

Assessment of

City of Venice Eastside WWTP

Sarasota County

NPDES #FL0041441

Sampled November 2003 and January 2004

May 2004

Biology Section

Bureau of Laboratories

Division of Resource Assessment and Management

Quality Manual No. 870346G

NELAC Certification No. E31780

Florida Department of Environmental Protection

Fifth Year Inspection Summary

Discharger:	City of Venice Eastside WWTP
County:	Sarasota
NPDES Number:	FL#0041441
Permit Expiration:	4/24/2005

Toxics Sampling Inspection **(XSI)**

Date Sampled: January 6, 2004

Results: Effluent metals complied with Class III Water Quality Criteria (FAC 62-302). Aluminum and copper were found in the effluent at levels above the method detection limit (MDL) and below the practical quantitation limit (PQL) while iron and zinc were detected above the PQL. The volatile organic pollutants bromodichloromethane, chloroform and dibromochloromethane were detected in the effluent at above the PQL, but complied with Class III Water Quality Criteria (FAC 62-302) and/or facility permit limits.

Compliance Biomonitoring Inspection **(CBI)**

Date Sampled: January 6, 2004

Results: The effluent sample was not acutely toxic to the fish, *Cyprinella leedsi,* or to the water flea, *Ceriodaphnia dubia,* during the 48-hour acute bioassays.

Water Quality Inspection **(WQI)**

Date Sampled: November 17, 2003 and January 6, 2004

Results: Fecal coliforms were detected in the receiving water at levels that did not exceed Class III Water Quality Criteria. Total coliforms were detected in the effluent and the receiving water at levels that did not exceed Class III Water Quality Criteria. Effluent conductivity, pH and dissolved oxygen complied with Class III Water Quality Criteria and facility permit limits. Dissolved oxygen, pH and conductivity at the Test and Control Sites complied with Class III Water Quality Criteria on both sampling dates. The effluent total nitrogen concentration was 1.48 mg/L and total phosphorus was 0.19 mg/L, which complied with facility permit limits. Effluent total nitrogen was approximately 60% total Kjeldahl nitrogen and approximately 40% nitrate+nitrite. More than 80% of effluent total phosphorus was orthophosphate. In November 2003, levels of nitrogen compounds were similar at the Test and Control Sites, while total phosphorus levels in the two Control Site samples were more than twice that of the Test Site. In January 2004, levels of nitrogen compounds were lower at all sites, but the effluent may be responsible for increased loading of nitrate+nitrite levels at the Test Site. Levels of total phosphorus and orthophosphate at the Test Site were higher in January than in November, which may be attributable to the facility's effluent.

Impact Bioassessment Inspection **(IBI)**

Date Sampled: November 17, 2003 and January 6, 2004

Results: Algal growth potential (AGP) results were above the 5 mg dry weight/L "problem" threshold in both Test (7.92, 14.0 mg dry weight/L) and Control Site (18.5, 19.0 and 9.79, 6.78 mg dry wt/L) samples from November 2003 and January 2004, respectively. Effluent AGP was 42.3 mg dry weight/L. The effluent may have been responsible for a relative increase in AGP at the Test Site in January 2004. Although there were other sources of nutrient inputs into Curry Creek, there was detectable nutrient enrichment related to the facility's discharge.

Biological assessments are prepared by FDEP staff to provide information for review of NPDES permit renewal applications. Biological assessments, in conjunction with other information concerning the subject facility and its receiving-water body, are used to determine appropriate permit conditions.

Introduction

Venice Eastside WWTP is located in Sarasota County, Florida (Appendix 1). The facility is a 6.0 million gallons per day, three-month average daily flow, Type I advanced wastewater treatment (Bardenpho® process) plant for treatment of domestic wastewater (see Facility Summary in Appendix 2). Treated effluent is intermittently discharged into the Class III fresh waters of Curry Creek, which then discharges into Roberts Bay, an Outstanding Florida Water (OFW). The facility is permitted to discharge 2.1 MGD annual average daily flow during the months of December, January and February, 1.5 MGD for 2.3 days in July, and 1.5 MGD for 2.9 days in August. The actual mean flow during this survey was 2.05 MGD (M. Gunter, FDEP Southwest District).

Surface Water Quality Criteria and facility permit limits are listed in Table 1. According to the facility's monthly discharge monitoring reports, the plant did not violate water quality criteria or facility water quality permit parameters in 2003 (Appendix 2). The facility is currently under enforcement for discharging to surface water outside of the permitted time frames and for discharging above permitted flow rates during permitted time frames.

Methods

The purpose of this investigation was to determine the potential effects of the facility's effluent on the receiving water biota. Chemical and biological comparisons were made between two control sites (located in Curry Creek approximately two miles upstream of the facility) and a test site (located in Curry Creek approximately 50 meters downstream of the discharge). The two upstream Control Sites were placed above and below a stormwater drain in habitat similar to that at the Test Site. Flow rates at the Test Site are influenced by tidal stage, but no salinity stratification is present. Sampling was conducted on November 17, 2003 when the facility was not discharging and on January 5, 2004 when the facility had been discharging for 10 days. Because of the limited period of discharge, biological impacts on benthic macroinvertebrate and periphyton communities related to the facility's effluent could not be estimated. Cancellation of the biological samples made interpretation of chemical results more difficult because of the relatively large distance between the Test and Control Sites, and the potential for additional inputs between the sites. Detailed methods and their relationship to Florida Administrative Code are given in Appendix 3.

All field and laboratory biological methods followed Biology Section Standard Operating Procedures (SOPs, see http://www.floridadep.org/labs/qa/2002sops.htm for details) and met FDEP quality assurance/quality control standards (see http://www.floridadep.org/labs/qa/index.htm).

The following were involved in this investigation: Melissa Gunter, Mary Szafraniec, Michelle Duggan and Todd Falkner (FDEP Southwest District), and FDEP Central Laboratory in Tallahassee. The report was reviewed by District representatives.

Results and Discussion

- Specific chemical results are reported in Table 1 and a complete list of chemical analytes can be reviewed in Appendix 4. The base, neutral and acid extractable, and pesticide effluent samples collected in January 2004 were stored in a laboratory refrigerator that failed after collection; results are not discussed in this report (see Appendix 4 for qualified data).
- Effluent metals complied with Class III Water Quality Criteria (FAC 62-302). Aluminum and copper were found in the effluent at levels above the method detection limit (MDL) and below the practical quantitation limit (PQL), while iron and zinc were detected above the PQL. The volatile organic pollutants bromodichloromethane, chloroform and dibromochloromethane were detected in the effluent at above the PQL. Chloroform was detected in the trip blank below the PQL at levels almost 10 times lower (0.23 µg/L) than the effluent sample (18 µg/L). Levels of dibromochloromethane (1.6 µg/L), if typical of annual releases, complied with facility permit limits (22.0 µg/L as an annual average). Oil and grease were detected in the effluent below the PQL (1.8 mg/L), but the trip blank showed approximately the same level of oil and grease (1.6 mg/L).
- The effluent sample was not acutely toxic to the fish, *Cyprinella leedsi,* or to the water flea, *Ceriodaphnia dubia,* during the 48-hour acute screening bioassays (See Table 1 for percent mortality and Appendix 6 for bioassay bench sheets).
- Effluent conductivity, pH and dissolved oxygen complied with Class III Water Quality Criteria (62-302 F.A.C.) and facility permit limits (Table 1). Dissolved oxygen, pH and conductivity at the Test and Control Sites complied with Class III Water Quality Criteria on both sampling dates (Table 1, 62-302.530 F.A.C.).
- Color was 120 Pt-Co at both Test and Control sites, and was <5 Pt-Co in the effluent (Table 1). Turbidity was <3.5 NTU in the effluent and all receiving water sites. TSS was <10 mg/L in the effluent and all receiving water sites. TSS in the

Table 1a. Class III Criteria and chemical, physical and microbiological data. November 2003

Venice Eastside WWTP	Class III Stds	Control Site 1 (11/03)	Control Site 2 (11/03)	Test Site (11/03)
Nutrients (mg/L)				
Organic Carbon	-	20	20	15
Ortho-phosphate	-	0.19	0.18	0.072
Total Phosphorus	-	0.22	0.23	0.11 A
Ammonia	-	0.059	0.061	0.017 I
Unionized Ammonia	≤0.02	≤0.02 c	≤0.02 c	≤0.02 c
Nitrate+Nitrite	-	0.14	0.14	0.11
Total Kjeldahl Nitrogen	-	1.1	1.2	0.9 A
Organic Nitrogen	-	1.04 c	1.14 c	0.88 c
Total Nitrogen	-	1.24 c	1.34 c	1.01 c
General Physical and Chemical Parameters				
Dissolved Oxygen (mg/L)	≥5	5.0	5.2	6.2
pH (S.U.)	6.0-8.5	6.9	7.0	7.3
Conductivity (umhos/cm)	≤1275	294	317	654
Temperature (C)	-	23	23	22.5
CBOD (mg/L)	-	0.29 I	0.48 AI	0.98 I
BOD (mg/L)	-	0.63 I	0.62 AI	1.1
Chlorophyll *a* (µg/L)	-	0.85 U	0.85 U	3.6
Phaeophytin (µg/L)	-	0.85 U	0.85 U	0

a - Annual average
b - Value is calculated based on hardness
c - Value is calculated.
A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptable range
I - Value reported is < the minimum quantitation limit, and ≥ the minimum detection limit
J - Estimated value
K - Actual value is known to be less than value given
U - Material analyzed for but not detected; value reported is the minimum detection limit
e - Analyte detected in the trip blank.
s - Single sample
d - Choice of chronic or acute definitive test depends on length of discharge. NOEC of <100% effluent is a violation of the permit.

effluent sample (9 mg/L) complied with the facility's single sample permit limit (10.0 mg/L).

