the application and plans for certification for the 85,000 GPD addition that has been completed at this project. It would be appreciated if this information were filed and, prior to 12/93, we will apply for an operating permit for this particular project.

If any additional information is needed, please contact.

Sincerely,

C.W. Sheffield, P.E.

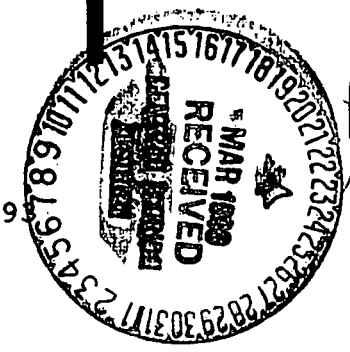
CWS/ag

cc: Thad Owner, Owner
Kelly Barnes, Homeowners Assoc.

SHEFFIELD ENGINEERING

4322 ANDERSON RD. • ORLANDO, FL. • 32812

C. W. SHEFFIELD, P.E.
President
(407) 658-0512



March 19, 1993

Ms. Chris Ferraro
Department of Environmental Regulation
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

SUBJECT: Sun Lake Estates 85,000 GPD W.W.T.P. Addition (9205)

Dear Chris:

This letter is to inform you that we are making a minor modification to this plan. We are switching the 5,000 GPD chlorine contact chamber and the aerobic sludge digester. Both these tanks are identical in size and construction. The reason for this being simplicity of operation. Please note, I have enclosed a plan showing the approved chlorine contact chamber and aerobic digester arrangement and a plan showing the modifications.

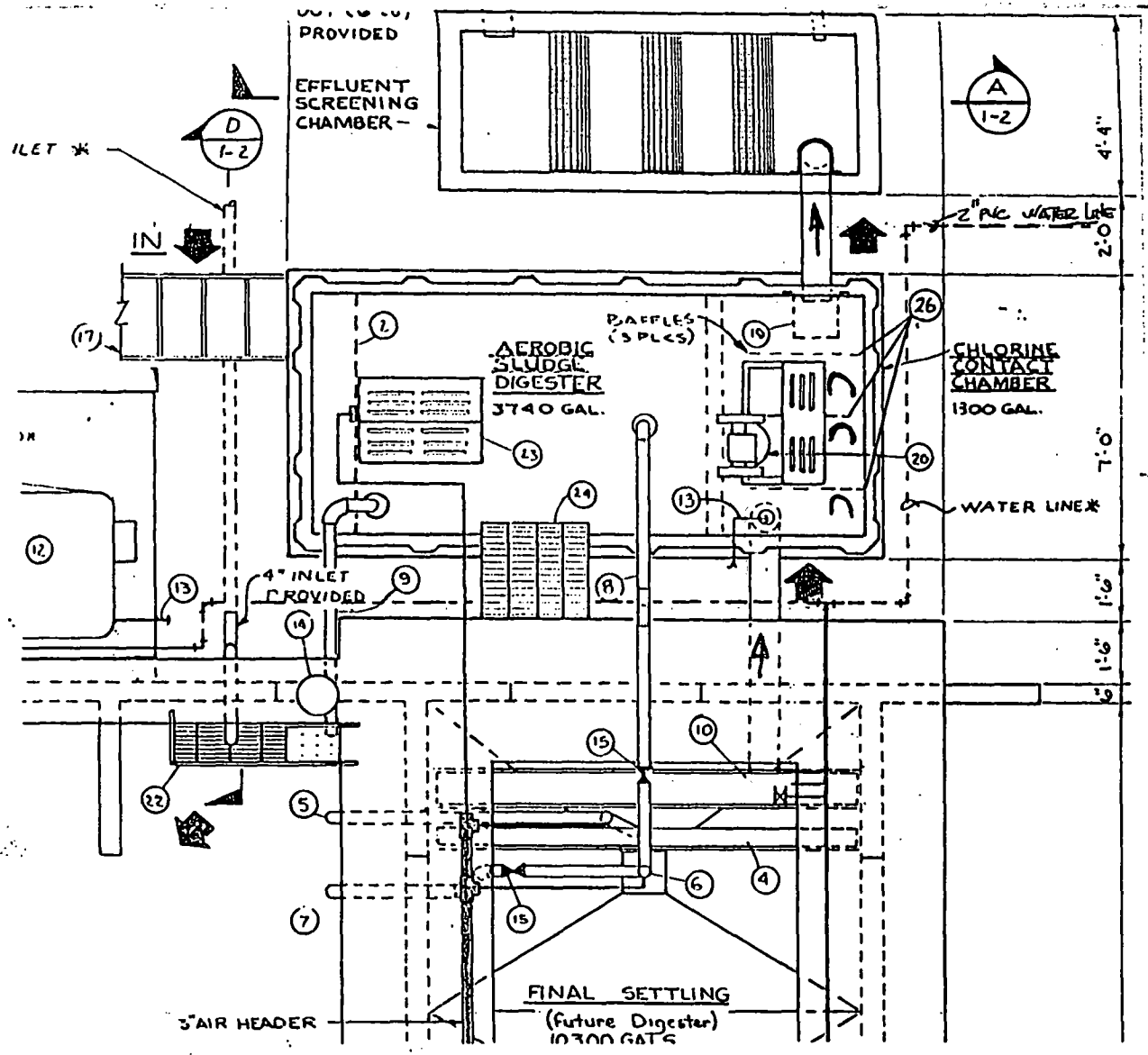
This minor modification will be shown in the certified record drawings when the project is complete. Until the next time we meet, I remain

Sincerely,

C.W. Sheffield, P.E.

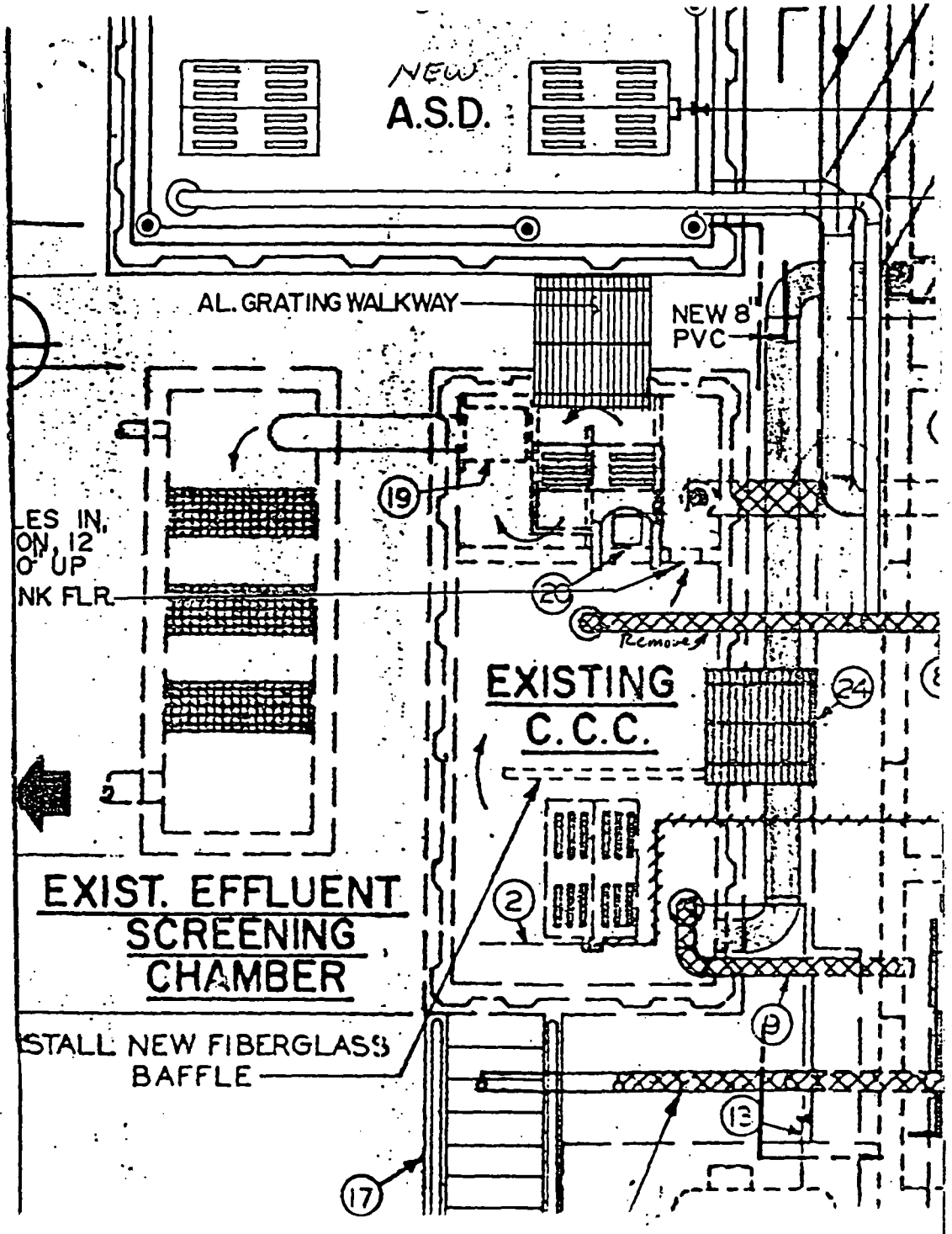
cc: Dan Stoneburger
Thad Terry

CWS/ag



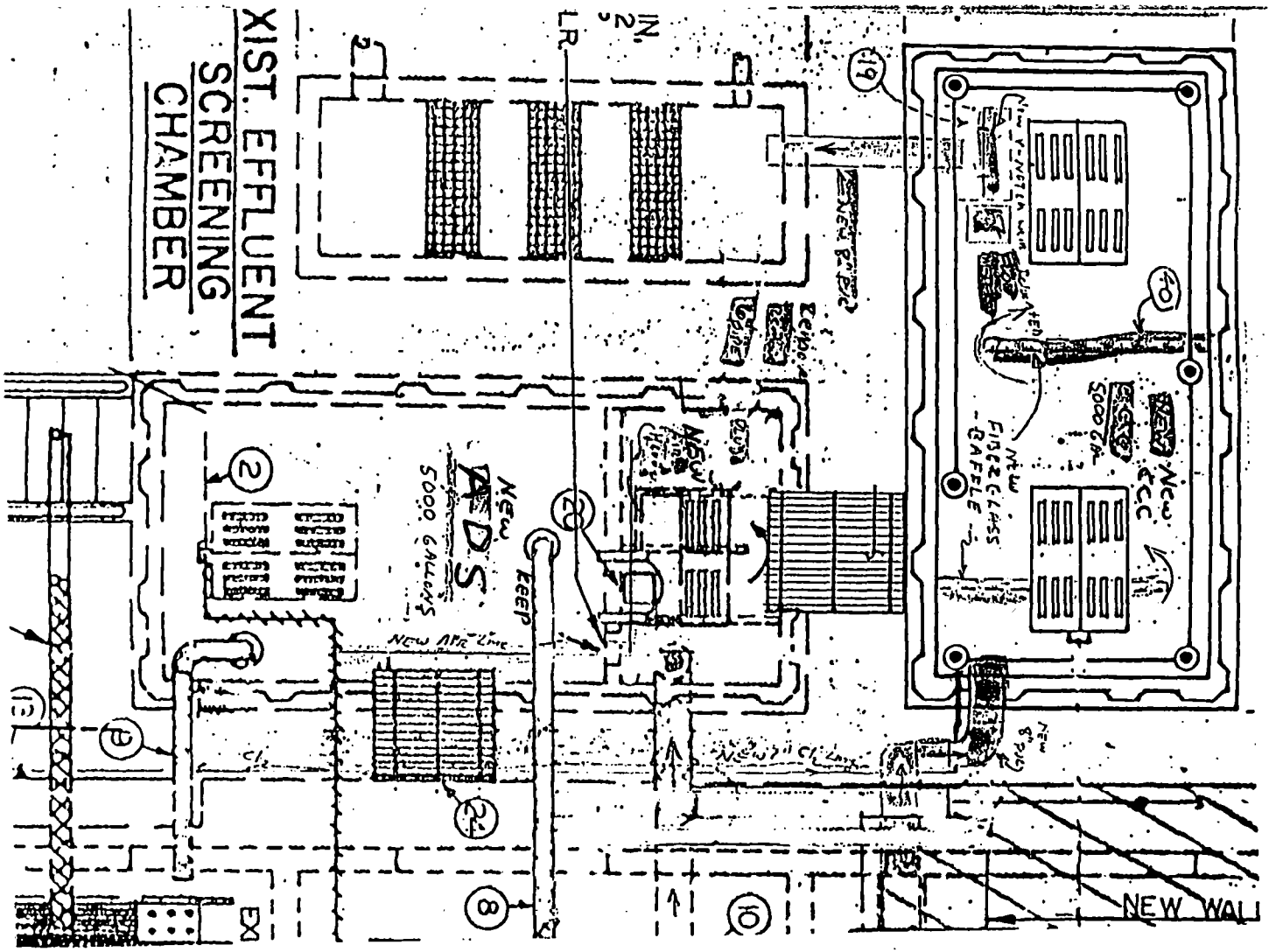
EXISTING 50,000 GPD W.W.T.P.

TITLE: EXIST. 50,000 GPD PLANT		DRWN. BY:	DRW. NO.:
CLIENT: SUNLAKE EST. HOMEOWNERS		REVISED:	JOB NO.:
APPROVED. BY: C.W.S.		W.O. NO.:	SHEFFIELD ENGINEERING
SCALE: C.W.S.	DATE: 3-93	P.O. NO.:	



TITLE: 85,000 GPD ADDITION	DRWN. BY:	DRW. NO.:	SHEFFIELD ENGINEERING
CLIENT: SUNLAKE EST. HOMEOWNERS	REVISED:	JOB NO.:	
APPROVED BY: C.W.S.	W.O. NO.:		
SCALE: N.T.S.	DATE: 3-93	P.O. NO.:	

AS APPROVED SHOWN IN RED



PROPOSED MODIFICATION TO 5,000 GALLON C.C.C. AND A.D.S. AS SHOWN IN RED.

TITLE: PROPOSED C.C.C.-A.D.S		DRWN. BY:	DRW. NO.:
CLIENT: SUNLAKE EST. HOMEOWNERS		REVISED:	JOB NO.:
APPROVED. BY: C.W.S.		W.O. NO.:	SHEFFIELD ENGINEERING
SCALE: N.T.S.	DATE: 3-93	P.O. NO.:	

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 9-29-92 TIME: 2:45 RECEIVED BY Helen Shepherd

REPORTED BY Paula Johnson

NAME OF PLANT/SYSTEM Sun Lake Estates MHP COUNTY: Brevard

ADDRESS _____

PHONE ( ) 639-0370

OWNER _____

DATE AND TIME OF FAILURE 9-28-92 6 P.M.

NATURE OF PROBLEM Solids went into ponds.

CORRECTIVE ACTION TAKEN Plant turned off to allow it to

EXPECTED BACK IN SERVICE BY (DATE & TIME) 9-28-92, 7 P.M.

REMARKS _____

Revised June 6, 1989

DJ — Received Reese Flaherty Report for Sosa Lake Estates/ Broward Co.
9/15/92

Approved 9/28/92

DER - MELBOURNE OFFICE
COMPLAINT REFERRAL/RECEIPT FORM

NUMBER: _____

PROGRAM:

WATER MANAGEMENT

92-038 WATER FACILITIES

WASTE MANAGEMENT

AIR

4790

Date: 9/25/92 Time: 10:00 County: BREVARD

COMPLAINANT: ANON

Street Address: _____

City: _____ Zip: _____ Phone: 639-2754

NATURE OF COMPLAINT: ~~SUNLAKE ESTATES~~ (SHARPES) ODOR PROBLEM

How long has problem existed: RECENT

Contact person: —

Address or directions to site: OFF US ·CANAVERAL BLVD

REMARKS: CONTACTED PAULA JOHNSON (MANAGER) NOTED WASHOUT OF STP. PERC PONDS HAD SOLIDS WHICH ARE APPROXIMATELY 150 FT FROM RESIDENCES. I TOLD MRS. JOHNSON TO USE THE PONDS FURTHEST AWAY FROM THE COMPLAINANTS HOME. ALSO TOLD MRS JOHNSON TO SPREAD LIME IN THE POND TO DECREASE ODOR EMANATING. EXPANSION OF STP WILL CONTROL WASHOUT PROBLEM. (PHOTOS TAKEN)

Person receiving complaint: T. POWERS

Person/Agency assigned to investigate: T. POWERS

Revised 01/02/91

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = OPTIONAL

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES, MHP, STP CANAVERAL BLVD SHARPES	3005P00377	BREVARD	8/18/92 4:30
	Phone	@ Exit Time/Date	
		8/18/92	5:00

Name(s) of Field Representatives(s)	Title	Phone

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #:

Inspection Type: CEI Samples Taken(Y/N): N @ Sample ID#: — Samples Split (Y/N): N

☑ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log Book Volume: 1 @ Page: 250

In Compliance With Permit Conditions (Y/N): N

Recommended Actions: NOV - COMPLIANCE LETTER

Name (s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Thomas A Powers	984-4800/MELBOURNE	8/19/92
@ Signature of Reviewer	District Office/Phone Number	Date

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

X	1. Permit: # DC0512603		6. Sampling	S	11. Effluent
	2. Compliance Schedule		7. Self-Monitoring Program		12. Groundwater
	3. Pretreatment	M	8. Facility Site Review	S	13. Disposal Method
S	4. Records & Reports		9. Flow Measurement		14. Residuals Management
	5. Laboratory	S	10. Operation & Maintenance	U	15. Other RP2 NEEDED

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI - RI Optional)

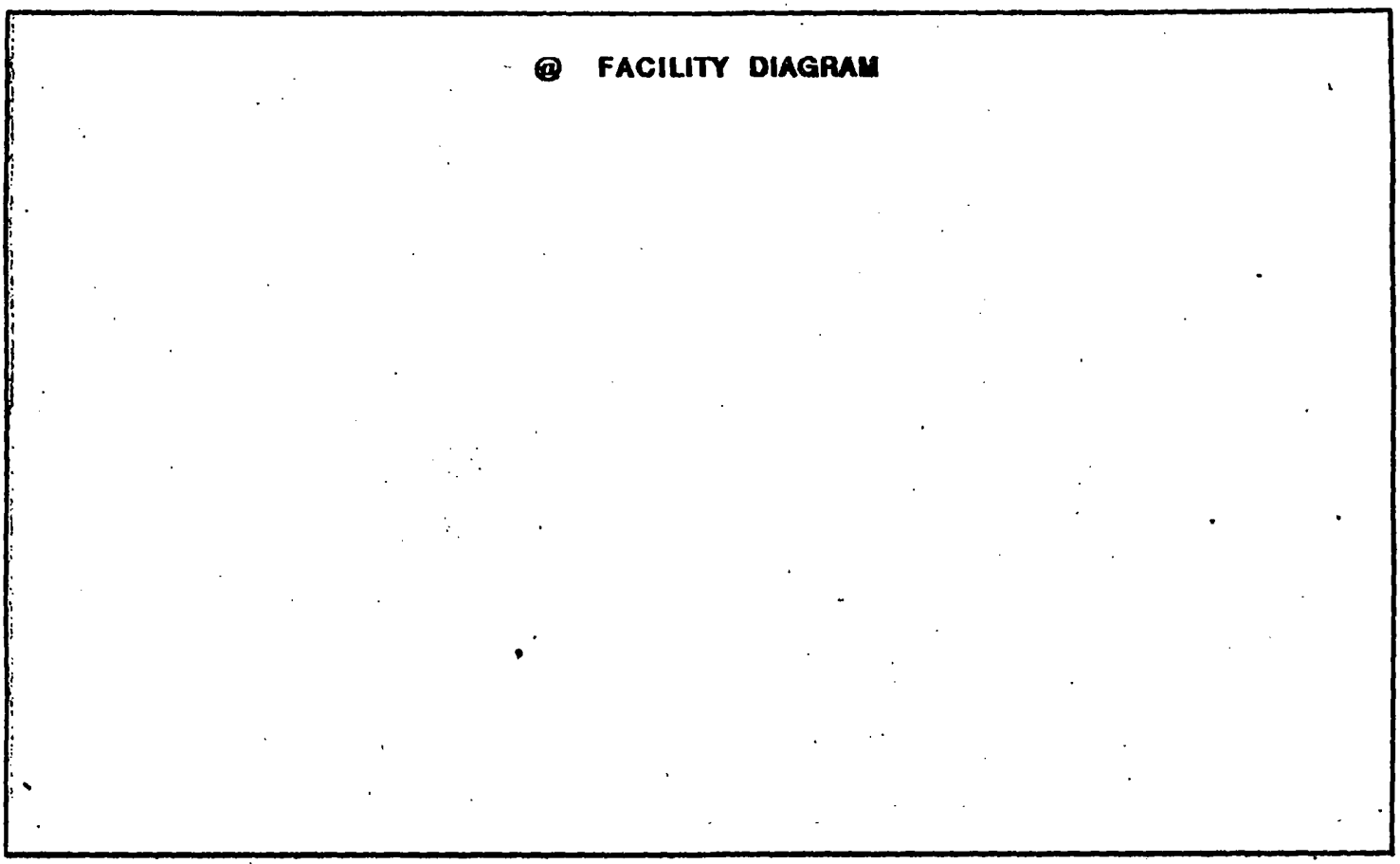
Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N	2 5 3	11 12	17 18	19	20

Remarks

21 66

Inspection Type (Field 18): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspector Code (Field 19): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead
Facility Type (Field 20): 1=Municipal (Publicly Owned), 2= Industrial and Privately Owned Domestic, 3=Agricultural, 4=Federal
Every other field is self explanatory.

@ FACILITY DIAGRAM



INSPECTION COMMENTS

ACCESS CONTROL: ADEQUATE FOUNDATION / EXPANSION BUILT WHEN
LOG ON SITE / OK FACILITY WAS CONSTRUCTED IN 1984.

*RPZ NEEDED ON POTABLE WATER LINE

AERATION: 2 BLOWERS. - MLSS CHOCOLATE BROWN
EXTENDED - NO ODOR
DIGESTOR EMPLOYED

CLARIFIER: SLUDGE-POP-UPS NOTED - EFFLUENT CLEAR
OVER WEIRS.

CCC: GAS Cl_2 - EFFLUENT FLOW METER OVER
V-NOTCH WEIR
MULTI-SCREEN SYSTEM NOT BEING UTILIZED

EFFLUENT DISPOSAL: 8 PERC PONDS LOCATED TO CANALFRAC
GROVET BLVD - 4 FEET FR[illegible] BOARD.

MAPS: OK

FLORIDA L TMENT OF ENVIRONMENTAL REG .ON

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = OPTIONAL

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUN LAKE ESTATES, MHP, STP CANAVERAL BLVD SHARPES	3005P00377	BREVARD	8/18/92 4:30
	Phone	@ Exit Time/Date	
		8/18/92	5:00

Name(s) of Field Representatives(s)	Title	Phone

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #:

Inspection Type: CEI Samples Taken(Y/N): N @ Sample ID#: — Samples Split (Y/N): N

☑ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log Book Volume: 1 @ Page: 250

In Compliance With Permit Conditions (Y/N): N

Recommended Actions: NON-COMPLIANCE LETTER

Name (s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Thomas A Powers	984-4800/MELBOURNE	8/19/92

@ Signature of Reviewer	District Office/Phone Number	Date

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

X	1. Permit: # DC05124603		6. Sampling	S	11. Effluent
	2. Compliance Schedule		7. Self-Monitoring Program		12. Groundwater
	3. Pretreatment	M	8. Facility Site Review	S	13. Disposal Method
S	4. Records & Reports		9. Flow Measurement		14. Residuals Management
	5. Laboratory	S	10. Operation & Maintenance	U	15. Other RP2 NEEDED

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI - RI Optional)

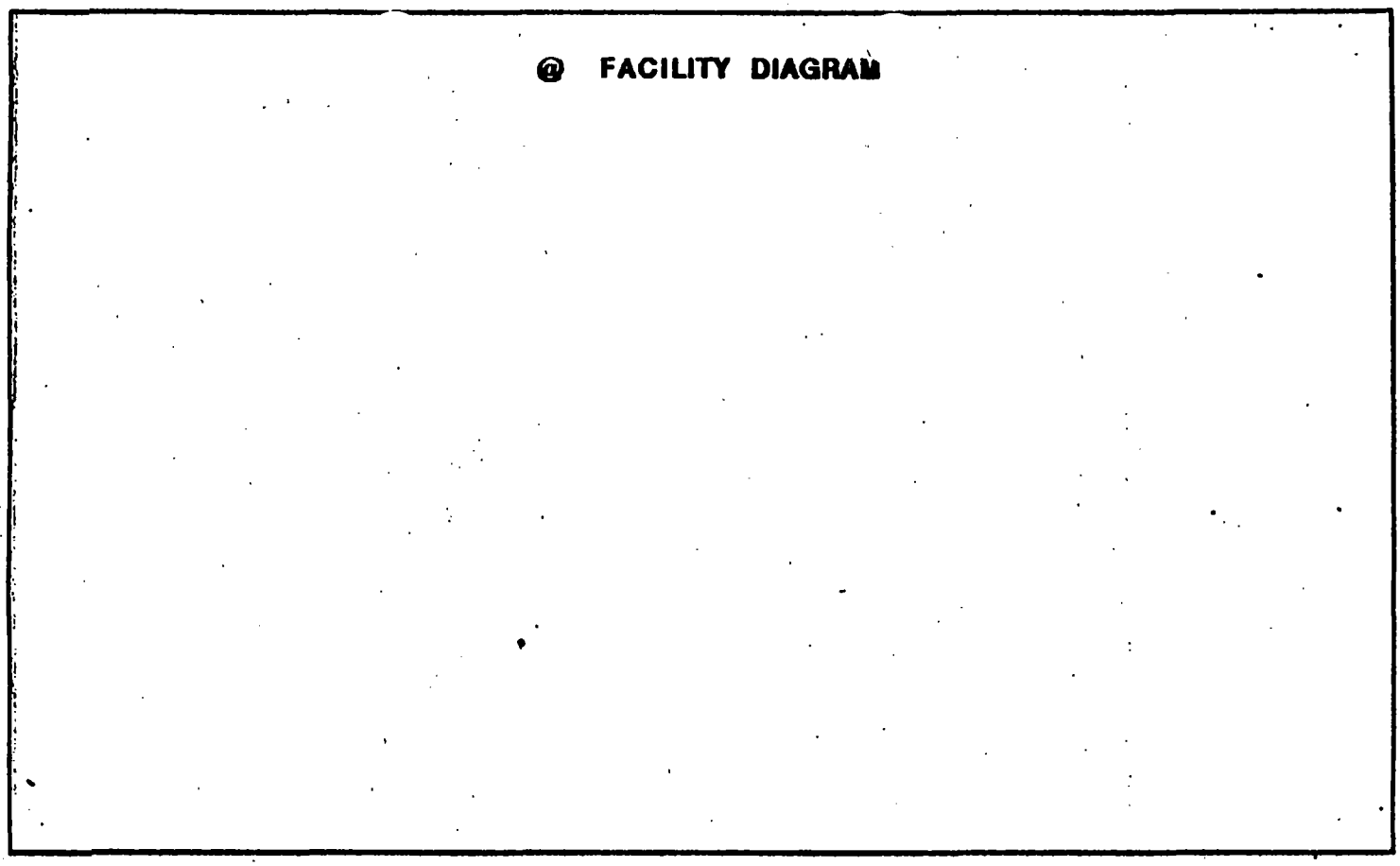
Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5 3	11 12	17 18		19	20

Remarks

21 66

Inspection Type (Field 18): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspector Code (Field 19): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead
Facility Type (Field 20): 1=Municipal (Publicly Owned), 2= Industrial and Privately Owned Domestic, 3=Agricultural, 4=Federal
Every other field is self explanatory.

@ FACILITY DIAGRAM



INSPECTION COMMENTS

ACCESS CONTROL: ADEQUATE — FOUNDATION / EXPANSION BUILT WHEN FACILITY WAS CONSTRUCTED IN 1984.

LOG ON SITE / OK

*RPZ NEEDED ON POTABLE WATER LINE

AERATION: 2 BLOWERS. - MLSS CHOCOLATE BROWN

EXTENDED - NO ODOR

DIGESTOR EMPLOYED

CLARIFIER: SLUDGE-POP-UPS NOTED - EFFLUENT CLEAR OVER WEIRS.

CCC: GAS Cl_2 - EFFLUENT FLOW METER OVER V-NOTCH WEIR

MULTI-SCREEN SYSTEM NOT BEING UTILIZED

EFFLUENT DISPOSAL: 8 PERC PONDS LOCATED TO CANALEJAL GROVE BLVD - 4 FEET FR(BOARD.

MORS: OK

Central Florida District
SEP 1992

SUN LAKE ESTATES

WASTEWATER TREATMENT PLANT

OPERATION-MAINTENANCE REPORT

FOR:

SUN LAKE ESTATES
HOMEOWNERS ASSOCIATION
KELLY BARNES, PRESIDENT

SUBMITTED TO:

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
ORLANDO, FLORIDA

SUBMITTED BY:

SHEFFIELD ENGINEERING
4322 ANDERSON RD. • ORLANDO, FL. • 32812

March, 1992
Rev. I: August, 1992

SUN LAKE ESTATES
WASTEWATER TREATMENT PLANT
OPERATION-MAINTENANCE REPORT

INTRODUCTION

In accordance to Florida Department of Environmental Regulation Rules Chapter 17-600.735 F.A.C., this report is being written. The existing wastewater treatment plant was originally approved under construction permit DC05-69218 for 50,000 GPD and has an operating permit DO05-117304 that was approved in 11/12/86.

The owners of the wastewater treatment plant (Sun Lake Estates Homeowners Association - Kelly Barnes, President) are in the process of endeavoring to obtain a renewal of their operating permit. The address of the Homeowners Association is: Ms. Kelly Barnes, P. O. Box 430, Sharpes, Florida 32959, phone no. (407) 639-0370.

The plant has a capacity of 50,000 GPD and is located in Brevard County as shown in Figure 1. The plant is run in the extended aeration mode with surge-in-aeration. The wastewater treatment plant process is followed by chlorination, screening and then pumped to a 206,000 GPD percolation pond effluent disposal site. Your attention is directed to the capacity analysis report for details on each of the individual operating units at this wastewater treatment plant facility.

This maintenance and operational report will be in the form of answering questions related to the operation of the plant for at least the last 3 years.

OPERATION-MAINTENANCE DISCUSSION

This section of the report will be in the form of answering the various questions on the operation of the Sun Lake Est. wastewater treatment plant. As discussed previously, this is a 50,000 GPD extended aeration plant that serves only those mobile home units in Sun Lake Estates Phase I (144 units) and Phase II (which will eventually have 151 units). For simplicity the questions and answers will be presented in an outline form as follows:

Ques: Indicate the physical conditions of the structures, mechanical equipment and electrical equipment.

Ans: They are in sufficiently good condition to meet the capacities and the treatment efficiencies of the treatment units as follows: (please see Figure 2 for the treatment plant layout)

a. Lift station pumping facilities: This facility is located outside of the treatment plant property. Visual inspection of these facilities on 2/19/92 indicate they are working satisfactorily in accordance to the design criteria (See Figure 3).

b. Influent bar rack: This unit is as per the approved plan and is working sufficiently as per the inspection of 2/19/92. They have sufficient amount of equipment to remove any of the objects caught on the bar rack. Disposal of this material

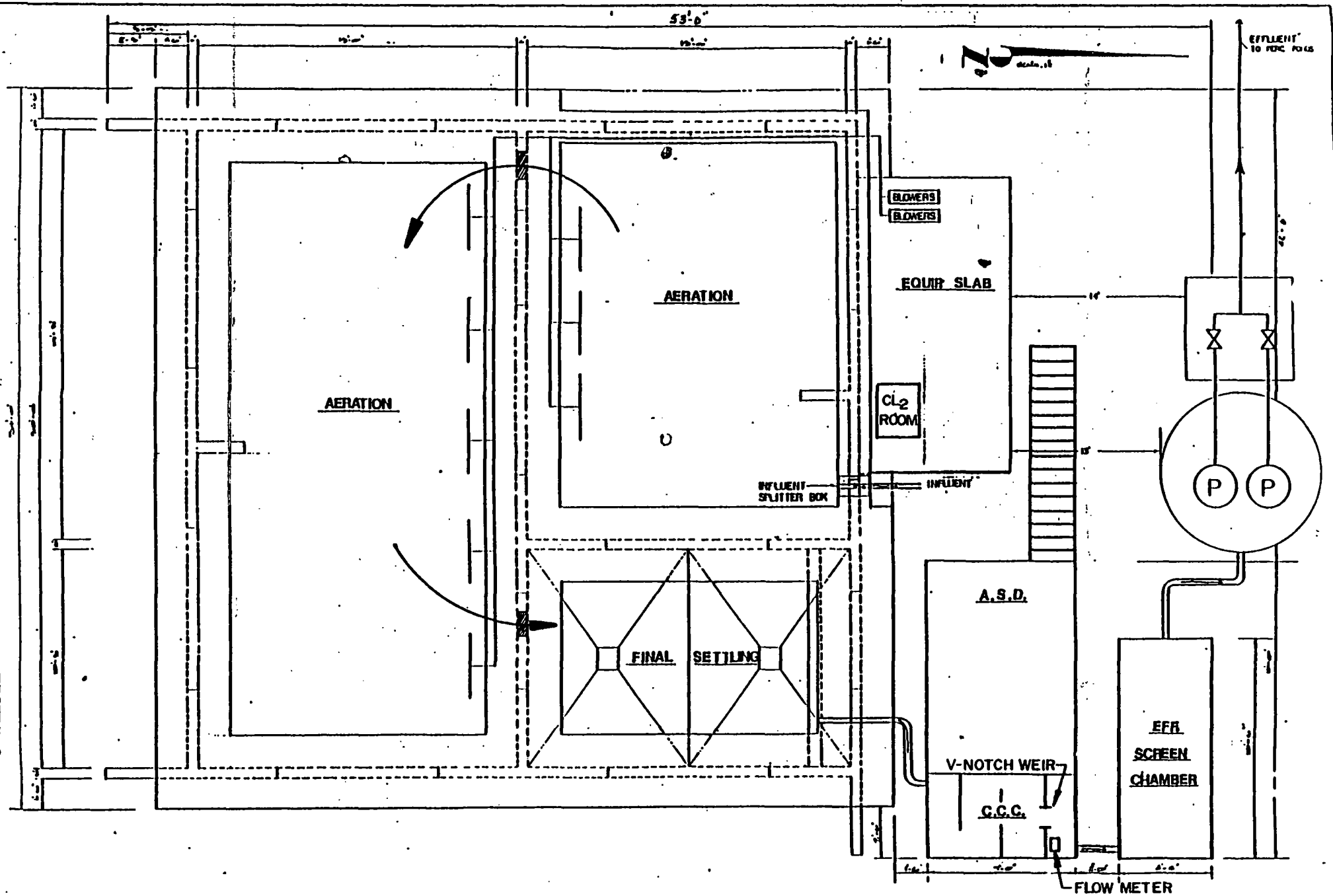


FIGURE 2

SCALE: N.T.S.	DESIGN:	TITLE: EXISTING PLANT LAYOUT 50,000 G.P.D. W.W.T.P.	PROJECT: SUN LAKE ESTATES	CLIENT: SUN LAKE ESTATES HOMEOWNERS ASSO.
DATE: 2/25/92	DRAWN:			

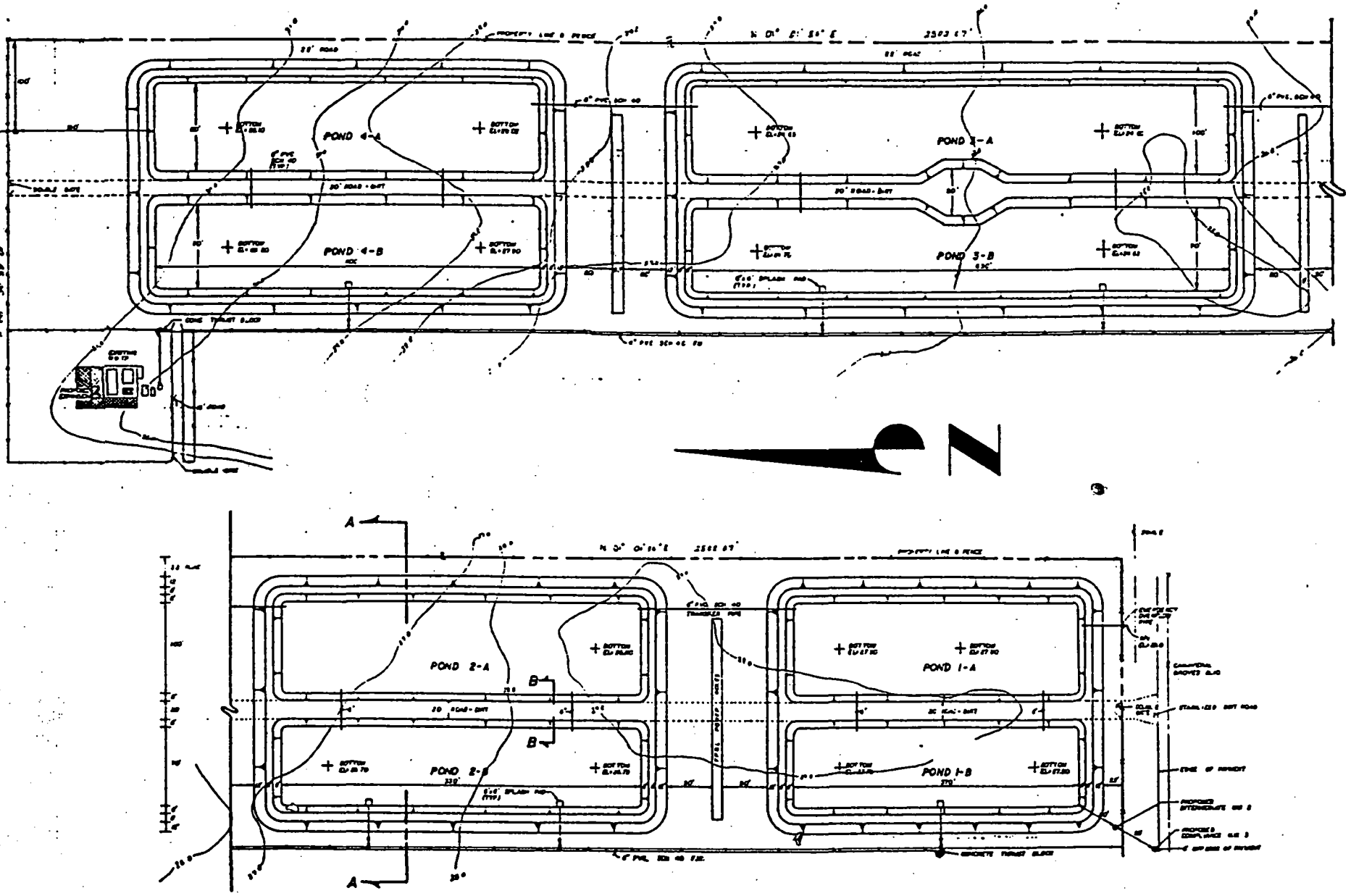


FIGURE 4

SEA Inc.	SCALE NTS	DESIGN	TITLE W.W.T.P. & EFFLUENT DISPOSAL PLAN	PROJECT SUN LAKE ESTATES ORIGINAL VALUE STUDY	CLIENT T.K.B.C. INC.
	DATE 12/4/86	DRAWN WM			

consists of placing them in a 5 gallon bucket and then into a garbage can that is collected twice a week.

c. Aeration units: From Figure 2 it can be observed that there are two tanks. These tanks physical condition are excellent and no deterioration of the concrete, catwalks, handrails are indicated.

d. Aeration system: This was inspected on 2/19/92 and it was determined that the aeration piping system from the blowers is in good physical condition and has the appropriate valves and other necessary appurtenances. The aerator header was not observed but from the roll in the tank it can be determined that there is a good even turn-over within each of these particular tanks. From this it can be concluded that the aeration headers are working satisfactorily.

e. Blowers: The 2 blowers were inspected on 2/19/92 and from all visual inspections they are in very satisfactory condition.

f. Settling tank: This 2 hopper settling tank with air conductors for picking up the settled solids. This equipment seems to be in excellent condition as is the scum baffle and the effluent troughs. The return solids lines from the settling tank hoppers to the influent was working in very

excellent condition on 2/19/92 when it was inspected. There is no reason to believe any of the units in the clarifier have had any problems since the plant was put into operation.

g. Chlorine contact chamber: The physical conditions of this tank are in very satisfactory conditions and the baffling, as so approved in the plans, is working. The chlorinator line into the tank are in good condition.

h. Flow metering device: This Steven level was inspected on 2/19/92 and was working in satisfactory condition. This meter has been calibrated twice since the plant was put into operation approximately 5 years ago. In discussions with the owners of the plant, they will continue to calibrate the meter when necessary. The strip flow chart in the meter was working and paper was available during our inspection.

i. Chlorinator: This is a 150 pound tank cylinder with dual heads and automatic switch-over. The chlorinator, its housing, and ventilation and light system were working satisfactorily during the inspection of 2/19/92. The physical condition of the housing was noted at that time to be in satisfactory condition.

j. Effluent line from chlorine tank to the screening tank: This 8 " pvc pipe is in satisfactory condition.

k. Screening tank: This physical structural condition of this tank is excellent and the screens during our inspection of 2/19/92 were in place and from all indications this tank is working to its maximum efficiency.

l. Effluent pump and sump: This 2 pump system structural facilities were in excellent condition the day they were observed on 2/19/92. The pumps were in satisfactory working order and also the valves, lines and other appurtenances.

m. Effluent force main for percolation ponds: This is a 4" line that is approximately 2340' long. The piping system when observed at various locations on 2/19/92 in excellent condition. There is a need to provide new valve covers on the valve boxes but this is not an absolute necessity but would make it easier to operate this facility. The valves were in good working condition and the splash pads into the percolation ponds were in place.

n. Effluent percolation ponds: This consist of 8 ponds that have a rating of 206,000 GPD as shown in Figure 4. During our inspection of 2/19/92 it

was observed that these ponds were being mowed and maintained in accordance to a letter delivered to the owner on the maintenance of these ponds. There is a need to provide maintenance of the 6" cross-over pipe between the east and west portion of each of the ponds running underneath of the powerline road. These ponds can be maintained by diverting the flow from one pond to another using the piping (4" PVC) valving system on the east side of the ponds as shown in Figure 4. The suggested rotation is to dose a pond both A and B for 7 days then divert to next pond for 7 days. This rests the initial pond for 21 days prior to being dosed again. Past performance indicates 21 days resting allows sufficient time for drying whereas mowing and maintenance can be performed.

o. Safety equipment: The appropriate safety equipment for the chlorine room consisting of a gas mask and ammonia to detect chlorine leaks was available during the inspection on 2/19/92.

p. Monitoring equipment: This plant is not provided with monitoring equipment but is hand sampled by the certified operator on a monthly basis as per the existing operating permit.

