



Florida Department of Environmental Protection

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

Dept. Of Environmental Protection

Residuals Annual Summary

FEB 17 2011

Southwest District

Part I - Facility Information

FACILITY NAME: HCU: Glen Lakes Subregional

FACILITY ID: FLA012069

WWTF

MAILING ADDRESS: 11354 Hexam Rd.

MONITORING PERIOD -- From: JAN 1, 2010 To: DEC 31, 2010

Weeki Wachee, FL 34605

Total Quantity of Residuals Applied During Reporting Period: 65.23 dry tons

Total Number of Residuals Land Application Sites Used During Reporting Period: 4 (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	11.00	Copper	mg/kg	4300	1100.00
Total Phosphorus	%	N/A	3.40	Lead	mg/kg	840	14.00
Total Potassium	%	N/A	0.96	Mercury	mg/kg	57	1.30
Total Solids	%	N/A	1.10	Molybdenum	mg/kg	75	28.00
pH	std. units	N/A	6.69	Nickel	mg/kg	420	11.00
Arsenic	mg/kg	75	3.70	Selenium	mg/kg	100	10.00
Cadmium	mg/kg	85	0.86	Zinc	mg/kg	7500	950.00

*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.
Joseph L. Staff	352-754-4490
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	DATE (YY/MM/DD)
Joseph L. Staff	11/02/03

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

Site Name (as identified in Agricultural Use Plan): BENHAM RANCH

Site Address (as shown in Agricultural Use Plan): 25725 LAYLAINE DRIVE, ASTATULA, FL 34705

Application Zone ID(s)	Crop(s)	Dry Tons Applied per Acre	Basis	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
2	BAHIA	0.013	annual	2.816	0.870	0.246	0.000	0.000	0.028	0.000	0.000	0.000	0.000	0.024
			cumulative				0.022	0.002	1.466	0.031	0.002	0.177	0.036	3.281
			annual											
			cumulative											
			annual											
			cumulative											
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			annual											
			cumulative											

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

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

Site Name (as identified in Agricultural Use Plan): D & B RANCH

Site Address (as shown in Agricultural Use Plan): 8954 E CR-48, CENTER HILL, FL 33514

Application Zone ID(s)	Crop(s)	Dry Tons Applied per Acre	Basis	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
1A	BAHIA	0.098	annual	21.670	6.698	1.891	0.001	0.000	0.217	0.003	0.000	0.002	0.002	0.187
			cumulative				0.008	0.001	0.973	0.018	0.002	0.032	0.014	1.156
2A	BAHIA	0.028	annual	6.250	1.932	0.545	0.000	0.000	0.063	0.001	0.000	0.001	0.001	0.054
			cumulative				0.002	0.000	0.173	0.002	0.000	0.021	0.004	0.355
3A	BAHIA	0.393	annual	86.390	26.702	7.540	0.003	0.001	0.864	0.011	0.001	0.009	0.008	0.746
			cumulative				0.026	0.003	3.078	0.054	0.006	0.132	0.047	3.992
			annual											
			cumulative											
			annual											
			cumulative											
			annual											
			cumulative											
			annual											
			cumulative											
			annual											
			cumulative											

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

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

Site Name (as identified in Agricultural Use Plan): DON MONN RANCH

Site Address (as shown in Agricultural Use Plan): 37731 SR 19, UMATILLA, FL 32784

Application Zone ID(s)	Crop(s)	Dry Tons Applied per Acre	Basis	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
3	BAHIA	0.046	annual	10.226	3.161	0.892	0.000	0.000	0.102	0.001	0.000	0.001	0.001	0.088
			cumulative				0.014	0.022	1.383	0.154	0.002	0.093	0.044	4.257
			annual											
			cumulative											
			annual											
			cumulative											
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			annual											
			cumulative											

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

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

Site Name (as identified in Agricultural Use Plan): SANCHEZ RANCH

Site Address (as shown in Agricultural Use Plan): 14024 CR 757/ P.O. Box 472, Center Hill, FL 33514

Application Zone ID(s)	Crop(s)	Dry Tons Applied per Acre	Basis	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
3B	BAHIA	0.126	annual	27.803	8.594	2.426	0.001	0.000	0.278	0.004	0.000	0.003	0.003	0.240
			cumulative				0.035	0.002	2.582	0.045	0.004	0.275	0.055	5.437
			annual											
			cumulative											
			annual											
			cumulative											
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			cumulative											
			annual											
			cumulative											

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

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): BENHAM RANCH

Site Address (as shown in Agricultural Use Plan): 25725 LAYLAINE DRIVE, ASTATULA, FL 34705