- Fecal coliforms were not detected in the effluent sample and were detected in the receiving waters at levels that did not exceed Class III Water Quality Criteria (See Table 1 for results and Appendix 6 for laboratory worksheets). Total coliforms were detected in the effluent sample and in the receiving waters at levels that did not exceed Class III Water Quality Criteria.
- The effluent total nitrogen concentration was 1.48 mg/L and total phosphorus was 0.19 mg/L, which complied with facility permit limits (Table 1). The total nitrogen was ~60% total Kjeldahl nitrogen and ~40% nitrate+nitrite. More than 80% of the total phosphorus was ortho-phosphate.
- Nutrient levels at the Test and Control Sites were measured in both November 2003, when the facility was not discharging, and in January 2004, when effluent was being released (Table 1). In November 2003, nitrogen levels at the Test and Control Sites were similar, with total nitrogen 1.01-1.34 mg/L, but levels of ammonia, nitrate+nitrite and TKN were slightly lower at the Test Site as compared to the Control Sites. In contrast, total phosphorus and ortho-phosphate levels were more than twice as high at the two Control Sites (approximately 0.22, 0.18 mg/L, respectively) as at the Test Site (0.11, 0.072 mg/L, respectively). It appears that total phosphorus and orthophosphate were being diluted between the Control and Test Sites, but the source of dilution water is unknown.
- Levels of nitrogen compounds at all sites were lower in January 2004 than November 2003 (Table 1). In January 2004, orthophosphate and total phosphorus levels were similar at the Test and Control Sites. Total nitrogen levels were similar among all sites in January 2004 (0.76-0.82 mg/L). However, the component compounds differed, with a three to four-fold dif-ference between nitrate+nitrite at the Control Sites (0.037, 0.045 mg/L) and the Test Site (0.13 mg/L). This relative increase in nitrate+nitrite at the Test Site compared to the Control Sites may be attributable to the facility's effluent. Levels of orthophosphate and total phosphorus at the Control Sites were typical of the 60-70th percentiles of values for Florida streams on both sample dates, while levels at the Test Site were similar to those of the 40th percentile in November 2003 and the 60-70th percentile in January 2004 (Appendix 5). Levels of TKN and nitrate+nitrite at the Control and Test Sites were typical of the 40-60th percentiles of Florida streams in November 2003 while ammonia levels were similar to those of the 5th percentile at the Test Site and the 40th percentile at the Control Sites. In January 2004, levels of ammonia, TKN and nitrate+nitrite were similar to those of the 20-50th

Table 1b. Effluent limits, Class III Criteria and chemical, microbiological, and toxicological data. January 2004

Venice Eastside WWTP	Class III Stds	Effluent Limits	Effluent Samples (1/04)	Control Site 1 (1/04)	Control Site 2 (1/04)	Test Site (1/04)
Volatile Organic Constituents (µg/L)						
Bromodichloromethane	≤22 a	-	5.9	-	-	-
Bromoform	≤360 a	-	0.2 U	-	-	-
Chloroform	≤470.8 a	-	18 e	-	-	-
Dibromochloromethane	≤34 a	22.0 a	1.6	-	-	-
Metals (µg/L unless otherwise noted)						
Aluminum	≤1500	-	24 I	-	-	-
Arsenic	≤50	-	6 U	-	-	-
Cadmium	≤2.2 b	-	0.025 U	-	-	-
Calcium (mg/L)	-	-	60.1	-	-	-
Chromium-III	≤169.9 b	-	3 U	-	-	-
Copper	≤18.9 b	-	1.8 I	-	-	-
Iron	≤1000	-	61	-	-	-
Lead	≤9.1 b	-	0.23 U	-	-	-
Magnesium (mg/L)	-	-	19.2	-	-	-
Nickel	≤105.2 b	-	3 U	-	-	-
Selenium	≤5	-	1 U	-	-	-
Silver	≤0.07	-	0.02 U	-	-	-
Zinc	≤241.9 b	-	30	-	-	-
Nutrients (mg/L)						
Organic Carbon	-	-	6.6	-	-	-
Ortho-phosphate	-	-	0.16	0.24	0.24	0.2
Total Phosphorus	-	2.0	0.19	0.27	0.26	0.23
Ammonia	-	-	0.052	0.077	0.064	0.052
Unionized Ammonia	≤0.02	-	≤0.02 c	≤0.02 c	≤0.02 c	≤0.02 c
Nitrate+Nitrite	-	-	0.61	0.045	0.037	0.13
Total Kjeldahl Nitrogen	-	-	0.87 J	0.73	0.72	0.69
Organic Nitrogen	-	-	0.82 c	0.65 c	0.66 c	0.64 c
Total Nitrogen	-	6.0	1.48 c	0.78 c	0.76 c	0.82 c
General Physical and Chemical Parameters						
Dissolved Oxygen (mg/L)	≥5	7.0	9.4	7	6.5	6
pH (S.U.)	6.0-8.5	6.0-8.5	7.3	7.4	7.4	7.4
Conductivity (umhos/cm)	≤1275	-	925	377	373	496
Temperature (C)	-	-	23.2	23	22.9	21.8
CBOD5 (mg/L)	-	10.0	2 U	2 U	2 U	2 U
BOD (mg/L)	-	-	2 U	2 U	2.74	2 U
TSS (mg/L)	-	10.0	9	3	2	4
Turbidity (NTU)	-	29	0.6	2.7	1.8	3.4
Color (Pt-Co)	-	-	<5	120	120	120
Oil and Grease (mg/l)	≤5	-	1.8 I e	-	-	-
Residual chlorine	0.01	0.01	<0.01	-	-	-
Flow (MGD)	-	Variable	2.05	-	-	-
Hardness (mg/L)	-	-	229.1 c	-	-	-
Chlorophyll *a* (µg/L)	-	-	0.85 U	0.85 U	0.85 U	0.85 U
Phaeophytin (µg/L)	-	-	0.85 U	0.85 U	0.85 U	0.85 U
Microbiology (# counts/100ml)						
Fecal Coliforms-Membrane Filter	800 s	25 s	1 K	100	120	70 BK
Total Coliforms	2400 s	-	20 BK	380	470	330
Toxicology Acute Screening Bioassays (Percent mortality)						
Fish		d	0%	-	-	-
Water flea		d	0%	-	-	-

Table 2. Measured and predicted algal growth potential (AGP) for total soluble nitrogen (TSIN) limitation

Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Inorganic N:P ratio
Control Site 1 (11/03)	19.0	7.56 ± 1.512	1.05
Control Site 2 (11/03)	18.5	7.64 ± 1.528	1.12
Test Site (11/03)	7.92	4.83 ± 0.966	1.76
Effluent Sample (1/04)	42.3	25.2 ± 5.0	4.14
Control Site 1 (1/04)	9.79	4.64 ± 0.93	0.51
Control Site 2 (1/04)	6.78	3.84 ± 0.77	0.42
Test Site (1/04)	14.0	6.92 ± 1.38	0.91

percentile of typical Florida streams at all sites. The similarity of nutrient results from the two Control Sites suggests that the stormwater input between the two sites was not contributing additional nutrients on either sample date.

- Algal growth potential (AGP) is a measure of nutrients available for algal growth (Miller *et al.* 1978). Raschke and Shultz (1987) found that AGP above 5.0 mg dry wt/L represents a "problem" threshold for fresh receiving waters, implying nutrient enrichment. The effluent sample from January 2004 had an AGP of 42.3 mg dry wt/L, more than eight times the "problem" threshold (Table 2). AGP at the Control and Test Sites was sampled when the facility was (January 2004) and was not discharging (November 2003). In both sets of samples, AGP exceeded the suggested "problem" threshold at all sites. In November 2003, AGP at the two Control Sites was more than twice the level at the Test Site (19.0, 18.5 vs. 7.92 mg dry wt/L). In contrast, in January 2004, AGP was ~4 mg dry weight/L higher at the Test Site than at either of the Control Sites (14.0 vs. 9.79, 6.78 mg dry wt/L). This indicates there is nutrient enrichment related to the Venice Eastside discharge in this portion of Curry Creek and is correlated with increased nitrate+nitrite at the Test Site which may be attributable to the facility's effluent. There was no evidence of growth inhibition in AGP data (Table 2).
- Chlorophyll *a* was not detected in samples of the effluent and from the Test and Control Sites (Table 1). We note that nutrients in the water column may or may not fuel algal production immediately, depending upon the sum of environmental conditions that limit algal growth at the site (e.g. pH, shading, turbidity). Thus it is not necessarily contradictory for ambient nutrient levels to be high and for no chlorophyll to be detected in water samples.

Summary

Effluent metals complied with Class III Water Quality Criteria (FAC 62-302). The metals aluminum and copper were found in the effluent at levels above the MDL and below the PQL while iron and zinc were detected above the PQL. The volatile organic pollutants bromodichloromethane, chloroform and dibromochloromethane were detected in the effluent above the PQL. Levels of dibromochloromethane (1.6 µg/L), if typical of annual releases, complied with facility permit limits (22.0 µg/L as an annual average). The effluent sample was not acutely toxic to the fish, *Cyprinella leedsi,* or to the water flea, *Ceriodaphnia dubia,* during the 48-hour acute screening bioassays. Fecal and total coliforms in the effluent and the receiving water complied with Class III Water Quality Criteria. Effluent conductivity, pH and dissolved oxygen complied with Class III Water Quality Criteria and facility permit limits. Dissolved oxygen, pH and conductivity at the Test and Control Sites complied with Class III Water Quality Criteria on both sampling dates.

The effluent total nitrogen concentration was 1.48 mg/L and total phosphorus was 0.19 mg/L, which complied with facility permit limits. The effluent was responsible for increased loading of nitrate+nitrite and possible total phosphorus at the Test Site in comparisons made between November 2003 and January 2004 data. AGP results were above the 5 mg dry wt/L "problem" threshold in both Test and Control Site samples from November 2003 and January 2004. The effluent may be responsible for a relative increase in AGP from the Test Site in January 2004. Although there were other sources of nutrient inputs into Curry Creek, there was detectable nutrient enrichment related to the facility's discharge.

The facility is currently under enforcement for discharging to surface

water outside of the permitted time frames and for discharging above permitted flow rates during permitted time frames.