QUES: Is this facility over-all capacity adequate to assure treatment and effluent disposal facilities that will be

capable of complying with the operating permit during the period of this permit?

ANS: Yes, these facilities are physically capable of meeting all of the requirements to treat the wastewater from this project to an acceptable level. This statement is based on the fact that the concrete tankage shows no deterioration and the physical equipment inside and out of the treatment plant is in satisfactory condition.

QUES: Can the operating report are there any trends towards an increase in any of the influent or effluent parameters than monitored.

ANS: The monitoring reports for this plant indicate that basically the effluent from the solely domestic waste mobile homes for the past three years has run 250 mg/l of BOD and approximately the same for total suspended solids. The effluent has a BOD ranging from less than 1 mg/l to 15 mg/l and TSS from less than one to 15 mg/l for the past 3 years. The efficienty of this treatment plant has not decreased in the past 3 years.

QUES: Is there an increase in the flow into the facility?

ANS: This particular plant is experiencing a growth pattern as shown in Figure 3 that is typical or below average for this area. The economy in Brevard County has slowed down the occupation of this mobile home park in the last couple of years.

QUES: Does the 3 month average daily flow exceed 50% of the permitted capacity both for the treatment plant and reuse?

ANS: The average flow in this treatment plant runs 30 to 35,000 GPD and the permitted capacity is 50,000 GPD. This then indicates they are exceeding the 50% capacity. With regards to the effluent disposal system, this is permitted for 206,000 so therefore they are only using 25% of the effluent disposal. The owners have obtained a construction permit to enlarge the plant to 135,000 GPD. When they obtain the financing for this enlargement, they will increase the plant by 85,000 gallons and therefore they will not exceed the 50% permitted capacity.

QUES: Have there been any untreated by-pass discharges or over-flowing?

ANS: To the knowledge of the engineer and the president of the Homeowners Association, there has not been a by-pass or discharge where over-flow occurred at this plant from either the influent or the effluent.

QUES: Groundwater monitoring.

ANS: This plant is not required to have a groundwater monitoring program due to its capacity being less than 100,000 GPD.

QUES: Does the sewage collection system have excessive infiltration/inflow that is causing operational problems?

ANS: According to the operator, the flow into the wastewater treatment plant is a problem during high rain fall periods. The capacity analysis report included a flow per connection section and this report indicated this mobile home park flow per unit is less than 200 GPD per connection. When the plant is enlarged to 135,000 GPD, a surge tank will be part of this construction and should resolve the surges into the plant.

QUES: Septic tank discharges.

ANS: The owners have indicated that they have a monitoring program to stop any type of septic tank dumping into their sewage collection system.

QUES: Does this facility have any discharges of industrial waste?

ANS: No there are no industrial waste.

QUES: Are the drawings, plans and specifications available to the operator?

ANS: Yes, these are available at the Sun Lake Est. mobile home office and Ms. Kelly Barnes, the homeowners president, indicated they are available to the operator for inspection.

QUES: Is there an up to date copy of the facilities operation and maintenance manual at this facility?

ANS: This facility has been in operation for approximately 6 years and the original operation and maintenance manual should suffice. The reason for this is that there have

been no changes in the physical characteristics or of the equipment in this plant since its start up.

QUES: Does this operation and maintenance manual include safety and emergency features, sampling, operating, maintenance, trouble-shooting and emergency repairs, staffing requirements and basic hydraulic engineering design criteria?

ANS: The existing manual does provide details on the maintenance and operation, emergency repairs, safety and other such items.

QUES: Does the facility have an update operation and maintenance log?

ANS: This facility relies on the daily log that is used on the monthly operating report. The operator does have a sign-in and sign-out sheet that indicates on that when he does perform sampling, repairs, maintenance and other general items. From this log he does make up a monthly operating report that is required by DER.

QUES: Is this plant routinely have a preventative maintenance schedule?

ANS: To an extent they do have preventative maintenance schedule because the weirs are clean, motor and blowers are lubricated and the chlorination system is checked on a routine basis.

QUES: Is the facility adequately staffed with certified operators in accordance to DER rules?

ANS: This plant is staffed with a C operator (Mr. Jerry Paggett) whose certification number is 7051C. The plant is visited daily by the operator 5 days a week and the general maintenace man of the park reviews the plant on the weekend and during the week if necessary.

QUES: Identify the physical, capacity, performance operation and maintenance problems and deficiencies at this particular plant.

ANS: The plant has run satisfactorily with the routine maintenance and operation that has prevailed and therefore it can be said that it does not have any deficiencies with regard to the physical and operational problems. The only deficiency that can be determined is that there is a need for the surge tank which would eliminate any hydraulic over-loading at this facility. At the present time they are planning the enlargement to have the surge tank separate from the surge and aeration that is currently prevailing in the existing 50,000 GPD plant.

QUES: When will emergency generator be installed as required by specific condition # 16 of D.E.R. permit DC05-124603?

ANS: A 100 K.W. generator will be installed as part of the proposed plant enlargement by 85,000 GPD. It will be located on the equipment slab. Currently if they need an auxiliary generator it is rented from Rent All in Brevard County.

/MMARY

This 50,000 GPD extended aeration plant has worked satisfactorily with a minimum of maintenance and break-downs.

At the present time the owners do have a permit to enlarge the plant to 135,000 GPD that would include a surge tank.

It can be concluded that this plant has worked and will continue to work satisfactorily during the 5 years they have requested on the renewal of their operating permit.

APPROVED:

X Jerry Paggett 4-13-92 C-W Sheffield 9/2/92

Operator: Jerry Paggett Date

Operator License No. 7051C

C. W. Sheffield, P.E., Date
Engineer

6690
Florida Registration Number

Billy R Barnes Sr.
Owner

SHEFFIELD ENGINEERING & ASSOCIATES
4322 E. Anderson Road
Orlando, Florida 32812

(407) 658-0512

/MMARY

This 50,000 GPD extended aeration plant has worked satisfactorily with a minimum of maintenance and break-downs.

At the present time the owners do have a permit to enlarge the plant to 135,000 GPD that would include a surge tank.

It can be concluded that this plant has worked and will continue to work satisfactorily during the 5 years they have requested on the renewal of their operating permit.

APPROVED:

X _____ 4-13-92 _____

Operator: Jerry Paggett Date

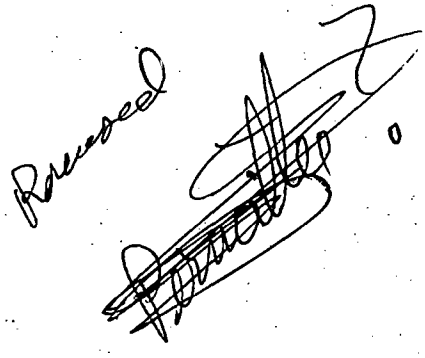
Operator License No. 7051C

C. W. Sheffield, P.E., Date
Engineer

6690
Florida Registration Number

SHEFFIELD ENGINEERING &
ASSOCIATES
4322 E. Anderson Road
Orlando, Florida 32812

(407) 658-0512



Florida Department of Environmental Regulation

Central District Satellite Office • 13 E. Melbourne Ave., • Melbourne, FL 32901

Lawton Chiles, Governor — Carol M. Browner, Secretary

September 15, 1992

CERTIFIED
P 386 746 687

Kelly Barnes, President
Sun Lake Estates Homeowners Association
Post Office Box 430
Sharpes, Florida 32959

MCD-DW-CE-92-0116

Brevard County - DW
Sun Lakes Estates, STP
Permit Number: DO05-124603

Dear Ms. Barnes:

On August 18, 1992, Department personnel conducted a routine inspection of your sewage treatment plant. During the course of the inspection, and/or as determined from records on file in this office, the following unsatisfactory condition was noted:

1. Backflow protection is not adequate. A reduced pressure zone backflow preventer must be installed in the potable water line.

Please respond to this item, in writing, with a schedule of corrective action. Pursuant to Rule 17-4.100(2) F.A.C. failure to comply with pollution control rules shall be grounds for permit suspension or revocation and initiation of formal enforcement action. Your reply is requested within 14 days from the date of this letter. Your reply and any questions should be addressed to Tom Powers, Melbourne Satellite Office, at (407) 984-4800 or at the letterhead address.

Sincerely,

Alvin Castro

Alvin Castro, P.E.
Section Supervisor
Domestic Waste
Compliance/Enforcement

AC/dv/tph

Recycled Paper

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 7-14-92 TIME: 9:00 RECEIVED BY Helen Shepherd

REPORTED BY Jerry Padrick, Operator

NAME OF PLANT/SYSTEM Sunlake Estates COUNTY: Brevard

ADDRESS _____

PHONE ( ) 639-0370

OWNER Sunlake Estates

DATE AND TIME OF FAILURE 7-13-92 Between 2-3 P.M.

NATURE OF PROBLEM Hydraulic washout (infiltration from rain) which "upset" clarifier. Spill discharged to evaporation percolation pond.

CORRECTIVE ACTION TAKEN _____

EXPECTED BACK IN SERVICE BY (DATE & TIME) 7-13-92, 4 P.M.

REMARKS _____

Revised June 6, 1989

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 6-15-92 TIME: 7:50 AM answering machine RECEIVED BY Helen Shepherd

REPORTED BY Paula Johnson

NAME OF PLANT/SYSTEM Sun Lake Estates MHP, ST COUNTY: Brevard

ADDRESS _____

PHONE ( ) 639-0970

OWNER _____

DATE AND TIME OF FAILURE 6-13-92 6 P.M.

NATURE OF PROBLEM Heavy rains caused "plant washout". No spill occurred.

CORRECTIVE ACTION TAKEN _____

EXPECTED BACK IN SERVICE BY (DATE & TIME) _____

REMARKS _____

Revised June 6, 1989

F

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor — Carol M. Browner, Secretary

May 20, 1992

Sun Lake Estates Homeowners Association
Post Office Box 430
Sharpes, FL 32959

OCD-CE-DW-92-0404

Attention: Kelly Barnes, President

Brevard County - DW
Sun Lake Estates, STP

Dear Mr. Barnes:

This is a reminder that, in accordance with the Indian River Lagoon Protection Act (Chapter 90-262, Laws of Florida) you are required to submit a reuse feasibility study to the Central District DER office by July 1, 1992. Please refer to the attached "Guidelines for Preparation of Reuse Feasibility Studies for Applicants Having Responsibility for Wastewater Management."

If you have previously submitted a Reuse Feasibility Study to this office, please indicate so in your response to this letter.

Sincerely,

Christianne Ferraro

Christianne Ferraro, P.E.
Program Manager
Domestic Waste

CCF/pd/jb
Enclosure
cc: DER/Melbourne Office

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 4-22-92 TIME: 3:33 RECEIVED BY Helen Shepherd

REPORTED BY Paula Johnson

NAME OF PLANT/SYSTEM Sun Lake Estates STP COUNTY: Brevard

ADDRESS

PHONE ( ) 639-0370

OWNER Sun Lake Estates

DATE AND TIME OF FAILURE 4-21-92, 6 P.M.

NATURE OF PROBLEM Heavy rains caused solids (pop ups) to go into pond. No spillage onto ground surfaces occurred.

CORRECTIVE ACTION TAKEN None.

EXPECTED BACK IN SERVICE BY (DATE & TIME) Level down 4-22-92 at 6:45 A.M.

REMARKS

Revised June 6, 1989

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 3/26/92 TIME: 3:20 RECEIVED BY T. Rowe

REPORTED BY PAULA JOHNSON

NAME OF PLANT/SYSTEM SUN LAKE ESTATES COUNTY: Brevard

ADDRESS _____

PHONE (407) 639-0390

OWNER _____

DATE AND TIME OF FAILURE 3/25/92 10:00 PM

NATURE OF PROBLEM WASHOUT OF SOLIDS TO PERC POND DUE TO HEAVY RAINS

CORRECTIVE ACTION TAKEN —

EXPECTED BACK IN SERVICE BY (DATE & TIME) 12:00 AM

REMARKS _____

Revised June 6, 1989

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 3-24-92 TIME: _____ RECEIVED BY Helen Shepherd

REPORTED BY Paula Johnson

NAME OF PLANT/SYSTEM Sun Lake Estates COUNTY: Brevard

ADDRESS _____

PHONE (407) 639-0370

OWNER _____

DATE AND TIME OF FAILURE 3/22/92 4:00 PM

NATURE OF PROBLEM FAILURE DUE TO HEAVY RAIN
WASHOUT - INFLOW TO PONDS

CORRECTIVE ACTION TAKEN _____

EXPECTED BACK IN SERVICE BY (DATE & TIME) 3/22/92 6:30 pm

REMARKS _____

Revised June 6, 1989

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 2-3-92 TIME: 10:57 RECEIVED BY: A. Shepherd

REPORTED BY Paula Johnson

NAME OF PLANT/SYSTEM Sun Lake Estates COUNTY: Brevard

ADDRESS

PHONE ( ) 639-0370

OWNER

DATE AND TIME OF FAILURE 2/2/92 Noon

NATURE OF PROBLEM "Wash out" due to young sludge.

CORRECTIVE ACTION TAKEN Operator Patrick turned plant off and let it cool down.

EXPECTED BACK IN SERVICE BY (DATE & TIME) 2-2-92 2 P.M.

REMARKS No spill occurred.

Revised June 6, 1989

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DATE: 1/27/92 TIME: 10:35 RECEIVED BY V. Powers

REPORTED BY PAULA JOHNSON

NAME OF PLANT/SYSTEM SUN LAKES ESTATES COUNTY: BREVARD

ADDRESS 655 CANAVERAL GROVES BLVD

PHONE ( ) 639-0370

OWNER

DATE AND TIME OF FAILURE 1/26/92

NATURE OF PROBLEM WASH OUT OF SOLIDS TO PERC POND

CORRECTIVE ACTION TAKEN READJUSTED FLOATS

EXPECTED BACK IN SERVICE BY (DATE & TIME) 1/27/92

REMARKS CONTAINED TO PERC POND

Revised June 6, 1989

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)

DW

DATE: 1-21-92 TIME: 8 A.M. RECEIVED BY Helen Shepherd

REPORTED BY Paula Johnson

NAME OF PLANT/SYSTEM Sun Lake Estates MHP COUNTY: Brevard

ADDRESS 655 Canaveral Groves Blvd.
Cocoa, FL

PHONE ( ) 639-0370

OWNER TKCB, Inc.

DATE AND TIME OF FAILURE 1-17-92, after 6 P.M., or early 1-18-92

NATURE OF PROBLEM Washout (that never overflowed plant) caused by work done on float adjustment and burned out wire putting an excessive load on lift station.

CORRECTIVE ACTION TAKEN Wire and floats repaired, adjusted - respectively.

EXPECTED BACK IN SERVICE BY (DATE & TIME) 1-18-92, 12 Noon

REMARKS This malfunction report was on the DER answering machine twice. Paula Johnson said she called it in on 1-18-92 and on 1-20-92. Ms. Johnson was told report would be referred to T. Powers.

Revised June 6, 1989

Sun Lake Estates

P.O. Box 430
Sharpes, Fla. 32959
(305) 636-5565



FORIDA DEPT. OF ENVIRMONETAL REGULATION
13 E. MELBOURNE AV.
MELBOURNE, FL. 32901

NOVEMBER 18, 1991

DEAR MR. POWERS,

THIS LETTER IS INFORM YOU AS THE WORK DONE TO CORRECT THE CONDITIONS AT SUN LAKE ESTATES WASTE WATER TREATMENT PLANT.

1. THE SOLIDS YOU NOTED IN THE CHLORINE CHAMBER WAS PEN FLOCKS.
2. THE PONDS HAVE BEEN MOWED AS YOU REQUESTED AND HAVE BEEN IN CONTACT WITH SOMEONE FOR AN ESTIMATE ON THE TURNING OVER OF THE BOTTOMS OF THE PONDS AND SHOULD BE DONE WITHIN THE NEXT FEW WEEKS.
3. THE ELECTRICIAN THAT WE HAVE FOR THE PLANT HAS ORDERED AN EXHAUST FAN FOR THE CHLORINE ROOM. AND IT SHOULD BE INSTALLED WITHIN THE NEXT WEEK.

THANK YOU,

Paula Johnson

PAULA JOHNSON MANAGER
SUN LAKE ESTATES WASTE WATER PLANT

Florida Department of Environmental Regulation

Central District Satellite Office • 13 E. Melbourne Ave., • Melbourne, FL 32901

Lawton Chiles, Governor

Carol M. Browner, Secretary

CF 10/28
AC 10/28
GM 11/01

October 30, 1991

CERTIFIED
P 708 135 964

Mr. Ollie King, Vice President
TKCB, Inc.
Post Office Box 430
Sharpes, Florida 32959

MCD-DW-91-0094

Brevard County - DW
Sun Lakes Estates STP
Permit Number: DO05-117304

Dear Mr. King:

On October 15, 1991, department personnel conducted a routine inspection of your sewage treatment plant. During the course of the inspection and/or determined from records on file in this office, the following unsatisfactory conditions were noted:

1. Solids were noted in the chlorine contact chamber.

2. The percolation ponds contained excessive solids and vegetation.

3. An overgrowth of dense vegetation prohibits safe access to the percolation ponds. The entire perimeter of the percolation pond berm must be accessible.

4. The ground level exhaust fan was not operating in the gas chlorine enclosure.

Please respond to these items, in writing, with a schedule of corrective action. Pursuant to Rule 17-4.100(2) F.A.C. failure to comply with pollution control rules shall be grounds for permit suspension or revocation. Your reply is requested within 14 days from the date of this letter. Your reply and any questions should be addressed to Tom Powers, Melbourne Satellite Office, at (407) 984-4800 or at the letterhead address.

Sincerely,

Christianne C. Ferraro

Christianne C. Ferraro, P.E.
Program Manager
Domestic Waste

CCF:dv:tph

cc: Lee Miller, FDER-Orlando

Recycled Paper

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = OPTIONAL

Name and Physical Location of Facility	GMS ID:	County	Entry Date/Time
SUNLAKE ESTATES, STP CANAVERAL BLVD SHARPES, FL	3005F00377	BREVARD	10/15/91 1:00
		Phone	@ Exit Time/Date
		639-0370	10/15/91 1:30

Name(s) of Field Representatives(s)	Title	Phone

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #:
TKCB INCORP. P.O. BOX 430 SHARPES FL 32959			

Inspection Type: [R|F] Samples Taken(Y/N): N @ Sample ID#: Samples Split (Y/N): N

☑ Domestic ☐ Industrial Were Photos Taken(Y/N): N @ Log Book Volume: 1 @ Page: 24

In Compliance With Permit Conditions (Y/N): N

Recommended Actions LETTER

Name (s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Thomas L. Powers	MELBOURNE/984-4800	10/16/91
@ Signature of Reviewer	District Office/Phone Number	Date

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; Blank=Not Evaluated *See Comments

S	1. Permit: # DC0512603		6. Sampling	M	11. Effluent
	2. Compliance Schedule	S	7. Self-Monitoring Program		12. Groundwater
	3. Pretreatment	M	8. Facility Site Review	S	13. Disposal Method
	4. Records & Reports		9. Flow Measurement		14. Residuals Management
	5. Laboratory	S	10. Operation & Maintenance	U	15. Other POND

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI - RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5 3	11 12	17 18	19	20	

Remarks

21 66

Inspection Type (Field 18): A=PAI, B=CBI, C=CEI, S=CSI, X=XSI, R=RI
Inspector Code (Field 19): S=State, J=Joint EPA/State-EPA Lead, T=Joint State/EPA-State Lead
Facility Type (Field 20): 1=Municipal (Publicly Owned), 2= Industrial and Privately Owned Domestic, 3=Agricultural, 4=Federal
Every other field is self explanatory.

@ FACILITY DIAGRAM

INSPECTION COMMENTS

ACCESS CONTROL: GOOD OPERATOR - JERRY PARISH C7051

LOG ONSITE: OK

AERATION: 2 BLOWERS / MIXED LIQUOR LIGHT BROWN
SLIGHT LIGHT BROWN FOAM.
BAR SCREEN NOTED

CLARIFIER: SLUDGE POPUPS NOTED
WEIRS CLEAN - EFFLUENT CLEAR

CCC: GAS CHLORINE WITH SCALES -
* SOLIDS NOTED IN CCC
* FAN NOT OPERATING IN CHLORINE STORAGE
3FT VISIBILITY

DISPOSAL: 4 PERC PONDS
* OVERGROWN VEGETATION IN PONDS AND ON BERMS

MORS: OK

file

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor — Carol M. Browner, Secretary

September 26, 1991

TKCB, Inc.
Post Office Box 430
Sharpes, FL 32959

OCD-CE-DW-91-0403

Attention: Ollie King, Vice President

Brevard County - DW
Notice of Operating Permit Expiration
Sun Lake Estates, S.T.P.
Sewage Treatment Plant

Dear Mr. King:

A review of our files has disclosed that your Operating Permit Number DO05-117304 will expire on October 30, 1991.

Operation of a pollution source without a valid permit from the Department of Environmental Regulation constitutes a violation of Section 17-4.03, Florida Administrative Code, and Section 403.161, Florida Statutes.

Section 17-4.09 further states: "Prior to sixty (60) days before the expiration of any department permit, the permittee shall apply for a renewal of a permit on forms and in a manner prescribed by the department."

You are requested to submit a complete permit application with appropriate fees, within fourteen (14) days of receipt of this letter.

Please address any questions to Peter F. Dentice, DW Compliance/Enforcement Section.

Sincerely,

Christianne C. Ferraro

Christianne C. Ferraro, P.E.
Program Manager
Domestic Waste

CCF/pd/dv

cc: DER/Melbourne Office

Recycled Paper

FLO A DEPARTMENT OF ENVIRONMENTA EGULATION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

Name and Physical Location of Facility	County	Entry Date	am [ ] pm [ ]
Sunlake Estate	Brevard	2/5/91	
	Phone	Exit Time/Date	

Name and Address of Responsible Official	Title	Phone
Reception		

Name (s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
W.E. Dalmus		

Signature of Reviewer	District Office/Phone Number	Date

Inspection Type: [R|I] Lead Inspector Initials (3): [W|E|D] Samples Taken(Y/N): N Were Samples Split With Facility Lab(Y/N): N

[X] Domestic [ ] Industrial Were Photos Taken(Y/N): N Log Book Page:

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Marginal; U=Unsatisfactory; N=Not Evaluated

S	Permit		Sampling	S	Effluent
	Compliance Schedules	S	Self Monitoring Program		Groundwater
	Pretreatment	S	Facility Site Review	S	Disposal Method
	Records and Reports	S	Flow Measurement		Residuals Management
	Laboratory	S	Operations and Maintenance		Other

Actions Taken:	X	Compliance
Followup Actions:		Non-Compliance

INSPECTION COMMENTS

MAR 1 ENT'D

Res Par	Initials (3)	Insp Date (YYMMDD)	COM LIM	FAC EVL	Corrective Action	Followup Date	Distance to
S	WED	910205	Yes	Sat	No		

Secure - good housekeeping - no odor - good color - clarifier clear, no pop-ups

chlorine contact chamber clear - chlorination equipment satisfactory -

back flow prevention equipment functioning - effluent disposal

to 3 perc ponds all basically dry.

Facility may not be in I.R. Lagoon drainage basin

11/0

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

January 9, 1991

T. K. C. B. Inc.
Post Office Box 430
Scottsmoore, FL 32759

OCD-DW-90-0840

Attention: Ollie King, V.P.

Brevard County - DW
Sun Lake Estates STP

Dear Mr. King:

The Florida Legislature passed a bill (Chapter 90-262, Florida Statutes) in 1990 dealing with protection of the Indian River Lagoon System. Provisions in the bill directly affect wastewater treatment facilities discharging to the Indian River Lagoon System from Jupiter Inlet north to Ponce de Leon Inlet.

The bill requires the elimination of existing discharges of treated effluent to the Indian River Lagoon System by July 1, 1995. Further, effective immediately, no new discharges or increased loadings from existing dischargers will be allowed. Your facility is not permitted to discharge to surface waters, and you must make every attempt to prevent any overflows or other emergency discharges to this system.

The bill further requires that by July 1, 1992, each owner of an existing wastewater treatment facility within the Indian River Lagoon Basin investigate the feasibility of using reclaimed wastewater consistently with Department rules. This means all systems defined to be in the Indian River Lagoon Basin whether discharging to surface waters or to ground waters. To comply with this requirement, you should submit to this office your plan for implementation of this requirement by February 1, 1991, and submit the feasibility study by December 1, 1991.

If your facility at the present time is reusing reclaimed water as defined in department Rule 17-600.200(72)(a) (copy enclosed) then your facility is in compliance with the reuse requirement and you should indicate so in your letter which is due by February 1, 1991,

For your information, the Department, the water management districts, and affected municipalities have other responsiblities outlined in the bill. The Department must identify, by July 1, 1991, areas in which package wastewater treatment plants have the potential to cause water quality problems. The water management district's must identify by July 1, 1993, areas where

improper use of septic tanks pose a threat to water quality. It is then the responsibility of each county and municipality in the Indian River Lagoon Basin to develop and begin implementing programs to provide centralized sewage collection and treatment for these problem areas by July 1, 1994.

As you can see, there is much that must be accomplished to meet the requirements of this bill. We have already begun the required inventories and are prepared to work cooperatively with you in meeting your responsibilities. While many of the deadlines for compliance are a few years away, planning must begin now. Careful consideration should be given to reuse options as alternatives to surface water discharge, as well as centralized collection systems for potential problem areas.

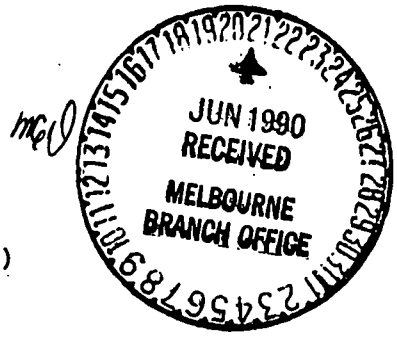
Please call Christianne C. Ferraro, P.E. at the above number if you have any questions or need further clarification on the requirements of the legislation.

Sincerely,

A. Alexander, P.E.
Deputy Assistant Secretary

CCF
AA/ccf/me

Enclosure



TO: DEPARTMENT OF ENVIRONMENTAL REGULATIONS

FROM: JERRY PADRICK (C LICENSED WASTEWATER OPERATOR)

RE: SPILL

On 06/14/90, at Sun Lake Estates, we had a spill of secondary Effluent and with treated solids.

The following caused the spill:

Lift station was left off by the plumbers for the entire day. So I turned on pump #1 to pump the park down. It was completely backed up. This was around 5:30 PM. At 6:30 PM I received a phone call that the sewer plant was overflowing. Since I live in the park I went directly to the plant at 6:34 PM. I found two starters for the effluent pumps tripped (probably a power surge). I quickly reset and went up and started wasting. This completely solved the problem. I then called for a tractor to soak up the spill with dirt. I also used HTH to disinfect the area before the tractor arrived at 7:00 PM. The spill was cleaned completely by 9:30 PM. I estimate around 300 to 400 gallons were cleaned up. I will inform the owners that we need to have an electrician check out starters for effluent pumps.

SINCERELY YOURS,

JERRY W. PADRICK

xc: B. Darling

DOMESTIC WASTE
MALFUNCTION REPORT

TO BE DELIVERED TO APPROPRIATE SECTION
IMMEDIATELY

(CLEARLY HANDWRITTEN, NOT TYPED)



DATE: 6/15/90 TIME: 8:45AM RECEIVED BY W Kappler

REPORTED BY Jerry Patrick - Operator

NAME OF PLANT/SYSTEM Sun Lake Estates COUNTY: Brevard

ADDRESS Canaveral Blvd - West

PHONE ( )

OWNER Mr. O. King, Vice President, T.K.C.B., Inc.

DATE AND TIME OF FAILURE 6/14/90 6:30PM

NATURE OF PROBLEM Effulent pump motor starter tripped due to a power surge.

CORRECTIVE ACTION TAKEN Reset pumps and lowered effluent wetwell.

EXPECTED BACK IN SERVICE BY (DATE & TIME) 7:00PM 6/14/90

REMARKS Discharged approximately 350-400 gallons of chlorinated effluent with some solids to the surrounding ground surface. Operator applied HTH and scraped areas effected by unauthorized discharge. Scraped material to be trucked and disposed of properly. Report from operator to be mailed to this office.

Revised June 6, 1989

CC: Orlando

COUNTY: Brevard

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

RECONNAISSANCE INSPECTION REPORT

1. Source Name: Sun Lake Estates GMS ID No: 05P00377
2. Source Location: Canaveral Blvd - West, Sharpes
3. Permits: State No: DC05-124603 Expires: 06-15-90
   DO05-117304 10-30-91
4. Source Description (circle one) (DW) IW 5. Application Received? Yes__ No X
6. Permitted Flow: 0.206 7. Discharge? Yes___ No X
8. Person Contacted: Paula Johnson Title: Office Manager
9. Purpose of Inspection: Routine Recon Visit
10. Comments: Overall impression 1-10 (9).
Access control is in place, and secure. Ponds are outside the secured area.

Note:
One pond accommodates the (relatively low) flow of the present operation. This pond is quite heavily overgrown, however, very shallow, if any, water depth exists — only a well-wetted area of the bottom — so that its freeboard may be considered the inside construction depth of its berm.

Several additional ponds are constructed in the deep, sandy area in the power line right of way. These ponds will be placed in service as they are needed by the expansion of the planned project activity. This could be years in the future.

The mixed liquor in the aeration bays has a good color.

(over)

11. Is Facility in Compliance? Yes X No___; Violations: ~~Major~~ ___ ~~Minor~~ ___
12. Corrective Action: None
13. Inspector: W. Cobb Title: ET-IV Date: 06-20-89

revised 05/22/89 mapped mcff

The clarifier and chlorine contact chamber are clear — reflecting a well balanced treatment process.
Disinfection is by gas chlorination — handled safely within compliance to Code requirements.
There are three grades of screen for removal of floatables, before the effluent is discharged to the pond(s). The flow meter is not operative.
Operator log is on site, and in order.
Overall, this plant's operation and performance is good.

BREVARD COUNTY ENVIRONMENTAL ENGINEERING

WASTEWATER TREATMENT PLANT INSPECTION REPORT

DATE: 11/27/89 TIME: 9:20

SOURCE NAME: Sun Lake Estate - 605 Canaveral Groves Blvd., Sharpes, Florida 32959

PERMITS: STATE DC05 124603 EXPIRES 6/15/90 NPDES # DC05 117304 EXPIRES 10/30/91

PERMITTED FLOW 0.050-0.135 MGD

PERSON CONTACTED: Mr. Ollie King - TITLE Owner - 632-9166 or 639-0370
P.O. Box 430
Sharpes, Florida 32959
Mr, Jerry Padrick (6-7051)
Operator.

PURPOSE OF INSPECTION: Compliance

COMMENTS AND EVALUATION: Light bulb in Chlorine room not working
No paper in flow recorder
Effluent met State of Florida regulations.

ACTION REQUIRED: The light in the chlorine room needs repair
The paper in the flow chart needs replacement

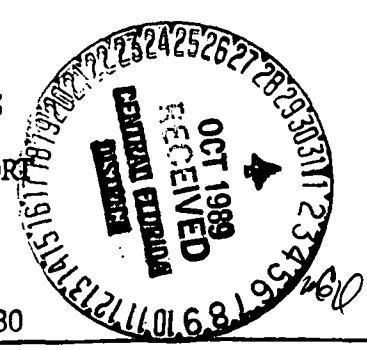
INSPECTOR: Carolina Alaverz TITLE: Engineer

Carolina Alaverz

ES/EE-01 (12-83)

BREVARD COUNTY ENVIRONMENTAL ENGINEERING

WASTEWATER TREATMENT PLANT INSPECTION REPORT



DATE: 10/25/89 TIME: 11:30

SOURCE NAME: Sun Lake Estate - 480 Cox Road Sharpes, Florida 32959

PERMITS: STATE DC05 124603 EXPIRES 6/15/90 NPDES # _____ EXPIRES _____

PERMITTED FLOW 0.050-0.135 MGD

PERSON CONTACTED: Mr.Ollie King - TITLE Owner - 632-9166 or 639-0370
Mr.Laurence L.Mill - (C 7310) 603 Canaveral Groves
Operator. Sharpes,Florida 32959

PURPOSE OF INSPECTION: Compliance

COMMENTS AND EVALUATION: Flow meter not working

Excessive plant growth in pond area

No operating log could be found on site

ACTION REQUIRED: Flow meter needs to be repaired

Grounds maintenance needed around pond area

The daily log needs to be kept on-site in a weather proof box.

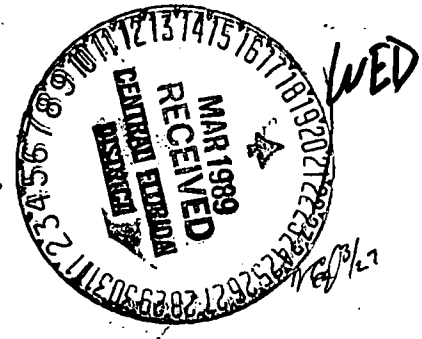
Trailer park manager was notify of the discrepancies and notified us that the meter is on order, the log is ussually kept on-site and they're hiring a company to clean the pond area.

INSPECTOR: Carolina Alvarez TITLE: Engineer

ES/EE-01 (12-83)

BREVARD COUNTY ENVIRONMENTAL ENGINEERING

WASTEWATER TREATMENT PLANT INSPECTION REPORT



DATE: March 14,1989 TIME: 9:22 AM

SOURCE NAME: Sun Lake Estate - 480 Cox Road Sharpes, Florida 32959

PERMITS: STATE DC05 124603 EXPIRES 6/15/90 NPDES # D005 117304 EXPIRES 10/30/91

PERMITTED FLOW 0.050-.135 MGD

PERSON CONTACTED: Mr.Ollie King - TITLE Owner - 632-9166 or 639-0370

Mr.Laurence L.Mille(C 7310) Operator.

603 Canaveral Groves
Sharpes,Florida 32959

PURPOSE OF INSPECTION: Compliance

COMMENTS AND EVALUATION: 1) Pop-Ups and Clamps noted in clarifier tank,Algae mats covering clarifier tank weirs.

2)The filtration system screens are partially clogged,could overflow unfiltered effluent to an adjacent property.

3)Effluent is not being chlorinated (chlorinator unit out of order and both 150 lbs cylinder tanks are empty).

4)Excessive dead vegetation covering all eight percolation ponds.

ACTION REQUIRED: A chlorine residual of 0.5 mg/l,After a minimum of fifteen minutes contact time,is mandatory.

2) Housekeeping maintenance should be provided.

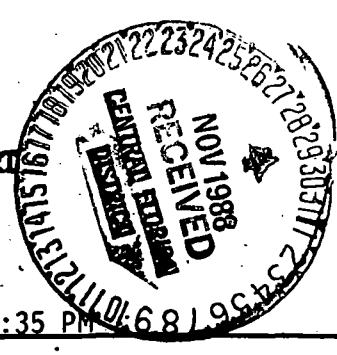
INSPECTOR: Charles D. Pacamalan TITLE: Sanitarian

Charles D.Pacamalan

ES/EE-01 (12-83)

BREVARD COUNTY ENVIRONMENTAL ENGINEERING

WASTEWATER TREATMENT PLANT INSPECTION REPORT



DATE: November 15,1988 TIME: 1:35 PM

SOURCE NAME: Sun Lake Estate - 480 Cox Road Cocoa ,Florida 32922

PERMITS: STATE D005 117304 EXPIRES 10/30/91 NPDES # _____ EXPIRES _____

PERMITTED FLOW 0.050 MGD

PERSON CONTACTED: Mr.Ollie King - TITLE Owner - 632-9166 or 639-0370
603 Canaveral Groves
Sharpes,Florida 32959
Mr.William M.Schader - B 5067
Operator.

PURPOSE OF INSPECTION: Compliance

COMMENTS AND EVALUATION: 1) All percolation ponds are covered with dead vegetation.

2) Excessive algae mats covering clarifier tank weirs.

3) No chlorine residual in the effluent.

4) Plant operation looked good.

ACTION REQUIRED: 1) A chlorine residual of 0.5 mg/l,After a minimum of fifteen minutes contact time,is mandatory.

2) Plant and percolation ponds maintenance should be provided.

INSPECTOR: Charles D.Pacamalan TITLE: Environmental Technician

ES/EE-01 (12-83)

BREVARD COUNTY ENVIRONMENTAL ENGINEERING

WASTEWATER TREATMENT PLANT INSPECTION REPORT

DATE: September 27, 1988 TIME: 2:09 PM

SOURCE NAME: Sun Lake Estate - 480 Cox Road Cocoa, Florida 32922

PERMITS: STATE D005 117304 EXPIRES 10/30/91 NPDES # _____ EXPIRES _____

PERMITTED FLOW 0.050 MGD

PERSON CONTACTED: Mr. Ollie King - TITLE Owner - 632-9166 or 639-0370
603 Canaveral Groves
Sharpes, Florida 32959

Mr. William M. Schader - B 5067
Operator.

PURPOSE OF INSPECTION: Compliance

COMMENTS AND EVALUATION: 1) All percolation ponds covered with dead vegetation.

2) Excessive algae mats covering clarifier tank weirs.

3) No operating log maintenance on site.

4) Plant operation looked good.

ACTION REQUIRED: Should have plant operating log maintenance accessible to a twenty four hours inspection.

