

Effluent Quality Assessment

Central Water Reclamation Facility

Escambia County

NPDES #FL0559351

Sampled February 3, 5, 7, 2014

April 2014

Biology Section
Bureau of Laboratories
Division of Environmental Assessment and Restoration
2014 FDEP Bureau of Labs Quality Manual
NELAC Certification No. E31780

CONTENTS

Facility Overview

Methods

Results

Conclusion

Literature Cited

Tables

Table 1	Effluent limits, Class III Freshwater Criteria and field parameters
Table 2	Effluent limits, Class III Freshwater Criteria and analytical water chemistry data
Table 3	Effluent limits, Class III Freshwater Criteria and analytical metals data
Table 4	Measured and predicted algal growth potential (AGP; mg dry weight/L)

Appendices

Appendix A	Facility Summary
Appendix B	Explanation of measurements
Appendix C	Chemical Analyses of Effluent

EPA End Sheet

Central Water Reclamation Facility (WRF), 2980 Old Chemstrand Road, Cantonment, Escambia County, Florida, 32533. NPDES #FL0559351.

Facility Overview

Central WRF is a domestic wastewater treatment facility. Reclaimed water is conveyed via a reclaimed water transmission main and discharged to International Paper's (IP) mixing box where it is mixed with the IP effluent at the start of the 10-mile effluent transmission pipeline to the wetlands (D-001). See Appendix A for a description of the facility, summary of permit limits, Administrative Order (AO) and Discharge Monitoring Report (DMR) information.

Methods

Effluent composite samples for toxicity testing were collected on February 3, 2014, February 5, 2014, and February 7, 2014. Effluent grab and composite samples for biological and chemical analyses for this facility were collected on February 3, 2014. All samples were collected from the EFF-01 NPDES sampling point for Outfall D-001 by Nathan Mulkey and Rick Abad (FDEP Northwest District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling (see Appendix B).

The 7-day chronic definitive toxicity tests and the algal growth potential test were performed following internal DEP SOPs TA07_05, TA07_09, and TA08_01 through TA08_09 (see Appendix B). After conferring with Northwest District personnel concerning the concentrations of residual chlorine in the bioassay samples exceeding concentrations of chlorine known to be acutely toxic to the test species, a decision was made not to perform a bioassay with the original sample. The bioassays were performed with dechlorinated sample.

Results

Chemistry Results (See Table 1 and Appendix C)

- Total residual chlorine was detected in all three bioassay samples in the laboratory (0.80 Q£, 0.77 Q£, and 0.80 Q£ in samples 1, 2, and 3, respectively), which represents an exceedance of Class III Freshwater Quality Criterion (62-302.530(18), F.A.C.) and a potential violation of permit limits. The total ammonia concentration in the grab sample collected and preserved for chemical analysis was 0.007 mg N/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.
- Total phosphorus, total nitrogen, turbidity, fluoride, copper, nickel and zinc were detected in the effluent at levels that comply with Class III Freshwater Quality Criteria (62-302.530, F.A.C.). Carbonaceous biochemical oxygen demand (CBOD), arsenic, chromium, and lead were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL).
- The effluent's dissolved oxygen (concentration and saturation) complied with the Class III Freshwater Criterion.
- Total ammonia and total organic carbon (TOC) were detected in the field blank.

Algal Growth Potential (See Table 4 and Appendix C)

- The effluent Algal Growth Potential (AGP) was 17.3 mg dry wt/L of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and Schultz (1987) determined that AGP values above 5.0 mg dry weight/L represent a "problem" threshold for fresh receiving waters, implying nutrient enrichment. The inorganic N:P ratio of the effluent suggests that the effluent is phosphorus limited, but the total N:P ratio suggests co-limitation (Miller et al. 1978).
- To determine actual nutrient limitation, a limiting-nutrient algal growth potential test with associated nutrient chemistry should be performed (Miller et al. 1978).

Toxicity Test Results (See Appendix C)

- Tests were performed February 4-11, 2014.

Ceriodaphnia dubia 7-day chronic definitive bioassay –	IC25: > 100 % NOEC: 100 %
Pimephales promelas 7-day chronic definitive bioassay –	IC25: > 100 % NOEC: < 6.25 %