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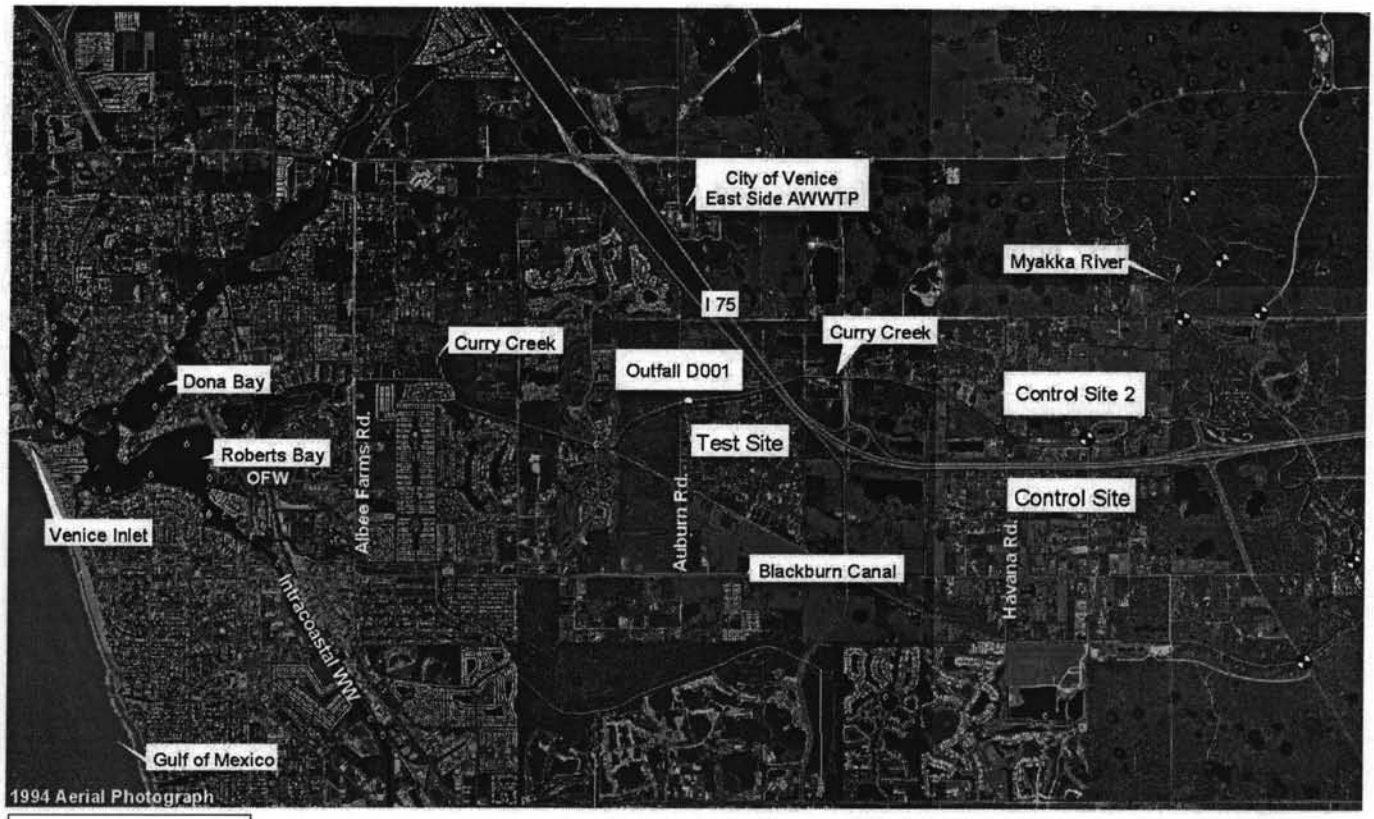
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Appendices

- Appendix 1. Map of facility
- Appendix 2. Facility summary and DMR data summary
- Appendix 3. Explanation of measurements
- Appendix 4. Chemical analyses of effluent and receiving water.
- Appendix 5. Typical values for selected parameters in Florida waters
- Appendix 6. Additional physical, chemical, toxicological and microbiological results

Appendix 1



Legend
- USGS Gaging Stations
- STORET Stations
- Water Lines

N W E S

0 1 Miles

City of Venice East Side AWWTP
Sarasota County

FYI5 Recon October 17, 2003
Sampling Events 11/17/03 & 1/5/04

NPDES FL0041441





Appendix 2

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENT PROECTION
FACILITY

Facility name: City of Venice East Side Wastewater Treatment Plant
(Please note, although the permit states East Side as two words,
in correspondences from the City, it is listed as **Eastside WWTP**.)

Date of Summary: October 30, 2003

Location (detailed ARC view map attached):
3510 East Laurel Road
Venice, Florida 34275
Latitude 27° 08′ 00″ N Longitude 82° 24′ 04″ W

County: Sarasota County

District: SWD

NPDES Permit: FL0041441-02

State GMS # and
State expiration date: 04/24/05

Facility Type: Domestic Waste

Function of facility: The facility is a 6.0 mgd (recently re-rated from a capacity of 3.0 mgd) three-month average daily flow (3MADF) Type I advanced wastewater treatment (Bardenpho® process) domestic wastewater treatment plant.

Description of treatment process: The headworks of the facility contains two mechanical fine bar screens, one backup coarse bar screen, and two grit removal chamber with a classifier; a bypass channel pipe and an influent flow measurement system at the headworks structure; dual four stage Bardenpho® trains, each with two first anoxic basins, a Carrousel aeration basin, three second anoxic basins with mechanical mixers, and three re-aeration basins, with diffused air; four clarifier basins, with flow splitter structures; three dual media (sand and anthracite) automatic backwashable traveling bridge filters, with an alum feed for coagulation and phosphorus removal; and three chlorine contact chambers, using a gaseous chlorination system, creating a contact time of 34 minutes for the 6.0 mgd 3MADF rating and 15 minutes at peak flow (2.4Q). There is also a remote de-chlorination facility at the Curry Creek outfall.

The solid waste stream processing consists of a lime storage facility and lime slaker, and six residuals holding tanks, where lime stabilization takes place. After stabilization, the residuals are disposed of by land application with an alternative of transport to several permitted Residuals Management Facilities. The facility is equipped with a polymer feed system for sludge thickening and two dual mode belt filter presses for either gravity thickening or de-watering of sludge.

Filter backwash and other plant process waters are returned to the headworks. Alum coagulant feed is available on a standby status for solids control and phosphorus removal.

Receiving waters: Curry Creek

Classification of water: Class III Freshwater

Design Flow: 6.0 mgd Three Month ADF

Mean Flow (12 month average): Due to the intermittent nature of the facility's surface water discharge, the 12-month average is not a representative flow average. The average flow for 2002 and 2003 were determined by dividing the total flow by the number of months that the discharge occurred. The following table outlines the discharge events from December 1997 through August 2003.

Table 1:

Year	Month	No. of Days Discharged	Avg. Daily Flow to Curry Creek per DMRs (MGD)
1997	December	18	2.34
1998	January	31	1.89
1998	February	28	1.89
1998	March	23	2.14
1998	April	13	2.28
1999	August	12	2.17
1999	September	17	1.99
1999	October	26	1.94
2000	February	14	1.80
2001	July	23	1.50

Year	Month	No. of Days Discharged	Avg. Daily Flow to Curry Creek per DMRs (MGD)
2001	August	3	1.45
2001	September	14	1.50
2002	September	22	2.97
2002	December	24	2.72
2003	January	31	1.34
2003	February	9	0.87
2003	March	11	1.42
2003	April	14	1.11
2003	June	12	4.67
2003	July	4	*
2003	August	31	3.72
2002 Average Flow			2.85
2003 Average Flow			2.19

* The DMR for July 2003 was not in the DW file.

Flow during survey: The facility was not discharging during the survey.

Discharge is: Intermittent – Limited Wet Weather Discharge
Therefore, the best time to sample the outfall is: The most optimum time to sample varies. According to the facility's discharge history listed above in Table 1, the most optimum sample time would be during the months of August, September and potentially December, January and February if it is a wet year.

If facility has a mixing zone proved details (size and parameters): No mixing zone

List effluent limits (add or remove rows and columns):
Table 2:

Parameter	Units	AnnAvg	MoAvg	WklyAvg	Max
Flow July only	mg	-	3.45 Max Mo Load	-	-
Flow August only	mg	-	4.35 Max Mo Load	-	-
Flow Dec, Jan, Feb only	mgd	-	2.1 max	-	-
CBOD5	mg/L	5.0	6.25	7.5	10.0
TSS	mg/L	5.0	6.25	7.5	10.0
Total Nitrogen	mg/L	3.0	3.75	4.5	6.0
Total Phosphorus	mg/L	1.0	1.25	1.5	2.0
Chlorine, Total Residual (For Disinfection)	mg/L	-	-	-	1.0
Chlorine, Total Residual (For Dechlorination)	mg/L	-	-	-	0.01
Total Suspended Solids (For Disinfection)	mg/L	-	-	-	5.0
pH	S.U.	-	-	-	6.0 - 8.5
Dissolved Oxygen	mg/L	-	-	-	7.0
Dichlorobromomethane	µg/L	22.0	-	-	-
Coliform, Fecal	#/100 mL		75% of values < detection limits		25
Acute Whole Effluent Toxicity					
Chronic Whole Effluent Toxicity					

Describe special permit conditions and permit modifications:
The facility is currently permitted for a wet weather surface water discharge limited to 2.1 mgd annual average daily flow during the months of December, January and February and 1.5 mgd for 2.3 days in July and 2.9 days in August.

Description of permitted outfall(s):
The facility is currently permitted for a wet weather surface water discharge to Curry Creek limited to 2.1 mgd annual average daily flow during the months of December, January and February and 1.5 mgd for 2.3 days in July and 2.9 days in August through

discharge location D001 to Curry Creek, a Class III fresh water of the State, thence approximately 3 miles to Roberts Bay (OFW) and then to the Gulf of Mexico. The point of discharge is located at approximately at latitude 27° 06' 55" N, longitude 82° 24' 04" W.

The facility is also permitted to discharge to golf courses and residential irrigation reclaimed water storage lakes, which may intermittently discharge through the stormwater management system during storm events. These lakes are located at Capri Isles Golf Course (D002), Bird Bay Golf Course (D003), Bird Bay Village residential area R-7 (D006), Estancia residential area R-8 (D007), Summer Green residential area R-9 (D008), Bridal Oaks residential area R-11 (D009), Par Four residential area R-12 (D010), and Fairways of Capri residential area R-14 (D011).

