



Florida Department of Environmental Protection

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

Residuals Annual Summary

Dept. Of Environmental Protection

FEB 22 2011

Part I - Facility Information

FACILITY NAME: Wastewater Treatment Plant #2 FACILITY ID: FL0021849-001-DW1P

Southwest District

MAILING ADDRESS: 4400 POLLARD ROAD PLANT #3 MONITORING PERIOD -- From: JAN 1, 2010 To: DEC 31, 2010
33884

Total Quantity of Residuals Applied During Reporting Period: 108.04 dry tons

Total Number of Residuals Land Application Sites Used During Reporting Period: 10 Zones (Parts II and III should address all residuals land application sites used)
1 site

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	6.94	Copper	mg/kg	4300	472
Total Phosphorus	%	N/A	4.64	Lead	mg/kg	840	35.9
Total Potassium	%	N/A	1.32	Mercury	mg/kg	57	1.60
Total Solids	%	N/A	1.24	Molybdenum	mg/kg	75	27.5
pH	std. units	N/A	6.34	Nickel	mg/kg	420	18.0
Arsenic	mg/kg	75	<1.27	Selenium	mg/kg	100	7.64
Cadmium	mg/kg	85	21.2	Zinc	mg/kg	7500	1128

*All units are in a 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

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 submitted 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.
Terry Carver / Chief Operator Pretreatment Coordinator	863-291-5766
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	DATE (YY/MM/DD)
<i>Terry Carver</i>	02/11/14

Part III. Total Residuals or Septage, Nutrients, and Trace Elements Applied to Application Zones Used by Multiple Facilities (attach separate page for "other solids," if applicable):

Site Name (as identified in Agricultural Use Plan): City of Winter Haven WWTP # 3

Site Address (as shown in Agricultural Use Plan): 4400 Pollard Road, Winter Haven, FL 33884

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Field #1	Calle Bermuda	WWTP # 3	3,889	383	419	68.3	0.0251	0.0063	2,558	0.0524	0.0028	0.0793	0.0517	2,900
		WWTP # 2	0											
Annual Total				383	419	68.3	0.0251	0.0063	2,558	0.0524	0.0028	0.0793	0.0517	2,900
Cumulative Total							0.2078	0.2430	62,195	3,297	0.3925	1.017	0.2404	54,509
Field # 1A	Calle Bermuda	WWTP # 3	1,314	117	120	13.8	0.0098	0.0022	0.7940	0.0195	0.0027	0.0225	0.0191	1,0679
		WWTP # 2	0											
Annual Total				117	120	13.8	0.0098	0.0022	0.7940	0.0195	0.0027	0.0225	0.0191	1,0679
Cumulative Total							0.9418	0.5092	14,378	0.8845	0.0687	0.3198	0.1320	13,669
Field # 2	Calle Bermuda	WWTP # 3	1,237	138	115	21	0.0031	0.0020	0.7200	0.0196	0.0011	0.0216	0.0115	0.9501
		WWTP # 2	0.335	46	31	9	0.0001	0.0142	0.3160	0.0240	0.0011	0.0120	0.0051	0.7553
Annual Total				184	146	30	0.0032	0.0162	1,036	0.0436	0.0022	0.0336	0.0166	1,7054
Cumulative Total							0.1560	0.1973	44,771	2,5286	0.4414	0.6543	0.1556	35,762

(Enter nutrients and trace elements in lbs/acre.)