- The bioassay samples appeared to show chronic toxicity to the *P. promelas* test organisms, producing a No Observed Effect Concentration for biomass of < 6.25%; however, the 25% Inhibition Concentration (IC25) for biomass was > 100% sample, which complies with the facility's permitted limit. The low NOEC was likely due to a statistical anomaly of a low coefficient of variation (4.48%) in the control and the resulting detectable Percent Minimum Significant Difference of 10.8% and is considered to be a Type 1 error (determining that a sample is toxic when in fact it is not) rather than true toxicity (USEPA, 2000).
- The bioassays samples were not chronically toxic to the *C. dubia* test organisms.
- Total residual chlorine (TRC) was detected in all three bioassay samples in the laboratory. An aliquot of each sample was dechlorinated by the addition of sodium thiosulfate (0.025 N) at a rate of 0.9 mL per liter of sample to neutralize the chlorine. Bioassays were performed on the dechlorinated aliquots. The same concentration of sodium thiosulfate was added to the dechlorinated test controls. The purpose of the dechlorinated test controls was to confirm that there was no adverse effect of adding sodium thiosulfate to the sample. There was no mortality in the dechlorinated controls of either test species.
- The first bioassay (1574299) sample was aerated for 30 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 11.1 mg/L to 8.5 mg/L.

Conclusion

The effluent sample collected from the EFF-01 NPDES sampling point for this facility on February 3, 5, and 7, 2014, appeared to show chronic toxicity to the fish test species during the 7-day chronic definitive bioassay; however, this is thought to be a Type 1 error. The effluent did not show toxicity to the *Ceriodaphnia dubia* test organisms. The facility's permitted limit of IC25 ≥ 100% was not exceeded for either species. The total residual chlorine detected in all three effluent composite samples collected for the bioassay tests may have contributed to the observed chronic toxicity. The TRC represents an exceedance of Class III Freshwater Quality Criterion (62-302.530(18) F.A.C.) and a potential violation of permit limits. The effluent AGP result was greater than the "problem" threshold for fresh receiving waters suggesting that nutrient enrichment may be an issue. Effluent water quality samples collected on February 3, 2014, did not exceed any other applicable water quality standards or represent potential violations of any other permit conditions.

For additional information concerning this sampling event, including bioassay bench sheets and SRT data, please contact Joseph.Faircloth@dep.state.fl.us and/or Diane.Power@dep.state.fl.us.

Literature Cited

Miller, W. E., T. E. Maloney, and J. C. Greene. 1978. The *Selenastrum capricornutum* Printz algal assay bottle test. EPA-600/9-78-018. U. S. EPA, Cincinnati, Ohio. 126 p.

Raschke, R. L. and D. A. Schultz. 1987. The use of the algal growth potential test for data assessment. J. Wat. Poll. Cont. Fed. 59(4): 222-227.

USEPA, 2000. Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136). EPA 821-B-00-004.

Table 1. Effluent limits, Class III Freshwater Criteria and field parameters

Central Water Reclamation Facility	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Sample Depth	m	-	-	0.15
Temperature	C	-	-	18.4
pH	SU	6.0 - 8.5	6.0 - 8.5	7.2
Specific Conductance	umhos/cm	≤ 1,275	-	442
Dissolved Oxygen Criteria- time of day corrected	% saturation	≥ 65.18	-	102.79
Dissolved Oxygen	mg/L	≥ 5.0	-	9.6
Flow	MGD	-	5.0 a	14.75
Total Residual Chlorine	mg/L	≤ 0.01	≤ 0.01	-

a – Annual average

A dash (-) indicates measurement was not collected or criterion/limit does not exist

Table 2. Effluent limits, Class III Freshwater Criteria and analytical water chemistry data

Central Water Reclamation Facility	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab	Effluent Composite
Ortho-phosphate	mg P/L	-	Report	0.006 I	-
Total Phosphorus	mg P/L	-	≤ 2.0 s	0.062	0.056
Total Ammonia	mg N/L	-	Report	0.007	-
Un-ionized Ammonia (calculated salinity)	mg N/L	≤ 0.02 s	-	< 0.02 c	-
Nitrate and Nitrite	mg N/L	-	Report	0.38	0.37
Total Kjeldahl Nitrogen	mg N/L	-	-	0.67	0.79
Organic Nitrogen	mg N/L	-	-	0.66 c	-
Total Nitrogen	mg N/L	-	≤ 6.0 s	1.05 c	1.16 c
Total Organic Carbon	mg C/L	-	-	5.2	-
Chlorophyll *a* - Corrected	ug/L	-	-	0.55 U	-
Phaeophytin	ug/L	-	-	0.40 U	-
CBOD, 5 day, N - inhibited	mg/L	-	≤ 10.0 s*	1.5 IJ	-
Hardness	mg/L	-	-	79.6 c	-
Total Residual Chlorine	mg/L	≤ 0.01	≤ 0.01	-	0.80 Q£
Total Suspended Solids	mg/L	-	≤ 5.0 s*	-	2 I
Turbidity	NTU	< 29 t	-	0.9	-
Color (true)	PCU	-	-	4.4 I	-
Alkalinity	mg CaCO3/L	-	-	93	-
Chloride	mg Cl/L	-	-	95	-
Fluoride	mg F/L	≤ 10.0	-	0.87	-
Sulfate	mg SO4/L	-	-	36	-
Microbiology					
Fecal Coliforms ¥	cfu/100 mL	≤ 400s #	25 s	1 U	-

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.