INSPECTOR: Charles D. Pacamalan TITLE: Environmental Technician

ES/EE-01 (12-83)

MD 10/3

Gateway Utility Service Inc.
471 West Lake Mary Blvd., Suite 3
Lake Mary, Florida 32746
Phone: 305 / 323-8360

RECEIVED
JUL 1988

July 15, 1988

Department of Environment Regulation
Central Florida District
3319 Maguire Blvd.
Orlando, Fl. 32803-3767

Attn: Lee Miller

Re: Sun Lakes Estates, S.T.P.

Dear Mr. Miller:

In reply to your letter dated July 1, 1988 to Sun Lakes Estates.

Item #7: Chlorine residual is being recorded daily. Please see enclosed copy of the April, 1988 monthly operating report.

Item #15: Steps have been taken to correct this matter by repair of chlorinator and an increase of chlorine to the plant.

Item #20: Chlorine residual is not being averaged. Please see enclosed copy of the April, 1988 monthly operating report.

Item #21: Has been corrected by Item #15.

Sincerely,

Lewis G. Parrish, Jr.
Vice President

ENLC: one (1)
LGP/vp

cc: Sun Lakes Estates, S.T.P.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

November 9, 1987

OCF-CS-87-0904

C. W. Sheffield, P.E.
Sheffield Engineering and Associates, Incorporated
3400 South Conway Road
Orlando, Florida 32812

Brevard County - CS
Sharpes Lake Village, S.T.P.

Dear Mr. Sheffield:

This is in response to your letter dated October 16, 1987.

The department's policy is such that justification of the design flow is necessary to compliment your certification if different from standard design criteria.

A summary of the justification shall be provided with each permit application. The need for this duplication is regretted, but there are too many facilities in the district and no mechanism exists to record special flow criteria for each.

Thank you for your cooperation.

Sincerely,

H. Lee Miller, Supervisor
Domestic Waste Section

HLM:eep

cc: Jim Stevenson - B.C.E.R.S.

SHEFFIELD ENGINEERING & ASSOCIATES, INC.

C. W. SHEFFIELD, P.E.
President

RICK JOHNSON, E.I.
Associate

(305) 282-7953

October 16, 1987



Gene Elliott
Department of Environmental
Regulations
3319 Maguire Boulevard
Suite 233
Orlando, Florida 32803-3767

Subject: Sun Lake Estates (Sharpes Lake Village) (8529)

Dear Gene,

We are in the process of designing the additional units on to this wastwater treatment plant. It is our understanding that we can use 100 GPD/coach (mobile home) for future design as long as we certify that the flow is not greater than 100 GPD/coach.

Your cooperation on this matter is greatly appreciated. Until the next time we meet, I remain

Justify!

Sincerely,

C. W. Sheffield, P.E.
President

CWS/hb
cc: Thad Terry

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

July 1, 1988

T.K.C.B., Inc.
480 Cox Road
Cocoa, FL 32922

Brevard County - DW
Sun Lake Estates, S.T.P.

Attention: Ollie King,
Vice President

Recent review of your monthly operating reports for the month of April, 1988 indicates inadequate data in the following areas(s):

1	{ }	Plant Name and Location.	11	{ }	T.S.S. (Total Suspended Solids) exceeds standard.
2	{ }	Permit Number.	12	{ }	Station I.D. number must be recorded, GMS#.
3	{ }	Plant Design Data.	13	{ }	Fecal Coliform exceeds standard.
4	{ }	Signature of Lead Operator	14	{ }	Average flow exceeds plant design.
5	{ }	No report submitted; Reports shall be submitted by the 15th day of the following month.	15	{X}	A chlorine residual of .5 ppm after a minimum contact time of fifteen minutes, must be maintained.
6	{ }	pH is to be recorded daily, (5 days/week).	16	{ }	Nitrate as N is to be recorded on a quarterly basis.
7	{X}	Chlorine residual is to be recorded daily, (5 days/wk)	17	{ }	Fecal Coliform must be recorded on a quarterly basis.
8	{ }	Flow data must be recorded daily, (5 days/week).	18	{ }	BOD_5 and Suspended Solids (TSS) shall be recorded monthly.
9	{ }	Certification number(s) of operating personnel.	19	{ }	Please total and average all columns of data, except chlorine residual
10	{ }	B.O.D. (Biochemical Oxygen Demand) exceeds standard.	20	{X}	Chlorine Residual is not to be averaged.

{X} Disinfection of the plant effluent is required by Florida's environmental law. According to the monthly operation report addressed herein, this requirement has not been met. Such Code violation must not be permitted to continue.

It is requested that these inadequacies be given immediate attention and corrected.

Sincerely,

H. Lee Miller, Supervisor
Domestic Waste Permitting

HLM/wcm

MAROLF

Waste treatment systems
Since 1922
15500 49th Street North
Clearwater, Florida 33520
Phone (813) 536-5991

WESTERN DIVISION
3033 South Central Avenue
Phoenix, Arizona 85040
Phone (602) 243-4215

RECEIVED
JUL 1987
CENTRAL FLORIDA DISTRICT

July 6, 1987

Department of Environmental Regulation
Central Florida District
3319 Maguire Blvd.
Orlando, Florida 32803-3767

Attention: Mr. Peter F. Dentice

Re: Marolf Job #2067
SUN LAKE ESTATES
Permit #OCF-DW-87-0358

Dear Mr. Dentice:

Our customer, Ollie & Tom, Inc., owners of the above sewage treatment plant, have sent us a copy of your letter dated May 13, 1987 concerning the lack of a backflow preventer on the potable water supply line to the gas chlorination system.

The DER rule says an approved device must be used. We assume that DER is the approval agency so we would appreciate a listing of backflow preventers approved by DER. If this is not correct, please let us know who we need approval from.

Also we would recommend the installation of this device at the point where the sewage plant water line taps into the main supply line so all water outlets downstream of this point are protected.

Attached is literature on watts backflow preventers series 900 that we will recommend to our customers. Marolf does not normally furnish this type of equipment because potable water supply line installation is not part of our sewage plant contracts.

Sincerely,

MAROLF, INC.

Raymond A. Caldwell
Service Manager

RAC/lmb Encl.

Designed to equal or exceed the requirements of A.S.S.E. Standard 1013, AWWA Standard C-[redacted] CSA Standard B64.4 and the performance requirements of U.S.C. [redacted]undation for Cross Connection Control Standard for reduced pressure principle backflow preventers.

No. 900 Series ¾", 1", 1¼", 1½", 2"

Reduced Pressure Principle Backflow Preventer For Higher Hazard Applications

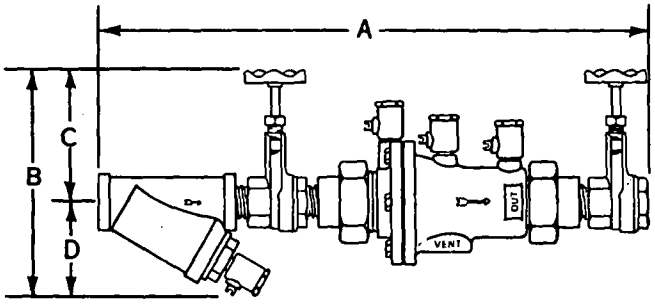
Watts No. 900 Series provides the complete concept in cross connection control for the protection of potable water, meeting the performance requirements of A.S.S.E. Standard 1013, AWWA Standard C-506 and U.S.C. Foundation for Cross Connection Control Standard for reduced pressure principle backflow preventers. Also, accepted by U.S. Public Health Service.

Beyond its size, weight, and cost advantages, the No. 900 Series offer many other advantages of value to anyone concerned with efficient cross connection control such as design simplicity, low flow resistance, quiet operation, simplified installation and service; and features a third (back up) check valve for added safety.

The No. 900 assembly is the only backflow preventer furnished complete with strainer, test cocks, and gate valves. Its compact, well-balanced, practical design now brings complete protection to thousands of installations which were not economically possible before such realistic considerations were proven and available.

No. 900 is suitable for supply pressures up to 175 psi and for water temperature up to 140° F.

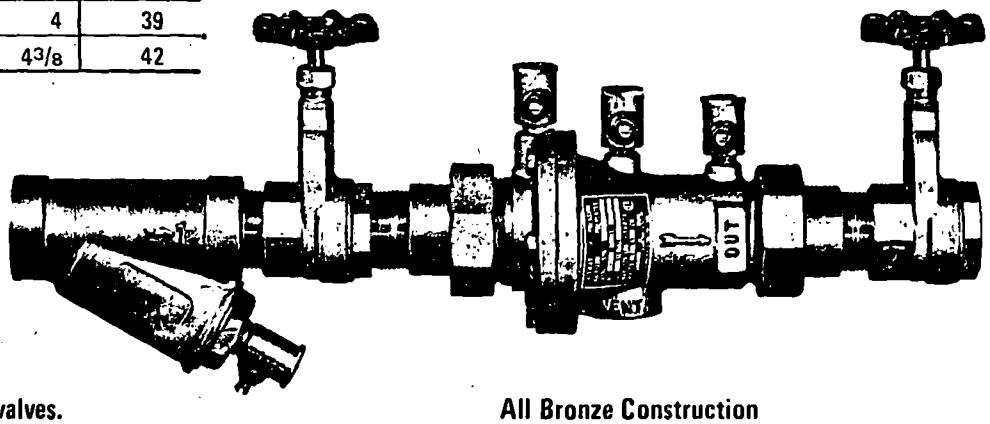
- **Union Connections**
- **Stainless steel internal parts**
- **Standardly furnished with bronze body strainer**
- **Maximum flow at low pressure drop**
- **Compact size for ease of installation**
- **Maximum total of 10 parts required for complete service**
- **Third (back up) Check Valve for added safety**



Sizes (In.)	Dimensions (Inches) A	B	C	D	Total Weight (Lbs.)
3/4	18 3/4	7 1/8	4	3 1/8	14 1/2
1	21 1/4	8 13/16	5 1/4	3 9/16	15
1 1/4	20 3/4	9 3/4	6	3 3/4	16
1 1/2	28 3/4	10 3/4	6 3/4	4	39
2	29 3/4	12 7/8	8 1/4	4 3/8	42

Maximum Supply Pressure 175 lbs.

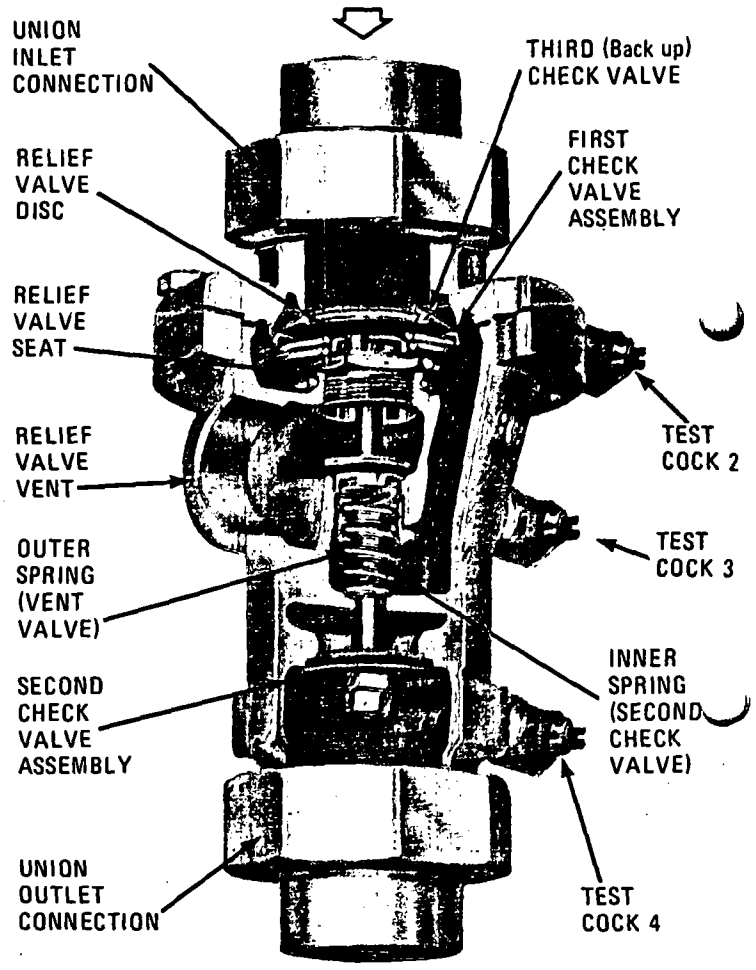
No. 900
Furnished complete with gate valves, strainer and test cocks, as shown.



Also available with O.S. & Y. gate valves.

All Bronze Construction

CONSTRUCTION OF BASIC VALVE
(GATE VALVES AND STRAINER NOT SHOWN)



Patent No. 3,636,968
Patent No. 3,747,621
Other U.S. and Foreign Patents Pending

For Additional Detailed Information, send for Folder F-900

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

May 13, 1987

Mr. O. King, Vice President
T.K.C.B., Incorporated
480 Cox Road
Cocoa, Florida 32922

OCF-DW-87-0358

Brevard County - DW
Sun Lake Estates
Sewage Treatment Facility

Dear Mr. King:

On April 24, 1987, department personnel conducted an inspection of your sewage treatment plant. During the course of inspection, the following unsatisfactory conditions were noted:

1) Absence of an approved backflow prevention device on the potable water line which is used for gas chlorine (the Watts #7 dual-check valve was not approved). Specific Condition #12 of permit DC05-69218 specified: "The backflow prevention device on the water line to the wastewater treatment plant shall be an approved reduced pressure device, installed above ground in accordance with the manufacturer recommendations."

2) The maintenance/operation log on-site was lacking the certified operator's time in and out.

Please respond to the aforementioned discrepancies in writing, including a schedule for corrective action, within twenty days from the date of this letter.

Sincerely,

Peter F. Dentice
Domestic Waste Operations

PFD/gmc

cc: Melbourne DER
B.C.E.R.S.

Brevard

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

RECONNAISSANCE INSPECTION REPORT

1. Source Name: Sun Lake Estates
2. Source Location: Canaveral Blvd, Sharpes
3. Permits: State No. DC05-174603 Expires: 6/15/90
   0005-112304 6/30/91
   NPDES No. FL _____ Expires: _____
4. Is there a State and/or Federal (circle) compliance schedule for this facility? Yes _____ No ✓
5. Is this facility in conformance with the existing State and/or Federal compliance schedule? Yes _____ No N/A
6. Source Description (circle one): (DW) IW
7. Discharge: Yes _____ No ✓
8. Permitted Flow: .050 → .135 MGD
9. Basin No: _____ Rank: _____
10. Person Contacted: Ollie King Title: Vice President of Corp.
11. Purpose of Inspection: Routine

12. Comments:
Access control satisfactory.
2 blowers.
Mixed liquor chc. brown, no odors.
Effluent clear going over weir of clarifier.
3 filter screens being used.
Stevens flowmeter.
Total of 8 perc. ponds - 4 ponds are dry the other 4 have only a few inches of effluent.
Time in & out needed on the maint/operation log.

13. Indicate Corrective Action(s) to be Undertaken by DER District Office: Letter

14. Individual Assigned Responsibility for Corrective Action(s): _____ Title: _____
15. Inspector Completing Report: Gary F. Mallin Title: EST Date: 04/24/87

Reduce pressure backflow preventer needed on the potable water line used for gas chlorine (watts #7 dual check valve on the potable line - not approved)...

SEP1986
RECEIVED
Central Florida
District

ENGINEERING REPORT

ON A

0.206 MGD WASTEWATER TREATMENT PLANT

EXPANSION

AT

SUN LAKE ESTATES

PC05-124603

ISSUED 4-6-87

Prepared For:

T. K. C. B., Inc.

Prepared By:

Sheffield Engineering & Associates, Inc.

September, 1986

TABLE OF CONTENTS

Subject	Page
Introduction	1
Proposed Area	2
Projected Flows	4
Proposed Plant Location	5
Process Design Information & Criteria	8
Design Data and Location of Effluent Disposal Area	18
Chlorination Equipment	19
Sludge Removal	20
Summary - Recommendations	21

Appendix

Soils Report
Wastewater Treatment Plant Specifications

SUN LAKE ESTATES

0.206 MGD C.M.

ENGINEERING REPORT

INTRODUCTION

The object of this Engineering Report for the proposed expansion on the Sun Lake Estates wastewater treatment plant to 0.206 MGD (complete mix) is to review the design parameters for the plant and method of effluent disposal.

This engineering report will review in a very cursory manner the steps taken to develop an expansion to an existing wastewater treatment plant of this nature.

Within this review it is our intention to incorporate the following:

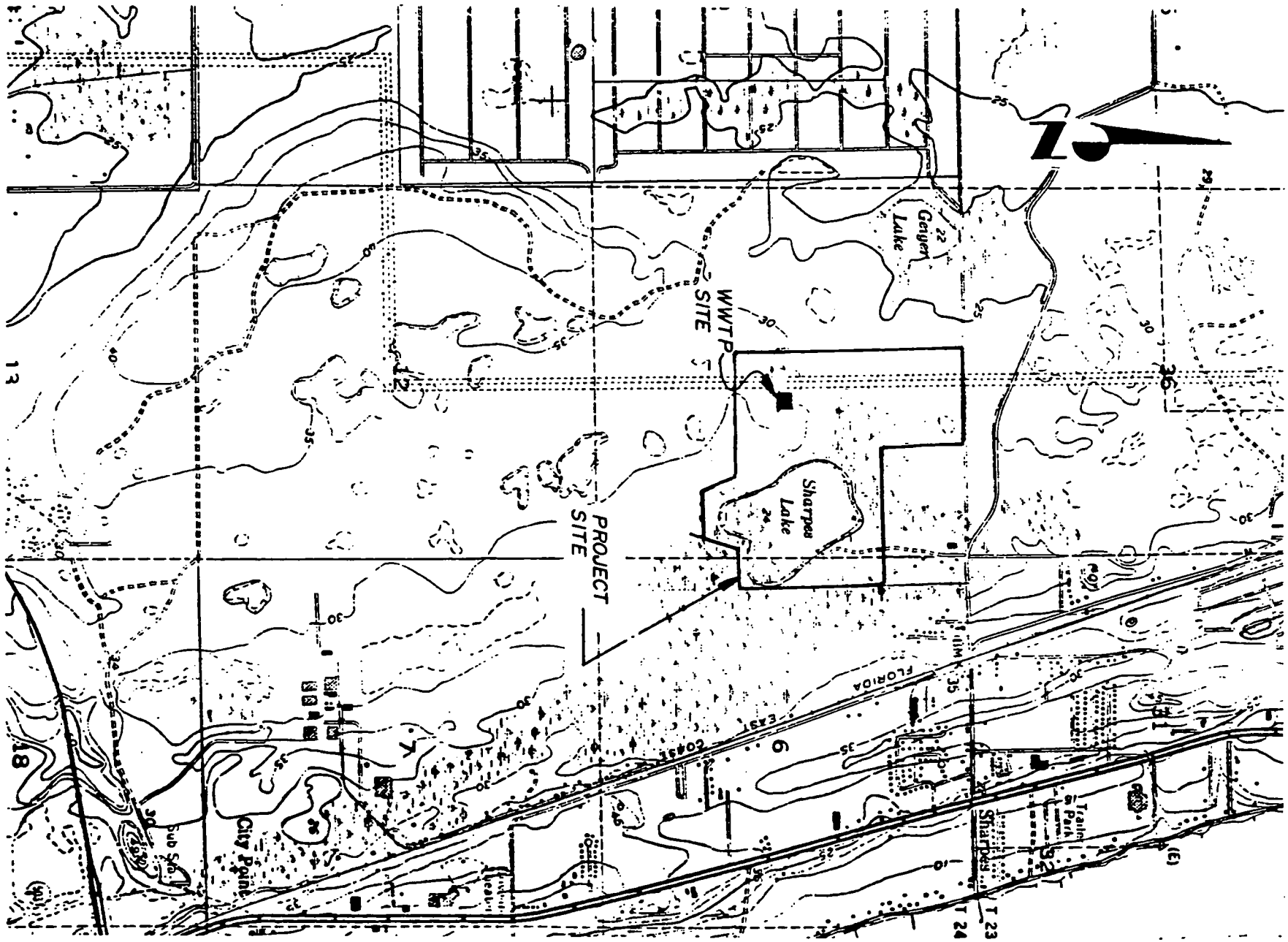
1. Area to be served by this plant.
2. Projected flow from the proposed Sun Lake Estates project.
3. Evaluation and reason for selecting the proposed wastewater system.
4. Identify the proposed wastewater treatment plant location.
5. Review the unit process design criteria.
6. Provide information on the design and location of the proposed effluent disposal method.
7. Suggested recommendations.

Please realize this review is preliminary in nature and is possibly subject to certain minor revisions as technical rules and regulations are modified by either the state or county.

PROPOSED AREA

For the purpose of this review, Sheffield Engineering & Associates personnel has reviewed with T.K.C.B.,Inc. officials to ascertain the proposed wastewater treatment plant site and area to be served in a practical and economical manner. It was deemed the Brevard County did not have a wastewater treatment plant in this area and, consequently, it was concluded they would need to expand their own wastewater treatment plant facility with on-site effluent disposal for additional development.

Figure One depicts the proposed area and location of the project and the existing wastewater treatment plant site. It is the intention of the owner to only treat sweage from his own property on this proposed site.



SCALE 1" = 2000'	DESIGN	TITLE	PROJECT	CLIENT
DATE 8/86	DRAWN WM	LOCATION MAP	SUN LAKE ESTATES	OLLIE KING

PROJECTED FLOWS

The expected flows for Phases II & III of Sun Lake Estates are based on 250 gpd/conn. and consists of single family residences of mobile homes. The existing Phase I consists of a wastewater treatment plant permitted at 50,000 gpd and based on 200 mobile home units. The proposed flows per phase were ascertained as follows:

1. PHASE II

   a. Existing Phase I Flows .....50,000 gpd

   b. Proposed 340 Mobile Home Lots ..... 85,000 gpd

      Total .....135,000 gpd

Phase III will consists of 234 mobile home lots plus the possibility of some commercial flows.

2. PHASE III

   a. Existing Phase II Flows .....135,000 gpd

   b. Proposed 234 Mobile Home Lots .....58,500 gpd

   c. Proposed Commercial ..... 12,500 gpd

      Total .....206,000 gpd

PROPOSED PLANT LOCATION

This plant site location is shown on Figures One, Two and Three. This site was selected for many reasons as follows:

1. Isolation: The proposed development will be to the North, South, and East of the wastewater treatment plant site. The area West of the wastewater treatment plant site maybe developed in the future.

2. Central Location: This site is isolated from the residential development as shown on Figure One, and is centrally located whereas the pumping facilities will be able to handle the anticipated flows economically.

3. Soil: The soils in the upper portion of the site consists of sandy soils with very high permeability rates. See Jammals soil report in appendix for soils information.

This plant site is amenable to expansion from the existing 0.05 MGD to the proposed total flow of 0.206 MGD for growth within the project area based on the fact the wastewater to the plant site will only be generated from this project.

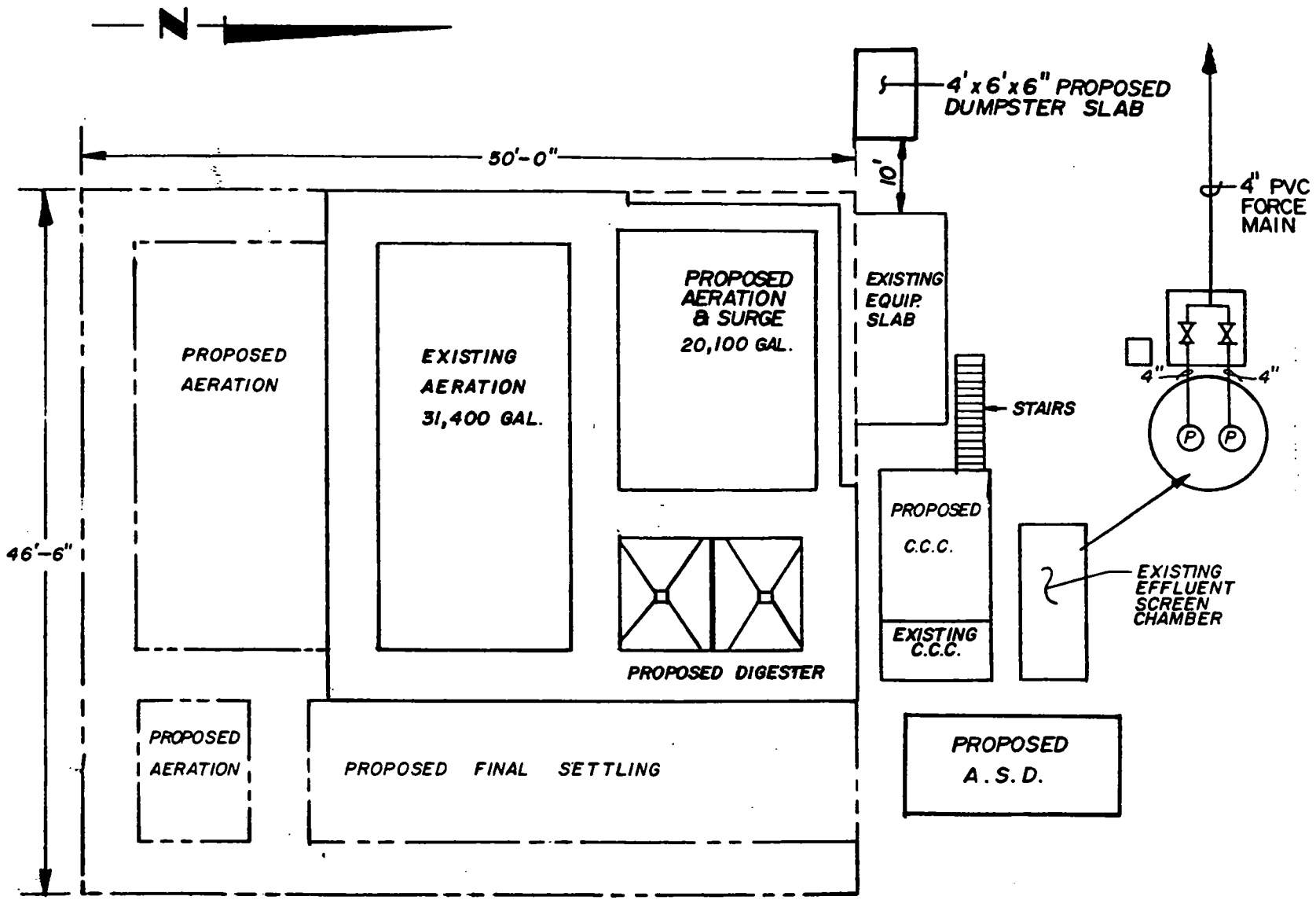


FIGURE No. 2

SCALE 1"= 10'	DESIGN N/A	TITLE SITE PLAN PHASE II	PROJECT SUN LAKE ESTATES	CLIENT OLLIE KING
DATE 9/86	DRAWN JJS			

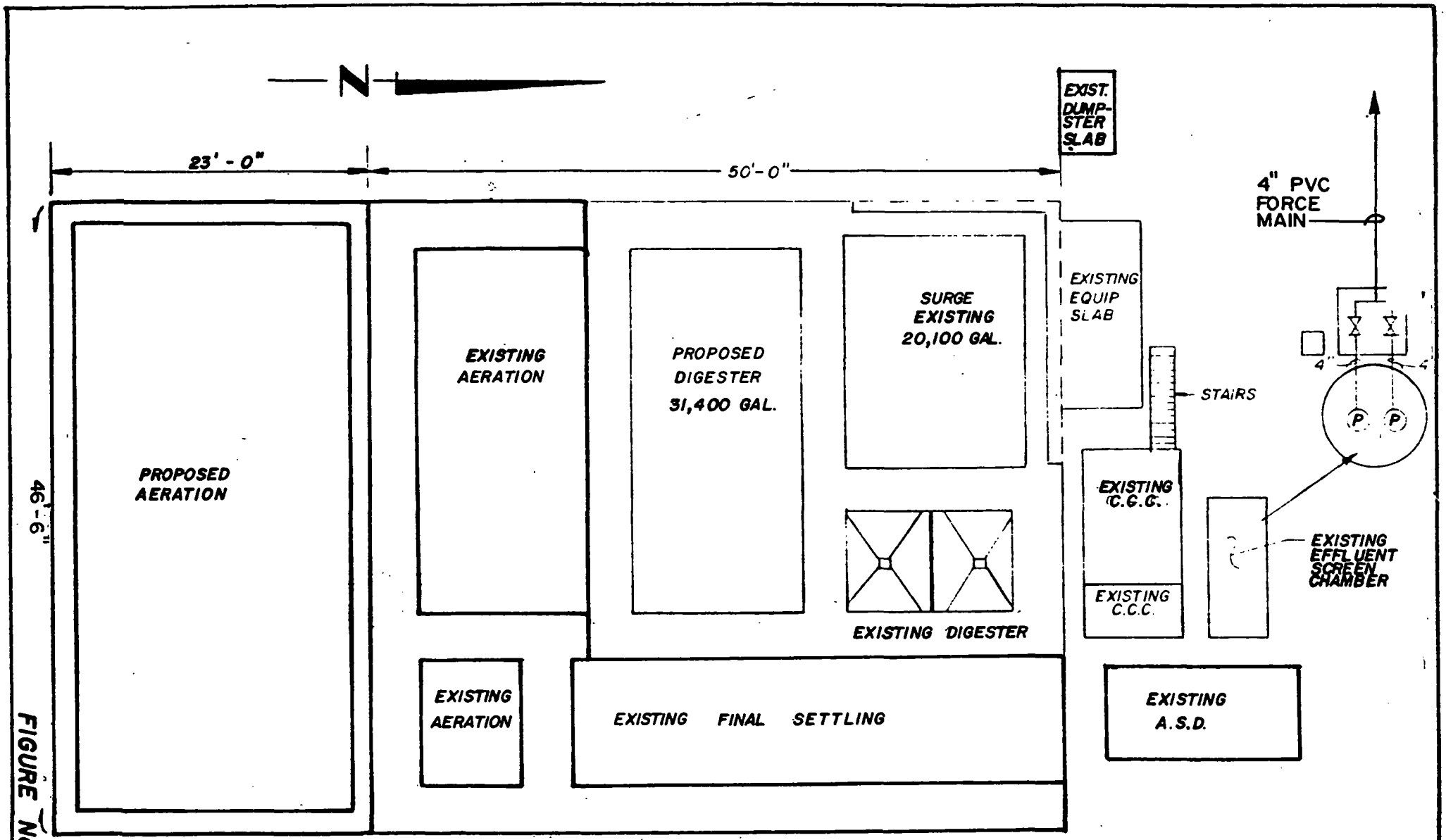


FIGURE No. 3

SCALE 1" = 10'	DESIGN N/A	TITLE SITE PLAN PHASE III	PROJECT SUN LAKE ESTATES	CLIENT OLLIE KING
DATE 9/86	DRAWN JJS			

PROCESS DESIGN INFORMATION

From the flow section it was deemed that two additional phases of 0.135 MGD and 0.206 MGD total flows would meet the needs of this facility in a practical and economical manner.

The phasing program at this facility call for Phase II total flow of 0.135 MGD, complete mix wastewater treatment plant and then expansion to 0.206 MGD complete mix process when the flow on site increases sufficiently.

This phasing system was selected whereas the plant could be enlarged as the flow from the proposed project increases without creating down times in the existing plant or interruptions in flow from the project. These phases are proposed as shown in the table below:

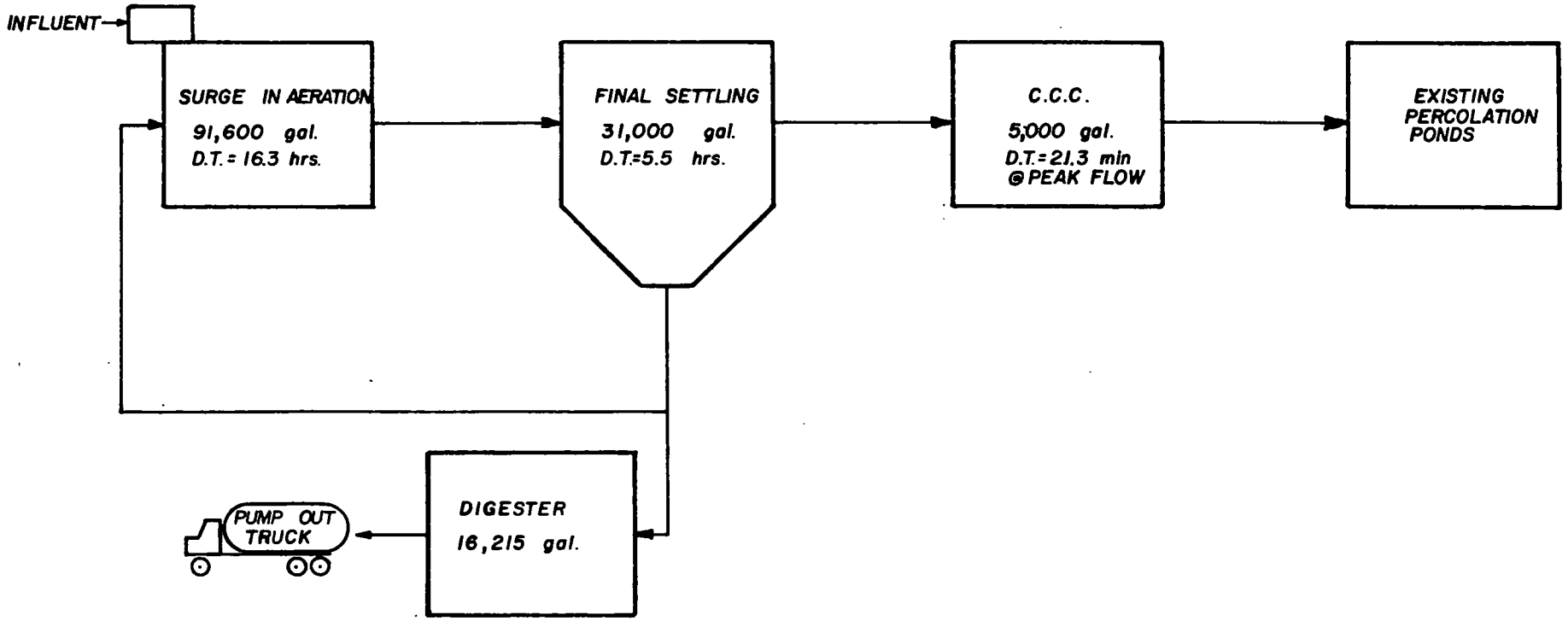
TABLE ONE
PHASING PROGRAM

Phase	Flow Increment	Total Flow	Type of Treatment Process	Treatment Units
I (existing)	0.05MGD	0.05MGD	Extended Aeration	Bar rack(1);aeration tank(2); clarifier (1); c.c.c. (1); fine screens (3) pump sump (2); four sets of 2 percolation ponds; digester(1), flow meter.
II (proposed)	0.085MGD	0.135MGD	Complete Mix	Surge pumps(2), Aeration tanks(3), clarifier (1), digester (1), air blowers (2).
III (proposed)	0.071MGD	0.206MGD	Complete Mix	Aeration tank (1), Air blowers increase (3).

Schematics and hydraulic profiles for the proposed phases are detailed on the following figures.

PHASE II

135,000 G.P.D.



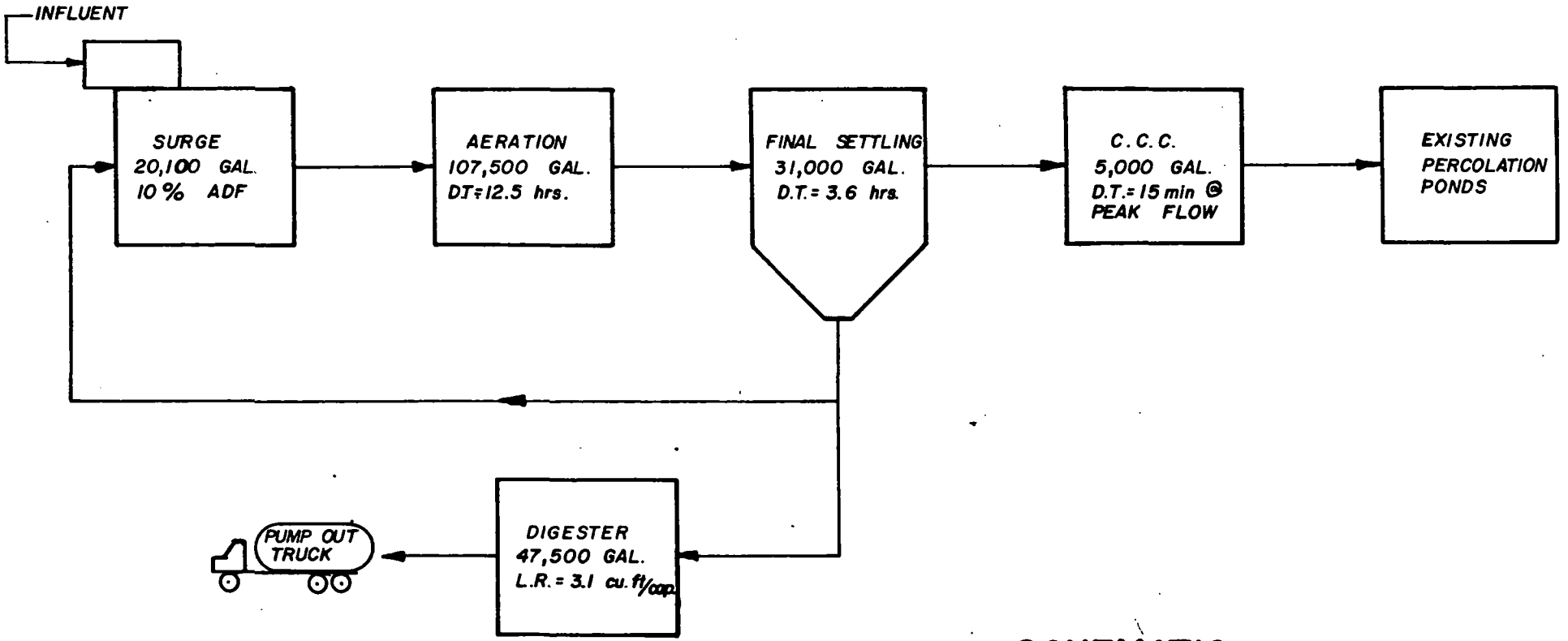
SCHEMATIC

FIGURE No. 4

SCALE NTS	DESIGN DB	TITLE SCHEMATIC PROFILE	PROJECT SUN LAKE EST.	CLIENT OLLIE KING
DATE 9-11-86	DRAWN WM			

PHASE III

206,000 G.P.D.



