



Florida Department of Environmental Protection

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

Residuals Annual Summary

FACILITY ID: LA012969

MONITORING PERIOD-- From: 1/1/2010 To: 12/31/2010

Part I-Facility Information

FACILITY NAME:

CENTRAL REGIONAL WWTP

MAILING ADDRESS:

VAUGH ROAD

EAGLE LAKE, FL

Total Quantity of Residuals Applied during the Period: 76.71 dry tons

Total Number of Residuals Land Application Sites Used during Reporting Period: 1
(Parts II and III should address all residuals land application sites used)

Update of Residuals Characteristics (arithmetic average of all samples taken pursuant to Rule 62-640.650(1), F.A.C., during the reporting period):

Parameter	Units*	Ceiling Limits For Class A and B	Concentration	Parameter (continued)	Units	Ceiling Limits For Class A and B	Concentration
Total Nitrogen	%	N/A	7.10	Copper	mg/Kg	4300	180.00
Total Phosphorus	%	N/A	1.50	Lead	mg/Kg	840	5.00
Total Potassium	%	N/A	0.38	Mercury	mg/Kg	57	0.06
Total Solids	%	N/A	4.30	Molybdenum	mg/Kg	75	5.90
pH	s.u.	N/A	12.29	Nickel	mg/Kg	420	5.50
Arsenic	mg/Kg	75	3.60	Selenium	mg/Kg	100	4.00
Cadmium	mg/Kg	85	0.35	Zinc	mg/Kg	7500	370.00

*All units are in dry weight basis except for total solids and pH. All sampling and analysis shall be conducted pursuant to Title 40 Code of Federal Regulations, Section 503.8 and the POTW Sludge Sampling and Analysis Guidance Document.

N/A=Not Applicable

Pathogen Reduction Class (Rule 62-640.600(1), F.A.C.): ☐ A ☒ B (Rule 62-640.600(1), F.A.C.)

EPA Vector Attraction Reduction Option (Rule 62-640.600(2), F.A.C.):

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☒ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

Certification

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

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT (Type or Print)	TELEPHONE NO.
Gary D. Fries, P.E., Utilities Division Director	863-298-4246
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	DATE (YY/MM/DD)
	20110215

Part II. Total Application of Residuals or Septage, Nutrients, and Trace Elements for Application Zones Used only By This Facility (attach a separate sheet "other solids," if applicable):

Facility Name: CENTRAL REGIONAL WWTP

Site Name	Application Zone ID(s)	Crop(s)	Dry Tons Applied per Acre	Basis	Max N allowed*	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
7C-Carter Ranch	11	Bermuda	1.4474	annual	400	202.63	55.00	11.87	0.01	0.00	0.46	0.01	0.00	0.01	0.00	1.19
				cumulative	N/A	N/A	512.02	965.56	0.23	0.07	14.32	1.07	0.03	0.71	0.20	25.81

Dept. of Environmental Protection

FEB 18 2011

Southwest District

(Enter all nutrient and trace element quantities in lb/acre)

* Based on two (2) growing seasons per year

Part III. Total Application of Residuals or Septage, Nutrients, and Trace Elements for Application Zones Used By Multiple Facilities (attach a separate sheet "other solids," if applicable):

Site Name: 7C-Carter Ranch

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	Max N allowed*	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
		Facility ID													
11	Bermuda	AVON PARK CORRECTIONAL	0.2168	400	24.46	11.3186	1.3877	0.0000	0.0007	0.1505	0.0104	0.0005	0.0061	0.0091	0.9892
		FL0040029													
		MACDILL AIR FORCE BASE	0.2795	400	26.38	10.6198	2.0122	0.0001	0.0022	0.7825	0.0140	0.0013	0.0157	0.0013	0.5142
11	Bermuda	FLA012124													
		CENTRAL REGIONAL WWTP	1.4474	400	202.63	55.0006	11.8685	0.0003	0.0010	0.4632	0.0116	0.0004	0.0145	0.0078	1.1869
		FLA012969													
11	Bermuda	POLK CORRECTIONAL INSTITUTE	0.0729	400	7.56	3.0603	0.6747	0.0000	0.0057	0.0947	0.0017	0.0003	0.0023	0.0023	0.0605
		FLA013360													
		CITY OF AVON PARK WWTP	0.5380	400	108.67	32.0634	7.2089	0.0001	0.0020	0.5509	0.1732	0.0008	0.0161	0.0108	1.1943
Annual Total		N/A	2.55	400	369.71	112.06	23.15	0.02	0.01	2.04	0.21	0.00	0.05	0.03	3.95
			428.06		N/A	N/A	N/A	0.23	0.07	14.32	1.07	0.03	0.71	0.20	25.81