Value exceeds the Class III Water Quality Criteria or permit limits

c - Value is calculated
s - Single sample
t - Shall not exceed 29 NTUs above background
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
Q - Sample held beyond normal holding time
U - Material analyzed for but not detected; value reported is the method detection limit
¥ - Fecal coliform analysis performed by UWF lab
- If 10 or fewer samples are taken within a month, the single sample limit is 400 CFU (62-302.530(6), F.A.C.)
£ - measurement taken in the FDEP laboratory; measurement from sample TOX1
* - Permit limit is for EFB-01; sample collected at EFF-01

Table 3. Effluent limits, Class III Freshwater Criteria and analytical metals data

Central Water Reclamation Facility	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab Class III Criteria	Effluent Grab
Hardness	mg/L	-	-	4.38 c	-
Aluminum	ug/L	-	-	-	88
Arsenic	ug/L	≤ 50	-	-	0.28 I
Cadmium	ug/L	-	-	0.228 b	0.050 U
Calcium	mg/L	-	-	-	27.5
Chromium, Total [2]	ug/L	-	-	71.5 b	0.31 I
Copper	ug/L	-	-	7.67 b	1.5
Iron	ug/L	≤ 1,000	-	-	30 U
Lead	ug/L	-	-	2.38 b	0.51 I
Magnesium	mg/L	-	-	-	2.65
Nickel	ug/L	-	-	43 b	1.55
Potassium	mg/L	-	-	-	10.1
Selenium	ug/L	≤ 5.0	-	-	0.20 U
Silver	ug/L	≤ 0.07	-	-	0.025 U
Sodium	mg/L	-	-	-	81.3
Zinc	ug/L	-	-	98.7 b	68

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.

2 - Class III Freshwater Quality Criterion (62-302.530(19)(a), F.A.C.) is for chromium-III

b - Value is calculated based on hardness, (62-302.530(3))

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

U - Material analyzed for but not detected; value reported is the method detection limit

Table 4. Measured and predicted algal growth potential (AGP; mg dry weight/L) for total soluble inorganic nitrogen (TSIN), ortho-phosphate (OP), total nitrogen (TN) and total phosphorus (TP) limitation and ratios of nitrogen to phosphorus

Central Water Reclamation Facility								
Location	**Test Species**	**AGP (measured)**	**Predicted AGP (TSIN) ± 20%**	**Predicted AGP (OP) ± 20%**	**Predicted AGP (TN) ± 20%**	**Predicted AGP (TP) ± 20%**	**Inorganic N:P ratio**	**Total N:P ratio**
Effluent Grab	*Pseudokirchneriella subcapitata*	17.3	14.7 ± 2.9	2.6 ± 0.5	39.9 ± 8	26.7 ± 5.3	64.5	16.9

Appendix A
Facility Summary

State of Florida
Department of Environmental Protection
Facility Introduction & Summary

PART I: Information gathered prior to sampling event	
Prepared By: **Kim Allen**	Contact Number: **595-0553**
Facility Name (as it appears on permit): **Central Water Reclamation Facility**	Former Names:
NPDES Permit Number: FL0559351	Permit Expiration Date: 11/5/17
Physical Address: **2980 Old Chemstrand Road, Cantonment**	
District: **NWD**	County: **Escambia**
Function of Facility: **Domestic wastewater treatment facility**	
Facility Type: **Domestic**	Permitted Capacity (MGD): **22.5**
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): 1/1/2013 – 12/31/2013: Flow to Surface water = 3.2mgd annual average	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): **14.478 mgd Annual average**	
Description of type of Discharge: ☒ Continuous ☐ Intermittent ☐ Seasonal ☐ Rainfall Dependent ☐ Other, please specify	
Description of Sampling Location(s) - actual permit designation of permitted sampling point(s): **FLW-02: Flow to D-001 (16' magmeter or 24' pipeline before mixing box to receiving wetlands)** **EFF-01: Location for composite and grab samples of the reclaimed water from the CWRF after disinfection** **EFB-01: TSS and turbidity sampling station after filtration before disinfection** **EFA-01: Flow from chlorine contact chamber** **OTH-01: Un-ionized Ammonia monitoring point at EFF-01 (reclaimed water CWRF after disinfection)**	

Description of Permitted Outfall(s):

An existing; 5.0 MGD annual average daily flow (AADF) discharge of reclaimed water to the International Paper's (IP) Rainwater Tract wetlands (D-001). Reclaimed water from the ECUA Central Water Reclamation Facility will be conveyed via a reclaimed water transmission main and discharged to IP mixing box where it will mix with the IP effluent at the start of the 10-mile effluent transmission pipeline to the wetlands (D-001)(WBID #489). The point of discharge (D-001) is located approximately at latitude 30º 29' 06" N, longitude 87º 21' 57" W.