List permit violations (form DMR data or other sources) and plant upsets that occurred within past year:
The DMRs from 2002 and 2003 were reviewed and the facility has not experienced any water quality parameter permit exceedances. The facility has discharged in violation of the permitted discharge timeframes during March, April and June 2003 and discharge flow limits during July and August 2003. Refer to the Table 1 above for more detailed discharge information.

Describe previous impact bioassessments, WQBELs, and previous or current enforcement actions:
The facility is currently under enforcement due to discharging to surface water outside of the permitted timeframes and discharge durations.

Discuss comparability of DMR results to past DEP sampling results and whether there are trends (improving, declining) in the data set. If ambient monitoring is required by permit then discuss results:
Ambient monitoring has been conducted by the facility. Watershed and Resource Management has the results of three ambient monitoring events, although the facility was only discharging during two of the events. There has not been enough data generated to determine direct correlations between the facility's discharge and the potential effects of the discharge on the ecosystem and water quality in Curry Creek.

Additional information
The permittee currently has a permit modification application in house for a continuous discharge into Curry Creek rather than the limited wet weather discharge.

Staff contributing to this review:

Biologist: Melissa Gunter

Inspector:

Engineer:

Grey line denotes that biologist should know data

Black line denotes that inspector or engineer should know data

Please note: The site map and control and test site comparability begin on page 4 of this document.

DMR Summary Results

01/01/2003 to 12/31/2003

Permit Number: FL0041441

Facility Name: VENICE - EASTSIDE WWTP

Outfall Indicator: 001-1
Monitoring Location Code: Y

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 00530	SOLIDS, TOTAL SUSPENDED	5	5/1/2000 to 4/30/2005	ANNL AVG	MG/L	0.7638	0.91	0.7
P 00600	NITROGEN, TOTAL (AS N)	3	5/1/2000 to 4/30/2005	ANNL AVG	MG/L	2.6125	2.9	2.4
P 00665	PHOSPHORUS, TOTAL (AS P)	1	5/1/2000 to 4/30/2005	ANNL AVG	MG/L	0.2	0.2	0.2
P 80082	BOD, CARBONACEOUS 05 DAY, 20C	5	5/1/2000 to 4/30/2005	ANNL AVG	MG/L	2.1	2.2	2

Outfall Indicator: 002-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	9/1/2000 to 10/31/2000	MAXIMUM	OCCUR/MONTH	0.4545	2	0
P 81381	DURATION OF DISCHARGE	ADDMON	9/1/2000 to 10/31/2000	MAXIMUM	HOURS/MONTH	98.1818	744	0

Outfall Indicator: 002-1
Monitoring Location Code: Q

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	9/1/2000 to 10/31/2000	MAXIMUM	OCCUR/MONTH	1.2727	3	0
P 81381	DURATION OF DISCHARGE	ADDMON	9/1/2000 to 10/31/2000	MAXIMUM	HOURS/MONTH	294.8	734.5	0

Outfall Indicator: 005-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1	3	0
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	213.4091	744	0

Outfall Indicator: 006-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1.4	3	1
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	593.6818	744	111

Outfall Indicator: 006-1
Monitoring Location Code: Q

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1.6364	3	0
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	440.7778	744	0

Outfall Indicator: 006-1
Monitoring Location Code: R

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1.3636	3	1
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	617.0455	744	111.5

Outfall Indicator: 007-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1.3636	3	0
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	298.7727	744	0

Outfall Indicator: 008-1
Monitoring Location Code: P

Outfall Indicator: 008-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2001	MO TOTAL	OCCUR/MONTH	1.3636	3	0
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2001	MO TOTAL	HOURS/MONTH	375.2273	744	0

Outfall Indicator: 009-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1.3636	4	0
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	360.4091	744	0

Outfall Indicator: 010-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1.6364	6	0
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	264.3636	744	0

Outfall Indicator: 011-1
Monitoring Location Code: P

Parameter Code	Description	Limit	Limit Effective Dates	STAT Base	Units	AVG	MAX	MIN
P 74062	OVERFLOW USE, OCCURRENCES	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	OCCUR/MONTH	1.1818	3	0
P 81381	DURATION OF DISCHARGE	ADDMON	11/1/2000 to 12/31/2000	MO TOTAL	HOURS/MONTH	272.7273	744	0

Appendix 3

Explanation of Measurements

(1) Quality Assurance and Quality Control

FDEP's quality assurance requirements for analytical laboratories and field activities are codified in Chapter 62-160, F.A.C., Quality Assurance (QA Rule) and in internal Standard Operating Procedures (FDEP SOPs). Methods for all analyses are on file at the FDEP Central Laboratory in Tallahassee and may be viewed on the web at http://www.floridadep.org/labs/sop/index.htm and/or http://www.floridadep.org/labs/qa/index.htm .

(2) Chemical Analyses of the Effluent

The effluent was analyzed for nutrients, metals, organic constituents (base, neutral, and acid extractables) and pesticides following FDEP SOPs. A list of the analytes tested for, results, data qualifiers, the minimum detection limit and the practical quantitation limit are given in Appendix 4. The results from these analyses were compared with Water Quality Criteria (62-302 F.A.C.) and facility permit limits (Table 1, Appendix 2). Exceedances of Water Quality Criteria may be violations of specific provisions of Chapter 62-302 (F.A.C.) and/ or facility permit limits.

(3) Toxicity Bioassays

Acute screening toxicity bioassays were performed on the effluent sample using the water flea, *Ceriodaphnia dubia,* and the fish, *Cyprinella leedsi* following FDEP SOPs TA07_01 and TA07_02. Failure of toxicity testing may constitute a violation of 62-302.520(21), 62-302.530(62) and/or facility permit limits.

(4) Bacteriological Testing

The effluent and water from control and test sites were analyzed for the presence and concentration of total and fecal coliform bacteria following FDEP SOPs MB1_0 and MB1_1. High levels of fecal or total coliform bacteria may constitute violation of 62-302.530(6), 62-302.530(7) and/or facility permit limits.

(5) Algal Growth Potential (AGP)

The effluent and water from control and test sites are autoclaved, filtered (0.45μm), inoculated with the unicellular green alga, *Pseudokirchneriella subcapitata* (formerly *Selenastrum capricornutum,* USEPA 2002), and incubated for 14 days (FDEP SOP TA08_05). The algal growth potential (AGP) value is the peak growth of the alga within that 14-day period, recorded as mg dry weight/L. Raschke and Shultz (1987) found that an AGP above 5.0 mg dry weight/L represents a "problem" threshold for fresh receiving waters, implying nutrient enrichment. High AGP values may constitute one line of evidence for violation of 62-302.530(47) F.A.C., 62-302.530(48)(a) F.A.C. and/or 62-302.530(48)(b) F.A.C..

The concentration of nutrients in a water sample may be used to calculate the expected yield of AGP under the assumption that other required nutrients (e.g. silicon, micronutrients) are present in excess (Miller *et al.* 1978). The expected amount of production is calculated as 38 times the total soluble inorganic nitrogen (nitrate and nitrite plus ammonia) under nitrogen limitation or 430 times the ortho-phosphate (OP) concentration under phosphorus limitation with an error of ± 20%. When the ratio of nitrogen to phosphorus (N:P) is less than 10:1, nitrogen limitation of algal production is likely. When the N:P ratio is 20:1 or greater, phosphorus limitation is likely (USEPA 2000). For ratios in-between, co-limitation may occur. Production of lower biomass than expected may be evidence of growth inhibition related to toxic compounds present in the water sample tested and may be a violation of 62-302.530(62) F.A.C..

(6) Phytoplankton

Phytoplankton were sampled using a 1 L grab sample (QA Rule SOP FS7100). Chlorophyll *a* content was measured to estimate algal biomass (FDEP SOP BB05). High algal biomass implies nutrient stress (Stevenson and Bahls 1999) and may be a violation of 62-302.530(47) F.A.C., 62-302.530(48)(a) F.A.C. and/or 62-302.530(48)(b) F.A.C..

Appendix 4

Chemical analysis of effluent and receiving water

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
11/17/03	CONTROL SITE 1	Bio-AGP/LimNut	Algal Growth Potential	19	mg DryWt/L		0.1	0.3
11/17/03	CONTROL SITE 1	Bio-BOD	Biochemical Oxygen Demand-5 Day	0.63	mg/L	I		
11/17/03	CONTROL SITE 1	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.29	mg/L	I		
11/17/03	CONTROL SITE 1	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
11/17/03	CONTROL SITE 1	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
11/17/03	CONTROL SITE 1	Nutrients-Liquid	Ammonia-N	0.059	mg N/L		0.01	0.02
11/17/03	CONTROL SITE 1	Nutrients-Liquid	NO2NO3-N	0.14	mg N/L		0.004	0.01
11/17/03	CONTROL SITE 1	Nutrients-Liquid	N_KJEL_TOT	1.1	mg N/L		0.06	0.2
11/17/03	CONTROL SITE 1	Nutrients-Liquid	O-Phosphate-P	0.19	mg P/L		0.012	0.03
11/17/03	CONTROL SITE 1	Nutrients-Liquid	Organic Carbon	20	mg C/L		1	5
11/17/03	CONTROL SITE 1	Nutrients-Liquid	Total-P	0.22	mg P/L		0.02	0.06
11/17/03	CONTROL SITE 2	Bio-AGP/LimNut	Algal Growth Potential	18.5	mg DryWt/L		0.1	0.3
11/17/03	CONTROL SITE 2	Bio-BOD	Biochemical Oxygen Demand-5 Day	0.62	mg/L	AI		
11/17/03	CONTROL SITE 2	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.48	mg/L	AI		
11/17/03	CONTROL SITE 2	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
11/17/03	CONTROL SITE 2	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
11/17/03	CONTROL SITE 2	Nutrients-Liquid	Ammonia-N	0.061	mg N/L		0.01	0.02
11/17/03	CONTROL SITE 2	Nutrients-Liquid	NO2NO3-N	0.14	mg N/L		0.004	0.01
11/17/03	CONTROL SITE 2	Nutrients-Liquid	N_KJEL_TOT	1.2	mg N/L		0.06	0.2
11/17/03	CONTROL SITE 2	Nutrients-Liquid	O-Phosphate-P	0.18	mg P/L		0.012	0.03
11/17/03	CONTROL SITE 2	Nutrients-Liquid	Organic Carbon	20	mg C/L		1	5
11/17/03	CONTROL SITE 2	Nutrients-Liquid	Total-P	0.23	mg P/L		0.02	0.06
11/17/03	FIELD BLANK	Bio-BOD	Biochemical Oxygen Demand-5 Day	0.2	mg/L	U		
11/17/03	FIELD BLANK	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.2	mg/L	U		
11/17/03	FIELD BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
11/17/03	FIELD BLANK	Nutrients-Liquid	NO2NO3-N	0.046	mg N/L		0.004	0.01
11/17/03	FIELD BLANK	Nutrients-Liquid	N_KJEL_TOT	0.06	mg N/L	U	0.06	0.2
11/17/03	FIELD BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	I	0.004	0.01
11/17/03	FIELD BLANK	Nutrients-Liquid	Organic Carbon	1	mg C/L	U	1	5
11/17/03	FIELD BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
11/17/03	TEST SITE	Bio-AGP/LimNut	Algal Growth Potential	7.92	mg DryWt/L		0.1	0.3
11/17/03	TEST SITE	Bio-BOD	Biochemical Oxygen Demand-5 Day	1.1	mg/L			
11/17/03	TEST SITE	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.98	mg/L	I		
11/17/03	TEST SITE	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	3.6	ug/L		0.85	2.6
11/17/03	TEST SITE	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0	ug/L		0.85	2.6
11/17/03	TEST SITE	Nutrients-Liquid	Ammonia-N	0.017	mg N/L	I	0.01	0.02
11/17/03	TEST SITE	Nutrients-Liquid	NO2NO3-N	0.11	mg N/L		0.004	0.01
11/17/03	TEST SITE	Nutrients-Liquid	N_KJEL_TOT	0.9	mg N/L	A	0.06	0.2
11/17/03	TEST SITE	Nutrients-Liquid	O-Phosphate-P	0.072	mg P/L		0.004	0.01
11/17/03	TEST SITE	Nutrients-Liquid	Organic Carbon	15	mg C/L		1	5