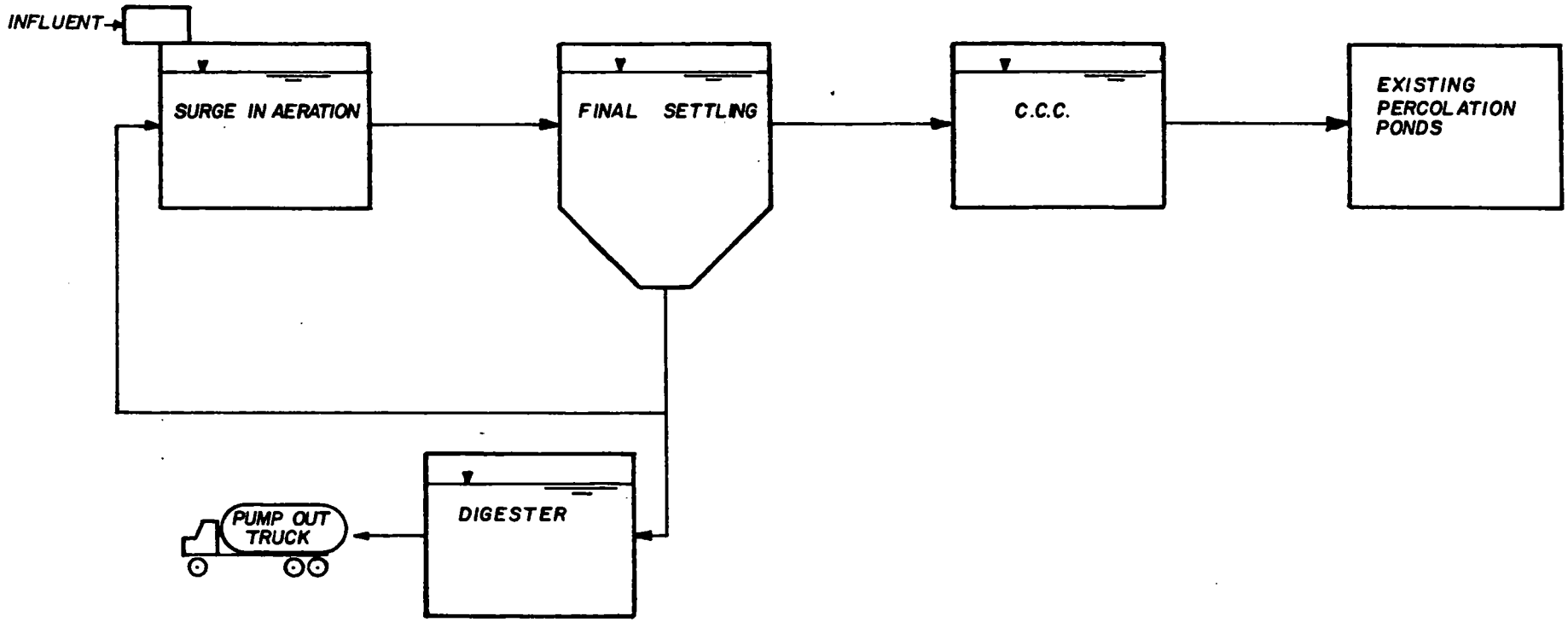
SCHEMATIC

FIGURE No. 6

SCALE NTS	DESIGN	TITLE SCHEMTIC PROFILE	PROJECT SUN LAKE EST.	CLIENT OLLIE KING
DATE 9-11-86	DRAWN WM			

PHASE II

135,000 GPD

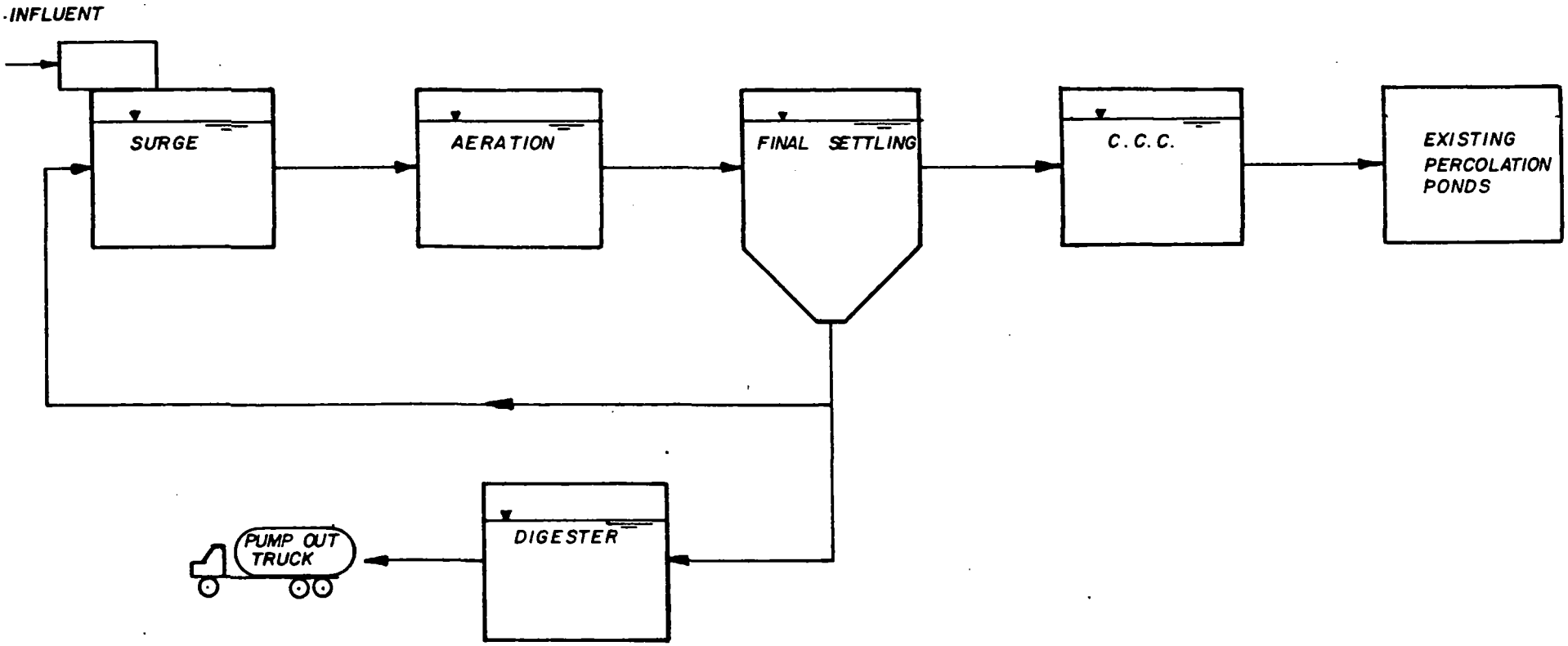


HYDRAULIC

SCALE NTS	DESIGN D B	TITLE HYDRAULIC PROFILE	PROJECT SUN LAKE ESTATES	CLIENT OLLIE KING
DATE 9-11-86	DRAWN WM			

PHASE III

206,000 G.P.D.



HYDRAULIC

SCALE NTS	DESIGN	TITLE	PROJECT	CLIENT
DATE 9-11-86	DRAWN WM	HYDRAULIC PROFILE	SUN LAKE EST.	OLLIE KING

The above program schematics are shown on the plans that are submitted to the Department of Environmental Regulation. It is the intention of each of these phases to treat the wastewater to at least 90% removal and to where the effluent has no more than 20 mg/l BOD; 20 mg/l Total Suspended Solids; Nitrite-Nitrogen of less than 12 mg/l and Total Fecal Coliform having very low values to meet D.E.R.'s standards on effluent disposal into an existing percolation pond system.

The manuals, standard and/or criteria, used to design this wastewater treatment plant and effluent facility were those as so described in D.E.R. rules Chapter 17-6 "Land Application of Domestic Wastewater Effluent in Florida". The design criteria selected for Phase II (0.135 MGD C.M.) and Phase III (0.206 C.M.) are set as shown in Table Two and Table Three respectively.

This report will review the design criteria for the proposed 0.135 MGD and 0.206 MGD complete mix wastewater treatment plant as shown in Figures Four through Seven.

Each of the tank or unit process capabilities, design criteria and dimensions are shown in Table Two for Phase II.

TABLE TWO

DESIGN CRITERIA FOR

SUN LAKES ESTATES - PHASE II (0.135 mgd)

WASTEWATER TREATMENT PLANT

Treatment Unit	Design Criteria Used
Design Flow for Phase II -	0.135 mgd A.D.F. 0.338 mgd Peak Flow (2.5 x A.D.F.) Complete mix operation mode
Lift Station:	Existing on Sun Lake Estates Project.
Aeration Surge Tanks:	1. Surge in Aeration (10% ADF = 13,500 gal.) 2. Volumes - 91,600 Gallons Total 3. Design Flows=Avg-0.135mgd or 94gpm Peak-0.338mgd=(ADFx2.5) 4. Sewage Strength: BOD-220 mg/l TSS-220 mg/l 5. Detention Time a. = 16.3 hours (max. water level) b. = 13.9 hours (min. water level) 6. Lbs BOD per Day = 248 7. Cu.Ft. air per lbs.of BOD = 1750 8. Lbs. BOD per cu.ft. loading = 19.4 9. MLSS = 2,000 - 3,000 mg/l 10. F/M = lb.BOD applied/lb MLVSS=0.13 11. Number of blowers: 2 12. Size of each blower:428cfm @ 5 psi 15 Hp @ 1388 RPM Sutorbuilt blowers (existing)
Final Settling Tank:	1. Volume = 31,000 gallons 2. Detention Time = 5.5 hours 3. Surface Setting Rate = 340gpd/sq.ft. 4. Weir Overflow Rate = 2812 gpd/ft. 5. Sludge Return Flows = 94 gpm

SHEFFIELD ENGINEERING & ASSOCIATES, INC.

Aerobic Sludge Digester:	1. Volume = 16,215 gallons 2. Design Capacity = 1.6 cu.ft./cap. 3. Air required based on 30 cfm/1,000 cu.ft.
Chlorine Contact Chamber:	1. Volume = 5,000 gallons 2. Type of chlorination = gas @ 100 lbs/day 3. Detention Time = 21.3 min @ peak flow
Chlorination:	1. Gas chlorination with a maximum flow rate of 100 lbs/day
Marscreen Filter Unit:	1. Existing Marscreen filter unit.
Effluent Disposal Percolation Ponds:	1. Existing percolation ponds with increased effluent disposal volume to 0.206 mgd. See attached Jammal's soils investigation report for details.
Sludge Drying Beds:	1. None, sludge will be hauled to an approved landfill site by a septic tank transport company.

Table Two indicates the design criteria used for the proposed Phase II of this project. The gallonage and dimensions of each unit are in the D.E.R. application. Details on the manufacturers equipment and specifications are enclosed in the Appendix.

Each of the tank or unit process capabilities, design criteria and dimensions are shown in Table Three for Phase III.

TABLE THREE

DESIGN CRITERIA FOR

SUN LAKE ESTATES - PHASE III (0.206 mgd)

WASTEWATER TREATMENT PLANT

Treatment Unit	Design Criteria Used
Design Floww for Phase III	0.206 mgd - A.D.F. Peak Flow = 0.515 mgd (2.5 x A.D.F) Complete mix operation mode
Lift Station:	Existing on Sun Lake Estates project.
Surge Tank:	1. Volume = 20,100 gallons 2. 10% ADF
Aeration Tank:	1. Volume - 107,500 gallons 2. Design Flows: Avg.= .206 mgd or 143 mgd Peak = 2.5 x ADF = 0.515 mgd 3. Sewage Strength: BOD = 220 mg/1 TSS = 220 mg/1 4. Detention Time: 12.5 hours. 5. Lbs. BOD per day = 378 6. Cu.ft. air per lb. of BOD = 1750 7. Lbs. BOD per cu.ft. loading = 26.3 8. MLSS: 2,000 - 3,000 mg/1 9. F/M = lb. BOD/lb. MLSS = 0.13 10. Number of blowers = 3 11. Size of each blower = 760 cfm @ 5 psi Sutorbuilt blowers Triplex Station
Final Settling Tank:	1. Volume = 31,000 gallons 2. Detention Time - 3.6 hours 3. Surface Setting Rate - 490 gpd/sq.ft. 4. Weir Overflow Rate - 4292 gpd/ft. 5. Sludge Return Flows - 143 gpm.

Aerobic Sludge Digester:	1. Volume - 47,500 gallons 2. Design Capacity -3.1 cu.ft./cap. 3. Air required based on 30 cfm/100 cu.ft.
Chlorine Contact Chamber:	1. Volume = 5,000 gallons 2. Peak Factor = 2.3 3. Detention Time = 15 min @ peak flow (2.3 x ADF)
Chlorination:	1. Gas chlorination with a maximum flow rate of 100 lbs/day.
Marscreen Filter Unit:	1. Existing marscreen filter unit.
Effluent Disposal Percolation Ponds:	1. Existing percolation ponds with increased effluent disposal volume to 0.206 mgd. See attached Jammals' soils investigation report for details.
Sludge Drying Beds:	1. None, sludge will be hauled to an approved landfill site by a septic tank transportation company.

Table Three indicates the design criteria used for the proposed Phase III of this project. The gallonage and dimensions of each unit are in the D.E.R. application. Details on the manufacturers equipment and specifications are enclosed in the Appendix.

DESIGN DATA AND LOCATION OF EFFLUENT DISPOSAL AREA

This is the single most important item regarding this proposed project. Discussions with the regional office of the Florida Department of Environmental Regulation and the Brevard County Health Department - Environmental Engineering Section, concluded that the effluent from this proposed project must be retained on site with no discharge.

With this edict from D.E.R., it was concluded that percolation ponds would have to be the means of effluent disposal for the existing 0.05 MGD flow and proposed 0.206 MGD flows.

Jammal & Associates provided a soil investigation report. Their preliminary findings in the 1/24/83 report indicated a loading rate of 0.3 GPD per sq.ft. of pond area. The pond berm must be extremely wide to eliminate weeping of this effluent through the berm. They indicated the quality of water entering the percolation ponds should be of the highest quality with little or no suspended solids.

A copy of this Jammal report is enclosed in the Appendix.

Jammal & Associates performed a reevaluation of the existing percolation ponds on May 23, 1986, and concluded that the existing percolation ponds can dispose of 206,000 GPD up from the original 50,000 GPD. A copy of this Jammal report is enclosed in the Appendix.

CHLORINATION EQUIPMENT

The chlorination is achieved at Sun Lakes Estates by using a dual auto change-over to assure chlorination at all times. The chlorination system is located in a building that has adequate ventilation and lighting. The chlorine is introduced in the c.c.c. of the wastewater treatment plant to achieve maximum detention time prior to distribution to the percolation ponds. The same system will be proposed for the two phases to maintain a chlorine residual of a least 0.5 mg/l in the wastewater treatment plant effluent prior to introduction to the percolation ponds.

SLUDGE REMOVAL

Digested sludge will be transfered to a sludge hauling truck and transproted to an approved D.E.R. landfill site for disposal.

The trash from the influent bar rack will be placed in a bucket and then dumped into a dumpster which will be on site as shown on the plans. The dumpster will be picked up twice per week by a solid waste disposal company that services the area.

SUMMARY - RECOMMENDATIONS

This engineering report was written to review and discuss the proposed Sun Lake Estates, wastewater treatment plant phasing program at the existing 50,000 GPD wastewater treatment plant.

The complete mix wastewater treatment plant phasing program was selected for this project because, it would provide the most economical and practical means of wastewater treatment for the Phase II flow of 0.135 MGD and the ultimate Phase III flow of 0.206 MGD.

Realizing that there may be a more cost effective-efficient method of wastewater treatment, Sheffield Engineering & Associates selected this process to ensure complete treatment prior to disposal into the six celled percolation pond which has an increased capacity rating of 206,000 GPD as per the Jammal & Associates re-evaluation report which is in the Appendix of this report.

PROJECT EVALUATION

This summary of the report is an evaluation of the proposed project with respect to Public Health, Safety and Welfare. Also, to show that there will be no harmful effects to the environment and to any undamaged species of animals or vegetation.

APPENDIX

SOILS AND HYDROGEOLOGIC INVESTIGATION

SHARPES LAKE VILLAGE

BREVARD COUNTY, FLORIDA

#8317

JAMMAL & ASSOCIATES, INC.
Consulting Geotechnical Engineers

MEMBER
Associated Soil and Foundation Engineers, Inc.
American Consulting Engineers Council
Florida Institute of Consulting Engineers
American Society for Testing and Materials
American Concrete Institute

913 N. Pennsylvania Avenue, P.O. Box 339, Winter Park, Florida 32789 ■ Telephone (305) 645-5560

JAMMAL & ASSOCIATES, INC.
Consulting Geotechnical Engineers

February 14, 1983
Project No. 82-1032

TO: Bussen Engineering Corporation
905 N. Courtenay Parkway
P. O. Box 1914
Merritt Island, Florida 32952

Attention: Mr. Brian J. Bussen

SUBJECT: Soils and Hydrogeologic Investigation, Sharpes Lake Village, Brevard County, Florida

---

Dear Mr. Bussen:

As requested and in accordance with your authorization dated December 19, 1982, we have completed the soil and hydrogeologic investigation for the proposed effluent disposal site at Sharpes Lake. The purpose of our investigation was to provide a data basis for a hydraulic evaluation of the capability of the site to dispose of 50,000 gpd of tested wastewater effluent generated from the proposed Sharpes Lake Village Wastewater Treatment Plant, Phase I of the proposed development.

The following report presents the results of the field and laboratory tests and includes our analysis and recommendations for the proposed disposal system.

We appreciate the opportunity of providing these services on this project. If you have any questions regarding the contents of thi report, or if we may be of further assistance, please do not hesitate to contact our office.

Sincerely,

JAMMAL & ASSOCIATES, INC.

Louis C. Murray, Jr.
Staff Engineer

Michael D. Sims, P.E.
Vice President
Florida Registration No. 24872

LCM/MDS/deb

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SHARPES LAKE VILLAGE
BREVARD COUNTY, FLORIDA

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JAMMAL & ASSOCIATES, INC.

PURPOSE AND SCOPE

The purpose of this study was to investigate the soil and hydrogeologic conditions within the area proposed for on-site effluent disposal by land application. Our investigation was also intended to supply supporting data for F.D.E.R. permitting. The scope of our work included providing soil borings, laboratory tests, as well as field permeability measurements to provide a basis for our engineering analysis and evaluation on the hydraulic suitability of the site.

PROJECT AREA LOCATION AND DESCRIPTION

The investigated area is located in Brevard County, Florida, approximately one mile west of the intersection of U.S. 1 and Canaveral Boulevard in Sharpes, Florida. The project, approximately 80 acres in area, is bounded on the west by a Florida Power easement, on the north Canaveral Boulevard, and along the southeast by Sharpes Lake. A vicinity map is presented on the attached Sheet 1 of 3. The area designated by Bussen Engineering for consideration and study, was the narrow existing power easement bordering the west property line.

Although specific topographic contours of the site were not provided, the estimated elevation of the site as seen from the U.S.G.S. Quadrangle Map is approximately 30 feet above mean sea level. The surface is relatively flat and contains an area of standing water near the southwestern portion of the site.

SOIL INVESTIGATION

Test Borings

The type, stratigraphy, and condition of subsoils within the study area was investigated by performing a total of six (6) Standard Penetration Test Borings (ASTM Designated D-1586), at the approximate locations presented on the attached Sheet 1. It was our understanding that the desired area for the percolation ponds consisted of a rectangular strip located along the western edge of the site as shown on Sheet 1. Five of the borings were extended to depths of

25.0 feet below ground surface, while a sixth boring was extended to 50 feet below ground surface. The results of the test borings, including other test data, is presented in the form of soil profiles on Sheet 2.

Permeability Tests

In order to estimate the coefficient of permeability of the predominant soil strata, a total of six (6) permeability measurements were made. The tests were made near the test boring locations designated TB-2, TB-3 and TB-6 at depths of 6.0, 5.5, and 3.5 feet below ground surface, respectively. At each depth, two types of tests were conducted, one which reflects the vertical component of permeability and one which reflects the horizontal component. The results of these tests are indicated adjacent to the corresponding depths and soil profile on Sheet 2.

Laboratory Tests

In order to aid in classification of the subsoils encountered, a series of laboratory tests were conducted on selected samples obtained from the test borings. These tests consisted of determining the natural moisture content and percent of fines (% passing the #200 U.S. Standard Sieve). Results from the tests are shown adjacent to the soil profiles at the depths from which the samples were taken.

SOIL AND HYDROGEOLOGIC CONDITIONS

Soil Type and Stratigraphy

As presented on the attached Sheet 2, five of the six test borings encountered a surface layer of dark gray organic fine sand to gray fine sand with roots (Stratum 1). This layer averaged 1.0 foot in thickness. Below the surface soil, a stratum of brown to light gray fine sand was encountered (Stratum 2) in all but TB-5. At the location of TB-5 a layer of dark reddish-brown slightly silty to silty fine sand was encountered (Stratum 3). Stratum 2 is thickest in the vicinity of TB-3, approximately 12 feet, and thins out when

moving towards TB-4 and TB-2, 4 and 5 feet, respectively. The top of Stratum 3, considered to be the most restrictive layer encountered with respect to percolating effluent because of its relatively high percentage of fines, is deepest below TB-3 and begins to slope towards the surface when moving away from TB-3 towards TB-4 and TB-2. The thickness of Stratum 3 varies from approximately 6 feet at TB-3 to approximately 19 feet at TB-1. Underlying Stratum 3 is a layer of light brown fine sand (Stratum 4), which extends to the terminated depth of 25 feet. In TB-4, Stratum 4 extends to approximately 43.5 feet below ground surface, at which depth a layer of greenish-gray silty fine sand (Stratum 5) was encountered and extends to the terminated boring depth of 50.0 feet.

Soil Permeability

Both vertical and horizontal permeability tests were conducted at the locations and depths shown on the soil profiles. These tests were conducted within Strata 2 and 3. Stratum 2 is considered to be the primary subsoil that will most freely percolate the applied effluent, while Stratum 3, as mentioned before, would tend to restrict vertical flow. Consequently, flow would tend to proceed laterally (horizontally) within Stratum 2.

The vertical test, employing the constant head test procedure, was used to determine the rate at which percolating effluent from the ponds seeps vertically through the soil; while the horizontal test, which employed the falling head test procedure; was used to determine the rate at which the effluent would tend to move laterally through the soil away from the percolation ponds.

As seen on Sheet 2, the vertical coefficient of permeability in Stratum 2 ranged from 6 ft/day at TB-6 to 7.2 ft/day at TB-3. The horizontal component varied from 15 ft/day at TB-6 to 18 ft/day at TB-3. In Stratum 3, vertical permeability was measured at 0.4 ft./day, while the horizontal component was found to be 0.6 ft/day.

Groundwater Levels

The shallow (non-artesian) groundwater table recorded during the time of our investigation ranged from 0.0 to 2.5 feet below ground surface. The levels found to be below ground surface may be expected to rise 0.5 to 1.0 feet during the traditional rainy season. Within a topographically depressed area, standing water seen during the investigation as depicted on Sheet 1.

EVALUATION AND RECOMMENDATIONS

Pond Capacity and Placement

As communicated to you during the study the presence of a near surface groundwater table within the southern half of the site limits the capability of this area for land disposal of effluent. However, if localized drainage improvements are planned which may affect a lowering of the groundwater, and improvement of surface runoff to alleviate ponding, the rating of the area can be improved. For example, should the groundwater table be lowered and maintained about 2 feet below ground surface by artificial drainage, we estimate that the soils would be capable to receive and percolate effluent at a hydraulic loading rate of approximately 0.15 gpd/ft^2. This figure represents a relatively low loading rate, due primarily to the small hydraulic gradient which would be imposed under a relatively flat topography and the persistent high groundwater table. Based on this loading rate, a series of six (6) percolation ponds located within the narrow power easement, each with wetted dimensions of 355 ft. x 150 ft., would be capable of disposing of approximately 50,000 gpd. It is our understanding that Phase I of this project calls for disposal of 50,000 gpd.

Since periodic drying and cleaning of the percolation ponds is desirable practice to prevent soil clogging of the pond bottoms, the 50,000 gpd can be applied to three of the six ponds for a period of 7 days. It is our opinion that the ponds can handle a loading rate of 0.30 gpd/ft^2 for this limited period of time. After the 7 day period, flow can then be diverted to the other three ponds while allowing the previously loaded ponds to be dried and cleaned. Actual cyclic loading schedules may be adjusted once the ponds become operational and can be monitored.

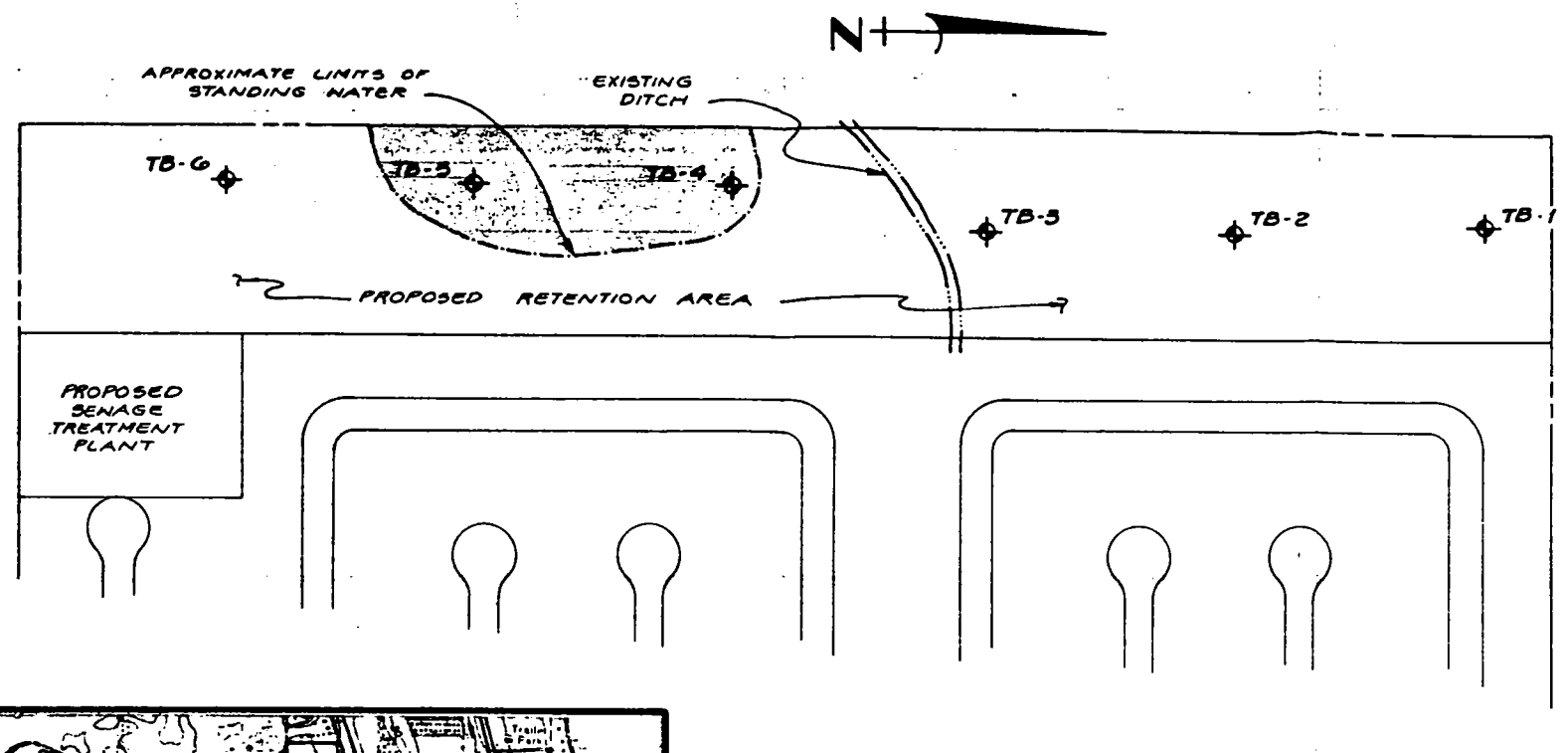
Pond Construction and Operations

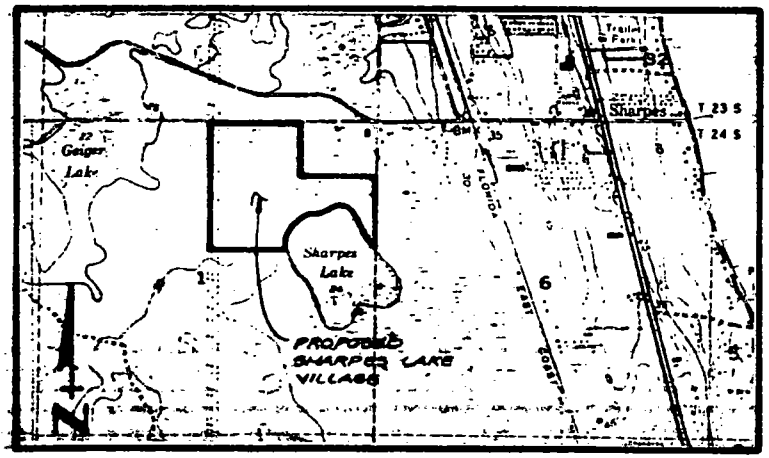
A typical pond/cell layout is presented on Sheet 3 of 3. In order to obtain sufficient wetted area, buffer zones may need to be reduced to about 75 feet. On the attached Plates I and II, the recommended pond geometry, berm cross sections, and appropriate construction specifications are shown.

Future Development

It is our understanding that the ultimate disposal capacity required by the project is 135,000 gpd. Thus, post Phase I development will require additional effluent disposal areas to dispose of 85,000 gpd. These additional areas will most likely have to be found outside of the proposed site boundaries and may or may not require artificial lowering of the groundwater table. One possibility would be to construct additional ponds along the easement south of the line of Phase I ponds. This is indicated by dashed lines on the attached Sheet 3. However, the hydraulic capacity of this area is not known and would need to be determined at the time of post Phase I development.

AF 23614A





VICINITY MAP

SCALE: 1" = 2000'

LOCATION OF STANDARD PENETRATION TEST BORING

REFERENCE:
U.S.G.S. SHARPES QUADRANGLE MAP DATED 1949, PHOTO-REVISED 1970

SUB-SURFACE SOIL EXPLORATION

SHARPES LAKE VILLAGE

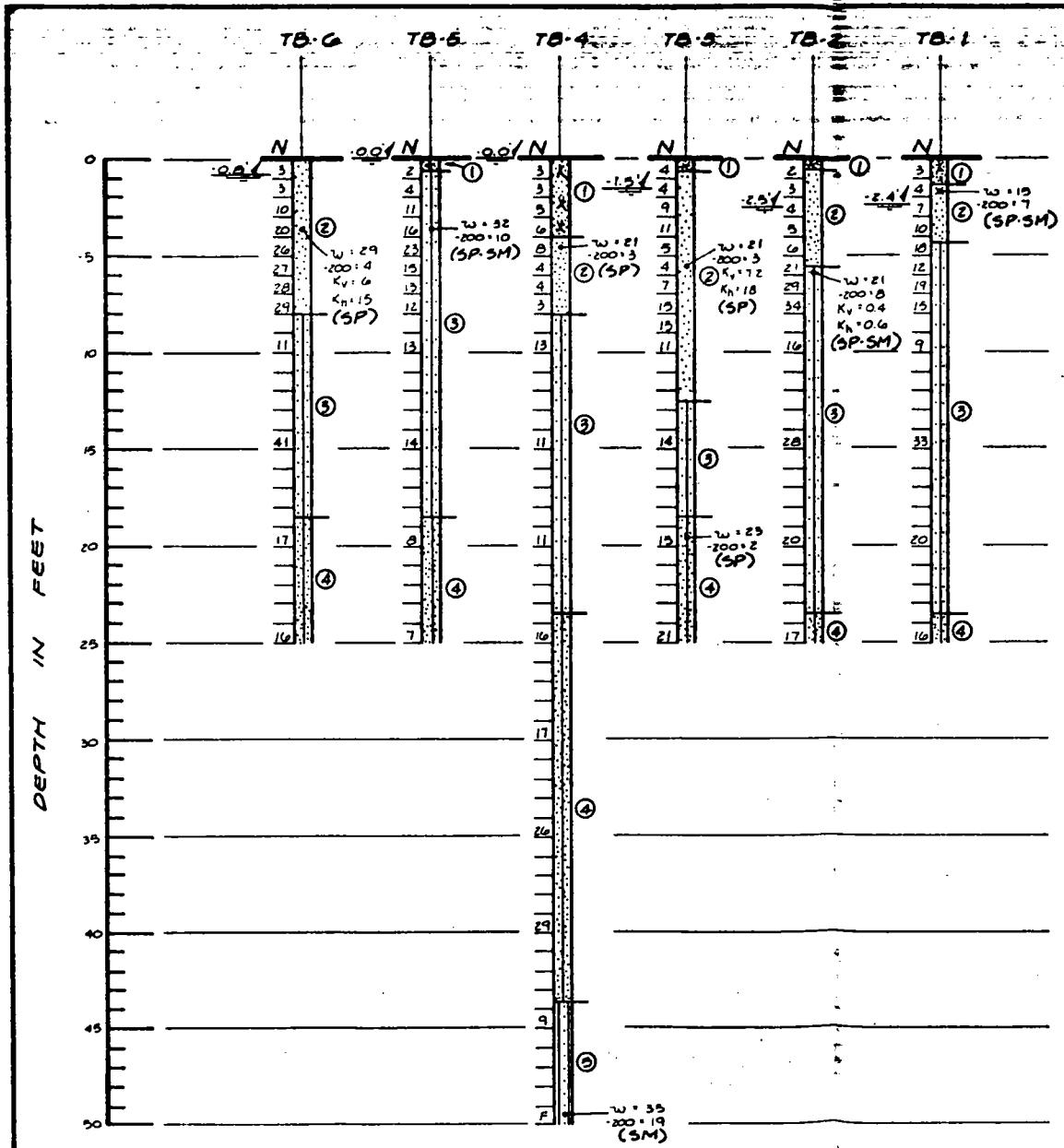
BREVARD COUNTY, FLORIDA

LOCATION PLAN

JAMMAL & ASSOCIATES, INC.
Consulting Geotechnical Engineers

DRAWN BY: KAS	SCALE: 1" = 200'±	PROJ. No. 82-1032
CHECKED BY: MDS	DATE: 12-82	SHEET No. 1 of 5

AF 23414A



LEGEND

①	DARK GRAY ORGANIC FINE SAND TO GRAY FINE SAND WITH ROOTS - VERY LOOSE TO LOOSE (SP)
②	BROWN TO LIGHT GRAYISH-BROWN TO LIGHT GRAY FINE SAND - VERY LOOSE TO MEDIUM DENSE (SP)(SP-SM)
③	DARK REDDISH-BROWN TO REDDISH-BROWN SLIGHTLY SILTY TO SILTY FINE SAND - LOOSE TO DENSE (SP-SM)
④	LIGHT BROWN FINE SAND - LOOSE TO MEDIUM DENSE (SP)
⑤	GREENISH-GRAY SILTY FINE SAND - VERY LOOSE TO LOOSE (SM)
N	"N" VALUES IN BLOWS PER FOOT
-0.8' ▽	DEPTH TO GROUNDWATER LEVEL: DECEMBER, 1982
F	FELL WITH THE WEIGHT OF THE EQUIPMENT
w	NATURAL MOISTURE CONTENT IN PERCENT
-200	PERCENT OF FINES PASSING THE NO. 200 SIEVE
(SP)	UNIFIED SOIL CLASSIFICATION GROUP SYMBOL
K_v	COEFFICIENT OF PERMEABILITY IN FT. PER D (VERTICAL)
K_h	COEFFICIENT OF PERMEABILITY IN FT. PER DAY (HORIZONTAL)

SUB-SURFACE SOIL EXPLORATION

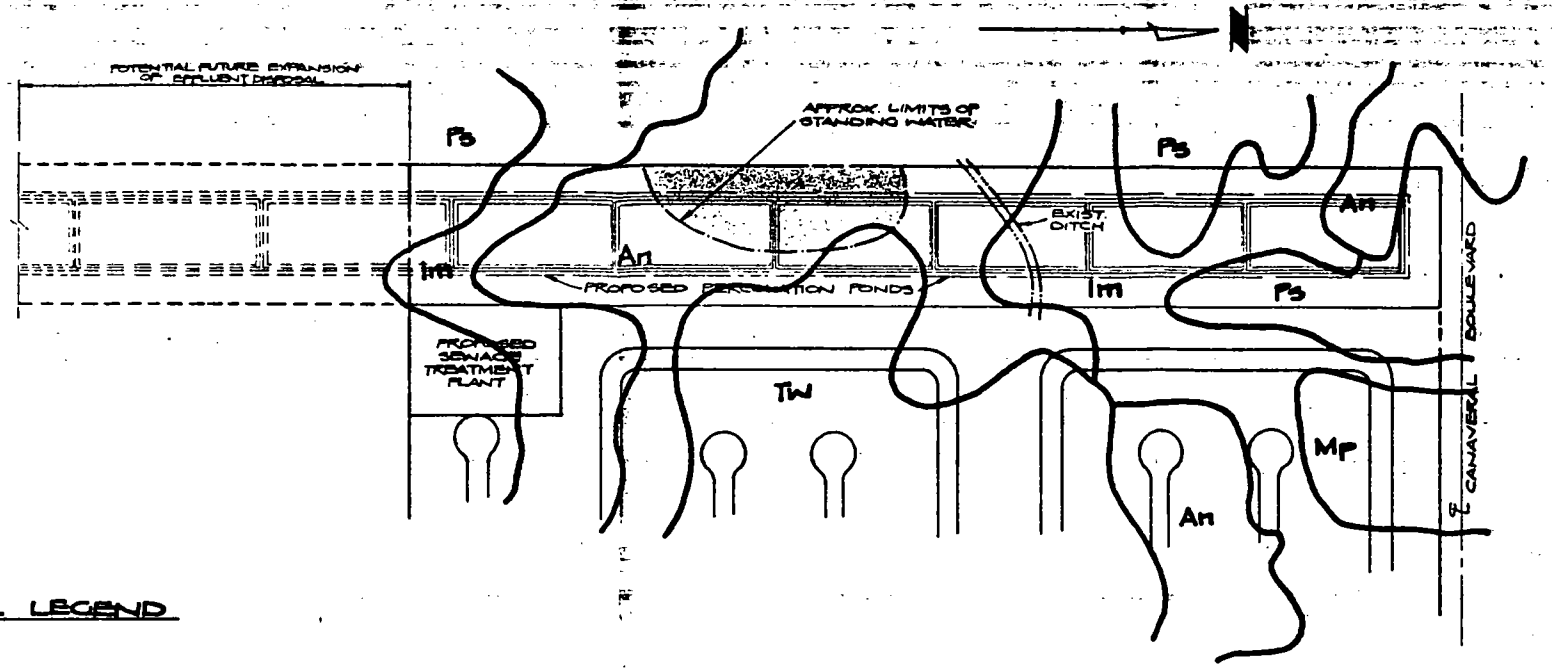
SHARPES LAKE VILLAGE

BREVARD COUNTY, FLORIDA

SOIL PROFILES

JAMMAL & ASSOCIATES, INC.
Consulting Geotechnical Engineers

DRAWN BY: KAS	SCALE: VERT 1"=6'	PROJ. No. 82-1032
CHECKED BY: MDS	DATE: 12-82	SHEET No. 5 of 5



SOIL LEGEND

An	ANCLOTE SAND
Im	IMMOKALEE SAND
MK	MYAKKA SAND
Mp	MYAKKA SAND, PONDED
Ps	POMELLO SAND
Tw	TOMOKA SAND

REFERENCE: U.S.D.A. BREVARD COUNTY SOIL SURVEY MAP, ISSUED NOV. 1974

SUB-SURFACE SOIL EXPLORATION

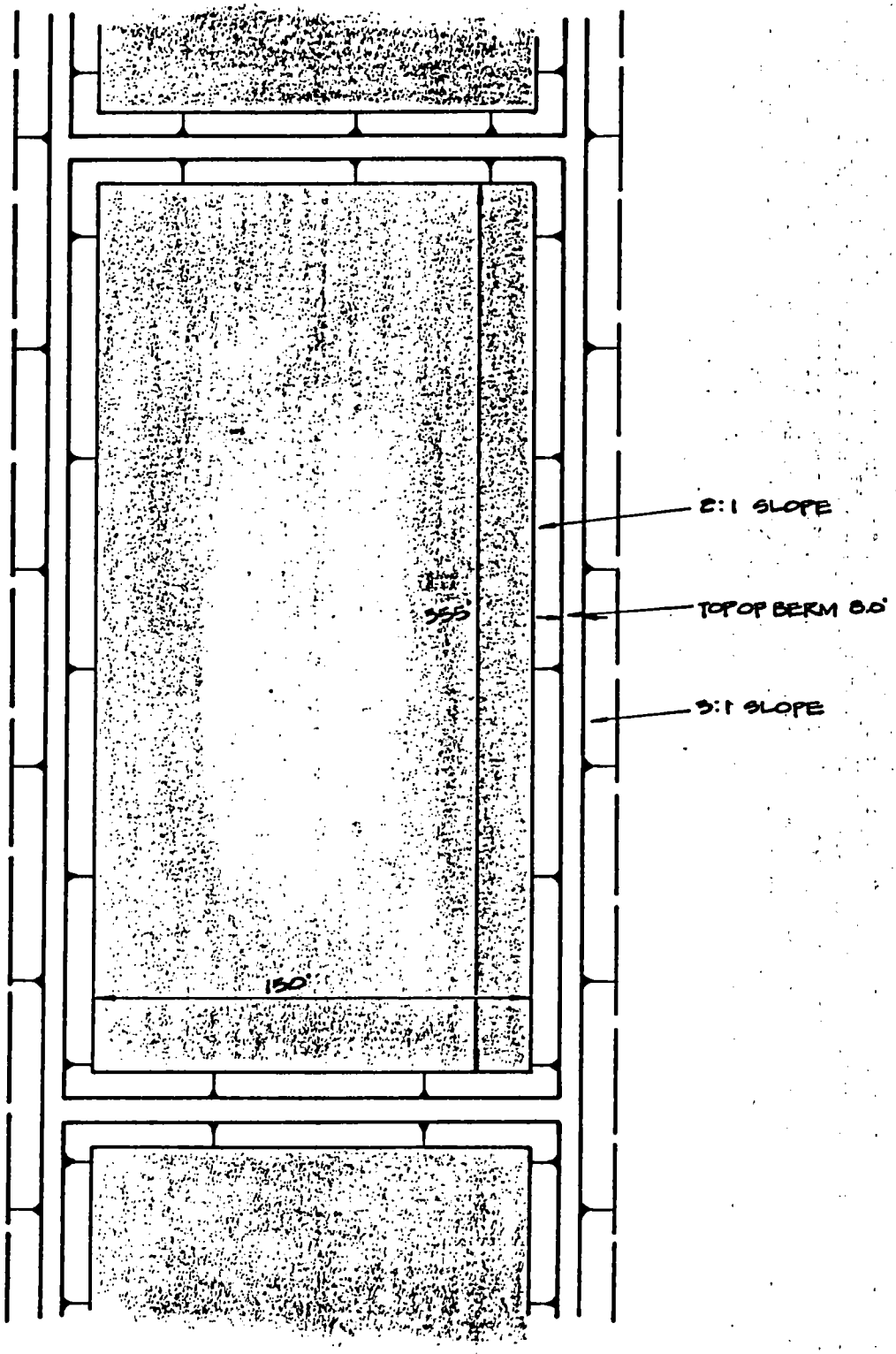
SHARPES LAKE VILLAGE

BREVARD COUNTY, FLORIDA

U.S.D.A SOILS MAP

JAMMAL & ASSOCIATES, INC.
Consulting Geotechnical Engineers

DRAWN BY: RLH	SCALE: 1" = 500'	PROJ. No. 82-1052
CHECKED BY: MDS	DATE: 2-83	SHEET No. 3 of 3



RECOMMENDED POND GEOMETRY

HYDROGEOLOGICAL EXPLORATION

EFFLUENT PERCOLATION POND

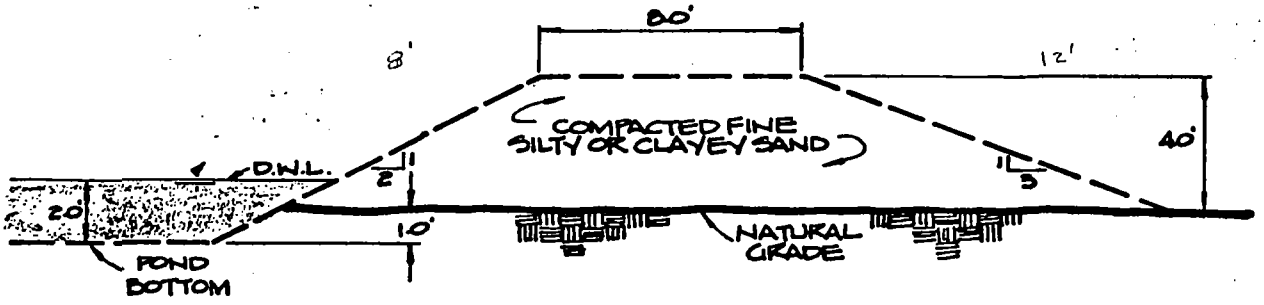
SHARPES LAKE VILLAGE

BREVARD COUNTY, FLORIDA

JAMMAL & ASSOCIATES, INC.
Consulting Geotechnical Engineers

Drawn by: RLH	Scale: N.T.S.	Project No.: 82-1052
Checked by: MDJ	Date: FEB. '83	Plate No.: 1

NOTE: D.W.L. WILL FLUCTUATE DEPENDING ON ACTUAL OPERATING CONDITIONS



1) CLEAR AND GRUB THE EXISTING POND AND BERM AREA TO REMOVE ALL TOPSOIL, ROOTS, VEGETATION AND OTHER DELETERIOUS MATERIALS.