ECUA's reclaimed water transmission main to the IP's effluent transmission pipeline mixing box was authorized by permit revision FLA559351-008-DWF/MR (issued July 11, 2011). The mixing box (which is a part of IP's effluent transmission pipeline) is located on IP's property near the discharge of their Industrial Wastwater (IW) treatment facility. D-001 was first permitted on May 21, 2012 by permit revision FL0559351-009-DW1/SW. IP's Permit FL0002526-008-IW1S/NR (issued March 15, 2010) authorized the IP wetland project and provides the discharge nutrient wasteload allocation for the ECUA CWRF of 5.0 MGD AADF. ECUA certified construction complete on August 2, 2012 with discharge to start on August 15, 2012.

Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility):

An existing 22.5 MGD annual average daily flow (AADF) permitted capacity activated sludge central water reclamation facility (CWRF). CWRF operates in the extended aeration mode. CWRF includes liquid and solid waste treatment streams. The liquid waste stream processes for the 22.5 MGD AADF include: One (1) influent storage tank (3 MG), Pre-treatment facility including two (2) screens (capacity 40 MGD each), four (4) grit kings (10 MGD capacity, each), two (2) grit classifiers, and three (3)effluent equalization basins (2 MG, 2MG and 4.7 MG, respectively); four (4) 5-stage biological nutrient removal (BNR) basins (7.277 MG, each) including an anaerobic selector, pre-anoxic selector, aeration basin, postanoxic selector, and re-aeration basin; four (4) secondary clarifiers (1.5 MG, each), two (2) return activated sludge pump station (6 pumps total), two (2) waste activated sludge pump stations (6 pumps total), seven (7) tertiary cloth disc filters (6.0 gpm/ft2, each); on-site hypochlorite generation, disinfection in six (6) chlorine contact chambers (735,350 gallons, total); reclaimed water wet weather storage basin (60 MG capacity); two (2)reject storage tanks (11.25 MG, each); and an in-plant pump station.
The solids waste stream includes: waste activated sludge pump station; scum pump station; two (2) aerobic sludge holding tanks (3 MG); solids dewatering; and solids drying. Residuals are piped to the residual treatment process at the CWRF plant site. The solids handling facility serves as a biosolids treatment facility which will produce Type AA residual or residuals less than Type AA will be disposed of in a landfill.

Appendix B
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. The results from these analyses were compared with Water Quality Criteria (62-302, F.A.C.) and facility permit limits.

(3) Toxicity Bioassays

Greater than 50% mortality in an acute toxicity test may constitute an exceedance of 62-302.500(1)(a) and/or a potential violation of facility permit limits. A 25% inhibition concentration (IC25) is the effluent concentration causing a 25% reduction in a biological response such as biomass or reproduction when compared to a control population. An IC25 of less than 100% in a chronic test may constitute exceedances of 62-302.530(20), 62-302.530(61) and/or a potential violation of facility permit limits. A no observed effect concentration (NOEC) less than 100% effluent in a chronic test may constitute an exceedance of 62-302.530(61) and/or a potential violation of facility permit limits. Standard reference toxicant (SRT) tests are conducted monthly to ensure quality in toxicity testing.

(4) Bacteriological Testing

High levels of fecal coliform bacteria may constitute an exceedance of 62-302.530(6) and/or a potential violation of facility permit limits. Fecal coliform and enterococci results often are based on colony counts outside the acceptable range (B-qualifier). The dilutions performed on the sample did not yield results within the method acceptable range of 20- 60 colony forming units per plate. The B-qualifier does not affect data quality.

(5) Algal Growth Potential (AGP)

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 exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C. and/or 62-302.530(47)(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 $\pm$ 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 constitute an exceedance of 62-302.530(61), F.A.C.

(6) Chlorophyll *a* Content

Chlorophyll a content is an estimate of algal biomass. High algal biomass implies nutrient stress (Stevenson and Bahls 1999) and may constitute exceedances of 62-302.530(46) F.A.C., 62-302.530(47)(a) F.A.C. and/or 62-302.530(47)(b) F.A.C.