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
11/17/03	TEST SITE	Nutrients-Liquid	Total-P	0.11	mg P/L	A	0.02	0.06
01/05/04	Effluent	Bio-AGP/LimNut	Algal Growth Potential	42.3	mg DryWt/L		0.1	0.3
01/05/04	Effluent	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Effluent	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Effluent	Bio-Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	LC50	L		
01/05/04	Effluent	Bio-Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	LC50	L		
01/05/04	Effluent	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	UY	3.8	15
01/05/04	Effluent	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	1,4-Naphthoquinone	19	ug/L	UY	19	76
01/05/04	Effluent	BNA-Water	1-Naphthylamine	9.5	ug/L	UYJ	9.5	38
01/05/04	Effluent	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	2,4,5-Trichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2,4-Dimethylphenol	48	ug/L	UY	48	190
01/05/04	Effluent	BNA-Water	2,4-Dinitrophenol	14	ug/L	UY	14	57
01/05/04	Effluent	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2,6-Dichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2-Acetylaminofluorene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2-Chloronaphthalene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2-Chlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	UY	2.9	11
01/05/04	Effluent	BNA-Water	2-Methylnaphthalene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2-Naphthylamine	9.5	ug/L	UYJ	9.5	38
01/05/04	Effluent	BNA-Water	2-Nitroaniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2-Nitrophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	2-Picoline	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	UY	38	150
01/05/04	Effluent	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	UYJ	19	76
01/05/04	Effluent	BNA-Water	3-Methylcholanthrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	3-Nitroaniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	4,4'-DDD	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	4,4'-DDE	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	4,4'-DDT	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	4-Aminobiphenyl	3.8	ug/L	UY	3.8	15
01/05/04	Effluent	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	UY	0.95	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Effluent	BNA-Water	4-Chloroaniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	4-Nitroaniline	0.95	ug/L	UYJ	0.95	3.8
01/05/04	Effluent	BNA-Water	4-Nitrophenol	14	ug/L	UY	14	57
01/05/04	Effluent	BNA-Water	5-Nitro-o-toluidine	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Acenaphthene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Acenaphthylene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Acetophenone	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Aldrin	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	Aniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Benzidine	95	ug/L	UY	95	380
01/05/04	Effluent	BNA-Water	Benzo(a)anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Benzo(a)pyrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Benzyl alcohol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	UY	2.9	11
01/05/04	Effluent	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	UY	14	57
01/05/04	Effluent	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	UY	4.8	19
01/05/04	Effluent	BNA-Water	Chrysene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	UY	4.8	19
01/05/04	Effluent	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Dibenzofuran	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Dieldrin	1.4	ug/L	UYJ	1.4	5.7
01/05/04	Effluent	BNA-Water	Diethyl phthalate	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Dimethyl phthalate	48	ug/L	UY	48	190
01/05/04	Effluent	BNA-Water	Dimethylaminoazobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Dinoseb	3.8	ug/L	UY	3.8	15
01/05/04	Effluent	BNA-Water	Diphenylamine	2.9	ug/L	UY	2.9	11
01/05/04	Effluent	BNA-Water	Endosulfan I	3.8	ug/L	UY	3.8	15
01/05/04	Effluent	BNA-Water	Endosulfan II	3.8	ug/L	UY	3.8	15
01/05/04	Effluent	BNA-Water	Endosulfan sulfate	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	Endrin	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	Endrin aldehyde	3.8	ug/L	UY	3.8	15
01/05/04	Effluent	BNA-Water	Ethyl methanesulfonate	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Fluoranthene	0.95	ug/L	UY	0.95	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Effluent	BNA-Water	Fluorene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Heptachlor	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	Heptachlor epoxide	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	Hexachlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Hexachlorobutadiene	2.9	ug/L	UY	2.9	11
01/05/04	Effluent	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UYJ	2.9	11
01/05/04	Effluent	BNA-Water	Hexachloroethane	2.9	ug/L	UY	2.9	11
01/05/04	Effluent	BNA-Water	Hexachloropropene	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Isophorone	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Isosafrole	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Methapyrilene	3.8	ug/L	UYJ	3.8	15
01/05/04	Effluent	BNA-Water	Methyl methanesulfonate	0.95	ug/L	UYJ	0.95	3.8
01/05/04	Effluent	BNA-Water	N-Nitrosodi-n-butylamine	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	N-Nitrosodiethylamine	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	UY	2.9	11
01/05/04	Effluent	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	N-Nitrosomorpholine	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	N-Nitrosopiperidine	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	Naphthalene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Nitrobenzene	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	UY	19	76
01/05/04	Effluent	BNA-Water	Pentachlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Pentachloroethane	48	ug/L	UY	48	190
01/05/04	Effluent	BNA-Water	Pentachloronitrobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Pentachlorophenol	2.9	ug/L	UY	2.9	11
01/05/04	Effluent	BNA-Water	Phenacetin	3.8	ug/L	UY	3.8	11
01/05/04	Effluent	BNA-Water	Phenanthrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Phenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Pyrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	Pyridine	3.8	ug/L	UY	3.8	15
01/05/04	Effluent	BNA-Water	Safrole	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	BNA-Water	alpha-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	beta-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	delta-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	gamma-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Effluent	BNA-Water	m,p-Cresols	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	o-Cresol	1.9	ug/L	UY	1.9	7.6
01/05/04	Effluent	BNA-Water	o-Toluidine	0.95	ug/L	UY	0.95	3.8
01/05/04	Effluent	GC-Water	Alachlor	0.57	ug/L	UY	0.57	2.28

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Effluent	GC-Water	Ametryn	0.048	ug/L	UY	0.048	0.19
01/05/04	Effluent	GC-Water	Atrazine	0.13	ug/L	IYJ	0.048	0.19
01/05/04	Effluent	GC-Water	Azinphos Methyl	0.048	ug/L	UY	0.048	0.19
01/05/04	Effluent	GC-Water	Bromacil	0.19	ug/L	UYJ	0.19	0.76
01/05/04	Effluent	GC-Water	Butylate	0.19	ug/L	UY	0.19	0.76
01/05/04	Effluent	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	UY	0.048	0.19
01/05/04	Effluent	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	UY	0.095	0.38
01/05/04	Effluent	GC-Water	Diazinon	0.048	ug/L	UYJ	0.048	0.19
01/05/04	Effluent	GC-Water	Ethion	0.048	ug/L	UY	0.048	0.19
01/05/04	Effluent	GC-Water	Ethoprop	0.095	ug/L	UY	0.095	0.38
01/05/04	Effluent	GC-Water	Fenamiphos	0.19	ug/L	UY	0.19	0.76
01/05/04	Effluent	GC-Water	Fonofos	0.095	ug/L	UY	0.095	0.38
01/05/04	Effluent	GC-Water	Hexazinone	0.095	ug/L	UYJ	0.095	0.38
01/05/04	Effluent	GC-Water	Malathion	0.14	ug/L	UY	0.14	0.56
01/05/04	Effluent	GC-Water	Metalaxyl	0.24	ug/L	UY	0.24	0.96
01/05/04	Effluent	GC-Water	Metolachlor	0.48	ug/L	UY	0.48	1.92
01/05/04	Effluent	GC-Water	Metribuzin	0.095	ug/L	UYJ	0.095	0.38
01/05/04	Effluent	GC-Water	Mevinphos	0.19	ug/L	UY	0.19	0.76
01/05/04	Effluent	GC-Water	Naled	0.76	ug/L	UY	0.76	3.04
01/05/04	Effluent	GC-Water	Norflurazon	0.095	ug/L	UYJ	0.095	0.38
01/05/04	Effluent	GC-Water	Parathion Ethyl	0.14	ug/L	UY	0.14	0.56
01/05/04	Effluent	GC-Water	Parathion Methyl	0.095	ug/L	UY	0.095	0.38
01/05/04	Effluent	GC-Water	Phorate	0.048	ug/L	UY	0.048	0.19
01/05/04	Effluent	GC-Water	Prometryn	0.14	ug/L	UY	0.14	0.56
01/05/04	Effluent	GC-Water	Simazine	0.048	ug/L	UYJ	0.048	0.19
01/05/04	Effluent	Metals-Water	Aluminum	24	ug/L	I	7	28
01/05/04	Effluent	Metals-Water	Arsenic	6	ug/L	U	6	24
01/05/04	Effluent	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
01/05/04	Effluent	Metals-Water	Calcium	60.1	mg/L		0.05	0.2
01/05/04	Effluent	Metals-Water	Chromium	3	ug/L	U	3	12
01/05/04	Effluent	Metals-Water	Copper	1.8	ug/L	I	1	4
01/05/04	Effluent	Metals-Water	Iron	61	ug/L		15	60
01/05/04	Effluent	Metals-Water	Lead	0.23	ug/L	U	0.23	0.92
01/05/04	Effluent	Metals-Water	Magnesium	19.2	mg/L		0.02	0.08
01/05/04	Effluent	Metals-Water	Nickel	3	ug/L	U	3	12
01/05/04	Effluent	Metals-Water	Selenium	1	ug/L	U	1	4
01/05/04	Effluent	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
01/05/04	Effluent	Metals-Water	Zinc	30	ug/L		4	16
01/05/04	Effluent	Nutrients-Liquid	Ammonia-N	0.052	mg N/L		0.01	0.02
01/05/04	Effluent	Nutrients-Liquid	NO2NO3-N	0.61	mg N/L		0.004	0.01
01/05/04	Effluent	Nutrients-Liquid	N_KJEL_TOT	0.87	mg N/L	J	0.06	0.2
01/05/04	Effluent	Nutrients-Liquid	O-Phosphate-P	0.16	mg P/L		0.012	0.03
01/05/04	Effluent	Nutrients-Liquid	Organic Carbon	6.6	mg C/L		1	5