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Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Field # 3	Calle Bermuda	WWTP # 3	3.349	338	348	57.9	0.0182	.0054	1.950	0.0469	0.0026	0.0654	0.0405	2.5245
		WWTP # 2	0											
Annual Total				338	348	57.9	0.0182	0.0054	1.950	0.0469	0.0026	0.0654	0.0405	2.5245
Cumulative Total							0.2654	0.1799	47.441	2.6482	0.2187	1.2961	0.5930	51.186
Field # 4	Calle Bermuda	WWTP # 3	1.667	160	143	16.7	0.0137	0.0026	0.9863	0.0277	0.0044	0.0286	0.0291	1.348
		WWTP # 2	0											
Annual Total				160	143	16.7	0.0137	0.0026	0.9863	0.0277	0.0044	0.0286	0.0291	1.348
Cumulative Total							0.2066	0.2125	47.021	2.6877	0.2514	1.1320	0.3709	45.508
Field # 5	Calle Bermuda	WWTP # 3	0.863	96	80	14.8	0.0022	0.0014	0.5024	0.0137	0.0008	0.0151	0.0080	0.6629
		WWTP # 2	0.0724	10	7	1.911	0.0002	0.0031	0.0683	0.0052	0.0002	0.0026	0.0011	0.1633
Annual Total				106	87	16.7	0.0024	0.0045	0.5707	0.0189	0.0010	0.0177	0.0091	0.8262
Cumulative Total							0.239	0.2509	68.044	3.1704	0.3116	1.2110	0.2756	63.859

(Enter nutrients and trace elements in lbs/acre.)

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Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Field # 5A	Calle Bermuda	WWTP # 3	2.833	241	259	25.6	0.0236	0.0048	1.7228	0.0416	0.0065	0.0483	0.0436	2.3235
		WWTP # 2	0											
Annual Total				241	259	25.6	0.0236	0.0048	1.7228	0.0416	0.0065	0.0483	0.0436	2.3235
Cumulative Total							0.0993	0.0921	25.902	1.2702	0.1234	0.5220	0.1426	24.661
Field # 6	Calle Bermuda	WWTP # 3												
		WWTP # 2	0											
Annual Total														
Cumulative Total							0.2287	0.1530	40.440	2.2320	0.1848	0.9631	0.4544	43.163
Field # 7	Calle Bermuda	WWTP # 3	0.0672	9.330	6.238	1.775	0.0002	0.0028	0.0634	0.0048	0.0002	0.0024	0.0010	0.1516
		WWTP # 2	2.5987	284.56	241.37	43.129	0.0077	0.0043	1.5173	0.0409	0.0027	0.0453	0.0253	2.0056
Annual Total				294	248	44.904	0.0079	0.0071	1.5807	0.0457	0.0029	0.0477	0.0263	2.1272
Cumulative Total							0.3685	0.1742	52.163	2.9897	0.2317	1.3742	0.4853	50.259

(Enter nutrients and trace elements in lbs/acre.)

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Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Field # 8	Callejé Bermuda	WWTP # 3	3.009	309	257.4	34.85	0.0225	0.0046	1.7507	0.0517	0.0075	0.0528	0.0522	2.3895
		WWTP # 2	0.1467	20	13.6	3.87	0.0004	0.0062	0.1385	0.0105	0.0005	0.0053	0.0022	0.3309
Annual Total				329	271	38.72	0.0229	0.0108	1.8892	0.0622	0.0080	0.0581	0.0544	2.7204
Cumulative Total							0.2401	0.1791	49.978	24579	0.2286	1.2887	0.5556	53.483
Field # 9	Callejé Bermuda	WWTP # 3	0.342	38.063	31.776	5.863	0.0009	0.0006	0.1988	0.0054	0.0003	0.0060	0.0032	0.2624
		WWTP # 2	0											
Annual Total				38.063	31.776	5.863	0.0009	0.0006	0.1988	0.0054	0.0003	0.0060	0.0032	0.2624
Cumulative Total							0.1450	0.1795	45.838	2.3742	0.2091	1.1073	0.3627	39.740
Field # 10	Callejé Bermuda	WWTP # 3	0.4284	36.5	39.160	4.019	0.0036	0.0007	0.2605	0.0063	0.0010	0.0073	0.0066	0.3513
		WWTP # 2	0.0686	9.5	6.364	1.811	0.0002	0.0029	0.0647	0.0049	0.0002	0.0025	0.0010	0.1547
Annual Total				46	45.5	5.83	0.0038	0.0036	0.3252	0.0112	0.0012	0.0098	0.0076	0.5060
Cumulative Total							0.1896	0.1399	38.636	2.0233	0.1565	1.4649	0.3834	37.374

(Enter nutrients and trace elements in lbs/acre.)