(7) Definition of Qualifiers

A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptable range.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J - Estimated value
K - Actual value is known to be less than value given
L - Actual value is known to be greater than value given
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
V - Analyte was detected in both sample and method blank.
X - Too few individuals to calculate SCI value.
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate
Z - Colonies were too numerous to count (TNTC)

Appendix C
Chemical Analyses of Effluent

Date_Sampled	UDL	Field_Sample_ID	SCH_Group	Component	Result	Units_Word_Result	MDL	PQL
2/3/2014	Effluent Grab	EFFLUENT GRAB	Overflow	Fecal Coliforms-Membrane Filter	1 U	cfu/100 mL	1	1
2/3/2014	Effluent Grab	Effluent	AGP/LN	Algal Growth Potential	17.3	mg DryWt/L	0.3	0.9
2/3/2014	Effluent Grab	Effluent	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.40 U	ug/L	0.4	1.2
2/3/2014	Effluent Grab	Effluent	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.55 U	ug/L	0.55	1.7
2/3/2014	Effluent Grab	Effluent	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.5 IJ	mg/L	0.2	2
2/3/2014	Effluent Grab	Effluent	Metals	Zinc	68	ug/L	5	20
2/3/2014	Effluent Grab	Effluent	Metals	Silver	0.025 U	ug/L	0.025	0.1
2/3/2014	Effluent Grab	Effluent	Metals	Nickel	1.55	ug/L	0.25	1
2/3/2014	Effluent Grab	Effluent	Metals	Arsenic	0.28 I	ug/L	0.25	1
2/3/2014	Effluent Grab	Effluent	Metals	Iron	30 U	ug/L	30	120
2/3/2014	Effluent Grab	Effluent	Metals	Sodium	81.3	mg/L	0.5	2
2/3/2014	Effluent Grab	Effluent	Metals	Selenium	0.20 U	ug/L	0.2	0.8
2/3/2014	Effluent Grab	Effluent	Metals	Copper	1.5	ug/L	0.5	1
2/3/2014	Effluent Grab	Effluent	Metals	Aluminum	88	ug/L	5	20
2/3/2014	Effluent Grab	Effluent	Metals	Potassium	10.1	mg/L	0.3	1.2
2/3/2014	Effluent Grab	Effluent	Metals	Calcium	27.5	mg/L	0.075	0.3
2/3/2014	Effluent Grab	Effluent	Metals	Lead	0.51 I	ug/L	0.2	0.8
2/3/2014	Effluent Grab	Effluent	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
2/3/2014	Effluent Grab	Effluent	Metals	Magnesium	2.65	mg/L	0.04	0.16
2/3/2014	Effluent Grab	Effluent	Metals	Chromium	0.31 I	ug/L	0.3	1.2
2/3/2014	Effluent Grab	Effluent	Nutrients	Organic Carbon	5.2	mg C/L	0.5	1
2/3/2014	Effluent Grab	Effluent	Nutrients	Chloride	95	mg Cl/L	0.2	0.5
2/3/2014	Effluent Grab	Effluent	Nutrients	O-Phosphate-P	0.006 I	mg P/L	0.004	0.01
2/3/2014	Effluent Grab	Effluent	Nutrients	NO2NO3-N	0.38	mg N/L	0.004	0.01
2/3/2014	Effluent Grab	Effluent	Nutrients	Ammonia-N	0.007	mg N/L	0.002	0.005
2/3/2014	Effluent Grab	Effluent	Nutrients	Alkalinity	93	mg CaCO3/L	0.65	2.5
2/3/2014	Effluent Grab	Effluent	Nutrients	Turbidity	0.9	NTU	0.1	0.1
2/3/2014	Effluent Grab	Effluent	Nutrients	Fluoride	0.87	mg F/L	0.035	0.1
2/3/2014	Effluent Grab	Effluent	Nutrients	Kjeldahl Nitrogen	0.67	mg N/L	0.08	0.2
2/3/2014	Effluent Grab	Effluent	Nutrients	Sulfate	36	mg SO4/L	0.2	0.5
2/3/2014	Effluent Grab	Effluent	Nutrients	Color (true)	4.4 I	PCU	2.5	6
2/3/2014	Effluent Grab	Effluent	Nutrients	Total-P	0.062	mg P/L	0.005	0.05
2/3/2014	Effluent Grab	Effluent	Pesticides	Ethion	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Fenamiphos	0.035 U	ug/L	0.035	0.14