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Effluent	Nutrients-Liquid	Total-P	0.19	mg P/L		0.02	0.06
01/05/04	Effluent	Overflow	Oil and Grease	1.8	mg/l	I		
01/05/04	Effluent	VOC-Water	Bromodichloromethane	5.9	ug/L		0.2	1
01/05/04	Effluent	VOC-Water	Bromoform	0.2	ug/L	U	0.2	1
01/05/04	Effluent	VOC-Water	Chloroform	18	ug/L		0.2	1
01/05/04	Effluent	VOC-Water	Dibromochloromethane	1.6	ug/L		0.2	1
01/05/04	Blank	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	UY	3.8	15
01/05/04	Blank	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	1,4-Naphthoquinone	19	ug/L	UY	19	76
01/05/04	Blank	BNA-Water	1-Naphthylamine	9.5	ug/L	UYJ	9.5	38
01/05/04	Blank	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	2,4,5-Trichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2,4-Dimethylphenol	48	ug/L	UY	48	190
01/05/04	Blank	BNA-Water	2,4-Dinitrophenol	14	ug/L	UY	14	57
01/05/04	Blank	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2,6-Dichlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2-Acetylaminofluorene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2-Chloronaphthalene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2-Chlorophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	UY	2.9	11
01/05/04	Blank	BNA-Water	2-Methylnaphthalene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2-Naphthylamine	9.5	ug/L	UYJ	9.5	38
01/05/04	Blank	BNA-Water	2-Nitroaniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2-Nitrophenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	2-Picoline	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	UY	38	150
01/05/04	Blank	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	UYJ	19	76
01/05/04	Blank	BNA-Water	3-Methylcholanthrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	3-Nitroaniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	4,4'-DDD	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	4,4'-DDE	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	4,4'-DDT	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	4-Aminobiphenyl	3.8	ug/L	UY	3.8	15
01/05/04	Blank	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	UY	0.95	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Blank	BNA-Water	4-Chloroaniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	4-Nitroaniline	0.95	ug/L	UYJ	0.95	3.8
01/05/04	Blank	BNA-Water	4-Nitrophenol	14	ug/L	UY	14	57
01/05/04	Blank	BNA-Water	5-Nitro-o-toluidine	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Acenaphthene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Acenaphthylene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Acetophenone	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Aldrin	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	Aniline	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Benzidine	95	ug/L	UY	95	380
01/05/04	Blank	BNA-Water	Benzo(a)anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Benzo(a)pyrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Benzyl alcohol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	UY	2.9	11
01/05/04	Blank	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	UY	14	57
01/05/04	Blank	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	UY	4.8	19
01/05/04	Blank	BNA-Water	Chrysene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	UY	4.8	19
01/05/04	Blank	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Dibenzofuran	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Dieldrin	1.4	ug/L	UYJ	1.4	5.7
01/05/04	Blank	BNA-Water	Diethyl phthalate	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Dimethyl phthalate	48	ug/L	UY	48	190
01/05/04	Blank	BNA-Water	Dimethylaminoazobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Dinoseb	3.8	ug/L	UY	3.8	15
01/05/04	Blank	BNA-Water	Diphenylamine	2.9	ug/L	UY	2.9	11
01/05/04	Blank	BNA-Water	Endosulfan I	3.8	ug/L	UY	3.8	15
01/05/04	Blank	BNA-Water	Endosulfan II	3.8	ug/L	UY	3.8	15
01/05/04	Blank	BNA-Water	Endosulfan sulfate	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	Endrin	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	Endrin aldehyde	3.8	ug/L	UY	3.8	15
01/05/04	Blank	BNA-Water	Ethyl methanesulfonate	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Fluoranthene	0.95	ug/L	UY	0.95	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Blank	BNA-Water	Fluorene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Heptachlor	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	Heptachlor epoxide	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	Hexachlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Hexachlorobutadiene	2.9	ug/L	UY	2.9	11
01/05/04	Blank	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UYJ	2.9	11
01/05/04	Blank	BNA-Water	Hexachloroethane	2.9	ug/L	UY	2.9	11
01/05/04	Blank	BNA-Water	Hexachloropropene	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Isophorone	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Isosafrole	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Methapyrilene	3.8	ug/L	UYJ	3.8	15
01/05/04	Blank	BNA-Water	Methyl methanesulfonate	0.95	ug/L	UYJ	0.95	3.8
01/05/04	Blank	BNA-Water	N-Nitrosodi-n-butylamine	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	N-Nitrosodiethylamine	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	UY	2.9	11
01/05/04	Blank	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	N-Nitrosomorpholine	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	N-Nitrosopiperidine	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	Naphthalene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Nitrobenzene	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	UY	19	76
01/05/04	Blank	BNA-Water	Pentachlorobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Pentachloroethane	48	ug/L	UY	48	190
01/05/04	Blank	BNA-Water	Pentachloronitrobenzene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Pentachlorophenol	2.9	ug/L	UY	2.9	11
01/05/04	Blank	BNA-Water	Phenacetin	3.8	ug/L	UY	3.8	11
01/05/04	Blank	BNA-Water	Phenanthrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Phenol	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Pyrene	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	Pyridine	3.8	ug/L	UY	3.8	15
01/05/04	Blank	BNA-Water	Safrole	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	BNA-Water	alpha-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	beta-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	delta-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	gamma-BHC	1.4	ug/L	UY	1.4	5.7
01/05/04	Blank	BNA-Water	m,p-Cresols	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	o-Cresol	1.9	ug/L	UY	1.9	7.6
01/05/04	Blank	BNA-Water	o-Toluidine	0.95	ug/L	UY	0.95	3.8
01/05/04	Blank	GC-Water	Alachlor	0.57	ug/L	UY	0.57	2.28