(Enter all nutrient and trace element quantities in lb/acre)

* Based on two (2) growing seasons per year



Advanced
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9610 Princess Palm Avenue
Tampa, FL 33619
Phone: (813)630-9616
Fax: (813)630-4327

February 25, 2010

Jason Hopp
Polk County Utilities
P.O. Box 2019
Bartow, FL 33831

RE: Workorder: T1001630 Central-Quarterly Sludge

Dear Jason Hopp:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, February 03, 2010. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heidi Brooks
hbrooks@aellab.com

Enclosures

Report ID: 115894 - 2404929

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SAMPLE SUMMARY

Workorder T1001630 Central-Quarterly Sludge

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1001630001	7-Day Sludge Composite	Sludge, Liquid	2/1/2010 08:25	2/3/2010 16:00

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ANALYTICAL RESULTS

Workorder T1001630 Central-Quarterly Sludge

Lab ID: T1001630001

Date Received: 2/3/2010 16:00

Matrix: Sludge, Liquid

Sample ID: 7-Day Sludge Composite

Date Collected: 2/1/2010 08:25

Results for sample T1001630001 are reported on a dry weight basis.

Sample Description

Location

Central Regional

Parameters	Results Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS							
Analysis Desc: SW846 6010B	Preparation Method: SW-846 3050B						
Analysis: Soils	Analytical Method: SW-846 6010						
Arsenic	3.6 mg/Kg		1	1.2	0.19	2/10/2010 06:48	T
Cadmium	0.35 mg/Kg		1	0.10	0.024	2/10/2010 06:48	T
Chromium	8.0 mg/Kg		1	0.23	0.11	2/10/2010 06:48	T
Copper	180 mg/Kg		1	0.92	0.22	2/10/2010 06:48	T
Lead	5.0 mg/Kg		1	1.2	0.41	2/10/2010 06:48	T
Molybdenum	5.9 mg/Kg		1	0.58	0.23	2/10/2010 06:48	T
Nickel	5.5 mg/Kg		1	1.0	0.42	2/10/2010 06:48	T
Potassium	0.38 %		1	0.0058	0.00061	2/15/2010 18:36	T
Selenium	4.0 mg/Kg		1	3.5	0.30	2/10/2010 06:48	T
Zinc	370 mg/Kg		1	1.2	0.37	2/10/2010 06:48	T
Analysis Desc: SW846 7471A Analysis, Soil	Preparation Method: SW-846 7471A						
	Analytical Method: SW-846 7471A						
Mercury	0.056 mg/Kg		1	0.022	0.0031	2/8/2010 17:10	T
WET CHEMISTRY							
Analysis Desc: pH, E150.1, Water	Analytical Method: EPA 150.1						
pH	12.29 pH unit		1	0.10	0.10	2/8/2010 14:20	T
Analysis Desc: Total Solids, E160.3, Soil	Analytical Method: EPA 160.3						
Percent Solid	4.3 %		1	0.0010	0.0010	2/4/2010 18:00	T
Analysis Desc: Total Volatile Solids, E160.4, Soil	Analytical Method: EPA 160.4						
Total Volatile Solids	22000 mg/Kg		1	5.0	5.0	2/7/2010 14:32	T
Analysis Desc: TKN, E351.2, Soil	Preparation Method: EPA 351.2						
	Analytical Method: EPA 351.2						
Total Kjeldahl Nitrogen	71000 mg/Kg		5	2300	1200	2/16/2010 14:19	T
Analysis Desc: Nitrate + Nitrite, SM4500NO3-F	Analytical Method: SM 4500NO3-F						
Nitrate + Nitrite	11 mg/Kg	U	1	46	11	2/8/2010 12:12	T

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ANALYTICAL RESULTS

Workorder T1001630 Central-Quarterly Sludge

Lab ID: T1001630001

Date Received: 2/3/2010 16:00

Matrix: Sludge, Liquid

Sample ID: 7-Day Sludge Composite

Date Collected: 2/1/2010 08:25

Results for sample T1001630001 are reported on a dry weight basis.