Date_Sampled	UDL	Field_Sample_ID	SCH_Group	Component	Result	Units_Word_Result	MDL	PQL
2/3/2014	Effluent Grab	Effluent	Pesticides	Malathion	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Alachlor	0.069 U	ug/L	0.069	0.28
2/3/2014	Effluent Grab	Effluent	Pesticides	Atrazine	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Naled	0.046 UJ	ug/L	0.046	0.18
2/3/2014	Effluent Grab	Effluent	Pesticides	Phorate	0.0058 U	ug/L	0.0058	0.023
2/3/2014	Effluent Grab	Effluent	Pesticides	Chlorpyrifos Ethyl	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Metolachlor	0.069 U	ug/L	0.069	0.28
2/3/2014	Effluent Grab	Effluent	Pesticides	Atrazine Desisopropyl	0.050 U	ug/L	0.05	0.19
2/3/2014	Effluent Grab	Effluent	Pesticides	Chlorpyrifos Methyl	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Disulfoton	0.0058 U	ug/L	0.0058	0.023
2/3/2014	Effluent Grab	Effluent	Pesticides	Mevinphos	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Parathion Methyl	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Prometon	0.023 U	ug/L	0.023	0.092
2/3/2014	Effluent Grab	Effluent	Pesticides	Atrazine Desethyl	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Prometryn	0.023 U	ug/L	0.023	0.092
2/3/2014	Effluent Grab	Effluent	Pesticides	Ametryn	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Azinphos Methyl	0.023 U	ug/L	0.023	0.092
2/3/2014	Effluent Grab	Effluent	Pesticides	Bromacil	0.046 U	ug/L	0.046	0.18
2/3/2014	Effluent Grab	Effluent	Pesticides	Demeton	0.028 U	ug/L	0.028	0.11
2/3/2014	Effluent Grab	Effluent	Pesticides	Ethoprop	0.0058 U	ug/L	0.0058	0.023
2/3/2014	Effluent Grab	Effluent	Pesticides	Fonofos	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Parathion Ethyl	0.023 U	ug/L	0.023	0.092
2/3/2014	Effluent Grab	Effluent	Pesticides	Diazinon	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Pesticides	Hexazinone	0.035 UJ	ug/L	0.035	0.14
2/3/2014	Effluent Grab	Effluent	Pesticides	Norflurazon	0.035 U	ug/L	0.035	0.14
2/3/2014	Effluent Grab	Effluent	Pesticides	Butylate	0.13 U	ug/L	0.13	0.52
2/3/2014	Effluent Grab	Effluent	Pesticides	Metalaxyl	0.046 U	ug/L	0.046	0.18
2/3/2014	Effluent Grab	Effluent	Pesticides	Metribuzin	0.023 U	ug/L	0.023	0.092
2/3/2014	Effluent Grab	Effluent	Pesticides	Simazine	0.012 U	ug/L	0.012	0.046
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2,4-Dinitrophenol	17 UJ	ug/L	17	67
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2,6-Dinitrotoluene	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Phenol	1.1 UJ	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Phenanthrene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Pentachlorophenol	3.4 U	ug/L	3.4	13
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Nitrobenzene	2.2 U	ug/L	2.2	9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3.4 UJ	ug/L	3.4	13
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2.2 U	ug/L	2.2	9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2-Chlorophenol	1.1 UJ	ug/L	1.1	4.5

Date_Sampled	UDL	Field_Sample_ID	SCH_Group	Component	Result	Units_Word_Result	MDL	PQL
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2.2 U	ug/L	2.2	9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Acenaphthylene	0.22 UJ	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Chrysene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Fluoranthene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Isophorone	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	3,3'-Dichlorobenzidine	45 UJ	ug/L	45	180
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Acenaphthene	0.22 UJ	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Di-n-butyl phthalate	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Di-n-octyl phthalate	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Naphthalene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	2.2 U	ug/L	2.2	9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Hexachloroethane	3.4 U	ug/L	3.4	13
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	N-Nitrosodimethylamine	2.2 U	ug/L	2.2	9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2,4,6-Trichlorophenol	1.1 UJ	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2,4-Dinitrotoluene	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.4 U	ug/L	3.4	13
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	4-Nitrophenol	17 U	ug/L	17	67
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Benzo(a)pyrene	0.22 UJ	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Diethyl phthalate	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Hexachlorobutadiene	3.4 U	ug/L	3.4	13
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Hexachlorobenzene	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	1,2,4-Trichlorobenzene	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2,4-Dichlorophenol	1.1 UJ	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	4-Chloro-3-methylphenol	1.1 UJ	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Benzo(b)fluoranthene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Bis(2-chloroethyl)ether	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3.4 U	ug/L	3.4	13
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Hexachlorocyclopentadiene	3.4 U	ug/L	3.4	13
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Pyrene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2-Chloronaphthalene	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2-Nitrophenol	1.1 UJ	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	4-Bromophenyl phenyl ether	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Anthracene	0.22 UJ	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Benzo(a)anthracene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Fluorene	0.22 U	ug/L	0.22	0.9