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Blank	GC-Water	Ametryn	0.048	ug/L	UY	0.048	0.19
01/05/04	Blank	GC-Water	Atrazine	0.048	ug/L	UYJ	0.048	0.19
01/05/04	Blank	GC-Water	Azinphos Methyl	0.048	ug/L	UY	0.048	0.19
01/05/04	Blank	GC-Water	Bromacil	0.19	ug/L	UYJ	0.19	0.76
01/05/04	Blank	GC-Water	Butylate	0.19	ug/L	UY	0.19	0.76
01/05/04	Blank	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	UY	0.048	0.19
01/05/04	Blank	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	UY	0.095	0.38
01/05/04	Blank	GC-Water	Diazinon	0.048	ug/L	UYJ	0.048	0.19
01/05/04	Blank	GC-Water	Ethion	0.048	ug/L	UY	0.048	0.19
01/05/04	Blank	GC-Water	Ethoprop	0.095	ug/L	UY	0.095	0.38
01/05/04	Blank	GC-Water	Fenamiphos	0.19	ug/L	UY	0.19	0.76
01/05/04	Blank	GC-Water	Fonofos	0.095	ug/L	UY	0.095	0.38
01/05/04	Blank	GC-Water	Hexazinone	0.095	ug/L	UYJ	0.095	0.38
01/05/04	Blank	GC-Water	Malathion	0.14	ug/L	UY	0.14	0.56
01/05/04	Blank	GC-Water	Metalaxyl	0.24	ug/L	UY	0.24	0.96
01/05/04	Blank	GC-Water	Metolachlor	0.48	ug/L	UY	0.48	1.92
01/05/04	Blank	GC-Water	Metribuzin	0.095	ug/L	UYJ	0.095	0.38
01/05/04	Blank	GC-Water	Mevinphos	0.19	ug/L	UY	0.19	0.76
01/05/04	Blank	GC-Water	Naled	0.76	ug/L	UY	0.76	3.04
01/05/04	Blank	GC-Water	Norflurazon	0.095	ug/L	UYJ	0.095	0.38
01/05/04	Blank	GC-Water	Parathion Ethyl	0.14	ug/L	UY	0.14	0.56
01/05/04	Blank	GC-Water	Parathion Methyl	0.095	ug/L	UY	0.095	0.38
01/05/04	Blank	GC-Water	Phorate	0.048	ug/L	UY	0.048	0.19
01/05/04	Blank	GC-Water	Prometryn	0.14	ug/L	UY	0.14	0.56
01/05/04	Blank	GC-Water	Simazine	0.048	ug/L	UYJ	0.048	0.19
01/05/04	Blank	Metals-Water	Aluminum	7	ug/L	U	7	28
01/05/04	Blank	Metals-Water	Arsenic	6	ug/L	U	6	24
01/05/04	Blank	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
01/05/04	Blank	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
01/05/04	Blank	Metals-Water	Chromium	3	ug/L	U	3	12
01/05/04	Blank	Metals-Water	Copper	1	ug/L	U	1	4
01/05/04	Blank	Metals-Water	Iron	15	ug/L	U	15	60
01/05/04	Blank	Metals-Water	Lead	0.23	ug/L	U	0.23	0.92
01/05/04	Blank	Metals-Water	Magnesium	0.02	mg/L	U	0.02	0.08
01/05/04	Blank	Metals-Water	Nickel	3	ug/L	U	3	12
01/05/04	Blank	Metals-Water	Selenium	1	ug/L	U	1	4
01/05/04	Blank	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
01/05/04	Blank	Metals-Water	Zinc	4	ug/L	U	4	16
01/05/04	Blank	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
01/05/04	Blank	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
01/05/04	Blank	Nutrients-Liquid	N_KJEL_TOT	0.06	mg N/L	U	0.06	0.2
01/05/04	Blank	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
01/05/04	Blank	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
01/05/04	Blank	Overflow	Oil and Grease	1.6	mg/l	I		
01/05/04	Blank	VOC-Water	Bromodichloromethane	0.2	ug/L	U	0.2	1
01/05/04	Blank	VOC-Water	Bromoform	0.2	ug/L	U	0.2	1
01/05/04	Blank	VOC-Water	Chloroform	0.23	ug/L	I	0.2	1
01/05/04	Blank	VOC-Water	Dibromochloromethane	0.2	ug/L	U	0.2	1
01/05/04	Test	Bio-AGP/LimNut	Algal Growth Potential	14	mg DryWt/L		0.1	0.3
01/05/04	Test	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Test	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Test	Nutrients-Liquid	Ammonia-N	0.052	mg N/L		0.01	0.02
01/05/04	Test	Nutrients-Liquid	NO2NO3-N	0.13	mg N/L		0.004	0.01
01/05/04	Test	Nutrients-Liquid	N_KJEL_TOT	0.69	mg N/L		0.12	0.4
01/05/04	Test	Nutrients-Liquid	O-Phosphate-P	0.2	mg P/L		0.012	0.03
01/05/04	Test	Nutrients-Liquid	Total-P	0.23	mg P/L		0.02	0.06
01/05/04	Control 1	Bio-AGP/LimNut	Algal Growth Potential	9.79	mg DryWt/L		0.1	0.3
01/05/04	Control 1	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Control 1	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Control 1	Nutrients-Liquid	Ammonia-N	0.077	mg N/L		0.01	0.02
01/05/04	Control 1	Nutrients-Liquid	NO2NO3-N	0.045	mg N/L		0.004	0.01
01/05/04	Control 1	Nutrients-Liquid	N_KJEL_TOT	0.73	mg N/L		0.12	0.4
01/05/04	Control 1	Nutrients-Liquid	O-Phosphate-P	0.24	mg P/L		0.012	0.03
01/05/04	Control 1	Nutrients-Liquid	Total-P	0.27	mg P/L		0.02	0.06
01/05/04	Control 2	Bio-AGP/LimNut	Algal Growth Potential	6.78	mg DryWt/L		0.1	0.3
01/05/04	Control 2	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Control 2	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
01/05/04	Control 2	Nutrients-Liquid	Ammonia-N	0.064	mg N/L		0.01	0.02
01/05/04	Control 2	Nutrients-Liquid	NO2NO3-N	0.037	mg N/L		0.004	0.01
01/05/04	Control 2	Nutrients-Liquid	N_KJEL_TOT	0.72	mg N/L		0.12	0.4
01/05/04	Control 2	Nutrients-Liquid	O-Phosphate-P	0.24	mg P/L		0.016	0.04
01/05/04	Control 2	Nutrients-Liquid	Total-P	0.26	mg P/L		0.02	0.06

Appendix 5

Typical Values for Selected Parameters in Florida Waters

Percentile Distribution (1617 stations)

CONTROL SITE 1

Parameter	5%	10%	20%	30%	40%	50%	60%	70%	80%	90%	95%	Measured
November 2003												
Total Kjeldahl Nitrogen	0.30	0.39	0.56	0.73	0.87	1.00	**1.11**	1.26	1.49	1.93	2.80	**1.1**
Total Ammonia	0.02	0.02	0.04	0.05	**0.06**	0.08	0.11	0.14	0.20	0.34	0.60	**0.059**
Nitrate plus Nitrite	0.01	0.01	0.03	0.05	0.07	0.10	**0.14**	0.20	0.32	0.64	1.05	**0.14**
Total Phosphorus	0.02	0.03	0.05	0.06	0.10	0.13	**0.18**	0.25	0.39	0.74	1.51	**0.22**
Orthophosphate	0.01	0.01	0.03	0.04	0.05	0.08	0.11	**0.17**	0.27	0.59	1.37	**0.19**
January 2004												
Total Kjeldahl Nitrogen	0.30	0.39	0.56	**0.73**	0.87	1.00	1.11	1.26	1.49	1.93	2.80	**0.73**
Total Ammonia	0.02	0.02	0.04	0.05	**0.06**	0.08	0.11	0.14	0.20	0.34	0.60	**0.077**
Nitrate plus Nitrite	0.01	0.01	**0.03**	0.05	0.07	0.10	0.14	0.20	0.32	0.64	1.05	**0.045**
Total Phosphorus	0.02	0.03	0.05	0.06	0.10	0.13	0.18	**0.25**	0.39	0.74	1.51	**0.27**
Orthophosphate	0.01	0.01	0.03	0.04	0.05	0.08	0.11	**0.17**	0.27	0.59	1.37	**0.24**
Turbidity (NTU)	0.60	0.90	1.20	1.45	**2.10**	2.80	3.60	4.50	6.65	10.45	16.30	**2.7**

CONTROL SITE 2

Parameter	5%	10%	20%	30%	40%	50%	60%	70%	80%	90%	95%	Measured
November 2003												
Total Kjeldahl Nitrogen	0.30	0.39	0.56	0.73	0.87	1.00	**1.11**	1.26	1.49	1.93	2.80	**1.2**
Total Ammonia	0.02	0.02	0.04	0.05	**0.06**	0.08	0.11	0.14	0.20	0.34	0.60	**0.061**
Nitrate plus Nitrite	0.01	0.01	0.03	0.05	0.07	0.10	**0.14**	0.20	0.32	0.64	1.05	**0.14**
Total Phosphorus	0.02	0.03	0.05	0.06	0.10	0.13	**0.18**	0.25	0.39	0.74	1.51	**0.23**
Orthophosphate	0.01	0.01	0.03	0.04	0.05	0.08	0.11	**0.17**	0.27	0.59	1.37	**0.18**
January 2004												
Total Kjeldahl Nitrogen	0.30	0.39	**0.56**	0.73	0.87	1.00	1.11	1.26	1.49	1.93	2.80	**0.72**
Total Ammonia	0.02	0.02	0.04	0.05	**0.06**	0.08	0.11	0.14	0.20	0.34	0.60	**0.064**
Nitrate plus Nitrite	0.01	0.01	**0.03**	0.05	0.07	0.10	0.14	0.20	0.32	0.64	1.05	**0.037**
Total Phosphorus	0.02	0.03	0.05	0.06	0.10	0.13	0.18	**0.25**	0.39	0.74	1.51	**0.26**
Orthophosphate	0.01	0.01	0.03	0.04	0.05	0.08	0.11	**0.17**	0.27	0.59	1.37	**0.24**
Turbidity (NTU)	0.60	0.90	1.20	**1.45**	2.10	2.80	3.60	4.50	6.65	10.45	16.30	**1.8**

TEST SITE

Parameter	5%	10%	20%	30%	40%	50%	60%	70%	80%	90%	95%	Measured
November 2003												
Total Kjeldahl Nitrogen	0.30	0.39	0.56	0.73	**0.87**	1.00	1.11	1.26	1.49	1.93	2.80	**0.9 A**
Total Ammonia	**0.02**	0.02	0.04	0.05	0.06	0.08	0.11	0.14	0.20	0.34	0.60	**0.017 I**
Nitrate plus Nitrite	0.01	0.01	0.03	0.05	0.07	**0.10**	0.14	0.20	0.32	0.64	1.05	**0.11**
Total Phosphorus	0.02	0.03	0.05	0.06	**0.10**	0.13	0.18	0.25	0.39	0.74	1.51	**0.11 A**
Orthophosphate	0.01	0.01	0.03	0.04	**0.05**	0.08	0.11	0.17	0.27	0.59	1.37	**0.072**
January 2004												
Total Kjeldahl Nitrogen	0.30	0.39	**0.56**	0.73	0.87	1.00	1.11	1.26	1.49	1.93	2.80	**0.69**
Total Ammonia	0.02	0.02	0.04	**0.05**	0.06	0.08	0.11	0.14	0.20	0.34	0.60	**0.052**
Nitrate plus Nitrite	0.01	0.01	0.03	0.05	0.07	**0.10**	0.14	0.20	0.32	0.64	1.05	**0.13**
Total Phosphorus	0.02	0.03	0.05	0.06	0.10	0.13	**0.18**	0.25	0.39	0.74	1.51	**0.23**
Orthophosphate	0.01	0.01	0.03	0.04	0.05	0.08	0.11	**0.17**	0.27	0.59	1.37	**0.2**
Turbidity (NTU)	0.60	0.90	1.20	1.45	2.10	**2.80**	3.60	4.50	6.65	10.45	16.30	**3.4**

NTU = Nephelometric turbidity units. Adapted from Joe Hand, FDER, personal communication, 1991 (data collected 1980-1989).