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Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Field # 11	Callej Bermuda	WWTP # 3	1.881	167	168	18.0	0.0156	0.003	1.1338	0.0288	0.0045	0.0322	0.0302	1.5357
		WWTP # 2	0.274	38.1	25.5	7.24	0.0007	0.0116	0.2590	0.0197	0.0009	0.0099	0.0042	0.6189
Annual Total				205.1	193.5	25.24	0.0163	0.0146	1.3928	0.0485	0.0054	0.0421	0.0344	2.1546
Cumulative Total							0.1986	0.0946	28.914	13310	0.0874	0.7165	0.3711	27.961
Field # 12	Callej Bermuda	WWTP # 3	0											
		WWTP # 2	0											
Annual Total														
Cumulative Total							.1552	0.0815	24.201	1.0824	0.0985	0.6221	0.2805	19.091
Field # 13	Callej Bermuda	WWTP # 3	1.533	157	126	15.88	0.0124	0.0023	0.8921	0.0271	0.0044	0.0264	0.0285	1.2293
		WWTP # 2	0											
Annual Total				157	126	15.88	0.0124	0.0023	0.8921	0.0271	0.0044	0.0264	0.0285	1.2293
Cumulative Total							0.1493	0.0686	22.719	0.9335	0.0714	0.6726	0.2293	20.167

(Enter nutrients and trace elements in lbs/acre.)

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Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Field # 14	Calle Bermuda	WWTP # 3	2.609	222	238	24.5	0.0217	0.0044	1.5860	0.0383	0.0059	0.0445	0.0402	2.139
		WWTP # 2	0											
Annual Total				222	238	24.5	0.0217	0.0044	1.5860	0.0383	0.0059	0.0445	0.0402	2.139
Cumulative Total							0.1240	0.0594	25.356	1.0771	0.135	0.7231	0.3273	21.535
Field # 15	Calle Bermuda	WWTP # 3	2.542	216	232	23.8	0.0212	0.0043	1.5453	0.0373	0.0058	0.0433	0.0391	2.0841
		WWTP # 2	0											
Annual Total				216	232	23.8	0.0212	0.0043	1.5453	0.0373	0.0058	0.0433	0.0391	2.0841
Cumulative Total							0.1681	0.0966	30.585	3.7538	0.2217	0.7595	0.3382	29.339
Field # 16	Calle Bermuda	WWTP # 3	2.935	300	246	31	0.0236	0.0044	1.7077	0.0513	0.0081	0.0511	0.0538	2.3450
		WWTP # 2	0.560	78	52	15	0.0014	0.0237	0.5290	0.0402	0.0018	0.0202	0.0086	1.2642
Annual Total				378	298	46	0.0250	0.0281	2.2367	0.0915	0.0099	0.0713	0.0624	3.6092
Cumulative Total							0.0791	0.1073	14.875	1.6348	0.0540	0.713	0.2181	28.997

(Enter nutrients and trace elements in lbs/acre.)

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Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Field # 17	Callejé Bermuda	WWTP # 3	0											
		WWTP # 2	0											
	Annual Total													
Cumulative Total						0.0236	0.0187	4.6814	0.2488	0.0104	1.0010	0.1150	11.038	
Field # 18	Callejé Bermuda	WWTP # 3	2.569	256	260	40.3	0.0177	0.0041	1.4915	0.0374	0.0033	0.0503	0.0377	1.9532
		WWTP # 2	0.833	116	77	22.0	0.0021	0.0353	0.7865	0.0598	0.0027	0.0300	0.0127	1.8796
	Annual Total													
Cumulative Total														
Field "A"	Callejé Bermuda	WWTP # 3	0	2.347	253	228	0.0083	0.0038	1.365	0.0356	0.0020	0.0429	0.0240	1.7869
		WWTP # 2	0	0.376	52	35	0.0009	0.0159	0.3547	0.0270	0.0012	0.0135	0.0057	0.8478
	Annual Total													
Cumulative Total														
Annual Total														
Cumulative Total														
Annual Total														
Cumulative Total														

(Enter nutrients and trace elements in lbs/acre.)