Date_Sampled	UDL	Field_Sample_ID	SCH_Group	Component	Result	Units_Word_Result	MDL	PQL
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	2,4-Dimethylphenol	11 UJ	ug/L	11	45
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Benzidine	110 UJ	ug/L	110	450
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Benzo(k)fluoranthene	0.22 U	ug/L	0.22	0.9
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	1.1 U	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Priority Organic Pollutants	Dimethyl phthalate	1.1 UJ	ug/L	1.1	4.5
2/3/2014	Effluent Grab	Effluent	Nutrients	Temperature	18.39	C		
2/3/2014	Effluent Grab	Effluent	Nutrients	pH	7.16			
2/3/2014	Effluent Grab	Effluent	Nutrients	Specific Conductance	442	umhos/cm		
2/3/2014	Effluent Grab	Effluent	Nutrients	Dissolved Oxygen	9.64	mg/L		
2/3/2014	Effluent Grab	Effluent	Nutrients	Sample Depth	0.15	m		
2/3/2014	Effluent Composite	Effluent (comp)	Nutrients	NO2NO3-N	0.37	mg N/L	0.004	0.01
2/3/2014	Effluent Composite	Effluent (comp)	Nutrients	TSS	2 I	mg/L	2	10
2/3/2014	Effluent Composite	Effluent (comp)	Nutrients	Total-P	0.056	mg P/L	0.005	0.05
2/3/2014	Effluent Composite	Effluent (comp)	Nutrients	Kjeldahl Nitrogen	0.79	mg N/L	0.08	0.2
2/3/2014	Effluent Composite	TOX 1	Toxicology	Bioassay-Chron-Def-FW-C.dubia, IC25	100 L	IC25		
2/3/2014	Effluent Composite	TOX 1	Toxicology	Bioassay-Chron-Def-FW-Fish, IC25	100 L	IC25		
2/3/2014	Effluent Composite	TOX 1	Toxicology	Bioassay-Chron-Def-FW-C.dubia, NOEC	100	NOEC		
2/3/2014	Effluent Composite	TOX 1	Toxicology	Bioassay-Chron-Def-FW-Fish, NOEC	6.25 K	NOEC		
2/3/2014	Field Blank	Field Blank	Metals	Selenium	0.20 U	ug/L	0.2	0.8
2/3/2014	Field Blank	Field Blank	Metals	Arsenic	0.25 U	ug/L	0.25	1
2/3/2014	Field Blank	Field Blank	Metals	Nickel	0.25 U	ug/L	0.25	1
2/3/2014	Field Blank	Field Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.3
2/3/2014	Field Blank	Field Blank	Metals	Iron	30 U	ug/L	30	120
2/3/2014	Field Blank	Field Blank	Metals	Chromium	0.30 U	ug/L	0.3	1.2
2/3/2014	Field Blank	Field Blank	Metals	Potassium	0.30 U	mg/L	0.3	1.2
2/3/2014	Field Blank	Field Blank	Metals	Magnesium	0.040 U	mg/L	0.04	0.16
2/3/2014	Field Blank	Field Blank	Metals	Copper	0.50 U	ug/L	0.5	1
2/3/2014	Field Blank	Field Blank	Metals	Silver	0.025 U	ug/L	0.025	0.1
2/3/2014	Field Blank	Field Blank	Metals	Lead	0.20 U	ug/L	0.2	0.8
2/3/2014	Field Blank	Field Blank	Metals	Aluminum	5.0 U	ug/L	5	20
2/3/2014	Field Blank	Field Blank	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
2/3/2014	Field Blank	Field Blank	Metals	Sodium	0.50 U	mg/L	0.5	2
2/3/2014	Field Blank	Field Blank	Metals	Zinc	5.0 U	ug/L	5	20
2/3/2014	Field Blank	Field Blank	Nutrients	Organic Carbon	0.64 IY	mg C/L	0.5	1
2/3/2014	Field Blank	Field Blank	Nutrients	Total-P	0.002 UY	mg P/L	0.002	0.005
2/3/2014	Field Blank	Field Blank	Nutrients	Ammonia-N	0.007 Y	mg N/L	0.002	0.005
2/3/2014	Field Blank	Field Blank	Nutrients	Fluoride	0.035 U	mg F/L	0.035	0.1