Sample Description

Location

Central Regional

Parameters	Results Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Total Phosphorus, EPA 365.4 Analysis		Preparation Method: EPA 365.4 Digestion					
		Analytical Method: EPA 365.4					
Total Phosphorus (as P)	1.5 %		1	0.029	0.021	2/16/2010 13:23	T
Analysis Desc: Total Nitrogen, Calculated, Solid		Analytical Method: Calculation					
Total Nitrogen	7.1 %		1	0.0000052	0.0000052	2/22/2010 16:55	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder T1001630 Central-Quarterly Sludge

PARAMETER QUALIFIERS

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

- T DOH Certification #E84589(AEL-T)(FL NELAC Certification)

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QUALITY CONTROL DATA

Workorder T1001630 Central-Quarterly Sludge

QC Batch: DGM/1066 Analysis Method: SW-846 7471A
QC Batch Method: SW-846 7471A Prepared: 2/8/2010 14:30
Associated Lab Samples: T1001215001 T1001220001 T1001236001 T1001293003 T1001294003 T1001295003
T1001296002 T1001297003 T1001308001 T1001309001 T1001310001 T1001337003
T1001361001 T1001362001 T1001502001 T1001574001 T1001620001 T1001630001
T1001757001

METHOD BLANK: 487445

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Mercury	mg/Kg	0.00042U	0.00042

QC Batch: DGM/1068 Analysis Method: SW-846 6010
QC Batch Method: SW-846 3050B Prepared: 2/9/2010 09:20
Associated Lab Samples: T1001620001 T1001630001 T1001757001

METHOD BLANK: 488074

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Arsenic	mg/Kg	0.042U	0.042
Cadmium	mg/Kg	0.0051U	0.0051
Chromium	mg/Kg	0.025U	0.025
Copper	mg/Kg	0.049U	0.049
Molybdenum	mg/Kg	0.049U	0.049
Nickel	mg/Kg	0.090U	0.090
Lead	mg/Kg	0.089U	0.089
Selenium	mg/Kg	0.065U	0.065
Zinc	mg/Kg	0.080U	0.080

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Potassium	%	0.00013U	0.00013

QC Batch: WCAI/28829 Analysis Method: EPA 150.1
QC Batch Method: EPA 150.1 Prepared:
Associated Lab Samples: T1001337003 T1001361001 T1001362001 T1001502001 T1001574001 T1001620001
T1001630001 T1001757001

QC Batch: WCAI/28836 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: J1000975002 T1001220001 T1001361001 T1001362001 T1001502001 T1001574001

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QUALITY CONTROL DATA

Workorder T1001630 Central-Quarterly Sludge

T1001620001 T1001630001

METHOD BLANK: 488124

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Nitrate + Nitrite	mg/Kg	0.48U	0.48

QC Batch: WCAV/28948

Analysis Method: EPA 351.2

QC Batch Method: EPA 351.2

Prepared: 2/15/2010 14:30

Associated Lab Samples:	A1000858001	J1000975002	J1001014002	T1001502001	T1001574001	T1001620001
	T1001630001	T1001757001	T1001758001	T1001758002	T1001759001	T1001760001
	T1001934001	T1002066001				

METHOD BLANK: 491773

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Total Kjeldahl Nitrogen	mg/Kg	11U	11

QC Batch: WCPH/16391

Analysis Method: EPA 365.4

QC Batch Method: EPA 365.4 Digestion

Prepared: 2/15/2010 14:30

Associated Lab Samples:	A1000858001	J1000975002	J1001014002	T1001502001	T1001574001	T1001620001
	T1001630001	T1001757001	T1001758001	T1001758002	T1001759001	T1001760001
	T1001934001	T1002066001				

METHOD BLANK: 491790

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Total Phosphorus (as P)	%	0.00092U	0.00092

QC Batch: WCAV/29142

Analysis Method: EPA 160.4

QC Batch Method: EPA 160.4

Prepared:

Associated Lab Samples: T1001630001

METHOD BLANK: 496175

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Total Volatile Solids	mg/Kg	5.0U	5.0

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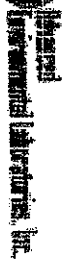
QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder T1001630 Central-Quarterly Sludge

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
T1001630001	7-Day Sludge Composite	SW-846 7471A	DGMI/1066	SW-846 7471A	CVAI/1020
T1001630001	7-Day Sludge Composite	EPA 160.3	WCAI/28828		
T1001630001	7-Day Sludge Composite	SW-846 3050B	DGMI/1068	SW-846 6010	ICPI/1045
T1001630001	7-Day Sludge Composite	SW-846 3050B	DGMI/1068	SW-846 6010	ICPI/1053
T1001630001	7-Day Sludge Composite	EPA 150.1	WCAI/28829		
T1001630001	7-Day Sludge Composite	SM 4500NO3-F	WCAI/28836		
T1001630001	7-Day Sludge Composite	EPA 351.2	WCAI/28948	EPA 351.2	WCAI/29017
T1001630001	7-Day Sludge Composite	EPA 365.4 Digestion	WCPI/16391	EPA 365.4	WCAI/29018
T1001630001	7-Day Sludge Composite	EPA 160.4	WCAI/29142		
T1001630001	7-Day Sludge Composite	Calculation	PM/	Calculation	PM/