2) EXCAVATE POND BOTTOM TO APPROX. 1.0' BELOW NATURAL GRADE, USE ONLY DOZIER EQUIPMENT TO KEEP COMPACTION (DUE TO MACHINERY TRAFFIC) TO A MINIMUM.

3) PLACE THE BERM FILL IN LEVEL LIFTS NOT TO EXCEED 12" LOOSE AND COMPACT WITH A LARGE PNEUMATIC TIRED FRONTEND LOADER.

4) COMPACT EACH LIFT OF FILL TO 98% OF THE STANDARD PROCTOR MAXIMUM DENSITY (AASHTO T-99), PRIOR TO PLACEMENT OF ADDITIONAL LIFTS OF FILL.

5) A REPRESENTATIVE OF JAMMAL AND ASSOC., INC. SHOULD INSPECT AND TEST ALL CLEARED AND COMPACTED SURFACES TO ASSURE SATISFACTORY COMPLIANCE WITH THE ABOVE RECOMMENDATIONS.

RECOMMENDED RETAINING BERM CROSS SECTION

HYDROGEOLOGICAL EXPLORATION
EFFLUENT PERCOLATION POND
SHARPES LAKE VILLAGE
BREVARD COUNTY, FLORIDA

JAMMAL & ASSOCIATES, INC.
Consulting Geotechnical Engineers

Drawn by: RLH	Scale: 1" = 6'	Project No.: 82-103C
Checked by: MDS	Date: FEB. '85	Plate No: II

#8529

ENGINEERING EVALUATION OF FULL SCALE HYDRAULIC LOAD TEST TO RE-RATE EXISTING PERCOLATION POND SYSTEM

SUNLAKE ESTATES
BREVARD COUNTY, FLORIDA

JAMMAL & ASSOCIATES, INC. Consulting Engineers

MEMBER
Associated Soil and Foundation Engineers, Inc.
American Consulting Engineers Council
National Society of Professional Engineers
Florida Institute of Consulting Engineers
American Society for Testing and Materials
American Concrete Institute

1675 Lee Road, 32789 ■ P.O. Box 339, Winter Park, Florida 32790 ■ Telephone (305) 645-5560

JAMMAL & ASSOCIATES, INC. Consulting Engineers

May 23, 1986
Project No. 82-1032

TO: Sunlake Estates
c/o Sheffield Engineering & Associates, Inc.
3400 Conway Road
Orlando, Florida 32806

Attention: Mr. David Baar

SUBJECT: Engineering Evaluation of Full Scale Hydraulic Load Test to Re-rate the Existing Percolation Pond System, Sunlake Estates, Brevard County, Florida

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Dear Mr. Baar:

Jammal & Associates, Inc. has completed an evaluation and seepage analysis of the load test data and presents the attached report to re-rate the effluent disposal capacity of existing percolation ponds at the subject site.

Briefly, the load test consisted of installing a series of monitoring wells (which was conducted by Jammal & Associates, Inc.) and loading one of the cells within the multi-cell effluent disposal system for a period of 18 days. The loading of the test cell was conducted by Ollie King (Sunlake Estates) and the results of the daily flows were submitted to us verbally over the phone. The groundwater level fluctuation at the location of the wells was monitored by Gateway Utilities, Inc. and the results were submitted to our office in the form of a summary table.

The results of the hydraulic load test were then evaluated and a seepage analysis was conducted to simulate the hydraulic response of the shallow aquifer beneath the disposal system during the loading test. On the basis of simulation, a long term effluent application over the entire effluent disposal system was conducted to estimate the maximum capacity of the ponds. The results of this analysis and together with engineering evaluation and conclusions are presented in the attached report.

We appreciate the opportunity to work on this project and trust that the information contained in this report is complete and sufficient for your needs. If you have any further questions or need clarification, feel free to contact our office.

Sincerely,

JAMMAL & ASSOCIATES, INC.

Lee Wiseman
Project Engineer

Nicolas E. Andreyev, P.E.
Senior Project Engineer
Fl. Registration No. 35459

LW/NEA:kme
0161K

BACKGROUND

The original subsurface exploration and hydraulic analysis was conducted by Jammal & Associates, Inc. in February 1983 and the results are presented in a report entitled "Soils and Hydrogeologic Investigation, Sharpes Lake Village, Brevard, County, Florida" Project No. 82-1032, dated February 14, 1983. For this investigation, a total of six (6) standard penetration test borings were drilled within the effluent disposal site extending to depths of 25 to 50 feet below ground surface.

Briefly, the subsurface conditions encountered at the location of the borings consisted of relatively well drained fine sands extending from surface to depths of 12 feet below ground surface underlain by dark colored slightly silty fine sands extending to depths of 18 to 24 feet below ground surface. Below these depths the test borings encountered secondary light colored well drained fine sands which extend to the terminated depth of the 20 foot borings and extend to approximately 44 feet below ground surface at the location of the deep boring. Between depths of 44 to 50 feet below ground surface (maximum depth of deep boring) the soils consist of silty fine sand in a very loose to loose condition. A detailed description of the surface soil conditions were presented in the above referenced report.

Based on the results of our initial investigation and analysis, the percolation pond system was designed for disposal of 50,000 gallons per day and a operating permit was obtained from F.D.E.R. Following construction and operation of the percolation basins, it was observed that the percolation pond system was capable of disposing more than the designed 50,000

gallons per day effluent capacity. However, in order to estimate the maximum effluent disposal capacity of this system, during operation, results from a full scale hydraulic load test would be needed. Jammal & Associates, Inc. was retained to set up the load test, provide guidelines for conducting the load test and evaluate the resulting load test data with subsequent seepage analysis and re-rating of the effluent disposal system. For this purpose, a total of 14 monitoring wells were installed surrounding the test pond, and the water level fluctuation within each well were monitored throughout the duration of the load test. The response of the groundwater mound surrounding the percolation ponds as well as below the loaded pond was then simulated by a computer program by trial and error. Approximate hydraulic parameters were estimated using the actual application rates, the geometry of the pond system and the groundwater mounding as recorded at the location of the monitoring wells. The long term disposal capacity of the overall system was then calculated using the hydraulic parameters within the unconfined aquifer which were estimated from an analysis of the load test data.

SITE LOCATION AND DESCRIPTION

The site is located in Brevard County, Florida, approximately 1 mile west of the intersection of U.S. 1 and Canaveral Boulevard near Sharpes Florida. The effluent disposal ponds are constructed along a power easement occupying a total length of approximately 2,300 feet, and approximately 320 feet wide. A vicinity map as well as a larger scale plan of the location and configuration of the effluent disposal system are included on

Sheet 1. Detailed site topographic data was not available at this time. However, Jammal & Associates, Inc. has determined spot elevations at the location of each monitoring well. Based on these elevations, the existing ground surface elevations within the effluent disposal site generally range from 25 to 29.5 feet MSL. The bottom elevation of the test pond is at approximately 27.9 feet MSL.

GROUNDWATER CONDITIONS

The shallow groundwater levels, as measured during the time of our field investigation (December 1982), were recorded at depths of 0 to 2.5 feet below natural grades. Due to the lack of topographic data at the time of our original investigation, the shallow groundwater elevations were not established. However, during out current investigation, shallow groundwater elevations were determined at each well location prior to loading. On February 25, 1986, recorded groundwater elevations varied from approximately 23.2 to 25.6 feet MSL, or approximately 2 to 4 feet below the bottom of the ponds. The groundwater elevations recorded on February 25, 1986 are summarized under load test results on Sheet 1.

Prior to and during the time of our load test, pond 2B located directly south and east of the test pond was receiving effluent from the on-site treatment plant. Therefore, the shallow groundwater levels in the immediate vicinity of the test pond are expected to be effected by the operation of this effluent percolation pond. The initial depth to groundwater table at the location of each monitoring well is presented adjacent to the monitoring well location on Sheet 1.

LOADING TEST

The approximate location of the selected test pond (pond 1A) is presented on Sheet 1. This pond was selected to minimize the pumping distance between the water source and the test pond. The water source was a road side drainage ditch located adjacent to Canaveral Groves Boulevard. To monitor the groundwater response as a result of hydraulic loading of the test pond, a line of monitoring wells in an east-west and north-south direction were installed as presented on Sheet 1. In addition, the water levels in the drainage ditch, the test pond and groundwater levels in the adjacent percolation ponds were also monitored. The approximate location of the monitoring wells are presented on Sheet 1.

The groundwater monitoring wells were installed by Jammal & Associates, Inc. and a typical detail of a monitoring well is presented on Sheet 1. The general load test procedures were explained to Sunlake Estates personnel by Jammal & Associates, Inc. The load test was then conducted and monitored by representatives of Sunlake Estates and Gateway Utilities, Inc. A flow meter was installed by Sunlake Estates personnel to monitor the amount of daily water flow into the test pond. We understand that the pond was loaded continuously during the day, but pumping was discontinued at night, resulting in zero flow to the pond. In addition, during the first 3 days water was pumped into the test pond at a rate of 400,000 gallons a day. The exact time increment of the 400,000 gallons pumped into the pond during each day is not known. After 3 days of loading at 400,000 gallons a day, the the pond was loaded at a rate of 250,000 gallons a day for a period of two days. Subsequently,

the pond was loaded at the rate of 150,000 gallons a day for a period of 13 days, except between 6 and 7 days of the 13 days when no flow was directed to the pond. The load test was terminated after a total of 18 days of loading.

The initial groundwater levels (February 25, 1986) were recorded by technicians from Jammal & Associates, Inc. Subsequently, the groundwater levels within each well were monitored by Gateway Utilities, Inc. According to these records, a total of 8 readings were obtained during the load test. Additional readings were obtained after the loading into the test pond was terminated. The results of all readings including the initial readings and readings during and after the pond was loaded are presented in a table, Sheet 1.

Rainfall was also monitored at the site for the duration of the load test. No rainfall was recorded during the total 24 days of monitoring. Due to the relatively short period of loading, evaporation from the test pond was considered to be insignificant and therefore was not accounted for in our analysis.

EVALUATION

Review and Analysis

In order to estimate the long term disposal capacity of this disposal system, the Hantush groundwater mounding analysis, using a computer flow model, was used to estimate the groundwater mounding beneath the disposal system as a result of

continuous application of treated effluent. Since Hantush's mounding equations are dependent upon the unconfined saturated aquifer thickness, transmissivity, fillable porosity above the water table, pond geometry and time, a short period load test significantly stressed can provide reasonable results for a time variant curve fitting method to estimate hydraulic parameters of the site by trial and error. In general, the fillable porosity of the soil above the water table can easily be estimated by physical measurements by using the following equation:

$$f = p - wx\frac{\gamma d}{\gamma w}$$

f = fillable porosity
p = total porosity
w = moisture content (dry weight basis)
γ d = dry unit weight of soil
γ w = unit weight of water

According to as-built specifications for the disposal system prepared by Sheffield Engineering & Associates, Inc. as well as field measurements, the geometry of the test pond was determined to be 320 feet long by 100 feet wide. The simultation time periods were chosen to correspond to the times when actual readings were obtained in the field. The loading rate of the pond was also measured. Therefore the only unknown hydraulic parameter in the groundwater mounding equations would be the variable transmissivity of the aquifer. The transmissivity of an unconfined aquifer is generally calculated by multiplying the effective saturated thickness of the aquifer by the average permeability of the effective aquifer. Therefore, the trial and

error curve fitting method was conducted by assuming reasonable values for initial saturated thickness of the aquifer and horizontal coefficent of permeability to obtain a best fit. For this purpose, several trial runs were performed on the computer mounding program to obtain reasonable values for aquifer thickness, horizontal permeability, and to a lesser extent fillable porosity. The main assumptions of the Hantush groundwater mounding equations, which was used for analysis may be summarized as follows:

1. The effective aquifer is assumed to consist of homogeneous, uniform soils and extends infinitely in all directions away from the application area.

2. The underlying restrictive soils are assumed impervious, continuous and horizontal.

3. The original groundwater table is assumed horizontal, parallel to the imperveous layer and has zero gradient.

The three assumptions described in the preceeding paragraphs rarely exist naturally in the field and the application of Hantush equation should be used only as an approximation. In the field soil permeability and aquifer thickness as well as groundwater levels are usually highly variable. However, the natural gradients of initial groundwater levels are normally relatively low in flat topographic settings, such as this site. Therefore, the Hantush mounding analysis is considered to provide reasonable results for the purpose of this re-rating analysis.

MODELING

The computer modeling involved retrofitting the mounding conditions at the location of selected monitoring wells. The results of the computer model were compared with recorded head changes at each modeled monitoring well. The hydraulic parameters were then adjusted by trial and error to produce similar hydraulic head rises at the time intervals reported under the same application conditions. The wells selected for retrofitting were purposely chosen to be as far from the drainage ditch (located immediately north of the test pond) as possible to avoid any drawdown effects. However, the monitoring wells placed at large distances from the percolation ponds appear to not have responded significantly to the short period of the pond loading test and therefore were not used for the simulation purposes. For the purpose of modeling, all well data was reduced and evaluated on the basis mounding trends and wells with reasonable response to the loading were selected for curve fitting analysis purposes. A total of 4 points were selected and consist of the water level within the test ponds, Well No. MW-1, MW-4 and MW-11. The approximate location of these wells are presented on Sheet 1.

Following several unsuccessful trial runs to fit the field data with computer results (assuming a shallow aquifer with restrictive layers at the hardpan depths of between 5 to 12 feet below ground surface), it was apparent that a connection between the shallow aquifer and deeper formations exist. Based on the results of the initial modeling and a review of deeper subsurface soil conditions (as described in our initial hydrogeologic invert), the initial aquifer saturated thickness



was re-evaluated and was selected to be approximately 50 feet. Although clay formations or other restrictive layers were not encountered within our borings drilled to 50 feet below ground surface, we estimated that the base of the aquifer occurs at approximately 55 feet below ground surface (50 feet saturated thickness) and allowed the horizontal permeability to increase slightly above normal for this type of soil. Since the computer model analysis calculates the transmissivity by multiplying the thickness times the permeability, a slight under estimation of thickness and over estimation of the permeability will usually provide the same results.

Assuming initial saturated aquifer thickness of 50 feet and the variable loading rates during the load test, varying from 5.9 to 9.1 gallons per day per square foot, the results of the field monitoring program were fitted, as best as possible, to the computer program output by varying the horizontal coefficient of permeability and the fillable porosity within the aquifers system. The results of the curve fitting analysis are presented by a series of curves designated as calculated and measured on Sheet 1. On the basis of this best fitting analysis, the coefficient of permeability varied between 50 feet per day and 70 feet per day for an initial saturated thickness of 50 feet. For purposes of analysis, fillable porosity was allowed to vary between 0.2 and 0.35. Best fit was obtained when fillable porosity was equal to 0.35. This valve for fillable porosity is considered to be reasonable since the load test was conducted during a dry period of the year, when the soils above the water table contained the least amount of moisture content. Once reasonable transmissivity and fillable porosity values were

estimated, conservative values (the lower value) of transmissivity and fillable porosity were used to predict the long term hydraulic capacity of the entire percolation pond system.

CONCLUSIONS

The results of the groundwater mounding retrofitting analysis indicated the following:

1. The encountered subsurface hardpan type soils, which occur at depths of 5 to 12 feet below ground surface appear not to represent a hydraulic barrier for the unconfined shallow aquifer.

2. The effective aquifer thickness at this site is estimated to be in the range of 50 to 60 feet with a value of 50 feet used for this analysis.

3. The average horizontal coefficient of permeability within the effective aquifer was estimated to be in the range of 50 to 70 feet per day. In order to fit the field measured curves at the location of the wells more precisely, the best fitted coefficient of permeability would generally vary for each location. However, only two typical values were selected and presented as best fitting values. The results of the recorded mounding conditions at selected wells in the corresponding computer fitted curves are presented on Sheet 1.

4. Evaluating the results of the curve fitting analysis, it was established that the lower values of transmissivity would be used for the long term prediction of overall percolation pond capacity. For this purpose, the following hydraulic parameters of the aquifer system were selected:

fillable porosity, f	0.35
Initial saturated thickness, H	50 feet
Average horizontal coefficient of permeability, K	50 feet per day
Geometry of loaded area (1/2 of the entire system including separation berms)	1,050 feet by 230 feet
Initial groundwater depth below the bottom of the pond (wet season conditions)	2 feet

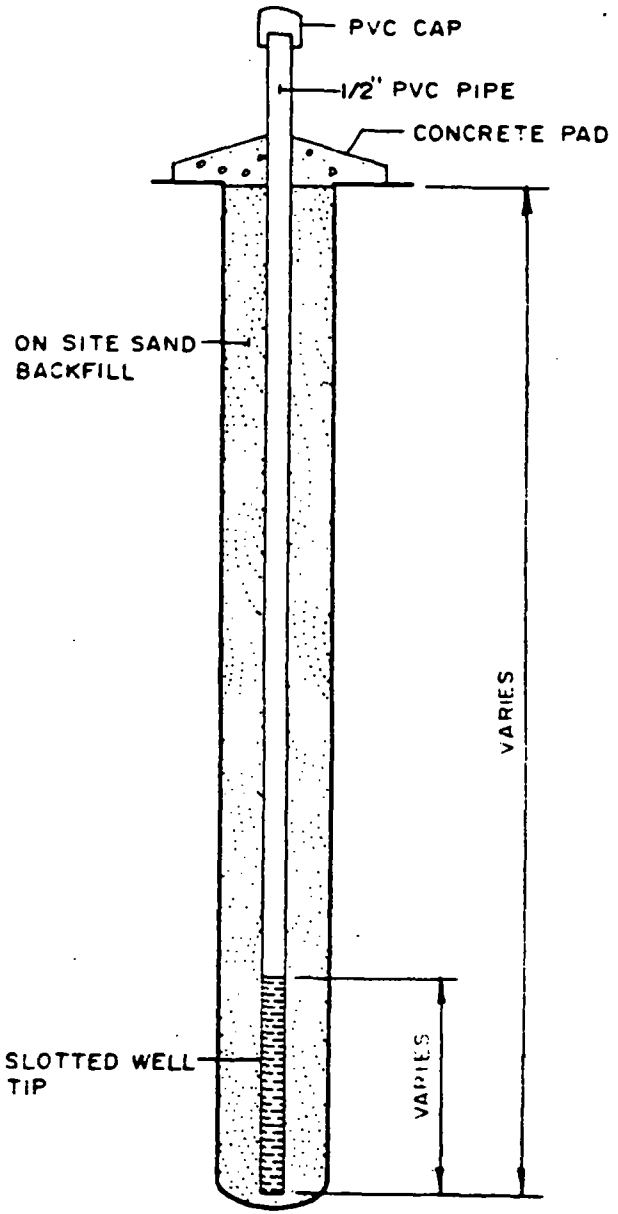
5. Using these conservatively assumed hydraulic parameters and assuming that one half of the system will be loaded alternately with the other half, a long term continuous application rate was analyzed to estimate the ultimate disposal capacity of the overall site. On the basis of this analysis it was estimated that a long term loading rate would be approximately 0.43 gallons per day per square foot over the entire 1,050 by 230 foot area or approximately 0.6 gallons per day per square foot over the effective bottom areas of the ponds. The resulting total disposal capacity of the site is therefore approximately 206,000 gallons per day. The calculated long term groundwater mound curve is presented on the attached Figure 1.

6. The re-evaluated disposal capacity assumes that the percolation basin bottoms will be maintained on a regular basis to remove accumulation of organic sediments and other clogging conditions. In addition, if certain portions of the effluent disposal site contains hardpan type soils that are more restrictive to vertical seepage then those encountered below the test basin, they would need to be deep raked or over excavated and replaced with suitable clean fine sand material. The presence of such hardpan restrictive layers, if present, can only be established during the time of the system operation. Therefore, the operation of the system should be monitored during a full loading capacity of 206,000 gallons per day.

7. Jammal & Associates, Inc. will be glad to evaluate the operating conditions of the ponds once they are put into full operation and can provide the necessary recommendations for modifications, if necessary.

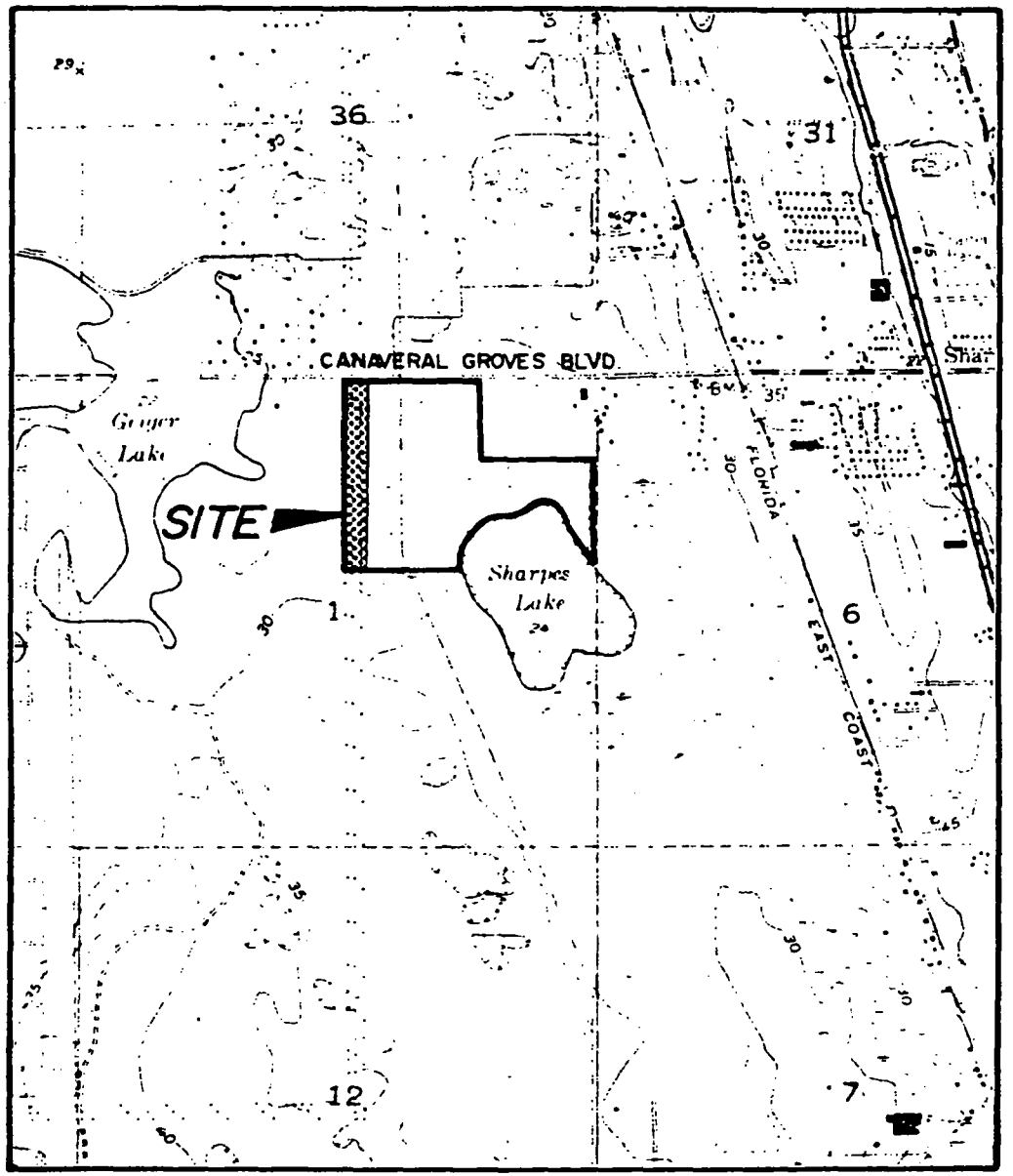
   This re-rated capacity assumes that all of the loading rate data provided to us by Sunlake Estates personnel are accurate.





TYP. MONITORING WELL DETAIL

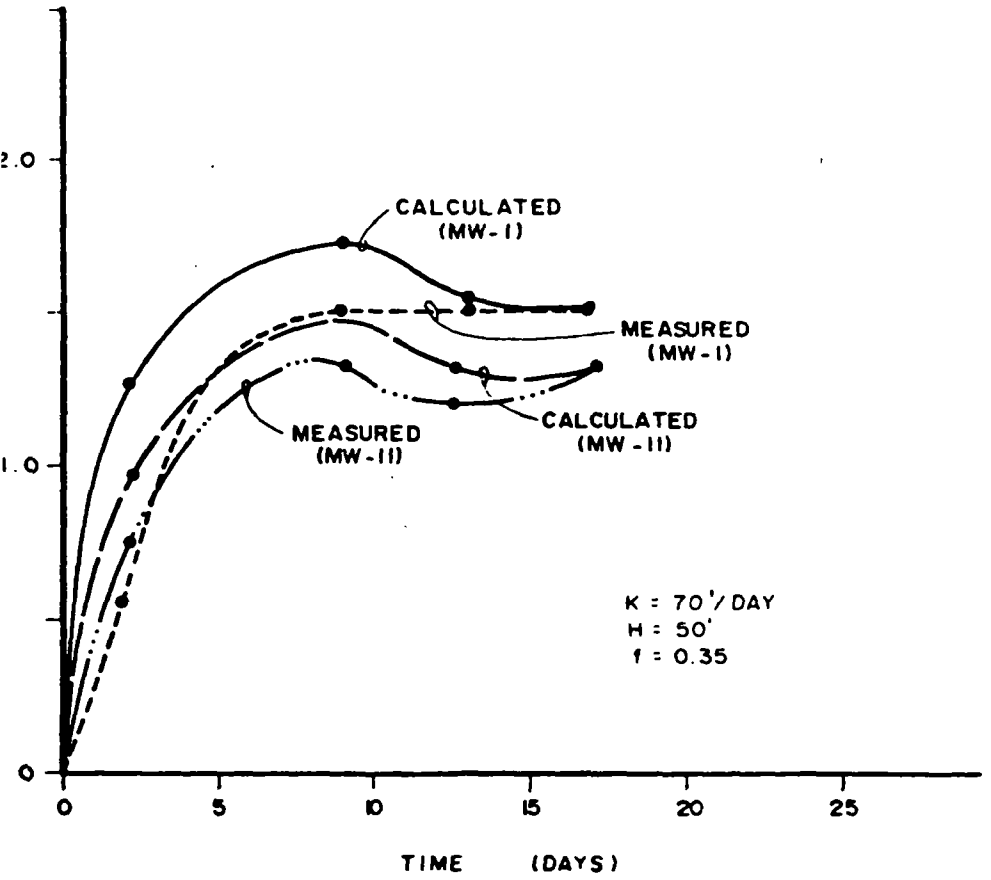
NTS

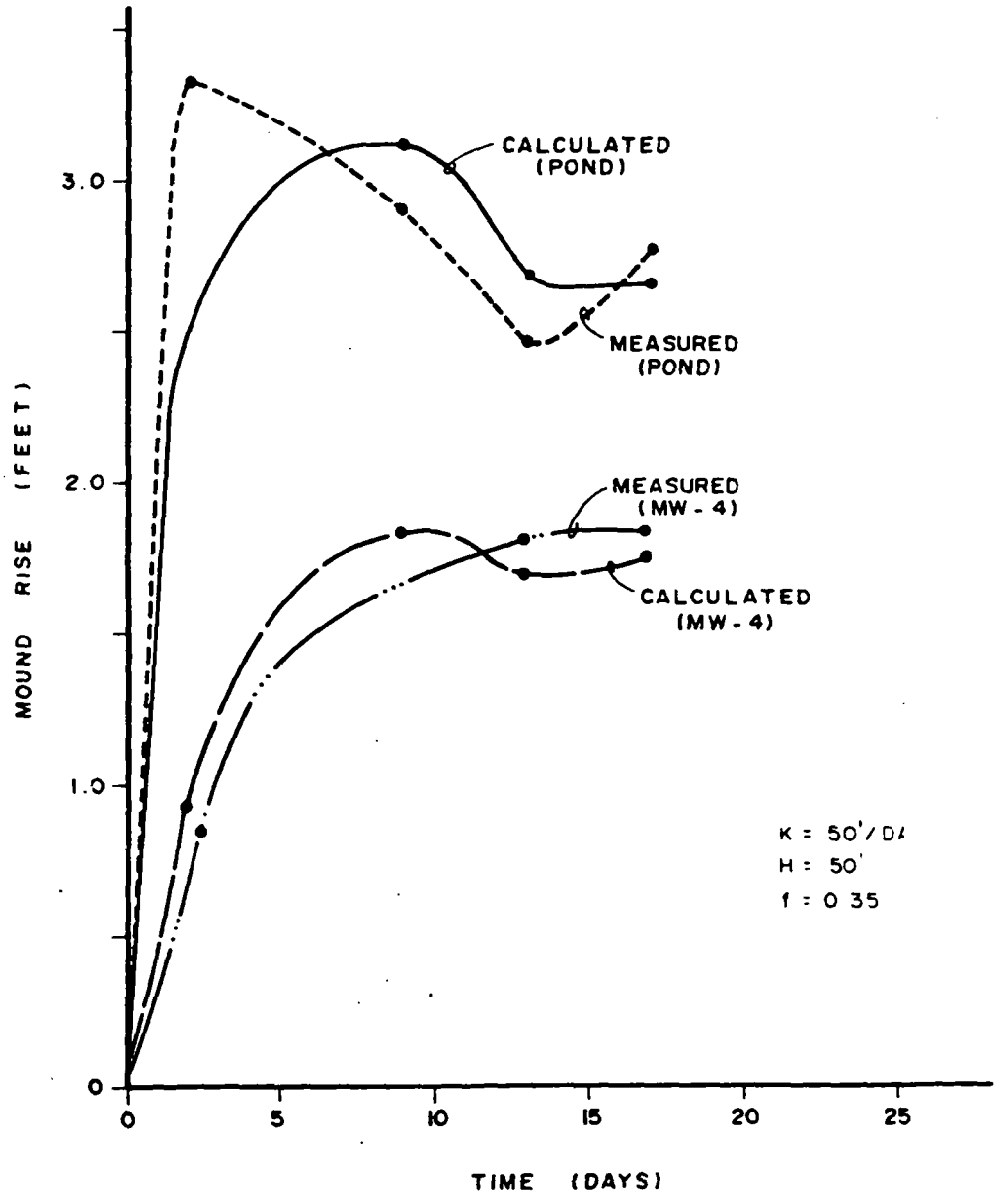


SEC 1, TWN 24S, RNG 35E
REFERENCE USGS, SHARPES QUADRANGLE MAP, DATED 1949, PHOTOREVISED 1980

VICINITY MAP

SCALE 1" = 2000'

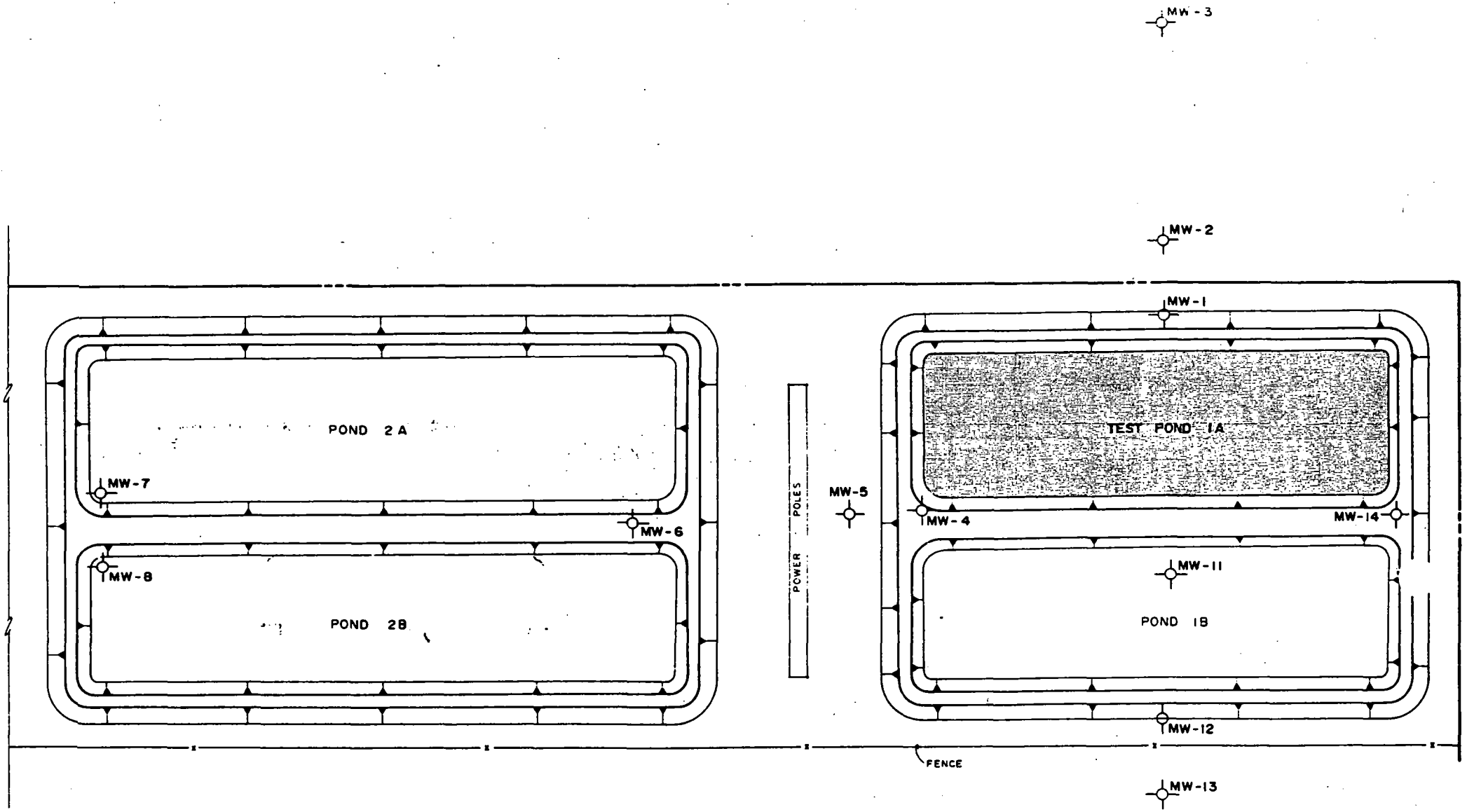

2.0
1.0
0
CALCULATED
(MW-I)
MEASURED
(MW-I)
MEASURED
(MW-II)
CALCULATED
(MW-II)
K = 70'/DAY
H = 50'
f = 0.35
0
5
10
15
20
25
TIME (DAYS)


MOUND RISE (FEET)
3.0
2.0
1.0
0
CALCULATED
(POND)
MEASURED
(POND)
MEASURED
(MW-4)
CALCULATED
(MW-4)
K = 50'/DA
H = 50'
f = 0 35
0
5
10
15
20
25
TIME (DAYS)