Appendix 6

Additional physical, chemical, toxicological and microbiological results

FL DEP SW District Chemistry Laboratory Report
Phone # 8-744-6100 DEP CompQAP # 880078 NELAP # E34886

3804 Coconut Palm Dr.
Tampa, FL 33619

Project:	FY15	Type:	CTY VENICE	Requested by:				
Site	Time	Date	Log	Samplers		RQF	Notes	
EQUIPMENT BLANK	1039	1/6/2004	29478	DUGGAN		2004-01-05-17		
EFFLUENT	1140	1/6/2004	29479	DUGGAN		2004-01-05-17		
EFFLUENT-POST FILTER	1140	1/6/2004	29480	DUGGAN		2004-01-05-17		
OUTFALL	1040	1/5/2004	29496	GUNTER		2004-01-05-17		
FIELD BLANK	1020	1/5/2004	29496	GUNTER		2004-01-05-17		
TEST SITE	1210	1/5/2004	29497	GUNTER		2004-01-05-17		
CONTROL SITE	1400	1/5/2004	29498	GUNTER	site: OUTFALL	site: FB	site: SITE	site: CSITE
Code	parameter	units	site: EB	site: EFFLU	site: ENL PF			
29	kg#	log	29478	29479	29480	29495	29496	29497	29498
10	water temp.	deg C							
78	secchi	meters				<5	<5	12ß	120
80	color	Pt-Co							
94	conductivity	umho/cm							
299	diss.Oxygen	mg/l							
301	diss.Oxygen	%				2U	2U	2U	2U
314	cbod5	mg/l	2U	2U		2U	2U	2U	2U
314	BOD	mg/l							
406	pH	units							
410	alkalinity	mg/l							
480	salinity	0/00							
530	tss	mg/l	1U	4	6	9	1U	4	3
4192	sample depth	meters							
31501	t-coliforms	#/100ml							
316`6	f-coliforms	#/100ml							
82079	turbidity	NTU				0.6	.1U	3.4	2.7
82903	total depth	meters							

A denotes mean, B counts unacceptable, J estimate, K less than, L greater than, O data lost, Q out of holding time, T value is less than MDL, U not detected, Y analyte detected in blank, Y inappropriately preserved, Z too numerous to count, D field measurement

Results for NELAP accredited tests contained in this report meet the requirements specified for the National Environmental Laboratory Accreditation Program. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published test performance acceptance criteria.

FL DEP SW District Chemistry Laboratory Report
Phone # 813-744-6100 DEP CompQAP # 880878 NELAP # E34886

3804 Coconut Palm Dr.
Tampa, FL 33619

Project:		Type:		Requested by:		
Site	Time	Date	Log	Samplers	RQ#	Notes
CONTROL SITE 2	1445	1/5/2004	29499	GUNTER	2004-01-05-17	
FIELD BLANK	1310	1/6/2004	29516	FALKNER	2004-01-05-17	
OUTFALL	1315	1/6/2004	29517	FALKNER	2004-01-05-17	
TEST SITE	1330	1/6/2004	29518	FALKNER	2004-01-05-17	
CONTROL SITE 2	1345	1/6/2004	29519	FALKNER	2004-01-05-17	
CONTROL SITE 1	1350	1/6/2004	29520	FALKNER	2004-01-05-17	

Code	parameter	units	site: C.SITE2	site: FB	site: OUTFAL	site: T.SITE	site:C.SITE2	site:C.SITE1	site:
29	Log#	og	29499	29516	29517	29518	29519	29520	
10	water temp	deg C							
78	secchi	meters							
80	color	Pt-Co	120						
94	conductivity	umho/cm							
299	diss.Oxygen	mg/l							
301	diss.Oxygen	%							
314	bod5	mg/l	2U						
314	BOD	mg/l	2.74						
403	pH	units							
410	alkalinity	mg/l							
480	salinity	0/00							
530	tss	mg/l	2						
4192	sample depth	meters							
31501	f-coliforms	#/100ml		1K	20BK	330	470	380	
31616	f-coliforms	#/100ml		1K	1K	70BK	120	100	
82079	turbidity	NTU	1.8						
82903	total depth	meters							

A denotes mean, B counts unacceptable, J estimate, K less than, L greater than, O data lost, Q out of holding time, T value is less than MDL, U not detected, V analyte detected in blank, Y improperly preserved, Z too numerous to count, D field measurement Results for NELAP accredited tests contained in this report meet the requirements specified for the National Environmental Laboratory Accreditation Program. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published test performance acceptance criteria.

1/6/04 @ 1149
TRC (Dechlorination) > 0.01
2.05 MGD

Table 1. Data recorded during the 48-hour acute screening bioassays of a sample of effluent from the Venice East Side Wastewater Treatment Plant, 3510 Laurel Road East, Venice, Sarasota County, Florida, NPDES# FL0041441, performed from 6 to 8 January, 2004.

Facility:	**Venice East Side WWTP**		**NPDES #:**	**FL0041441**	Facility Type: **WWTP**	**Analysts:**	Christa Pierini
Location:	3510 Laurel Road East, Nokomis		Contact/District:	Melissa Gunter/SW			Josh Ayres
County:	Sarasota		Test type:	static acute screen			Marshall Faircloth
Sample Collection Date:	1/5/2004	Time: 1040	# tests:	2	Receiving Water: Class III fresh		Sarah Prichard
Test Beginning Date:	1/6/2004	Time: 1500	Chlorination Type:	dechlorinated	Curry Creek		
Test Ending Date:	1/8/2004	Time: 1330	FDEP SOP#:	TA07_01 / 02	**Page 1 of 1**	**Reviewer:**	Julie Espy

Organism: ***Ceriodaphnia dubia*** (water flea) Life stage: <24 hours Chamber size: 30 mL [A]Feeding: YCT/Algae Food Batch #: YCT #4 /P. sub. #23

	Sample/Diluent	SURVIVAL # Alive			pH			[B]Temperature (°C)			Diss. Oxygen (mg/L)			[C]Conductivity	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/20	5	5	5	7.8	-	7.8	24.2	-	24.1	7.8	-	7.4	155	200
Control B	0/20	5	5	5	-	-	8.0	-	-	24.0	-	-	7.5	-	180
Control C	0/20	5	5	5	-	-	8.0	-	-	24.0	-	-	7.4	-	180
Control D	0/20	5	5	5	-	-	8.0	-	-	24.1	-	-	7.5	-	180
100% A	20/0	5	5	5	7.6	-	8.2	24.3	-	24.0	7.7	-	7.6	880	920
100% B	20/0	5	5	5	-	-	8.2	-	-	24.1	-	-	7.7	-	950
100% C	20/0	5	5	5	-	-	8.2	-	-	24.0	-	-	7.6	-	960
100% D	20/0	5	5	5	-	-	8.2	-	-	24.0	-	-	7.6	-	1040

[A] Organisms fed prior to testing.
[B]Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
[C]Conductivity value is uncorrected mmhos/cm.
Room Temperature range for the test period was 23.0 - 24.0°C.
Incubator #3 temperature range for the test period was 24.0 - 25.0 °C.
Light Intensity during the test was 50-100 foot candles.
Photoperiod during the test was 16 hours of light : 8 hours of dark.

LIMS	
Job number:	TLH-2004-01-06-12
sample number:	725628

Data Transcription Verification
date: 2/2/04
by: Josh Ayres/Scott Andree

Total Residual CL2	mg/L	Method
Field 100% sample:	-	-
Lab 100% sample:	0.03	Hach
Control water (water flea):	0.02	Hach
Control water: (fish):	0.01	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water: (water flea):	<0.017	<0.017
Control water (fish):	<0.017	<0.017
100% Sample:	0.046	<0.017

Organism: ***Pimephales promelas*** (fish) Life stage: 13days Chamber size: 1000 mL [D]Feeding: *Artemia* Food Batch #: 0194025G

	Sample/Diluent	SURVIVAL # Alive			pH			[E]Temperature (°C)			Diss. Oxygen (mg/L)			[F]Conductivity	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.2	7.9	8.2	24.3	24.6	24.0	7.9	7.2	7.4	320	340
Control B	0/500	5	5	5	8.2	8.0	8.1	24.3	24.3	24.0	7.8	7.2	7.4	315	335
Control C	0/500	5	5	5	8.2	8.0	8.1	24.2	24.3	24.2	7.8	7.2	7.4	315	335
Control D	0/500	5	5	5	8.2	8.0	8.1	24.2	24.2	24.9	7.9	7.2	7.5	315	340
100% A	500/0	5	5	5	7.5	7.9	8.0	24.7	24.1	24.0	7.8	7.2	7.6	905	940
100% B	500/0	5	5	5	7.5	7.9	8.1	24.7	24.2	24.1	7.9	7.2	7.6	930	960
100 % C	500/0	5	5	5	7.5	7.9	8.1	24.6	24.7	24.5	7.9	7.2	7.6	935	965
100% D	500/0	5	5	5	7.5	7.9	8.1	24.6	24.6	24.1	7.9	7.2	7.6	935	965

[D]Organisms fed prior to testing.
[E]Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
[F]Conductivity value is uncorrected mmhos/cm.
Room Temperature range for the test period was 23.0 - 24.0°C.
Incubator #3 temperature range for the test period was 24.0 - 25.0 °C.
Light Intensity during the test was 50-100 foot candles.
Photoperiod during the test was 16 hours of light : 8 hours of dark.

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water: (water flea):	68	73
Control water: (fish)	78	94
100% Sample:	96	220

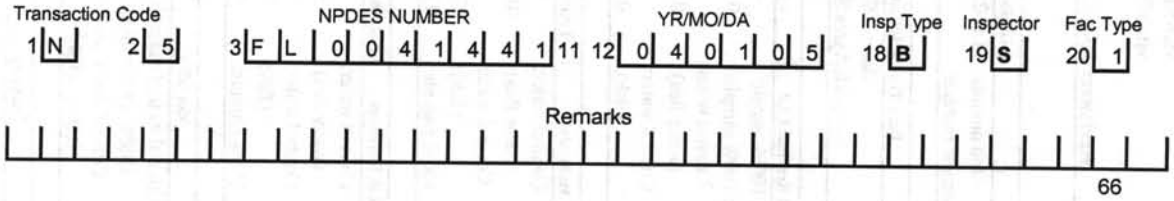
Mortality	Percent
Control water (water flea):	0%
100% (water flea):	0%
Control water (fish):	0%
100 % (fish):	0%

[G]Salinity	ppt
100% sample:	0
Control water (water flea):	0
Control water (fish):	0

[G]Salinity based on conductivity and temperature.

The Bioassay of Venice Eastside WWTP effluent sampled on January 5, 2004, NPDES #FL0041441.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)



The Priority Pollutants Analysis for Bioassay of Venice Eastside WWTP effluent sampled on January 5, 2004, NPDES #FL0041441.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