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RESIDUALS STABILIZATION REPORT (I)

DAILY pH READING RESULTS

Permit Number: FLA012969-001-DW1P

Tank Identification ID

Batch Tank

Month/Year: March

Tank Volume (gallons)

40,000 Gallons

Day of Month	Volume of Residuals Treated (gallons)	Initial pH Reading after adding Lime	Time of Initial pH reading after adding Lime	pH /Temp after (2) Hours [note time]	Adjusted pH After Temperature Correction Factor Applied	pH /Temp after (24) Hours [note time]	Adjusted pH After Temperature Correction Factor Applied
1						11.95 ^{24°} 1800	11.9
2	39510	12.23	1600	12.29 @ 17.2°	12.05		
3						11.97 ^{24°} 1800	11.9
4							
5							
6							
7	39274	12.40	1535	12.32 @ 18.7°	12.13		
8						12.23 ^{18.35} 19.6°	12.03
9	39353	12.29	1800	12.32 @ 18.4°	12.12		
10						12.2/20° 1805	12.0
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

NOTE: Initial pH Reading prior to liming and (24) hour pH Reading CAN NOT APPEAR on the same date.

RESIDUALS STABILIZATION REPORT (R&R) DAILY pH READING RESULTS

Permit Number: FLA012969-001-DW1P

Tank Identification ID

Batch Tank

Month/Year:

February / 2010

Tank Volume (gallons)

40,000 Gallons

Day of Month	Volume of Residuals Treated (gallons)	Initial pH Reading after adding Lime	Time of Initial pH reading after adding Lime	pH / Temp after (2) Hours [note time]	Adjusted pH After Temperature Correction Factor Applied	pH / Temp after (24) Hours [note time]	Adjusted pH After Temperature Correction Factor Applied
1				1830		12.18 @ 23°	12.12
2	39510	12.20	1630	12.33 @ 19.6°	12.16	12.30	
3						12.16 @ 20°	12.01
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23	38875	12.12	1045	12.18 @ 23°	12.12		
24	38875	12.15	1400	12.20 @ 24°	12.2	12.01 @ 22° 1045	11.9
25						12.21 @ 20° 1800	12.0
26							
27							
28	39510	12.14	12:00	12.22 @ 17.1°C	12.15		
29							
30							
31							

NOTE: Initial pH Reading prior to liming and (24) hour pH Reading CAN NOT APPEAR on the same date.

RESIDUALS STABILIZATION REPORT (R) DAILY pH READING RESULTS

Permit Number: FLA012969-001-DWIP

Tank Identification ID

Batch Tank

Month/Year:

JANUARY 2010

Tank Volume (gallons)

40,000 Gallons

Day of Month	Volume of Residuals Treated (gallons)	Initial pH Reading after adding Lime	Time of Initial pH reading after adding Lime	pH/Temp after (2) Hours [note time]	Adjusted pH After Temperature Correction Factor Applied	pH/Temp after (24) Hours [note time]	Adjusted pH After Temperature Correction Factor Applied	
1								
2								
3	37898	12.45	1555	1755 12.36 @ 16.6°C	12.10	1355		JA
4				1715		12.42 @ 15.8°C	12.14	JA
5	32155	12.65	1515	12.57 @ 13.3°C	12.21	1525		JA
6						12.18 @ 20°C	12.01	VAC
7								
8								
9				1815				
10	38875	12.86	1615	12.64 @ 10.2°C	12.19	1615		JA
11				1900		12.61 @ 11.9°C	12.21	JA
12	32155	12.52	1700	12.84 @ 12.4°C	12.46	1700		JA
13						12.31 @ 21°C	12.19	VAC
14								
15								
16				1759				
17	37891	12.24	1559	12.27 @ 20.8°C	12.14	1559		JA
18				1821		12.10 @ 20.5°C	11.96	JA
19	32155	12.41	1621	12.37 @ 19.3°C	12.21	1620		JA
20						12.12 @ 25°C	12.12	VAC
21								
22								
23				1507				
24	37216	12.10	1307	12.21 @ 23.6°C	12.16	1507		JA
25				1757		12.12 @ 24°C	12.09	MC
26	37891	12.23	1557	12.21 @ 19.8°C	12.05			JA
27								
28						0650 12.2 @ 20°C	12.0	
29								
30				1530				
31	37891	12.23	1230	12.31 @ 21.6°C	12.20			JA

NOTE: Initial pH Reading prior to liming and (24) hour pH Reading CAN NOT APPEAR on the same date.