Day	1		2		3		4		5		6		9		10		11		12		13		14		15		16		17		18		20		21		22		23		24	
Date	3/25/86		3/27/86		3/28/86		3/29/86		3/30/86		3/31/86		4/3/86		4/4/86		4/5/86		4/6/86		4/7/86		4/8/86		4/9/86		4/10/86		4/11/86		4/12/86		4/13/86		4/14/86		4/15/86		4/17/86		4/18/86		4/19/86		4/20/86		4/21/86	
Flow (GPM)	400,000		400,000		250,000		250,000		150,000		150,000		150,000		150,000		150,000		0		150,000		150,000		150,000		150,000		150,000		0		0		0		0		0		0	
Well No.	Elev. (Ft MSL)	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
1	23.57	24.12	0.55										25.07	1.5	25.11	1.54					25.07	1.5	25.01	1.44	25.01	1.44	25.03	1.46	25.07	1.5			25.07	1.5	25.09	1.52	25.11	1.54	25.11	1.54	25.15	1.58
2	26.53	24.86	-1.67										24.90	-1.63	24.90	-1.63					24.98	-1.55	24.90	-1.63	24.89	-1.63	24.90	-1.63	24.90	-1.6			24.89	-1.64	24.85	-1.68	24.90	-1.63	24.92	-1.61	24.70	-1.83
3	25.25	25.35	0.1										24.91	-0.34	24.91	-0.34					24.99	-0.26	24.87	-0.38	24.87	-0.38	24.91	-0.34	24.89	-0.36			24.89	-0.36	24.87	-0.38	24.86	-0.39	24.85	-0.40	24.87	-0.38
4	25.59	26.42	0.83										26.61	1.02	26.67	1.08					27.38	1.79	27.44	1.85	27.25	1.66	27.31	1.72	27.40	1.81			27.42	1.83	27.40	1.81	27.44	1.85	27.46	1.87	27.44	1.85
5	25.56	25.69	0.13										26.42	0.86	26.44	0.88					26.48	0.92	26.53	0.97	28.94	3.38	28.86	3.30	28.86	3.30			28.86	3.30	28.86	3.30	29.86	3.30	28.86	3.30	28.86	3.30
6	23.65	23.97	0.32										24.37	0.92	24.37	0.92					25.21	1.76	24.93	1.38	24.92	1.47	24.96	1.51	25.12	1.67			25.17	1.72	25.17	1.72	25.12	1.67	25.12	1.67	25.16	1.71
7	24.32	24.37	0.05										24.62	0.60	24.62	0.60					24.33	0.31	24.58	0.56	24.53	0.51	24.62	0.60	24.62	0.60			24.62	0.60	24.66	0.64	24.70	0.68	24.69	0.67	24.69	0.67
8	24.16	23.92	-0.24										24.31	0.15	24.28	0.12					25.22	1.06	24.53	0.37	24.67	0.46	24.79	0.58	24.72	0.56			24.76	0.60	24.74	0.58	24.72	0.56	24.70	0.54	24.70	0.54
9	25.32	24.83	-0.49										24.02	-1.0	24.02	-1.0					24.71	-0.31	24.23	-0.79	24.24	-0.88	24.23	-0.79	24.29	-0.73			24.27	-0.71	24.27	-0.71	24.27	-0.71	24.27	-0.71	24.27	-0.71
10	24.65	24.71	0.06										24.38	-0.57	24.09	-0.57					24.44	-0.21	24.25	-0.40	24.17	-0.48	24.25	-0.40	24.46	-0.19			24.37	-0.28	24.40	-0.25	24.37	-0.28	24.37	-0.28	24.37	-0.29
11	24.95	23.96	-1.09										26.26	1.31	26.28	1.33					26.32	1.37	25.87	-0.92	25.62	0.67	25.78	0.83	26.28	1.33			26.20	1.25	26.16	1.21	26.12	1.17	26.07	1.12	26.07	1.12
12	23.38	23.62	0.24										23.60	0.22	23.60	0.22					23.73	0.35	23.63	0.22	23.69	0.31	23.73	0.35	23.69	0.31			23.67	0.29	23.67	0.29	23.67	0.29	23.67	0.29	23.67	0.29
13	25.24	25.47	0.23										25.26	-0.10	25.26	-0.10					25.38	0.02	25.22	-0.14	25.24	-0.12	25.10	-0.26	25.24	-0.10			25.25	-0.11	25.22	-0.14	25.24	-0.12	25.26	-0.10	25.22	-0.14
14	23.22	23.14	-0.08										23.51	0.29	23.51	0.29					23.39	0.17	23.39	0.17	23.35	0.13	23.39	0.17	23.45	0.23			23.45	0.23	23.47	0.25	23.43	0.21	23.43	0.21	23.47	0.25
Pond	25.64	28.58	2.94										28.56	2.92	28.61	2.97					28.11	2.47	28.36	2.72	28.15	2.51	28.27	2.63	28.42	2.78			28.42	2.78	28.36	2.72	28.27	2.63	28.19	2.55	28.19	2.55
Ditch	22.91	22.65	-.26										22.73	.08	22.78	0.13					22.82	0.21	22.67	.06	22.78	0.17	22.82	0.21	22.82	0.21			22.80	0.23	22.82	0.21	22.78	0.17	22.77	0.16	22.74	0.13

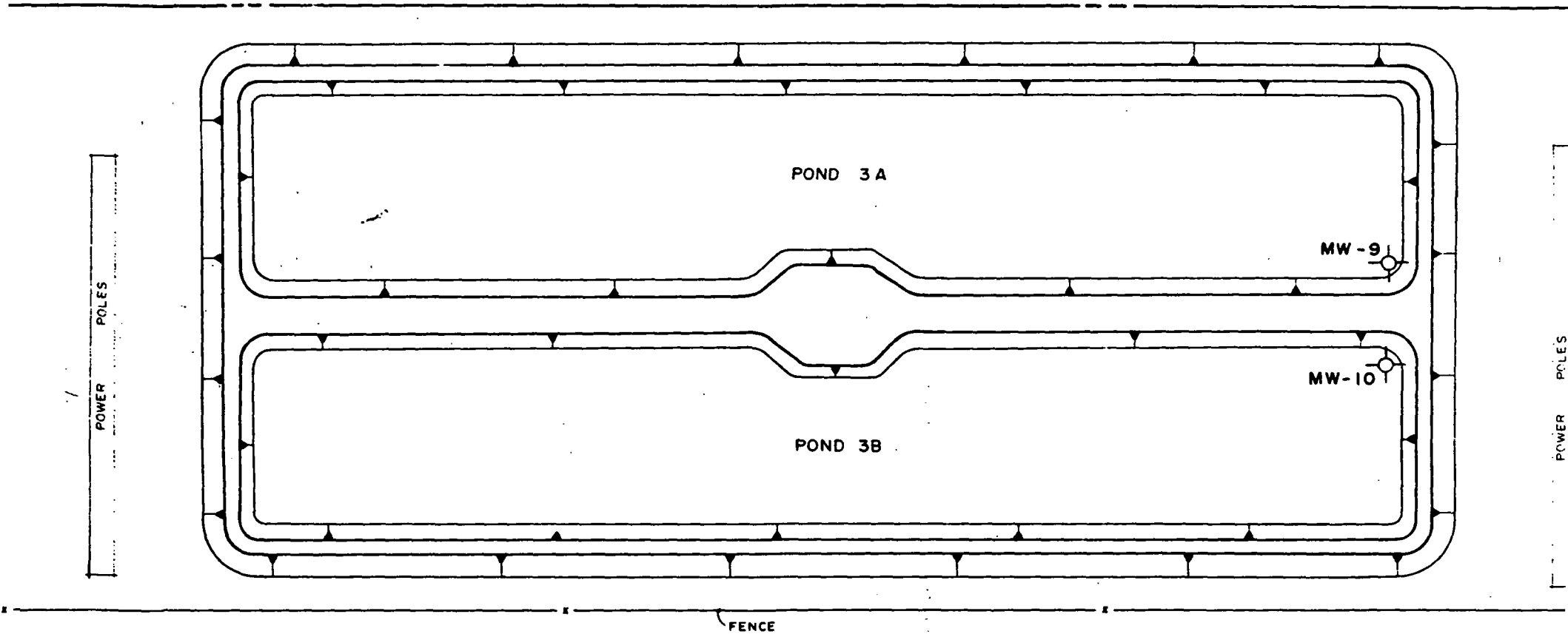
NOTE: A = Elevation (Feet MSL)
B = Change in Elevation (Feet) (i.e. 0.55 = rise; -1.67 = decline)

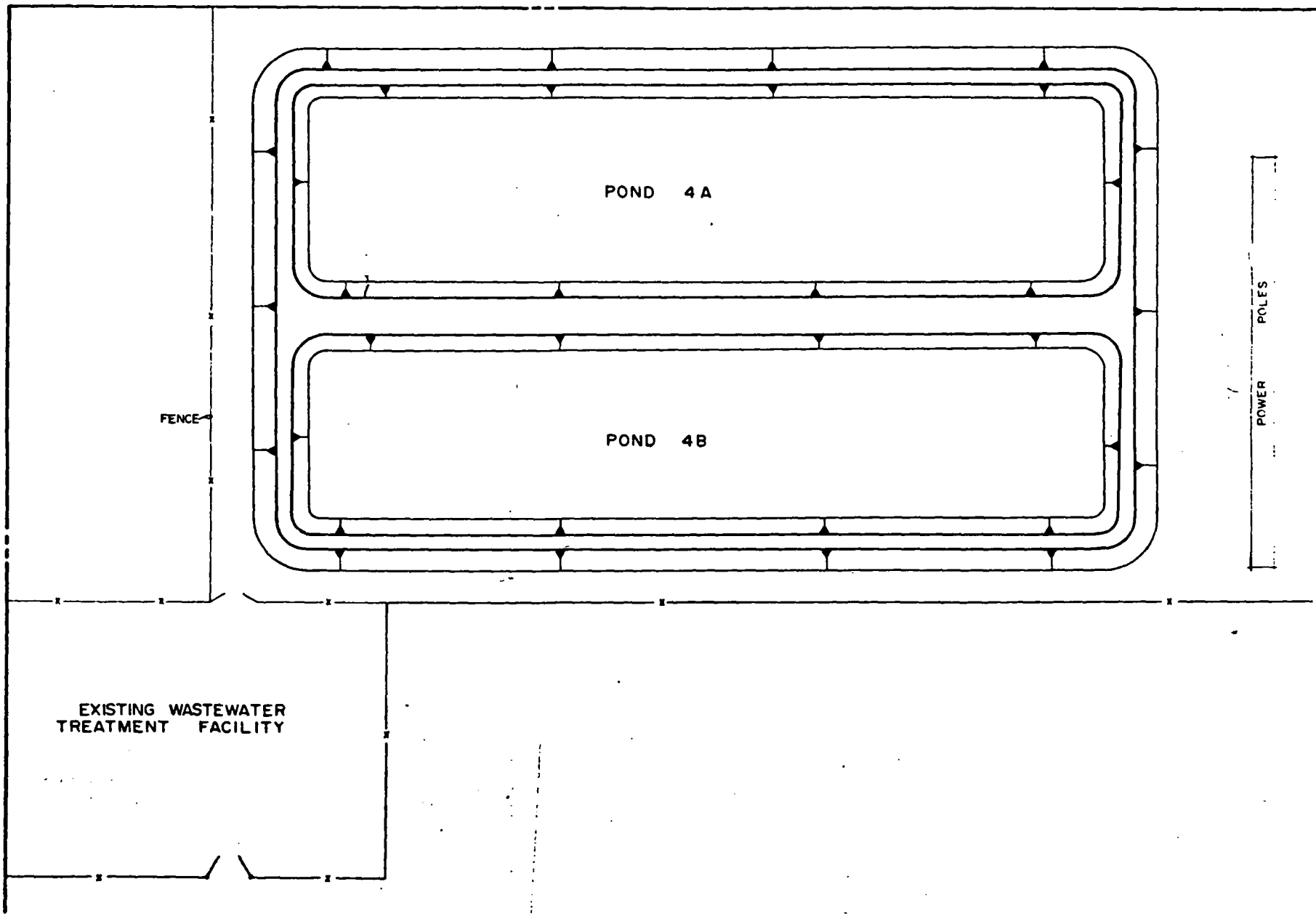
LOAD TEST RESULTS

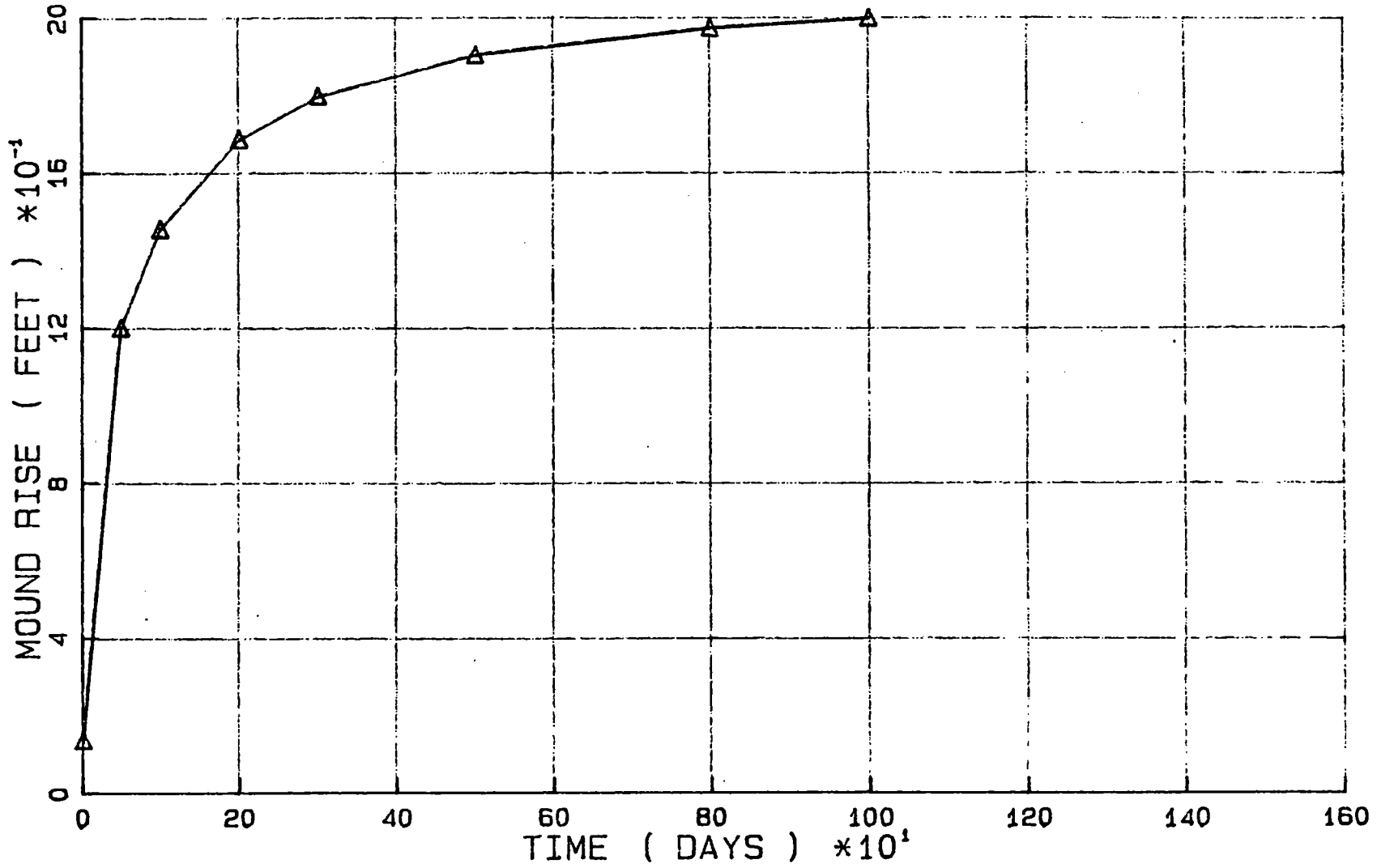


LOCATION PLAN

SCALE 1" = 60'


POND 3A
MW-9
MW-10
POND 3B
POWER POLES
POWER POLES
FENCE


POND 4A
POND 4B
FENCE
POWER POLES
EXISTING WASTEWATER TREATMENT FACILITY



PROJECT NAME: SUN LAKE ESTATES

PROJECT NO. : 82-1032

DATE: 5/22/86

JAMMAL & ASSOCIATES, INC

FIGURE 1

F.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

February 27, 1987

Mr. C. W. Sheffield, P.E.
Sheffield Engineering &
Associates, Inc.
3400 South Conway Road
Orlando, Florida 32806

OCF-DW-87-0162

Brevard County - DW
Sun Lake Estates S.T.P.

Dear Mr. Sheffield:

This office has reviewed your request to decrease the required flow per unit used in design flow computations for the above facility.

The following points have been noted:

1) Please note the enclosed computer print-out. The flows stated fluctuate drastically on a seasonal basis.

2) Your submittal failed to address occupancy of existing units. Accurate occupancy figures for a year are required to evaluate this type of request when addressing a change of flow criteria in an area with a highly seasonal characteristic.

3) The flow data from April 1986 are significant in that they exceeded the facility's capacity. If this occurs with only 76 of the 140 units connected, it would appear that a plant expansion is needed. The plant must be capable of handling peak flows regardless of average annual flows.

4) The request did not address residential occupant characteristics:

   a. retired persons of adults only;

   b. number of bedrooms.

5) When was the flow meter last calibrated?

6) The request did not address infiltration/inflow.

With consideration to the points above, it is concluded that there is insufficient merit to your request for department approval. Please note that use of 300 gpd/unit is satisfactory in many instances, but 150 gpd/unit would be extreme.

Thank you for your cooperation.

Sincerely,

H. Lee Miller
Domestic Waste Engineer

HLM/eec

Enclosure: GMST36 screen

cc: Ollie King

SHEFFIELD ENGINEERING & ASSOCIATES, INC.

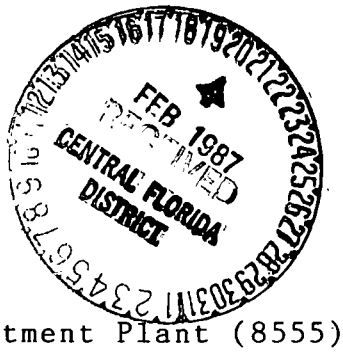
C. W. SHEFFIELD, P.E.
President

RICK JOHNSON, E.I.
Associate

DAVID BAAR, E.I.
Associate

(305) 282-7953

February 18, 1987



Carlos Rivero de Aquilar
Dept. of Environmental Regulations
3319 Maguire Boulevard
Suite 233
Orlando, Florida 32803-3767

Subject: Sun Lake Estates Wasterwater Treatment Plant (8555)

Dear Carlos,

Find attached an EngineeringReport on Equialent Residental Connections (ERC) at the Sun Lake Estates Wastewater Treatment Plant. Sheffield Engineering & Associates, Inc. is requesting an ERC value at 150 gpd/conn for the Sun Lake Estates development.

If any questions arise during your review of this request, please call our office.

Sincerely,

Micky

C. W. Sheffield, P.E.
President

CWS/hb
Enc.
cc: Ollie King

GMST36 3005X14214 050053 02/25/87

PARAMETER RESULT TRENDS 13:59:00

FOR 3005P00377 - SUN LAKE ESTATES, STP

SITE NAME - SHARPES LAKE VILLAGE (SUN LAKE ESTA

RPT DATE	FLOW,MONTH AVG 050053 MGD
12/00/86	.001
11/00/86	.002
10/00/86	.003
08/00/86	.024
07/00/86	.039
06/00/86	.026
05/00/86	.024
04/00/86	.053
03/00/86	.002
02/00/86	.002
01/00/86	.003
12/00/85	.003
11/00/85	.005
10/00/85	.002
AVERAGE:	0.01350
STD DEV:	0.01703

} did everyone move out ?

?

accessory

ENGINEERING REPORT

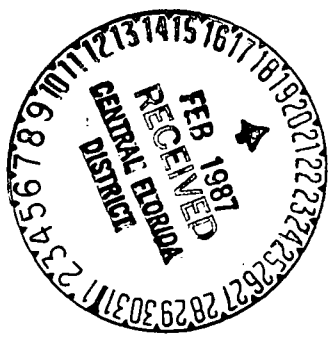
ON

EQUIVALENT RESIDENTAL CONNECTIONS

AT

SUN LAKE ESTATES

WASTEWATER TREATMENT PLANT



PREPARED BY

SHEFFIELD ENGINEERING & ASSOCIATES, INC.

C. W. SHEFFIELD, P.E
President

RICK JOHNSON, E.I
Associate

(305) 282-7953

SUN LAKE ESTATES WASTEWATER TREATMENT PLANT
ENGINEERING REPORT

INTRODUCTION

The object of this report is to obtain an equivalent residential connection (E.R.C.) value for the existing Sun Lake Estates project. This determined E.R.C. flow rate will be requested for the design flow rate on future expansions and transmission lines at the existing Sun Lake Estates wastewater treatment plant. This E.R.C. flow rate was obtained from the past years operating data supplied to Sheffield Engineering & Associates by T.K.C.B., Inc., the owners of the wastewater treatment plant. The wastewater treatment plant site is located west of Sharpes, Florida and south of Canaveral Boulevard as shown in Figure One.

The present permitted capacity of the Sun Lake Estates wastewater treatment plant is 50,000 GPD. Sheffield Engineering & Associates currently has submitted construction plans, an engineering report and a construction application to the Department of Environmental Regulation to increase the plant size to 0.206 MGD. This planned construction will be in two phases with Phase I at 0.135 MGD and Phase II increasing to the ultimate 0.206 MGD flow value. The effluent is disposed via percolation ponds which are located north of the wastewater treatment plant site as shown in Figure One. At the present time there is an average of 76 active connections on the sewerage system with a total of 140 permitted connections available. (See Table One and Figure Two for average connection determinations and monthly flow data).

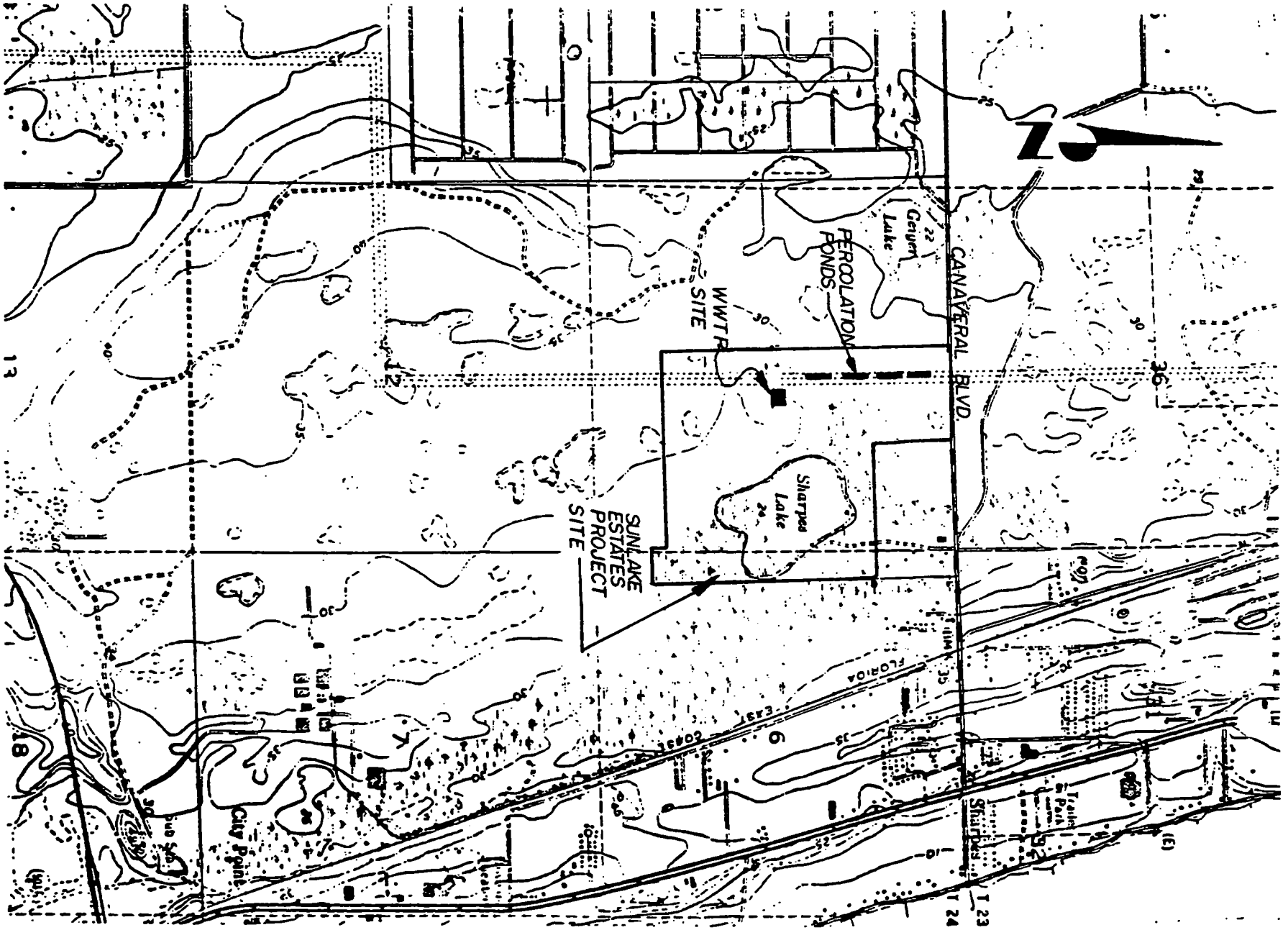


FIGURE No. 1

SCALE 1"=2000'	DESIGN	TITLE	PROJECT	CLIENT
DATE 1/87	DRAWN WM	LOCATION MAP	SUN LAKE ESTATES	T.K.C.B., INC.

SUN LAKE ESTATES — W.W.T.P

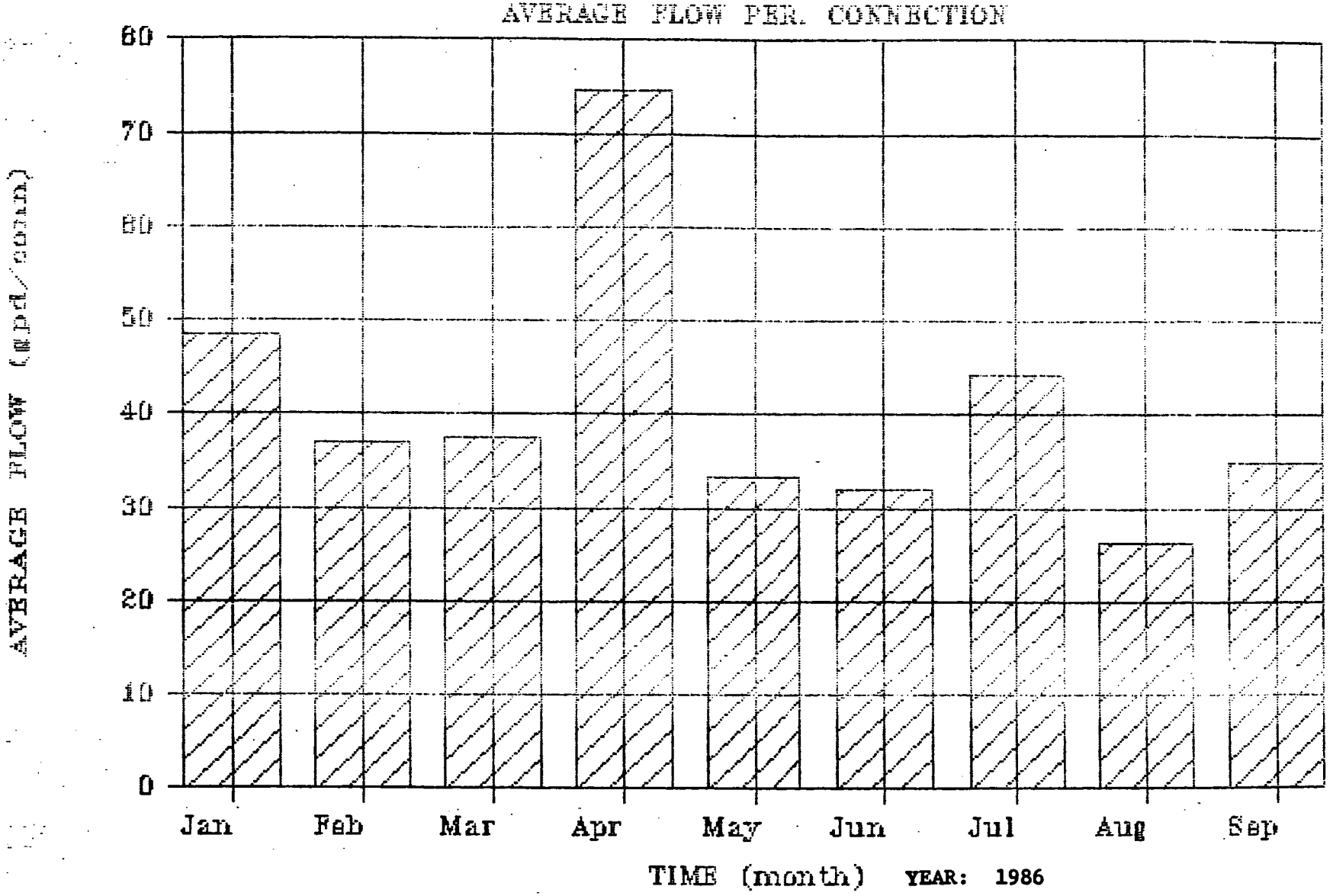


FIGURE No. 2

SCALE NTS	DESIGN ——	TITLE AVE FLOW PER. CONN.	PROJECT SUNLAKE ESTATES	CLIENT TKCB, INC.
DATE 1/87	DRAWN JN			

300002.390
76

EXISTING WASTEWATER TREATMENT PLANT FLOWS

The average wastewater flows, from data provided to Sheffield Engineering & Associates by T.K.C.B., Inc. personnel, are depicted in Table One. This flow is measured by utilizing a Stevens flow meter and totalizer recorder which is located in the chlorine contact chamber on the Sun Lake Estates wastewater treatment plant and timers on the influent lift station. The monthly average daily flow values for the months from January to September, 1986 averaged 3,000 GPD. An average daily flow versus connections for this operation time period equated to 41.0 GPD/conn. A design value of 350 GPD/conn. was used for the construction application for this wastewater treatment plant. Considering the existing and future construction at the Sun Lake Estates project will be coach homes (single family), and this engineering report data, Sheffield Engineering & Associates is requesting an E.R.C. value of 150 GPD/conn. for all existing and future permits.

At a rate of 150 GPD/conn., the existing 50,000 GPD wastewater treatment plant and effluent disposal facility will safely handle 330 single family coach homes.

SUN LAKE ESTATES WASTEWATER TREATMENT PLANT

TABLE ONE

DATE (1986)	CONNECTIONS	PEAK FLOWS (GPD)	AVG FLOWS (GPD)	AVG FLOWS/ CONN. GPD/CONN.
Jan.	62	5,000	3,000	48.4
Feb.	62	3,200	2,300	37.1
March	64	3,500	2,400	37.5
April	71	11,000	5,300	74.6
May	72	4,300	2,400	33.3
June	81	4,100	2,600	32.1
July	88	5,100	3,900	44.3
Aug.	91	3,400	2,400	26.4
Sept.	89	5,700	3,100	34.8
Avg.	76	5,000	3,000	41.0

EXISTING WATER FLOWS

The existing potable water usage at the Sun Lake Est. development for four months in 1986 is listed in Table Two. These monthly flows verify the low flows which are measured at the wastewater treatment plant site and water meters. A monthly average of 2,678 GPD was calculated from data supplied to Sheffield Engineering & Associates, Inc. by T.K.C.B., Inc. and the City of Cocoa water department.

TABLE TWO

SUN LAKE ESTATES WATER FLOW

DATE (1986)	A.D.F. (gpd)
4-17 to 5-15	2,877
5-15 to 6-16	2,955
6-16 to 7-20	2,390
7-20 to 8-18	2,490
avg.	2,678*

* Data supplied to Sheffield Engineering & Associates by T.K.C.B., Inc. who received data from the City of Cocoa Water Department.

CONCLUSION

The existing Sun Lake Estates wastewater treatment plant has a permitted average daily flow of 50,000 GPD. The actual average daily flow for the operation period in 1986 was 3,000 GPD from an average of 76 connections which equates to 41 GPD/conn. Also, with the records of low potable water consumption, this low sewerage flow and flow meters are verified. A value of 150 GPD/ connection is being requested per unit in lieu of the standard 350 GPD/connection from the Department of Environmental Regulation.

At 150 GPD/connection the existing 50,000 GPD plant and effluent disposal system will safely handle 330 connections.

Brevard

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

ALEX SENKEVICH
DISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT

RECONNAISSANCE INSPECTION REPORT

1. Source Name: Sharpes Lake Village (Sun Lake Estates)
2. Source Location: Canaveral Blvd, Sharpes
3. Permits: State No. Application in house Expires: _____
   NPDES No. FL _____ Expires: _____
4. Is there a State and/or Federal (circle) compliance schedule for this facility? Yes _____ No U
5. Is this facility in conformance with the existing State and/or Federal compliance schedule? Yes _____ No NA
6. Source Description (circle one): (DW) IW
7. Discharge: Yes _____ No U
8. Permitted Flow: 1050 MGD
9. Basin No: _____ Rank: _____
10. Person Contacted: Johnny Mimms Title: Contractor
11. Purpose of Inspection: _____
12. Comments:
Access control satisfactory - chain-link fence around plant & perc. ponds.
2 blowers, not on during inspection.
2 aeration tanks, 1 clarifier, 1 digester, 1 ccc. Also foundation was poured for future expansion.
Effluent clear going over weir of clarifier.
Stevens flowmeter being used.
Gas chlorine - wt scales needed.
ccc & tertiary screen tank (Akw) are leaking effluent.
Watts #7 dual check valve on potable water line used for gas chlorine. A reduce pressure backflow preventer needed (specific condition #12 of permit). Water line is below effluent in ccc.
13. Indicate Corrective Action(s) to be Undertaken by DER District Office: Permit application in house
14. Individual Assigned Responsibility for Corrective Action(s): _____ Title: _____
15. Inspector Completing Report: Doug Miller Title: EST Date: 04/03/86

8 perc. ponds - 7 ponds are dry, only one pond has some effluent in the bottom. Some grading for testing appears to be taking place in the north ponds.

SHEFFIELD ENGINEERING & ASSOCIATES, INC.

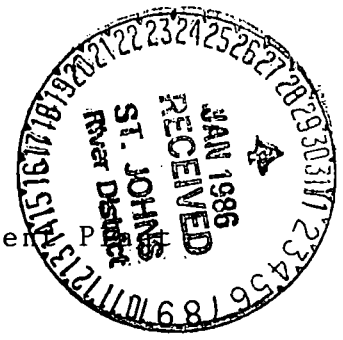
C. W. SHEFFIELD, P.E.
President

RICK JOHNSON, E.I.
Associate

(305) 282-7953

January 28, 1986

William Bostwick
Florida Department of
Environmental Regulation
3319 Maguire Blvd.
Orlando, FL 32803-3767



Subject: Sharpes Lake Village Wastewater Treatment Plant
(Sunlake Estates), 8317
Permit No. DC05-69218

Dear Bill,

Reference is made to our correspondence of 6/24/85 and to permit extension of this construction permit to 1/15/86. By this letter, I would like to relate that Sheffield Engineering & Associates, Inc. is in the process of completing the operational permit which should be complete in 20 days, at which time it will be submitted to your office.

Your cooperation on this matter will be appreciated and if there are any questions please contact our office.

Sincerely,

C. W. Sheffield, P.E.
President

CWS/md1
Enc.
cc: Ollie King

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENT

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

CERTIFIED
P 147 919 941

December

Mr. Alex King, Owner
K & P Properties
480 Cox Road
Cocoa, Florida 32922

Dear Mr. King:

Re: Notice of Construction
Permit Expiration
Brevard County - DW
Sharpes Lake Village
Sewage Treatment Facility

PS Form 3811, July 1983 DC - MC DOMESTIC RETURN RECEIPT

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☒ Show to whom, date and address of delivery. XXXXXXXXXX
2. ☐ Restricted Delivery.

3. Article Addressed to:
Alex King
K & P Properties
480 Cox Road
Cocoa, Florida 32922

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 147 919 941

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X PK

7. Date of Delivery
12-6

8. Addressee's Address *(ONLY if requested and fee paid)*

A review of our files has disclosed that your construction Permit No. DC05-69218 ~~expired~~/will expire on January 15, 1986.

Please reply in writing no later than December 20, 1985 stating that either:

1) the facilities are not to be constructed, in which case it will be necessary for you to apply for a new permit should you desire to build the facilities at some future date, or

2) the facilities are still under construction and six months operating data demonstrating compliance with effluent limitations in Chapter 17-6, F.A.C., are unavailable, and you wish to request an extension of construction permit, or

3) the facilities are operational with six months of acceptable operation data and you are requesting/submitting the necessary application for an operation permit and a certificate of construction completion (if not previously submitted).

Let me remind you that a certified operator is required for operation of the plant and monthly reports must be submitted to this office as soon as a treatment plant is put into use, regardless of the type of permit.

Sincerely,

Peter F. Dentice
Domestic Waste Operations

PFD/gmc

cc: Brevard County Health Department

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX ALEXANDER
DISTRICT MANAGER

June 26, 1985

Alex King, Owner
K and P Properties
480 Cox Road
Cocoa, Florida 32922

Dear Mr. King:

Brevard County DW
Sharpes Lake Village STP, Phase I
Modification of Conditions
Permit No. DC05-69218

We are in receipt of your request for a modification of the permit conditions. The conditions are changes as follows:

Condition	From	To
Expiration date	July 15, 1985	Jan. 15, 1986

This letter must be attached to your permit and becomes a part of that permit.

Sincerely,

A. Alexander, P. E.
District Manager

BLW
AA/lmw

cc: C. W. Sheffield, P. E.
James Stevenson, P. E.

SHEFFIELD ENGINEERING
& ASSOCIATES, INC.

C. W. SHEFFIELD, P.E.
President

RICK JOHNSON, E.I.
Associate

(305) 282-7953

June 24, 1985

Bill Bostwick
Department of Environmental Regulation
3319 Maguire Blvd.
Orlando, Florida 32803-3767

Subject: Sharpes Lake Village WWTP (8317)

Dear Bill,

As per your letter of June 18, 1985 in regards to the construction permit No. DC05-69218 for the Sharpes Lake Village wastewater treatment plant, Sheffield Engineering & Associates would like to request an extension in order to obtain six months of operating data. The WWTP was certified and letter of completion was sent to the D.E.R. on March 18, 1985. We would like the six month period to start on July 15, 1985 which is when the construction permit will expire. Please notify us of this additional time when possible.

If you have any questions, please contact.

Sincerely,

C. W. Sheffield, P.E.
President

CWS/cac
cc: Ollie King

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX ALEXANDER
DISTRICT MANAGER

June 26, 1985

GPSI

Alex King, Owner
K and P Properties
480 Cox Road
Cocoa, Florida 32922

Dear Mr. King:

Brevard County DW
Sharpes Lake Village STP, Phase I
Modification of Conditions
Permit No. DC05-69218

We are in receipt of your request for a modification of the permit conditions. The conditions are changes as follows:

Condition	From	To
Expiration date	July 15, 1985	Jan. 15, 1986

This letter must be attached to your permit and becomes a part of that permit.

Sincerely,

A. Alexander, P. E.
District Manager

BLW
AA/lmw

cc: C. W. Sheffield, P. E.
James Stevenson, P. E.

SHEFFIELD ENGINEERING & ASSOCIATES, INC.

C. W. SHEFFIELD, P.E.
President

RICK JOHNSON, E.I.
Associate

(305) 282-7953

June 24, 1985



Bill Bostwick
Department of Environmental Regulation
3319 Maguire Blvd.
Orlando, Florida 32803-3767

Subject: Sharpes Lake Village WWTP (8317)

Dear Bill,

As per your letter of June 18, 1985 in regards to the construction permit No. DC05-69218 for the Sharpes Lake Village wastewater treatment plant, Sheffield Engineering & Associates would like to request an extension in order to obtain six months of operating data. The WWTP was certified and letter of completion was sent to the D.E.R. on March 18, 1985. We would like the six month period to start on July 15, 1985 which is when the construction permit will expire. Please notify us of this additional time when possible.

If you have any questions, please contact.

Sincerely,

C. W. Sheffield, P.E.
President

CWS/cac
cc: Ollie King

CASE HISTORY SHEET

File Name Thorpes Lake Village

PATS Number DC05-10570 Permit Number _____

Date	Action Taken	Init.	Time	Miles
ENTERED JUN 2 1985		DT	.20	
6/26	Draft Mail.	LM	.15	
6/26/85	Emailed extension	LBC	.50	

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

A. ALEXANDER,
DISTRICT MANAGER

June 18, 1985

Alex King, Owner
K & P Properties
480 Cox Road
Cocoa, Florida 32922

Dear Mr. King:

Notice of Construction
Permit Expiration
Brevard County Dw
Sharpes Lake Village
Sewage Treatment Plant

A review of our files has disclosed that your construction Permit No. DC05-69218 will expire on July 15, 1985.