Date_Sampled	UDL	Field_Sample_ID	SCH_Group	Component	Result	Units_Word_Result	MDL	PQL
2/3/2014	Field Blank	Field Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.2	0.5
2/3/2014	Field Blank	Field Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.004	0.01
2/3/2014	Field Blank	Field Blank	Nutrients	Turbidity	0.10 U	NTU	0.1	0.1
2/3/2014	Field Blank	Field Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.2	0.5
2/3/2014	Field Blank	Field Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6
2/3/2014	Field Blank	Field Blank	Nutrients	Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
2/3/2014	Field Blank	Field Blank	Pesticides	Atrazine Desethyl	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Malathion	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Butylate	0.020 U	ug/L	0.02	0.081
2/3/2014	Field Blank	Field Blank	Pesticides	Ethion	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Hexazinone	0.030 UJ	ug/L	0.03	0.12
2/3/2014	Field Blank	Field Blank	Pesticides	Metalaxyl	0.040 U	ug/L	0.04	0.16
2/3/2014	Field Blank	Field Blank	Pesticides	Ametryn	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Chlorpyrifos Methyl	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Demeton	0.024 U	ug/L	0.024	0.097
2/3/2014	Field Blank	Field Blank	Pesticides	Disulfoton	0.0051 U	ug/L	0.0051	0.02
2/3/2014	Field Blank	Field Blank	Pesticides	Fenamiphos	0.030 U	ug/L	0.03	0.12
2/3/2014	Field Blank	Field Blank	Pesticides	Metolachlor	0.061 U	ug/L	0.061	0.24
2/3/2014	Field Blank	Field Blank	Pesticides	Metribuzin	0.020 U	ug/L	0.02	0.081
2/3/2014	Field Blank	Field Blank	Pesticides	Norflurazon	0.030 U	ug/L	0.03	0.12
2/3/2014	Field Blank	Field Blank	Pesticides	Atrazine Desisopropyl	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Diazinon	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Mevinphos	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Prometryn	0.020 U	ug/L	0.02	0.081
2/3/2014	Field Blank	Field Blank	Pesticides	Azinphos Methyl	0.020 U	ug/L	0.02	0.081
2/3/2014	Field Blank	Field Blank	Pesticides	Fonofos	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Atrazine	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Ethoprop	0.0051 U	ug/L	0.0051	0.02
2/3/2014	Field Blank	Field Blank	Pesticides	Parathion Ethyl	0.020 U	ug/L	0.02	0.081
2/3/2014	Field Blank	Field Blank	Pesticides	Prometon	0.020 U	ug/L	0.02	0.081
2/3/2014	Field Blank	Field Blank	Pesticides	Simazine	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Alachlor	0.061 U	ug/L	0.061	0.24
2/3/2014	Field Blank	Field Blank	Pesticides	Bromacil	0.040 U	ug/L	0.04	0.16
2/3/2014	Field Blank	Field Blank	Pesticides	Parathion Methyl	0.010 U	ug/L	0.01	0.04
2/3/2014	Field Blank	Field Blank	Pesticides	Naled	0.040 UJ	ug/L	0.04	0.16
2/3/2014	Field Blank	Field Blank	Pesticides	Phorate	0.0051 U	ug/L	0.0051	0.02
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Benzidine	99 U	ug/L	99	400

Date_Sampled	UDL	Field_Sample_ID	SCH_Group	Component	Result	Units_Word_Result	MDL	PQL
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Phenol	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	3.0 U	ug/L	3	12
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	15 UJ	ug/L	15	59
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	3.0 U	ug/L	3	12
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Fluorene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Diethyl phthalate	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3.0 U	ug/L	3	12
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Fluoranthene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Hexachloroethane	3.0 U	ug/L	3	12
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Isophorone	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2.0 U	ug/L	2	7.9
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Pentachlorophenol	3.0 U	ug/L	3	12
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	9.9 U	ug/L	9.9	40
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	40 U	ug/L	40	160
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.0 U	ug/L	3	12
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2.0 U	ug/L	2	7.9
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Nitrobenzene	2.0 U	ug/L	2	7.9
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Pyrene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	4-Nitrophenol	15 U	ug/L	15	59
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3.0 U	ug/L	3	12
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Phenanthrene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	0.99 U	ug/L	0.99	4

Date_Sampled	UDL	Field_Sample_ID	SCH_Group	Component	Result	Units_Word_Result	MDL	PQL
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Naphthalene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	2.0 U	ug/L	2	7.9
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.99 U	ug/L	0.99	4
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0 U	ug/L	2	7.9
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Acenaphthene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Anthracene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Chrysene	0.20 U	ug/L	0.2	0.79
2/3/2014	Field Blank	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.20 U	ug/L	0.2	0.79
2/3/2014	Equipment Blank	Equipment Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.08	0.2
2/3/2014	Equipment Blank	Equipment Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.004	0.01
2/3/2014	Equipment Blank	Equipment Blank	Nutrients	Total-P	0.002 U	mg P/L	0.002	0.005

EPA End Sheet

The Bioassay of Central Water Reclamation Facility effluent sampled on February 3, 2014. NPDES #FL0559351.

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 F L 0 5 5 9 3 5 1 11 12 1	4 0 2 0 3	18 B	19 S	20 1

Remarks

66

The Priority Pollutants Analysis of Central Water Reclamation Facility effluent sampled on February 3, 2014. NPDES #FL0559351.

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 F L 0 5 5 9 3 5 1 11 12 1	4 0 2 0 3	18 X	19 S	20 1

Remarks

66

Biological Analyses of Central Water Reclamation Facility effluent sampled on February 3, 2014. NPDES #FL0559351.

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 F L 0 5 5 9 3 5 1 11 12 1	4 0 2 0 3	18 S	19 S	20 1

Remarks

66