Please reply in writing no later than July 1, 1985 stating that either:

1) The facilities are not be constructed, in which case it will be necessary for you to apply for a new permit should you desire to build the facilities at some future date, or

2) The facilities are still under construction and six months operating data demonstrating compliance with effluent limitations in Rule 17-6, F.A.C., is unavailable, and you wish to request an extension of construction permit, or

3) The facilities are operational with six months of acceptable operation data and you are requesting/submitting the necessary applications for an operation permit and a certificate of construction completion (if not previously submitted).

Let me remind you that a certified operator is required for operation of the plant and monthly reports must be submitted to this office as soon as a treatment plant is put into use, regardless of the type of permit.

Sincerely,

Peter Dentice
Domestic Waste Engineering

PD/gmw
cc: Brevard County Environmental Health

Brevard

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

ALEX SENKEVICH
DISTRICT MANAGER

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT

RECONNAISSANCE INSPECTION REPORT

1. Source Name: Sharpes Lake Village (Sun Lake Estates)
2. Source Location: Canaveral Blvd, Sharpes
3. Permits: State No. DC05-69218 Expires: 7-15-85
   NPDES No. FL — Expires: —
4. Is there a State and/or Federal (circle) compliance schedule for this facility? Yes ____ No V
5. Is this facility in conformance with the existing State and/or Federal compliance schedule? Yes ____ No N/A
6. Source Description (circle one): (DW) IW 7. Discharge: Yes ____ No V
8. Permitted Flow: .050 MGD 9. Basin No: ____ Rank: ____
10. Person Contacted: Johnny Mimms Title: Contractor
11. Purpose of Inspection: ____
12. Comments:
    Low flow - only ≈ 35 families in subdivision.
    Access control - chain link fence,
    2 blowers, not on during inspection.
    Slight odor noted from plant,
    Algae noted in aeration bays & mosquito larva in clarifier.
    Stevens flowmeter being used.
    #7 watts dual check, model #97 on potable water line, this is not a reduce pressure backflow preventer (specific condition #12 of permit).
13. Indicate Corrective Action(s) to be Undertaken by DER District Office: ____
    None
14. Individual Assigned Responsibility for Corrective Action(s): ____ Title: ____
15. Inspector Completing Report: Jay [illegible] Title: EST Date: 05/31/85
    Gas chlorine being used - no wt. scales,
    Unable to walk around perc ponds - gate locked,

FLORIDA DEPARTMENT OF
Environmental Protection

CENTRAL DISTRICT OFFICE
3319 MAGUIRE BLVD., SUITE 232
ORLANDO, FLORIDA 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

MEMO TO FILE

September 21, 2020

Sunlake Estates WWTF
Facility ID No.: FLA010353
Brevard County

Subject: Sanitary Sewer Overflow

The Department acknowledges the September 12, 2020 Sanitary Sewer overflow of 700 gallons of raw wastewater. Based on the information provided after the event, this action was determined to not have substantial impact to the environment and was appropriately addressed. Therefore, the Department is not initiating formal enforcement proceedings at this time. This memorandum does not preclude further action in accordance with Sections 403.121, 403.131, 403.141 and 403.161, Florida Statutes.

Helena Dacenay
Environmental Specialist II
Central District

FLORIDA DEPARTMENT OF Environmental Protection

CENTRAL DISTRICT OFFICE
3319 MAGUIRE BLVD., SUITE 232
ORLANDO, FLORIDA 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

MEMO TO FILE

October 21, 2021

Sun Lake Estates WWTF
Facility ID No.: FLA010353
Brevard County

Subject: Sanitary Sewer Overflow at 616 Emerald Lake Drive

The Department acknowledges that Sun Lake Estates WWTF has reported a Sanitary Sewer overflow of 400 gallons of partially treated wastewater on October 6, 2021. The Department acknowledges receipt of the necessary information related to the spill. The Department is not initiating formal enforcement proceedings at this time; however, this memorandum does not preclude the referenced spill from further action in the future in accordance with Sections 403.121, 403.131, 403.141 and 403.161, Florida Statutes.

Amanda Mahalek
Environmental Specialist II
Central District

FLORIDA DEPARTMENT OF Environmental Protection

CENTRAL DISTRICT OFFICE
3319 MAGUIRE BLVD., SUITE 232
ORLANDO, FLORIDA 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

MEMO TO FILE

January 26, 2022

Sun Lake Estates
Facility ID No.: FLA010353
Brevard County

Subject: Sanitary Sewer Overflow at 616 Emerald Lake Drive

The Department acknowledges that Sun Lake Estates has reported a Sanitary Sewer overflow of 1500 gallons of partially treated wastewater during December 23, 2021. The Department acknowledges receipt of the necessary information related to the spill. The Department is not initiating formal enforcement proceedings at this time; however, this memorandum does not preclude the referenced spill from further action in the future in accordance with Sections 403.121, 403.131, 403.141 and 403.161, Florida Statutes.

Trey Stamm
OPS Environmental Specialist I
Central District

FLORIDA DEPARTMENT OF Environmental Protection

CENTRAL DISTRICT OFFICE
3319 MAGUIRE BLVD., SUITE 232
ORLANDO, FLORIDA 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

MEMO TO FILE

January 26, 2022

Ocala 2 WRF
Facility ID No.: FLA010680
Marion County

Subject: Unauthorized Discharge at 2105 NW 21st Street

The Department acknowledges that Ocala 2 WRF has reported a Unauthorized Discharge of 1.5 million gallons of fully treated wastewater during December 23, 2021. The Department acknowledges receipt of the necessary information related to the spill. The Department is not initiating formal enforcement proceedings at this time; however, this memorandum does not preclude the referenced spill from further action in the future in accordance with Sections 403.121, 403.131, 403.141 and 403.161, Florida Statutes.

Trey Stamm
OPS Environmental Specialist I
Central District

FLORIDA DEPARTMENT OF Environmental Protection

CENTRAL DISTRICT OFFICE
3319 MAGUIRE BLVD., SUITE 232
ORLANDO, FLORIDA 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

November 14, 2019

Thad Terry, Owner
Sun Lake Estates Homeowners Association
616 Emerald Lake Drive
Cocoa, FL 32926

Re: Compliance Assistance Offer
Sun Lake Estates WWTF
DW FLA010353
Brevard County

Dear Mr. Terry:

A(n) inspection/file review was conducted at your property on October 31, 2019. During this inspection, potential non-compliance was noted. The purpose of this letter is to offer compliance assistance as a means of resolving these matter(s).

Specifically,

Potential non-compliance with the requirements of chapter 403, Florida Statutes, chapters 62-620 Florida Administrative Code were observed. Please see the attached inspection report for a full account of Department observations and recommendations.

It is the Department's desire that you are able to adequately address the aforementioned issues so that this matter can be closed. Your failure to respond promptly may result in the initiation of formal enforcement proceedings.

Please address your response and any questions to Carolyn Hall of the Central District Office at (407) 897 -4114 or via e-mail at Carolyn.X.Hall@floridaDEP.gov. We look forward to your cooperation with this matter.

Sincerely,

David Smicherko , Manager
Central District
Florida Department of Environmental Protection

Enclosures: Inspection Report (with attachments)

cc: Jerry Padrick JPadrick67@bellsouth.net

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTEWATER COMPLIANCE INSPECTION REPORT

Facility Name and Physical Address	WAFR ID	County	Entry Date	Entry Time
Sun Lake Estates 616 Emerald Lake Drive Cocoa, FL 32926	FLA010353 **Facility Phone #** 321-639-8440	Brevard	10/31/2019 **Exit Date** 10/31/2019	10:18 AM **Exit Time** 10:59 AM

LAT	28	°	25	‘	31.54	“
LONG	80	°	46	‘	42.66	“

Name(s) of Field Representatives(s) and Title	Operator Certification #	Email	Phone
Jerry Padrick, Operator	C-0007051	JPadrick67@bellsouth.net	321-508-4714

Name & Address of Permittee / Designated Rep.	Title	Email	Phone
Thad Terry 5600 N US Highway 1 Cocoa, FL 32927	Owner	N/A	321-639-8440

Inspection Type	C	E	I		Samples Taken(Y/N): N	Sample ID#: N/A	Samples Split (Y/N) : N

X **Domestic** ☐ **Industrial**

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; MC = Minor Out of Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a “♦”

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1. ♦ Permit	IC	3. Laboratory	IC	6. Facility Site Review	IC	9. ♦ Effluent Quality
NC	2. ♦ Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10. ♦ Effluent Disposal
		NC	5. ♦ Records & Reports	IC	8.♦ Operation & Maintenance	IC	11. Biosolids
						IC	12. ♦ Groundwater
NA	14. Other					IC	13. ♦ SSO Survey

Facility and/or Order Compliance Status:	☐ In-Compliance	X Out-Of -Compliance	☐ Significant-Out-Of-Compliance

Recommended Actions: **Compliance Assistance Offer**

Name(s) and Signature(s) of Inspector(s)		District Office/Phone Number	Date
Carolyn Hall	Click here to enter text	(407) 897-4114	11/5/2019

Name and Signature of Reviewer	District Office/Phone Number	Date
David Smicherko	CD 407 897 4169	11/12/2019

Single Event Violations (*SNC SEVs)				
Check for Yes	**Evaluation Area**	**Description**	**Finding Description**	**Finding ID**
☐	Permit	Effluent Violations - Unapproved Bypass	Wastewater was diverted from a portion of the treatment process without department approval.	**UNBY**
☐	*Permit	Permit Violations - Discharge Without a Valid Permit	The facility was operating without a permit or with an expired permit.	**UPHI**
☐	Permit	Permit Violations - Failure to Submit Timely Permit Renewal Application	The permittee failed to submit an application to renew the existing permit at least 180 days prior to expiration.	**PFSA**
☐	Laboratory	Management Practice Violations - Laboratory Not Certified	The laboratory was not certified by the National Environmental Laboratory Accreditation Conference (NELAC).	**LNCE**
☐	Sampling	Monitoring Violations - Analysis not Conducted	The facility failed to collect and/or analyze samples as required by permit or enforcement action.	**ANCV**
☐	Sampling	Monitoring Violations - Failure to Monitor for Toxicity Requirements	The facility failed to collect and/or analyze routine or follow-up toxicity samples.	**FTOX**
☐	Records and Reports	Management Practice Violations - Failure to Develop Adequate SPCC Plan	The facility failed to develop or maintain their Spill Prevention Control and Countermeasures (SPCC) plan.	**FSPC**
☐	Records and Reports	Management Practice Violations - Failure to Maintain Records	The facility failed to maintain records for the required retention period.	**FMRR**
☐	Records and Reports	Reporting Violations - Failure to Notify	The permittee failed to notify the department of any event or activity that requires notification as required by permit or rule.	**RSWP**
☐	Records and Reports	Reporting Violations - Failure to Submit DMRs	The permittee failed to submit any DMR required by rule, permit, or enforcement action in a timely manner.	**FDMR**
☐	Records and Reports	Reporting Violations - Failure to submit required report (non-DMR, non-pretreatment)	The facility failed to submit any report required by rule, permit, enforcement action or inspection activity except for DMRs.	**FRPT**
☐	Facility Site Review	Management Practice Violations - Improper Land Application (non-503, non-CAFO)	The land application system was not being maintained.	**LASN**
☐	Flow Measurement	Monitoring Violations - No Flow Measurement Device	The facility failed to install a flow measurement device, an approved flow measurement device, or a working flow measurement device.	**NOFL**
☐	Operation and Maintenance	Management Practice Violations - Improper Operation and Maintenance	The facility failed to follow their operation and maintenance plan/manual.	**IONM**
☐	Operation and Maintenance	Management Practice Violations - Inflow/Infiltration (I/I)	The facility had an inflow and infiltration problem causing collection system issues and/or operational issues.	**ININ**
☐	Operation and Maintenance	Management Practice Violations - No Licensed/Certified Operator	The facility was being operated without a certified operator or by an operator that is not licensed for the size of plant.	**ONCO**
☐	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute toxicity has been documented through follow-up tests.	**EATX**
☐	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent chronic toxicity has been documented through follow-up tests.	**ECTX**
☐	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute or chronic toxicity has been documented in the effluent through the use of routine and follow-up tests.	**ETOX**
☐	Effluent Quality	Effluent Violations - Narrative Effluent Violation	The facility violated a permit or enforcement narrative effluent limit.	**XNEV**
☐	*Effluent Quality	Effluent Violations - Reported Fish Kill	The facility had a discharge of wastewater that resulted in a fish kill.	**XFSH**
☐	Sanitary Sewer Overflow Survey	WW SSO - Failure to Maintain Records or Meet Record Keeping Requirements	The facility failed to keep routine documentation and reporting records of spills, and/or operation and maintenance activities on the collection/transmission system.	**SSO2**
☐	Sanitary Sewer Overflow Survey	WW SSO - Failure to monitor	The facility failed to collect and/or analyze bacteriological samples for sewage spills that reached surface waters.	**SSO3**
☐	Sanitary Sewer Overflow Survey	WW SSO - Failure to report violation that may endanger public health 122.41(l)(7)	The facility failed to report a sewage spill within 24 hours of discovery.	**SSO4**
☐	Sanitary Sewer Overflow Survey	WW SSO - Improper Operation and Maintenance	The facility failed to perform routine preventative maintenance to keep the collection/transmission system in good working order.	**SSO5**

Facility Treatment Summary: An existing 0.099 million gallon per day (MGD) annual average daily flow (AADF) (rerated from 0.135 MGD AADF) permitted capacity extended aeration domestic wastewater treatment plant consisting of flow equalization, influent screening, aeration, secondary clarification, chlorination, and aerobic digestion of biosolids.

R-001 is a reuse system which consists of four (4) dual-cell rapid infiltration basins (RIBs).

1. ♦**Permit:** In-Compliance

Current Permit available on-site?	Yes
Date Permit issued	**October 28, 2015**
Date Permit Expires	**October 27, 2020**
Permit Renewal Application due by	**April 30, 2020**.
Administrative or Judicial Orders?	N/A

2. ♦**Compliance Schedules:** Out-of-Compliance

Compliance Schedule in Permit met?	No
Compliance Schedules in Order are being met?	Not Applicable

2.1 Deficiency: At the time of inspection the facility failed to meet the schedule in the permit/order.

Improvement Action	Completion Date
1. Remove the grit from the surge tank	02/15/2016
2. Repair tank leaks	02/15/2016
3. Register for and begin using the Departments EzDMR system, per condition I.B.7 of this permit	Within 6 months of effective date of permit

Rule/Permit Reference: 403.161(1)(b), F.S. It shall be a violation of this chapter, and it shall be prohibited for any person: (b) To fail to obtain any permit required by this chapter or by rule or regulation, or to violate or fail to comply with any rule, regulation, order, permit, or certification adopted or issued by the department pursuant to its lawful authority.

Corrective Action: Please complete the improvement actions and notify the department by email once completed.

2.2 Observation: At the time of inspection the leaks had been patched but are still have minor seepage in four areas of the plant. The grit has not been removed from the surge tank which could be a partial cause to the excessive foaming throughout the facility aeration basins.

3. Laboratory: In-Compliance

Contract Lab Name and Certification #	Test America
Facility DOH Certification #	E-84282

4. Sampling: In-Compliance

Sampling conducted during inspection?	Yes
Sampling observed during inspection?	No
Sampling conducted at locations identified by the permit?	Yes
Safe access to sampling locations?	Yes

4.1 Observation: At the time of inspection the operator took a total chlorine residual of .5 mg/L and a pH sample of 7.4. Samples were pulled from the correct sampling location of EFA-1, chlorine contact chamber effluent.

5. ♦Records and Reports: In-Compliance

Documents/Records reviewed	Time frame
Discharge Monitoring Reports (DMRs)	9/01/2018 to 9/30/2019

5.1 Deficiency: The Annual Average Daily Flow (AADF) as computed from the Discharge Monitoring Reports (DMRs) from October 2018 was .40 million gallons per day (MGD), which exceeded the plant design capacity of .099 MGD.

Rule/Permit Reference: Chapter 62-620.610(18)(a), F.A.C. - Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.

Corrective Action: The exceedance was reported on the DMR as required. No other flow exceedances were noted during the DMR review period. No further action is required at this time.

5.2 Observation:

- There is no RPZ on site.
- A copy of the operation and maintenance manual was available on site.
- A valid operator certification was on site for Jerry Padrick (C-0007051) and Eva Padrick (D-0022210) with both expiring on April 30th, 2021.
- The operators log book was bound and properly numbered. All sampling and maintenance were logged.
- The operator is meeting the onsite staffing requirements of five days per week plus one weekend day for a total of a half hour each day.

6 **Facility Site Review:** In-Compliance

6.2 Observation: *Access Control*- The facility was fenced, locked, and had the appropriate advisory signs. There were no odors, or excessive noise noted. There is no RPZ on site. There was some minor seepage in four areas on the east side of the plant. There was corrosion noted on the piping across the top of the facility. The operator notes it is scheduling to be painted.

6.3 Observation: *Headworks*- Influent comes in from the lift station through the bar screen and into the surge tank. The surge tank contains two operational pumps. Debris is cleaned from bar screen each visit and disposed of into a covered screening container.

6.4 Observation: *Aeration*- The facility contains three aeration basins. There are two operational blowers on site. Each blower had belt guards. The basins appeared to be adequately mixing however there was excessive foam throughout the basins. The RAS was in the correct position. The color was brown to dark brown. The operator notes a surfactant issue and a small air leak that is scheduled to be patched.

6.5 Observation: *Clarifier*- The facility contains one clarifier. The clarifier had some ashing. The stilling was clean, and the simmer was operational. The weirs were level and without fouling. The effluent leaving the weir appeared clear.

6.6 Observation: *Disinfection/ Chlorine Contact Chamber*- The facility contains one chlorine contact chamber with baffles. Sodium hypochlorite is used for disinfection. There is one Stenner hypo pump that was operational. Effluent leaving the chamber was clear.

6.7 Observation: *Lift Station*- The facility contains one lift with two operational pumps. The lift station is within the facility fence. Audible and visual alarms were present.

6.8 Observation: *Digestor*- The facility contains two sludge holding basins. One is smaller and used as needed. Each digestor had sufficient storage, no odors, and no vectors were detected.

6 **Flow Measurement:** In-Compliance

Flow meter present and location as per permit?	Yes
Easy access to flow meter?	Yes
Date of last flow meter calibration	December 18, 2018

6.1 Observation: The flow calibration is done annually by Jerry Padrick.

7 ♦**Operation and Maintenance:** In-Compliance

Facility being operated as per permit?	Yes

8 ♦**Effluent Quality:** In-Compliance

DMRs review period	9/30/2018-8/31/2019
Any exceedances?	No

9 ♦**Effluent Disposal:** In-Compliance

Facility discharging?	Yes
Discharge location(s) as per permit?	Yes

9.1 Observation: The facility contains four Rapid Infiltration Basins (RIBs) along the powerline easement. They are fenced with signage at each entry point. The berms were maintained and without excessive vegetation. Each RIB had sufficient storage.

10 **Biosolids:** In-Compliance

10.1.1 Observation: At the time of inspection the most recent biosolid hauling record on site was from June 28th, 2019. All Service Sanitation hauled 4,000 gallons of sludge.

11 ♦**Groundwater Quality:** In-Compliance

DMRs review period	09/01/2018 to 09/30/2019
Any exceedances?	See Observation
All monitoring wells accessible, secured & locked?	See Observation

11.1 Observation: Prior to inspection there was no monitoring well sampling data in the data base past the first part of 2018. On inspection entry the operator provided a hard copy of the most recent sampling data. This copy was turned in to the front desk for data entry. There does not appear to be any exceedances. At the time of inspection, I was able to access one monitoring well on the south west side of the RIBs. The well was locked and had the concrete pad but was not numbered. It was recommended to address the rust on the outside of the piping.

12 ♦**SSO Survey:** In-Compliance

12.1 Observation: During the review period of September 01, 2018 through September 30, 2019 there were no spills reported.

13 **Other:** Not Applicable

FLORIDA DEPARTMENT OF
Environmental Protection

CENTRAL DISTRICT OFFICE
3319 MAGUIRE BLVD., SUITE 232
ORLANDO, FLORIDA 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

April 10, 2020

Thad Terry, Owner
Sun Lake Estates Homeowners Association
5600 N US Highway 1
Cocoa, FL 32927

Re: Return to Compliance
Sun Lake Estates WWTF
DW FLA010353
Brevard County

Dear Mr. Terry:

Department personnel conducted a review of the response to the Compliance Assistance Offer Letter issued November 14, 2019. Based on the information provided in your response, the facility was determined to have resolved the identified issues and has returned to compliance with the Department's rules and regulations.

The Department appreciates your efforts to maintain this facility in compliance with state and federal rules. Should you have any questions or comments, please contact Carolyn Hall at 407-897-4114 or via e-mail at Carolyn.X.Hall@floridaDEP.gov.

Sincerely,

David Smicherko

David Smicherko, Manager
Central District
Florida Department of Environmental Protection

cc: JERRY PADRICK jpadrick67@bellsouth.net

COMET ENTRY DATE
_ _ / _ _ / _ _

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	5/27/2010 9:00
SHARPES BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	5/27/2010 10:00

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type: C | E | I | | **Samples Taken(Y/N):** **@ Sample ID#:** **Samples Split (Y/N):**

☒ **Domestic** ☐ **Industrial** **Were Photos Taken(Y/N): N** **@ Log book Volume :** **@ Page**

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦ "

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1.♦Permit	IC	3. Laboratory	NC	6. Facility Site Review	IC	9. ♦Effluent Quality
IC	2.♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10.♦Effluent Disposal
		IC	5.♦Records & Reports	IC	8.♦Operation & Maintenance	IC	11. Residuals/Sludge
	13. Other:					NC	12. Groundwater

Facility and/or Order Compliance Status: ☒ In-Compliance ☐ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions:

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)893-3313	June 30.2010
@ Signature of Reviewer	**District Office/Phone Number**	**Date**
CLARENCE ANDERSON Clarence Anderson	Central (407)893-7876	7/19/10

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 issued 10/6/05 expires 10/1/2010.

RECORDS AND REPORTS: In compliance.
Bound logbook on-site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on-site. Discharge Monitoring Reports (DMRs), lab results and chains of custody are to be stored on site for Department review. DMRs have correct information submitted. Operations to correct DMRs reporting regarding percent capacity and qualifiers. Corrections to be resubmitted to the Department.

LABORATORY: In compliance.
PACE Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).

FACILITY SITE REVIEW: In compliance.
Access: Locked gate with fence.
Signs posted.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
Brown foam noted. Slight earthy odor. Aerobic digester.
Clarifier: Continuing to repair slight leakage noted on the east wall of the digester. Chlorine added to weirs for algae control.
CCC: Hypochlorination. Operations continue to seal slight leakage on outer walls of the CCC.
Well water utilized for cleanup.

FLOW MEASUREMENT: In compliance.
Stevens flow meter with chart recorder. Chart recorder not being utilized due to low flows.
Documentation of calibration for the flow meter was performed on 5/4/2010.

OPERATION AND MAINTENANCE: Facility maintained.

EFFLUENT: Clear. Minor. Review of the DMRs from by Orlando staff indicate from 1/09 to 3/10 the facility was in compliance.
TRC was 2.7 mg/L.

EFFLUENT DISPOSAL: In compliance.
0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds.
Saturation in ponds is excellent. 5 feet freeboard noted.

GROUND WATER: **Out of compliance.**
A review of the ground water files for this facility indicates the following deficiencies:
The Department has not received the groundwater monitoring reports for the fourth quarter of 2009 and first quarter of 2010. These reports were due by the end of October 2009 and the end of April 2010 respectively. Submit these reports as soon as possible.
Fecal coliform results were reported above the primary standard of 4 fecal coliform colonies per 100 milliliters (fcc/100mL) in the groundwater samples from all wells for the third quarter of 2009 at 10 fcc/100mL. Determine the cause of these concentrations and report this to the Department. If the groundwater samples were analyzed using

less than 25 mL of sample, report what changes the laboratory will make to meet the primary groundwater standard requirement.

RESIDUALS MANAGEMENT: In compliance.
Solids disposed of by American Bio-clean.

OTHER:

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

SENT VIA E-MAIL TO: matlantisinvest@cfl.rr.com

July 9, 2012

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION OCD-C-WW-12-0391
4865 LAKE ONTARIO DRIVE
COCOA, FLORIDA 32926

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On May 22, 2012, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. Please note the items listed below which need to be addressed:

1. The surge tank has accumulated sand and grit. It is recommended that these solids be removed from the tank.

2. It is recommended that a communitor be installed at the surge tank to control paper products that affect the treatment process.

3. Slight seepage of wastewater was noted discharging from cracks in the concrete structure of the wastewater plant. Continue to repair these cracks.

4. The north fence surrounding the percolation ponds has collapsed and is in need of repair.

5. A review of the groundwater files for this facility indicates the following deficiency: The Department has not received the groundwater monitoring reports for the third and fourth quarters of 2011 and first quarter of 2012. Submit these reports as soon as possible or report why the data is not available.

The Department requests a written response addressing the items listed above within 14 days from the date of this letter. Your response should include an explanation of any corrective actions that either been taken or that you plan to take. Please note that this letter and report, being part of the Departments investigation, is preliminary to agency action in accordance with Section 120.57(5), Florida Statutes. Please direct ground water questions to Marsha Johnson at (407) 897-4118. Any other questions should be addressed to Tom Powers at (407) 897-4165.

Sincerely,

Clarence Anderson

Clarence Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

CA/tp/aa

Enclosure: Inspection Report

cc: James McRoy, Public Service Commission, jmcroy@psc.state.fl.us
GW Section, Anil Desai, anil.desai@dep.state.fl.us

COMET ENTRY DATE
_ _ / _ _ / _ _

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	5/22/2012 11:00
SHARPES LAKE BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	5/22/2012 12:45

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type: [C] [E] [I] [ ] **Samples Taken(Y/N):** **@ Sample ID#:** **Samples Split (Y/N):**

☒ **Domestic** ☐ **Industrial** **Were Photos Taken(Y/N): N** **@ Log book Volume :** **@ Page**

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦ "

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1.♦Permit	IC	3. Laboratory	NC	6. Facility Site Review	NC	9. ♦Effluent Quality
IC	2.♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10.♦Effluent Disposal
		IC	5.♦Records & Reports	IC	8.♦Operation & Maintenance	IC	11. Residuals/Sludge
						NC	12. Groundwater
	14. Other:					NA	13. ♦SSO Survey

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)897-4165 or (321)229-8930(Cell)	June 28, 2012
@ Signature of Reviewer	**District Office/Phone Number**	**Date**
CLARENCE ANDERSON Clarence Anderson	Central (407)897-4166	7/6/12

Single Event Violation Code(s):

_____, _____, _____, _____, _____

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 issued 11/1/2010 expires 10/27/2015.

COMPLIANCE SCHEDULES: In compliance.

RECORDS AND REPORTS: In compliance.
Bound logbook on-site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on-site. Discharge Monitoring Reports (DMRs), lab results and chains of custody are to be stored on site for Department review. DMRs have correct information submitted.

LABORATORY: In compliance.
PACE Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).
The influent and effluent composite samplers were not programmed to collect flow-proportioned composite samples. Samples are to be collected in accordance with the Department's Standard Operating Procedures FS 2400 2.28 Wastewater Sampling.
The Department is in the process of reviewing your request for a minor permit revision to address the flow-proportioned composite sampling requirement.

FACILITY SITE REVIEW: **Out of compliance.**
Access: Locked gate with fence.
Signs posted.
The surge tank has accumulated sand and grit. It is recommended that these solids be removed from the tank.
It is recommended that a communitor be installed at the surge tank to control paper products that affect the treatment process.
Slight seepage of wastewater was noted discharging from cracks in the concrete structure of the wastewater plant. Continue to repair these cracks.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
MLSS, chocolate brown. Slight earthy odor. Aerobic digester.
Clarifier: Chlorine added to weirs for algae control.
CCC: Hypochlorination. Effluent clear in chamber.
Well water utilized for cleanup.

FLOW MEASUREMENT: In compliance.
Dual effluent totalizers located at pump station. Documentation of calibration for the flow meter was performed on 1/2012.

OPERATION AND MAINTENANCE: In compliance.
Continue to seal/repair seepage noted on the east wall of the digester and chlorine contact chamber.

EFFLUENT QUALITY: In compliance.
Clear. Minor. Review of the DMRs by Orlando staff from 2/2011 to 3/2012 indicated:
The contract laboratory did not perform analysis for various parameters collected in June 2011 and August 2011. Operations have since changed to a certified laboratory to correct this concern.
TRC was 1.5 mg/L.

EFFLUENT DISPOSAL: **Out of compliance.**

0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds. Saturation in ponds is excellent. 4 feet freeboard noted.
The north fence surrounding the percolation ponds has collapsed and is in need of repair.

GROUND WATER: **Out of compliance.**
A review of the groundwater files for this facility indicates the following deficiency:
The Department has not received the groundwater monitoring reports for the third and fourth quarters of 2011 and first quarter of 2012.

RESIDUALS MANAGEMENT: In compliance.
Solids disposed of by Bill Curry Septic to BCSUD South Central RMF.

OTHER:

Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

SENT VIA E-MAIL TO: matlantisinvest@cfl.rr.com

July 9, 2012

SUN LAKE ESTATES HOMEOWNERS ASSOCIATION OCD-C-WW-12-0391
4865 LAKE ONTARIO DRIVE
COCOA, FLORIDA 32926

ATTENTION THAD TERRY
OWNER

Brevard County - DW
Sun Lake Estates WWTF
Wastewater Facility - Permit No. FLA010353
Noncompliance Letter

Dear Mr. Terry:

On May 22, 2012, Department personnel conducted a routine inspection of your wastewater facility. A copy of the inspection report is enclosed for your review. Please note the items listed below which need to be addressed:

1. The surge tank has accumulated sand and grit. It is recommended that these solids be removed from the tank.

2. It is recommended that a communitor be installed at the surge tank to control paper products that affect the treatment process.

3. Slight seepage of wastewater was noted discharging from cracks in the concrete structure of the wastewater plant. Continue to repair these cracks.

4. The north fence surrounding the percolation ponds has collapsed and is in need of repair.

5. A review of the groundwater files for this facility indicates the following deficiency: The Department has not received the groundwater monitoring reports for the third and fourth quarters of 2011 and first quarter of 2012. Submit these reports as soon as possible or report why the data is not available.

The Department requests a written response addressing the items listed above within 14 days from the date of this letter. Your response should include an explanation of any corrective actions that either been taken or that you plan to take. Please note that this letter and report, being part of the Departments investigation, is preliminary to agency action in accordance with Section 120.57(5), Florida Statutes. Please direct ground water questions to Marsha Johnson at (407) 897-4118. Any other questions should be addressed to Tom Powers at (407) 897-4165.

Sincerely,

Clarence Anderson

Clarence Anderson
Environmental Supervisor
Wastewater Compliance/Enforcement

CA/tp/aa

Enclosure: Inspection Report

cc: James McRoy, Public Service Commission, jmcroy@psc.state.fl.us
GW Section, Anil Desai, anil.desai@dep.state.fl.us

COMET ENTRY DATE
_ _ / _ _ / _ _

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	5/22/2012 11:00
SHARPES LAKE BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	5/22/2012 12:45

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
SUN LAKE ESTATES HOME OWNERS ASSOCIATION	OWNER		216/871-6445
P.O. BOX 430			
SHARPES, FL 32959			

Inspection Type: [C] [E] [I] [ ] **Samples Taken(Y/N):** **@ Sample ID#:** **Samples Split (Y/N):**

☒ **Domestic** ☐ **Industrial** **Were Photos Taken(Y/N): N** **@ Log book Volume :** **@ Page**

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE or Blank = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦ "

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1.♦Permit	IC	3. Laboratory	NC	6. Facility Site Review	NC	9. ♦Effluent Quality
IC	2.♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10.♦Effluent Disposal
		IC	5.♦Records & Reports	IC	8.♦Operation & Maintenance	IC	11. Residuals/Sludge
						NC	12. Groundwater
	14. Other:					NA	13. ♦SSO Survey

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: NONCOMPLIANCE LETTER

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
TOM POWERS T. Powers	Central (407)897-4165 or (321)229-8930(Cell)	June 28, 2012
@ Signature of Reviewer	**District Office/Phone Number**	**Date**
CLARENCE ANDERSON Clarence Anderson	Central (407)897-4166	7/6/12

Single Event Violation Code(s):

_____, _____, _____, _____, _____

INSPECTION COMMENTS

An existing 0.135 MGD annual average daily flow (AADF) design capacity extended aeration wastewater treatment facility consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion.

PERMIT: In compliance.
FLA010353 issued 11/1/2010 expires 10/27/2015.

COMPLIANCE SCHEDULES: In compliance.

RECORDS AND REPORTS: In compliance.
Bound logbook on-site. C-operator on site 1/2 an hour a day for 5 days a week and one weekend visit. Copy of permit on-site. Discharge Monitoring Reports (DMRs), lab results and chains of custody are to be stored on site for Department review. DMRs have correct information submitted.

LABORATORY: In compliance.
PACE Laboratory. Department of Health certified.

SAMPLING: In compliance.
Grab samples are being taken for the influent and effluent. An 8-hour composite sample of influent and effluent is being performed for nitrates, Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) and Total Suspended Solids (TSS).
The influent and effluent composite samplers were not programmed to collect flow-proportioned composite samples. Samples are to be collected in accordance with the Department's Standard Operating Procedures FS 2400 2.28 Wastewater Sampling.
The Department is in the process of reviewing your request for a minor permit revision to address the flow-proportioned composite sampling requirement.

FACILITY SITE REVIEW: **Out of compliance.**
Access: Locked gate with fence.
Signs posted.
The surge tank has accumulated sand and grit. It is recommended that these solids be removed from the tank.
It is recommended that a communitor be installed at the surge tank to control paper products that affect the treatment process.
Slight seepage of wastewater was noted discharging from cracks in the concrete structure of the wastewater plant. Continue to repair these cracks.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
MLSS, chocolate brown. Slight earthy odor. Aerobic digester.
Clarifier: Chlorine added to weirs for algae control.
CCC: Hypochlorination. Effluent clear in chamber.
Well water utilized for cleanup.

FLOW MEASUREMENT: In compliance.
Dual effluent totalizers located at pump station. Documentation of calibration for the flow meter was performed on 1/2012.

OPERATION AND MAINTENANCE: In compliance.
Continue to seal/repair seepage noted on the east wall of the digester and chlorine contact chamber.

EFFLUENT QUALITY: In compliance.
Clear. Minor. Review of the DMRs by Orlando staff from 2/2011 to 3/2012 indicated:
The contract laboratory did not perform analysis for various parameters collected in June 2011 and August 2011. Operations have since changed to a certified laboratory to correct this concern.
TRC was 1.5 mg/L.

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0.206 MGD AAD rapid rate restricted access percolation ponds. (R-001). Consists of (4) dual cell percolation ponds. Saturation in ponds is excellent. 4 feet freeboard noted.
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GROUND WATER: **Out of compliance.**
A review of the groundwater files for this facility indicates the following deficiency:
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RESIDUALS MANAGEMENT: In compliance.
Solids disposed of by Bill Curry Septic to BCSUD South Central RMF.

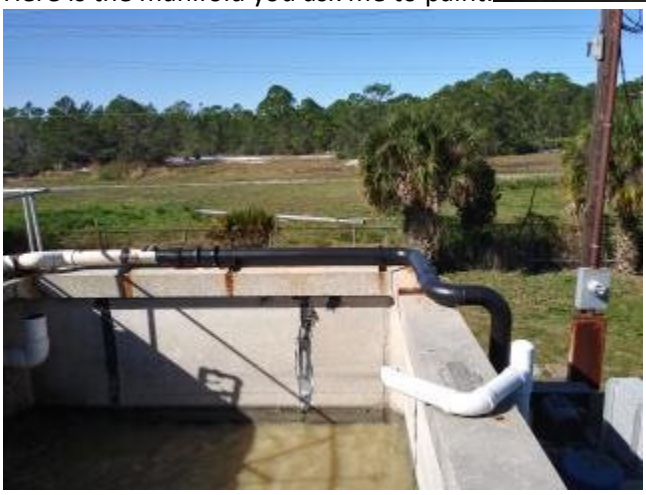
OTHER:

Nicholas Henslee

From: JERRY PADRICK <jpadrick67@bellsouth.net>
Sent: Tuesday, January 28, 2020 12:25 PM
To: Hall, Carolyn X
Subject: Painted Manifold



Here Is the manifold you ask me to paint.



Nicholas Henslee

From: JERRY PADRICK <jpadrick67@bellsouth.net>
Sent: Sunday, March 22, 2020 11:08 AM
To: Hall, Carolyn X
Subject: Sand and grit Removal

Hi Carolyn I left you a voice mail Friday, here are the before and after pictures. Also the material went to Merritt Island regional sewer plant. The land fill would not take it even though they are a class A site.





WASTEWATER MALFUNCTION / ABNORMAL EVENT REPORT

This form is provided for your convenience only. You may complete this form and email to DEP_CD@dep.state.fl.us. If the spill is greater than 1000 gallons you MUST call the State Watch Office at 1-800-320-0519. All items with an asterisk (*) are required by rule and must be completed.

*FACILITY NAME: Sunlake Estates
*FACILITY TYPE: Choose One
*PERMIT NUMBER: FLA 010353-007-DW3P
*COUNTY: Choose One
*REPORTER NAME: Jerry Padrick
*RESPONSIBLE PARTY: TKCB Thad Terry
*REPORTER ADDRESS: 4220 Temple St Cocoa 32926
*RESPONSIBLE PARTY ADDRESS: 5600 North Hwy 1
*REPORTER PHONE: 321-508-4714
*RESPONSIBLE PARTY PHONE: 321-639-1124
*DEP: ☒ *DATE: 9-12-20 *TIME: 10:00 AM *PERSON CONTACTED: Carolyn Hall
*STATE WATCH OFFICE: ☐ *DATE: _____ *TIME: _____ INCIDENT NUMBER: _____

SPILL INFORMATION

*SPILL CHARACTERISTIC	*SOURCE		*AREA AFFECTED
☒ UNTREATED/RAW	☐ LIFT STATION # _____	☐ SURGE TANK	☒ STORM WATER
☐ PARTIALLY TREATED	☒ MANHOLE	☐ AERATION TANK	☐ SURFACE WATER/ _____
☐ TREATED	☐ FORCE MAIN/GRAVITY LINE	☐ CLARIFIER	☒ GROUND
☐ REUSE/RECLAIMED	☐ DISPOSAL SYSTEM	☐ DIGESTER	☐ CONTAINMENT AREA
☐ OTHER _____	☐ OTHER _____	☐ CHLORINE CONTACT TANK	☐ OTHER/ _____

*DATE / TIME DISCHARGE /MALFUNCTION OCCURRED: 9-12-20 1:30 PM
*AMOUNT OF DISCHARGE: 500-700 GALLONS
*AMOUNT RECOVERED: 0 GALLONS
*ONGOING: ☐ * CEASED: ☒

*PHYSICAL LOCATION/ ADDRESS/ LATITUDE & LONGITUDE:

* MALFUNCTION/CAUSE

		WEATHER
☐ PUMP FAILURE	☐ LINE BREAK	☐ LIGHTNING
☐ BLOWER FAILURE	☐ FATS/OILS/GREASE BLOCKAGE	☒ HEAVY RAINFALL
☐ SWITCH/TIMER FAILURE	☒ OTHER CLOG OR BLOCKAGE	☐ HIGH WINDS
☐ CLARIFIER FAILURE	☐ POWER OUTAGE/FAILURE	☐ TROPICAL STORM: Sally Bands
☐ FILTER BYPASS/FAILURE	☐ ACCIDENT	☐ HURRICANE: _____
☐ DISINFECTION SYSTEM FAILURE	☐ UNKNOWN	☐ OTHER: _____
☐ OTHER _____	☐ OUTSIDE CONTRACTOR Septic illegal Dump	

* EXPLAIN:

* EFFLUENT LIMIT VIOLATIONS

☐ Cl_2 _____ MG/L	☐ TURBIDITY _____ NTU	☐ pH _____ SU
☐ TSS _____ MG/L	☐ NO_3 _____ MG/L	☐ $CBOD_5$ _____ MG/L
☐ OTHER _____	☐ FECAL COLIFORMS _____ CFU/100ML	☐ ABNORMAL FLOW _____ MGD

* CORRECTIVE / REMEDIAL ACTION BEING TAKEN

☐ LINE REPAIRED	☐ CONTAINED ON-SITE	☐ RESTORED POWER
☒ DISINFECTED WITH Lime	☐ SAMPLES TAKEN (IF SURFACE WATERS IMPACTED)	☐ AUXILIARY POWER SYSTEM ON-LINE
☐ WASHED DOWN	☐ SIGNS POSTED NEAR AFFECTED WATERS	☐ BACK-UP ON-LINE
☐ VAC TRUCK/DESTINATION _____	☐ REPAIRED/REPLACED EQUIPMENT	☐ OTHER _____

* REMEDIAL ACTIONS BEING TAKEN / ESTIMATED TIME FOR COMPLETION OF REPAIRS:

330 PM Plumber Cleaned Manhole Completly fill with Sant. Wipes

PREVENTATIVE PLANS/MEASURES

PLEASE DESCRIBE HOW YOU INTEND TO PREVENT SIMILAR OCCURRENCES IN THE FUTURE:

I handed out my card To Nearby home owners & offered a 25^{oo} Reward if they See That Truck Again. This has never happed in 20 years as operaton.

Comet Gr 7/27 CA 7/27 7/28

RECEIVED-DEP
CENTRAL DISTRICT OFFICE
2012 JUL 24 AM 10: 01

DATE: July 23, 2012

TO: DEP (CLARENCE ANDERSON)

FROM: JERRY PADRICK

RE: SUNLAKE ESTATES WASTEWATER PLANT (OCD-C-WW-12-0391)

Mr. Anderson,

This letter is a response to the inspection report conducted on 05/22/2012 by Tom Powers. The following corrective action will be taken.

1. The grit and sand in the surge tank will be cleaned and we have received a bid of over 3,000 dollars to do so; however, as you may be aware, we are in the process of obtaining an increase of fees from our customers via the Public Service Commission. This will be our first increase ever and the plant has been in operation since1983. We are requesting that we be allowed the time to receive this increase to cover the cost. As per Public Service Commission, this should take place by the first of the year of 2013. This cost has been submitted to the Public Service Commission.
2. As stated in number 1, we are also requesting time for the communitor as well.
3. As per the seepage of wastewater, I will be repairing as needed. They are not bad leaks but I will keep an eye on it.
4. As stated in number 1, we have received 3 bids for the entire perimeter fence, averaging 6500 dollars, including the north fence to be repaired when we receive the go ahead from the Public Service Commission, but for now we will temporarily fix the north fence.
5. Ground water deficiencies have been corrected and sent to Marsha Johnson over a week ago.

Thank you. Should there be any further questions, please contact me.

Jerry Padrick (321-508-4714) or Thad Terry (321-639-1124)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL DISTRICT
3319 MAGUIRE BOULEVARD, SUITE 232
ORLANDO, FLORIDA 32803

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

September 16, 2013

THAD TERRY, OWNER
SUN LAKE ESTATES HOMEOWNERS ASSOCIATION
4865 LAKE ONTARIO DRIVE
COCOA, FLORIDA 32926
matlantisinvest@cfl.rr.com

Re: Sun Lake Estates WWTF
DW permit # FLA010353
Brevard County
OCD-CAP-13-3283

Dear Mr. Terry:

Department personnel conducted a compliance inspection of the above-referenced facility on July 16, 2013. Based on the information provided during and/or following the inspection, the facility was determined to be in compliance with the Department's rules and regulations. A copy of the inspection report is attached for your records.

The Department appreciates your efforts to maintain this facility in compliance with state and federal rules. Should you have any questions or comments, please contact Tom Powers at 321-229-8930 or by via e-mail at tom.powers@dep.state.fl.us.

Sincerely,

Gary Miller, Manager
Central District
Florida Department of Environmental Protection

Enclosure: Inspection Report

COMET ENTRY DATE
_ _ / _ _ / _ _

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
SUN LAKE ESTATES WWTF	FLA010353	BREVARD	07/16/2013 9:00
SHARPES LAKE BLVD		Phone	@ Exit Date/Time
SHARPES, FL		321/639-0370	07/16/2013 11:30

Name(s) of Field Representatives(s)	Title	Phone
THAD TERRY	PRESIDENT	321/631-8440
JERRY PADRICK	OPERATOR	321/508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
THAD TERRY SUN LAKE ESTATES HOME OWNERS ASSOCIATION 5600 US HIGHWAY 1 SHARPES, FL 32927	OWNER		321/631-8440

Inspection Type: C | E | I | **Samples Taken(Y/N):** **@ Sample ID#:** **Samples Split (Y/N): N**

☒ **Domestic** ☐ **Industrial** **Were Photos Taken(Y/N): N** **@ Log book Volume :** **@ Page**

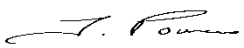
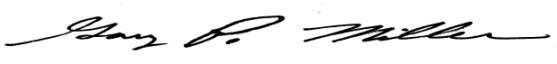
FACILITY COMPLIANCE AREAS EVALUATED

IC: In Compliance; MC: Minor Out of Compliance; NC: Out of Compliance SC: Significant Non-Compliance;
NA: Not Applicable; NE or Blank: Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed When Out of Compliance Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1.♦Permit	IC	3. Laboratory	IC	6. Facility Site Review	IC	9. ♦Effluent Quality
IC	2.♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10.♦Effluent Disposal
		IC	5.♦Records & Reports	IC	8.♦Operation & Maintenance	IC	11. Biosolids/Sludge
						NE	12. Groundwater
NE	14. Other:					NE	13. SSO Survey

Facility and/or Order Compliance Status: ☒ In-Compliance ☐ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions:

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Tom Powers 	CD 321-229-8930	08/08/2013
@ Signature of Reviewer Gary Miller 	District Office/Phone Number CD 407-897-4164	Date 9/13/13

Single Event Violation Code(s):
_____, _____, _____, _____, _____

INSPECTION REPORT SUMMARY

Facility Name: SUN LAKE ESTATES WWTF
Facility ID: FLA010353
Inspection Type: CEI/DW
Inspection Date: 07/16/2013

FACILITY BACKGROUND:

Facility Address: 616 Emerald Lake Drive, Cocoa Florida
Program/Permit Information: DW, permit issue date: 11/01/2010, expiration date: 10/27/2015
Treatment Summary: Extended Aeration Sewage Treatment Plant consisting of influent screening, flow equalization, aeration, clarification, chlorination, filtration, and aerobic digestion. Reuse consists of 4 dual cell percolation ponds.
Permitted Capacity: 0.135 MGD

1. **Permit:** RATING – In-Compliance

   Observations: Copy of permit located on-site.

2. **Compliance Schedules:** RATING – In-Compliance

   Observations: Operations continue to seal seepage cracks at the aeration basin and chlorine contact chamber.

3. **Laboratory:** RATING – In-Compliance

   Observations: Test America, Department of Health certified.

4. **Sampling:** RATING – In-Compliance

   Observations: Sampling point located at end of chlorine contact chamber. Operator performs required influent and effluent grab sampling. Effluent Carbonaceous Biochemical Oxygen Demand ($CBOD_5$), Total Suspended Solids (TSS) and fecal coliform are being sampled monthly. Annual effluent sampling being performed for nutrients. HACH DR 100 is utilized for total residual chlorine.

5. **Records and Reports:** RATING – In-Compliance

   Observations: Certified operator on site for 1/2 hour per day 5 days a week and on weekend visit. Records stored in locked shed. Discharge Monitoring Reports (DMRs) have been submitted for this review period.

   Please Note: A more efficient and paperless alternative to reporting discharge and groundwater monitoring data is available at http://www.edmr.dep.state.fl.us."

INSPECTION REPORT SUMMARY

6. **Facility Site Review:** RATING – In-Compliance

Observations: Access: Locked gate with fence. Signs posted.
Influent surge tank.
Dual lift station pumps.
Aeration: Bar screen. Marloff system with surge control. Two blowers, alternate.
MLSS, chocolate brown. Earthy odor. Aerobic digester.
Clarifier: Chlorine added to weirs for algae control.
CCC: Hypochlorination. Effluent clear in chamber.
Well water utilized for cleanup.

7. **Flow Measurement:** RATING – In-Compliance

Observations: Dual effluent totalizers located at pump station. Documentation of calibration for the flow meter was performed on 03/01/2013.

8. **Operation and Maintenance:** RATING – In-Compliance

Observations: Operation and Maintenance Manuals located in the office.

9. **Effluent Quality:** RATING – In-Compliance

Observations: Clear over weir at chlorine contact chamber. Review of the Discharge Monitoring Reports (DMRs) by Orlando staff from April 2012 through March 2013 were satisfactory.
At the time of the inspection, Total Residual Chlorine (TRC) was 0.70 mg/L.

10. **Effluent Disposal:** RATING – In-Compliance

Observations: 0.206 MGD AAD rapid rate restricted access percolation ponds (R-001). South fence is under repair. Consists of (4) dual cell percolation ponds. 3 to 4 feet freeboard noted. Disposal site to be mowed and cleared of vegetation quarterly.

11. **Biosolids/Sludge:** RATING – In-Compliance

Observations: Solids disposed of by Bill Curry Septic to BCSUD South Central RMF.

12. **Groundwater Quality:** RATING – Not Evaluated

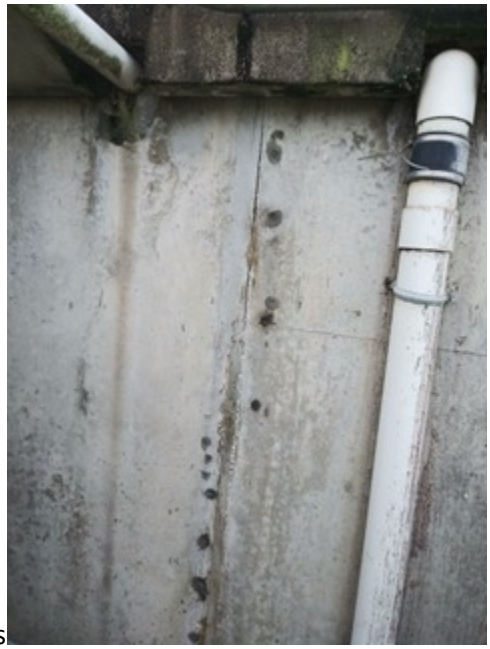
Observations: A groundwater review by the Department was not performed at this time. 3 monitoring surficial wells. Bi-annual sampling performed.

INSPECTION REPORT SUMMARY

13. **SSO Survey:** RATING – Not Evaluated
14. **Other:** RATING – Not Evaluated

Nicholas Henslee

From: JERRY PADRICK <jpadrick67@bellsouth.net>
Sent: Monday, January 13, 2020 3:55 PM
To: Hall, Carolyn X
Subject: Sunlake repair



Hi Carolyn here are some pictures of Sunlake's repair of wall leaks







FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTRAL DISTRICT
3319 MAGUIRE BOULEVARD, SUITE 232
ORLANDO, FLORIDA 32803-3767

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

March 30, 2015

Thad Terry, Owner
Sun Lakes Homeowners Association
5600 U.S. Highway 1 N
Sharps, Florida 32927

Re: Sun Lakes Estates Wastewater Treatment Facility (WWTF)
DW Facility ID # FLA010353
Brevard County
SPCD-CAP-15-3514

Dear Mr. Terry:

Department personnel conducted a Compliance Evaluation Inspection (CEI) of the above-referenced facility on February 17, 2015. Based on the information provided during and following the inspection, the facility was determined to be in compliance with the Department's rules and regulations. A copy of the inspection report is attached for your records, and any non-compliance items which may have been identified at the time of the inspection have been corrected.

The Department appreciates your efforts to maintain this facility in compliance with state and federal rules. Should you have any questions or comments, please contact Megan Leslie at 407-897-2922 or via e-mail at Megan.Leslie@dep.state.fl.us.

Sincerely,

Reggie Phillips, Manager
Central District
Florida Department of Environmental Protection

Enclosures: Inspection Report

cc: Jerry Padrick, JPadrick67@bellsouth.net

COMET ENTRY DATE

/ /

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
Sun Lakes Estates WWTF	FLA010353	Brevard	02/17/2015 08:30 AM
616 Emerald Lake Drive		Phone	@ Exit Date/Time
Cocoa, FL 32926-4648			02/17/2015 10:00 AM

Name(s) of Field Representatives(s)	Title	Phone
Jerry Padrick	Operator	321-508-4714

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
Thad Terry	President	321-508-4714	
Sun Lakes Estates Homeowners Association			
5600 US Highway 1			
Sharps, FL 32927			

Inspection Type: C | E | I | [ ] **Samples Taken(Y/N):** **@ Sample ID#: N/A** **Samples Split (Y/N): N/A**

☒ **Domestic** ☐ **Industrial** **Were Photos Taken(Y/N): N** **@ Log book Volume :** **@ Page**

FACILITY COMPLIANCE AREAS EVALUATED

IC: In Compliance; MC: Minor Out of Compliance; NC: Out of Compliance SC: Significant Non-Compliance;
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	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
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IC	2.♦Compliance Schedules	MC	4. Sampling	IC	7. Flow Measurement	MC	10.♦Effluent Disposal
		MC	5.♦Records & Reports	MC	8.♦Operation & Maintenance	IC	11. Biosolids/Sludge
						IC	12. Groundwater
NA	14. Other:					NE	13. SSO Survey

Facility and/or Order Compliance Status: ☐ In-Compliance ☒ Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions: Compliance Letter

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Megan Leslie (Megan Leslie)	407-897-2922	03/25/2015
@ Signature of Reviewer	**District Office/Phone Number**	**Date**
Reggie Phillips	407-897-4132	

Single Event Violation Code(s):

_____, _____, _____, _____, _____

INSPECTION REPORT SUMMARY

Facility Name: Sun Lakes Estates
Facility ID: FLA010353
Inspection Type: CEI
Inspection Date: 02/17/2015

FACILITY BACKGROUND:

Facility Address: 616 Emerald Lake Drive, Cocoa, FL 32926
Program/Permit Information: DW; Permit Issue Date: 11/01/2010; Expiration Date: 10/27/2015
Treatment Summary: Extended aeration domestic wastewater treatment plant consisting of flow equalization, influent screening, aeration, secondary clarification, chlorination, and aerobic digestion of residuals
Permitted Capacity: 0.099 MGD

1. **Permit:** RATING – In-Compliance
   1.1. Observations:
   A copy of the current permit was onsite.

2. **Compliance Schedules:** RATING – In-Compliance
   2.1 Observations:
   The current permit is valid until 10/27/2015. Please note the permit renewal application must be received by 04/27/2015, at least 180 prior to the expiration of the permit.

3. **Laboratory:** RATING – Not Evaluated

4. **Sampling:** RATING – Minor Out-of-Compliance
   4.1 **Deficiency:**
   The residual chlorine pocket colorimeter and the secondary standards were not being checked with the primary standards. This check must be performed annually.

   Permit/Rule or Other Reference:
   DEP SOP 001/01 FT 2000 3.2.3.2- Instruments with pre-set factory calibration should be verified with primary standards before first use and at least annually.
   DEP SOP 001/01 FT 2000 3.2.5.2- At a minimum, verify the values of the secondary standards annually or when the meter fails to meet verification requirements with secondary standard; more frequent calibration verifications are required for discharge permit compliance measurements or other regulatory requirements.

   Recommendations for Corrective Action:
   Follow the DEP SOP standards regarding the calibration check of the chlorine (Cl) meters and secondary standards. The operator confirmed that he ordered the primary standard materials to verify the chlorine pocket colorimeter and the secondary standards. Operator will notify the Department once the calibration verification is complete.

4.2 Observations:

The correct sampling locations identified in the permit were verified with the operator.

5. **Records and Reports:** RATING – Minor Out-of-Compliance

5.1 **Deficiency:**

Copies of the: laboratory certification, operations and maintenance manual, operator certification, and biosolids hauling records were not accessible on site.

Permit/Rule or Other Reference:

Permit Condition V.C.1.(a-d, f-j)- The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility: a) Records of all compliance monitoring information, including calibration monitoring instrumentation, a copy of the laboratory certification for at least three years from the date the sample was taken; b) Copies of all reports required by the permit; c) Records of all data, including reports and documents used to complete the application for the permit; d) Monitoring information, including a copy of the laboratory certification, related to the residual use and disposal activities; f) a copy of the current operation and maintenance manual; g) a copy of any required record drawings; h) copies of the licenses of the current certified operators; i) Copies of the logs and schedules showing plant operations and equipment maintenance; j) Records of the biosolids quantities, treatment, monitoring, and hauling for at least five years.

Recommendations for Corrective Action:

Maintain a copy of all required records on site. The operator scanned and emailed all documents for verification on February 27th, 2015. Verbally verified that copies have been left onsite.

5.2 Observations:

The operator's log book is on site and properly bound. The information was organized, relevant, and concise. The records indicate that the operator is visiting the facility six days a week and meeting all minimum time requirements to be onsite. The page numbers were not numbered, however the operator has since hand-number the pages.

5.3 Additional Comments:

Please Note: A more efficient and paperless alternative to reporting discharge monitoring reports is available at: http://www.dep.state.fl.us/water/wastewater/wce/edmr

6. **Facility Site Review:** RATING – Minor Out-of-Compliance

6.1 **Deficiency:**

One of the facilities blowers is non-operational.

Permit/Rule or Other Reference:

Chapter 62-620.610 (7)- The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of the permit.

Recommendations for Corrective Action:

Repair and reinstall the blower to the facility. The operator verified that the blower was fixed and operational as of February 20th, 2015.

6.2 Observations:

- *Access Control*- The facility grounds for the plant were properly locked and secured by a fence.
- *Aeration Basin/Blower*- The facility contains two blowers and two aeration basins. At the time of inspection only one of the two blowers was operational. The contents in the aeration chambers were light brown in color, appeared to be adequately mixed, and were receiving sufficient air. No excessive noise or odor were observed. A high quantity of foam was observed in the aeration basins, however the operator addressed it as being likely due to the recent fluctuations and decrease in temperature.
- *Clarifier*- The facility contains one clarifier. The skimmer was functioning and the surface of the clarifier was mostly clear. The weir appeared level, clean, and functioning properly.
- *Disinfection*- Sodium hypochlorite is used for disinfection on site. The chlorine contact chamber contained clear effluent, proper baffles, and lacked solids.
- *Digester/ Sludge Holding Tank*- The facility contains two sludge holding basins. There is sufficient storage available, no excessive odors were noticed, and no insects/vectors were observed.
- *Lift Station*- The facility contains one lift station. It is contained within the locking fence of the water treatment grounds.

7. **Flow Measurement:** RATING – In-Compliance

7.1 Observations:

The flow meter was annually calibrated on January 5th, 2015.

8. **Operation and Maintenance:** RATING – Minor Out-of-Compliance

8.1 **Deficiency:**

Minor leaks were observed on the outer wall of the E side of the clarifier and from the piping which exits from the N side of the lower chlorine contact chamber.

Permit/Rule or Other Reference:

Chapter 62-620.610 (7)- The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of the permit.

Recommendations for Corrective Action:

Repair leaks and continue maintenance to prevent future leaks. The operator verbally confirmed the leak from the chlorine contact chamber has been repaired as of March 16th, 2015. The leak from the east side of the clarifier has been additionally inspected by an engineer brought on site for the permit renewal process and a schedule for repairing the leak will be addressed in the compliance schedule of the new permit.

9. **Effluent Quality:** RATING – Minor Out-of-Compliance

9.1 **Deficiency:**

The chlorine results of the onsite grab sample taken from the chlorine contact chamber was 0.38 mg/L, which is below the required concentration of 0.50 mg/L.

Permit/Rule or Other Reference:
Chapter 62-600.440(4)(b)-Where chlorine is used for disinfection, the design shall include provisions for rapid and uniform mixing, and a total chlorine residual of at least 0.5 mg/L shall be maintained after at least 15 minutes of contact time at the peak hourly flow. Higher residuals or longer contact times may be needed to meet the operation criteria for basic disinfection. The chlorine residual and contact time selected for design shall be justified in the preliminary design report.

Recommendations for Corrective Action:
The operator was able to make adjustments to the facilities operation during the inspection. After the adjustments the sample results were 0.78 mg/L.

9.2 Observations:
The discharge monitoring report (DMR) review period was from July 2013-December 2014. No exceedances were reported during this the DMR review.

10. **Effluent Disposal:** RATING – Minor Out-of-Compliance

10.1 **Deficiency:**

The vegetation in the rapid infiltration basins (RIBs) is overgrown and not properly maintained.

Permit/Rule or Other Reference:
Chapter 62-610.523(6) - Rapid infiltration basins shall be routinely maintained to control vegetation growth and to maintain percolation capability by scarification or removal of deposited solids.

Recommendations for Corrective Action:
Remove vegetation from RIBs; maintain vegetation control and proper scarification to keep percolation capability. The operator began vegetation removal on March 9th, 2015 and has the remainder of the maintenance scheduled to be completed by March 31st, 2015.

10.2 Deficiency:

a- The access control to the effluent disposal area is not secure. The fence on the N side of the disposal area along Canaveral Groves Blvd is in need of repair.

b- Proper advisory signs indicating the area is an effluent disposal area are not posted.

Permit/Rule or Other Reference:
Chapter 62.610.518(1)- For all rapid-rate land application systems, appropriate advisory signs shall be posted around the site boundaries to designate the nature of the project area. Rapid infiltration basins shall be enclosed with a fence or otherwise designed with appropriate features to discourage the entry of animals and unauthorized persons.

Recommendations for Corrective Action:

a- Fix all fencing and properly secure access control to the effluent disposal area. The operator has scheduled for the fencing to be repaired by March 31st, 2015.

b- Install signs indicating the nature of the disposal area. The operator posted advisory signage indicating effluent disposal on March 9th, 2015.

10.3 Observations:

- The facility contains four dual-cell RIBs. Loading is rotated between the four RIBs using their E cells, the W cells of each RIB is only used for overflow during periods of excessive flow or rainfall.
- All RIBs were fully drained or nearly drained at the time of inspection. There is sufficient freeboard space available and no solids present in the disposal area.

11. **Biosolids/Sludge:** RATING – In-Compliance

11.1 Observations:

The operator verbally verified that biosolids are hauled approximately every 3-4 months to the Viera Regional Facility. Maintain records of biosolids hauling records on site for the required five years.

12. **Groundwater Quality:** RATING – In-Compliance

12.1 Observations:

A review of the groundwater monitoring reports indicated pH levels below the level of compliance (6.8-8.5 SU) in February 2014 at 5.78 SU and September 2014 at 5.67 SU. However the background well results indicated a natural background pH of 4.58 SU and 4.77 SU, respectively. The low pH from the compliance well is determined to be a result of the natural environmental conditions, rather than non-compliance or negligence by the facility.

13. **SSO Survey:** RATING – Not Evaluated

14. **Other:** RATING – Not Applicable

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Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

September 14, 2018

Thad Terry, Owner
Sun Lake Estates
616 Emerald Lake Drive
Cocoa, FL 32926

Re: Sun Lake Estates
DW Facility ID #FLA010353
Brevard County

Dear Mr. Terry:

Department personnel conducted an inspection of the above-referenced facility on August 14, 2018. Based on the information provided during and following the inspection, the facility was determined to be in compliance with the Department's rules and regulations. A copy of the inspection report is attached for your records, and any non-compliance items which may have been identified at the time of the inspection have been corrected.

The Department appreciates your efforts to maintain this facility in compliance with state and federal rules. Should you have any questions or comments, please contact Megan Warr at 407-897-2915 or via e-mail at Megan.Warr@FloridaDEP.gov.

Sincerely,

Reggie Phillips, Manager
Central District
Florida Department of Environmental Protection

Enclosure: Inspection Report

cc: FDEP: Reggie Phillips; Megan Warr
Jerry Padrick, JPadrick67@bellsouth.net

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTEWATER COMPLIANCE INSPECTION REPORT

Facility Name and Physical Address	WAFR ID	County	Entry Date	Entry Time
Sun Lake Estates 616 Emerald Lake Drive Cocoa, FL 32926	FLA010353	Brevard	8/14/2018	8:00 AM
	Facility Phone # 321-639-8440		**Exit Date** 8/14/2018	**Exit Time** 9:00 AM

LAT	28	°	25	‘	31.54	“
LONG	80	°	46	‘	42.66	“

Name(s) of Field Representatives(s) and Title	Operator Certification #	Email	Phone
Jerry Padrick, Operator	007051	JPadrick67@bellsouth.net	321-508-4714

Name & Address of Permittee / Designated Rep.	Title	Email	Phone
Thad Terry 5600 N US Highway 1 Cocoa, FL 32927	Owner	N/A	321-639-8440

Inspection Type	C	E	I		Samples Taken(Y/N): N	Sample ID#: N/A	Samples Split (Y/N) : N

X **Domestic** ☐ **Industrial**

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; MC = Minor Out of Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE = Not Evaluated
Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a “♦ ”

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1. ♦Permit	IC	3. Laboratory	IC	6. Facility Site Review	NC	9. ♦Effluent Quality
NC	2. ♦Compliance Schedules	IC	4. Sampling	IC	7. Flow Measurement	IC	10. ♦Effluent Disposal
		IC	5.♦Records & Reports	IC	8.♦Operation & Maintenance	IC	11. Biosolids
						IC	12. Groundwater
NA	14. Other					NA	13. ♦SSO Survey

Facility and/or Order Compliance Status:	☐ In-Compliance	X Out-Of -Compliance	☐ Significant-Out-Of-Compliance

Recommended Actions: Click or tap here to enter text.

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Megan Warr Megan Warr	Central District – 407-897-2915	9/13/2018
Name and Signature of Reviewer	**District Office/Phone Number**	**Date**
Reggie Phillips	Central District – 407-897-4132	9/13/2018

Single Event Violations				
Check for Yes	**Evaluation Area**	**Description**	**Finding Description**	**Finding ID**
☐	Effluent Disposal	General	Operation of unpermitted disposal system at a permitted facility.	EDUN
☐	Laboratory	General	The laboratory is not certified by the Department of Health.	LNCE
☐	Permit	General	Unauthorized discharge from the collection system with a high potential for water quality or health impacts	UNBP
☐	Permit	General	The facility is operating without a wastewater permit.	UPHI
☐	Records and Reports	General	Falsification of any record or report	FARR
☐	Records and Reports	General	The Permittee failed to report noncompliance to the Department within 24 hours as required by 62-620.610(20), F.A.C.	RSWP

Facility Treatment Summary: 0.099 million gallon per day (MGD) annual average daily flow (AADF) permitted capacity extended aeration domestic wastewater treatment plant consisting of flow equalization, influent screening, aeration, secondary clarification, chlorination, and aerobic digestion of biosolids.

1. Permit: In-Compliance

Current Permit available on-site?	Yes
Date Permit issued	10/28/2015
Date Permit Expires	10/27/2020
Permit Renewal Application due by	4/30/2020
Administrative or Judicial Orders?	N/A

1.1 Additional Comments: Please note the permit renewal application due date in the table above. A complete permit renewal application must be submitted at least 180 days before the expiration date of this permit.

2. Compliance Schedules: Out-of-Compliance

Compliance Schedule in Permit met?	No
Compliance Schedules in Order are being met?	Not Applicable

2.1 Deficiency:

Leaks are observed on the east side of the clarifier.

Rule/Permit Reference:
Permit Condition VI.1.2- Repair tank leaks.

Corrective Action:
Repair leaks from tank. The operator provided photos on 9/12/18 showing that all tank leaks have been repaired. No further corrective action required at this time.

2.2 Observation:

- The additional items noted in the compliance schedule items had been completed at the time of inspection.

3. Laboratory: In-Compliance

Contract Lab Name and Certification #	Test America, Savannah – E87052 Test America, Tampa – E84282 Environmental Conservation Lab Inc. (ENCO) – E83182
Facility DOH Certification #	N/A

4. Sampling: In-Compliance

Sampling conducted during inspection?	No
Sampling observed during inspection?	Yes

Sampling conducted at locations identified by the permit?	Yes
Safe access to sampling locations?	Yes

4.1 Observation:

- Chlorine residual 0.58 mg/L at the time of inspection.
- Chlorine meter is verified daily with secondary standards. Standards expiration date: May 2020.

5. Records and Reports: In-Compliance

Documents/Records reviewed	Timeframe
Discharge Monitoring Reports (DMRs)	From 08/01/17 to 07/31/18

5.1 Observation:

- The DMRs throughout the above stated review period were all received by the Department on time and complete.
- The operators log book was properly bound with number pages. The records are organized, concise, and include sampling results and relevant maintenance. Entries indicate the operator is visiting the site six days per week and meeting the minimum onsite time requirement per the permit.
- The flow meter calibration records were available onsite. Calibration last performed 8/9/2018.
- The operations and maintenance manual is available onsite.
- The facility utilizes well water, therefore no RPZ certification is applicable for the site.
- The operator license for Jerry Padrick is valid and available onsite. Class C license number 007051.

6. Facility Site Review: In-Compliance

6.1 Observation:

- *Access Control*- The facility grounds for the plant were properly locked and secured by a fence.
- *Headworks*- The facility contains one manual barscreen. The headworks is cleaned approximately twice per week and screenings are placed into a covered container.
- *Aeration Basin/Blower*- The facility contains two blowers and two aeration basins. Both blowers are operational and have proper belt guards. The contents in the aeration chambers were light brown in color, appeared to be well mixed, and all aerators were operational. No excessive noise or odor were observed. Foam was observed in the aeration basins, however the operator attributed the foam due to infiltration/inflow (I/I) caused by a recently damaged manhole which was properly reported on the DMR.
- *Clarifier*- The facility contains one clarifier. The skimmer was functioning and the surface of the clarifier was mostly clear. The weir appeared level, clean, and to be functioning properly.

- *Disinfection*- Sodium hypochlorite is used for disinfection on site. The chlorine contact chamber contained clear effluent, proper baffles, and lacked solids.
- *Digester/ Sludge Holding Tank*- The facility contains a two-stage sludge holding basins. There is sufficient storage available, no excessive odors were noticed, and no vectors were observed.
- *Lift Station*- The facility contains one lift station. It is contained within the locking fence of the water treatment grounds with a visual alarm.
- No filtration is applicable at this facility.

7. Flow Measurement: In-Compliance

Flow meter present and location as per permit?	Yes
Easy access to flow meter?	Yes
Date of last flow meter calibration	08/09/18

8. Operation and Maintenance: In-Compliance

Facility being operated as per permit?	Yes

9. Effluent Quality: Out-of-Compliance

DMRs review period	From 08/01/17 to 07/31/18
Any exceedances?	Yes

9.1 Deficiency:

The following exceedances were noted during the review period:

Month	Monitoring Location	Parameter	Result	Limit (mg/L)
October 2017	R001	Flow	0.107 MGD	0.099 MGD
June 2018	R001	Total Nitrate	16.0 mg/L	12.0 mg/L

Rule/Permit Reference:

Permit Condition I(A)1 - During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to direct reclaimed water to Reuse System R-001. Such reclaimed water shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.B.7

Corrective Action:

The flow exceedance is attributed to Hurricane Irma. Per the DMR and operator comments, the Nitrate exceedance was a result of an I/I issue due to a manhole damaged during roadwork done by an unrelated party. The manhole has since been repaired and no continual issues have been observed. No further corrective actions are requested at this time.

10. Effluent Disposal: In-Compliance

Facility discharging?	Yes
Discharge location(s) as per permit?	Yes

10.1 Observation:

- The facility contains four dual-cell rapid infiltration basins (RIBs). Loading is rotated between the four eastern cells, with the western cells connected via an overflow for periods of excessive wet weather or high flow.
- All RIBs were fully drained at the time of inspection. Vegetation is well maintained.

11. Biosolids: In-Compliance

11.1 Observation:

- All Service Sanitation hauls biosolids approximately every 6-8 weeks to the BCUD Viera Regional Facility.
- Biosolids hauling records are maintained onsite. Last hauled on 8/10/2018 per onsite records.

12. Groundwater Quality: In-Compliance

DMRs review period	From 08/01/17 to 07/31/18
Any exceedances?	Yes
All monitoring wells accessible, secured & locked?	Yes

12.1 Observation:

- A review of the groundwater monitoring reports indicated pH levels below the level of compliance (6.8-8.5 SU) in May 2018 at 6.0 SU. However the background well results indicated a natural background pH of 3.8 SU. The low pH from the compliance well is determined to be a result of the natural environmental conditions, rather than non-compliance or negligence by the facility.

13. SSO Survey: Not Applicable

14. Other: Not Applicable

FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Interim Secretary

Wastewater Abnormal Event 5 Day Report

This form is provided for your convenience only, in order to report the required information to Florida DEP. You may complete this form and email to the appropriate District office, as listed below.

Northwest District –NWD_WastewaterCompliance@floridadep.gov
Northeast District - DEP_NED@floridadep.gov
Southwest District - SWD_DW@floridadep.gov
Southeast District - SED.Wastewater@dep.state.fl.us
South District – SD-AbnormalEvents@floridadep.gov
Central District – DEP_CD@floridadep.gov

These incidents, and the corresponding Public Notice of Pollution, may also be reported through the DEP Business Portal. If it is preferred to submit these separately, the PNP may be submitted here. If the spill is greater than 1000 gallons, it MUST be reported to the **State Watch Office** at 1-800-320-0519 and a PNP MUST be submitted. All fields with an asterisk (*) must be completed as they are required by rule 62-620.610, F.A.C.

Responsible Party Information

*Facility Name:	SUN LAKE ESTATE WWTF
*Permit Number:	FLA010353-006DW3P
*Facility Type:	Domestic
*County:	Brevard
*Reporter Name:	Jeffrey M Tuttle
*Reporter Phone:	772-201-3706
*Reporter Email:	jeff@accurateutilitiesinc.net
*Reporter Address:	397 Benschop St Sebastian Fla 32958
*Responsible Party Name:	Operator Jeffrey M Tuttle Plant owners Sun lake Estate Homeowners Assoc.
*Responsible Party Address:	397 Benschop St Sebastian FL 32958 / 5600 N US HWY 1 Cocoa Fl 32926-
*Responsible Party Phone:	772-201-3706 (Operators cell #)
*Responsible Party Email:	Jeff@Accurateutilitiesinc.net

Who was contacted?

DEP

*Date and Time: 10/6/2021 16:24

*Person contacted: Carolyn Hall

State Watch Office

*Date and Time:

*Incident Number:

Other

*Date and Time:

*Person contacted:

Spill Information

*Spill Characteristic / Wastewater: Biosolids

*Type Source: Other Digester

*Area affected: Ground

*Date / Time Discharge Began: 10/6/2021 11:00

*Amount Discharged (in gallons): 400.00

*Amount Recovered (in gallons): 250.00

*Date / Time Discharge Ceased: 10/6/2021 16:15

*Physical Address: 616 Emerald Lake Dr Cocoa Fl 32926-4648

*Latitude/Longitude:

*Malfunction/Cause: Blockage

Effluent Limit Violations

- ☐ CL_2 (mg/L)
- ☐ TSS (mg/L)
- ☐ Turbidity (NTU)
- ☐ NO_3 (mg/L)
- ☐ Other
- ☐ Fecal Coliforms (CFU/100 mL)
- ☐ pH (SU)
- ☐ CBOD5 (mg/L)
- ☐ Abnormal Flow (MGD)

*Clean Up Status:

***Clean Up Actions:**

- ☐ Vacuumed/Pump Truck
- ☐ Applied Disinfectanct
- ☑ Applied Lime
- ☑ Applied HTH/chlorine
- ☐ Applied absorbents
- ☐ Washed down area
- ☐ Water samples/field measurements taken
- ☑ Raked and disposed of debris
- ☐ Signs posted
- ☐ Other

Sampling results / Field readings:

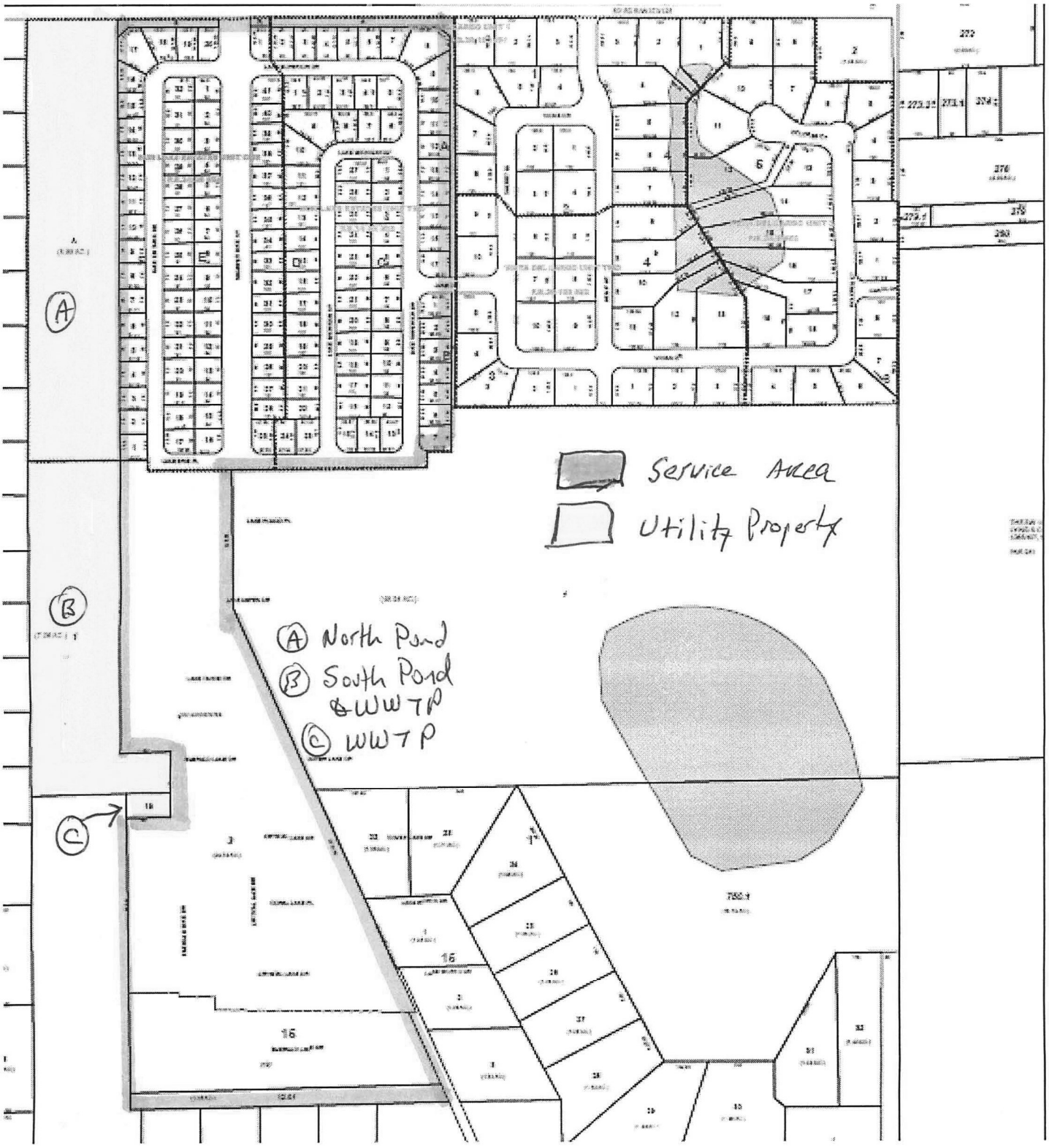
***Incident Description and Remedial Action Being Taken** (Include estimated time for completion)**:**

While wasting a blockage stopped supernate from flowing to surge tank. As digester topped off a leak was detected around a pipe that feeds WAS to a secondary digester. Hydraulic cement being applied around pipe to repair.

***Future Preventative Measures:**

Above mentioned repair

Attachment VIII – TKCB Service Area Map



Source: Brevard County Property Appraiser



888 SW 5TH AVENUE, SUITE #1170

PORTLAND, OR 97204

www.consoreng.com