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn	
2	BAHIA	HCU: Glen Lakes	0.013	2.816	0.870	0.246	0.000	0.000	0.028	0.000	0.000	0.000	0.000	0.024	
		HCU: Spring Hill	0.331	25.813	9.597	3.640	0.002	0.000	0.301	0.006	0.001	0.001	0.007	0.004	0.381
		New Smyrna	0.461	40.093	22.811	6.728	0.003	0.001	0.253	0.011	0.000	0.000	0.008	0.006	0.392
		Shelley's Cake	1.650	126.69	46.191	0.099	0.012	0.000	0.709	0.000	0.000	0.000	0.133	0.018	2.102
		Shelley's Liquid	1.325	64.949	12.354	12.168	0.003	0.000	0.110	0.004	0.000	0.000	0.025	0.005	0.161
Annual Total															
Cumulative Total															
2 Cont'd	BAHIA	Winter Garden	0.230	35.009	15.086	3.225	0.002	0.000	0.064	0.010	0.000	0.004	0.002	0.221	
Annual Total				294.09	107.52	26.542	0.022	0.002	1.465	0.032	0.002	0.176	0.035	3.287	
Cumulative Total							0.056	0.032	5.047	0.215	0.004	0.365	0.101	5.590	
Annual Total															
Cumulative Total															

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

Site Address (as shown in Agricultural Use Plan): 8954 E. CR 48, CENTER HILL, FL 33514

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

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): D and B Ranch

Site Address (as shown in Agricultural Use Plan): 8954 E. CR 48, CENTER HILL, FL 33514

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
2A	BAHIA	HCU: Glen Lakes	0.028	6.250	1.932	0.545	0.000	0.000	0.063	0.001	0.000	0.001	0.001	0.054
		HCU: Spring Hill	0.169	13.220	4.915	1.864	0.001	0.000	0.154	0.003	0.000	0.003	0.002	0.195
		Shelley's Cake	0.198	15.223	5.550	0.012	0.001	0.000	0.085	0.000	0.000	0.016	0.002	0.253
		Shelley's Liquid	0.233	11.399	2.168	2.136	0.000	0.000	0.019	0.001	0.000	0.004	0.001	0.028
		Winter Garden	0.021	3.237	1.395	0.298	0.000	0.000	0.006	0.001	0.000	0.000	0.000	0.020
Annual Total				49.329	15.960	4.855	0.004	0.000	0.327	0.005	0.001	0.025	0.006	0.550
Cumulative Total							0.007	0.004	0.331	0.009	0.004	0.028	0.009	0.554
Annual Total														
Cumulative Total														
Annual Total														
Cumulative Total														

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

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): D and B Ranch

Site Address (as shown in Agricultural Use Plan): 8954 E. CR 48, CENTER HILL, FL 33514

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn	
3A	BAHIA	HCU: Glen Lakes	0.393	86.390	26.702	7.540	0.003	0.001	0.864	0.011	0.001	0.009	0.008	0.746	
		Shelley's Cake	0.492	37.790	13.778	0.030	0.004	0.000	0.212	0.000	0.000	0.000	0.040	0.006	0.627
		Shelley's Liquid	2.263	110.88	21.091	20.774	0.004	0.000	0.187	0.006	0.000	0.000	0.043	0.008	0.276
		HCU: Spring Hill	1.969	153.60	57.108	21.662	0.014	0.002	1.792	0.033	0.005	0.005	0.040	0.024	2.265
		Winter Garden	0.082	12.452	5.366	1.147	0.001	0.000	0.023	0.003	0.000	0.000	0.001	0.001	0.079
Annual Total				401.11	124.04	51.151	0.026	0.003	3.078	0.054	0.006	0.132	0.047	3.992	
Cumulative Total							0.036	0.063	4.147	0.106	0.012	0.198	0.062	5.906	
Annual Total															
Cumulative Total															
Annual Total															
Cumulative Total															

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

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): DON MONN RANCH

Site Address (as shown in Agricultural Use Plan): 37731 SR 19, UMATILLA, FL 32784

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
3	BAHIA	Casselberry	0.057	7.922	3.192	10.999	0.000	0.000	0.045	0.002	0.000	0.002	0.001	0.076
		Shelley's Cake	1.337	93.789	29.773	3.513	0.006	0.004	0.564	0.125	0.000	0.055	0.028	3.001
		Shelley's Liquid	1.207	44.053	14.552	12.713	0.003	0.001	0.211	0.010	0.000	0.023	0.007	0.408
		HCU: Glen Lakes	0.046	10.226	3.161	0.892	0.000	0.000	0.102	0.001	0.000	0.001	0.001	0.088
		HCU: Spring Hill	0.276	21.549	8.012	3.039	0.002	0.000	0.251	0.005	0.001	0.006	0.003	0.318
		Annual Total												
		Cumulative Total												
3 Cont'd	BAHIA	Winter Garden	0.114	17.270	7.442	1.591	0.001	0.000	0.032	0.005	0.000	0.002	0.001	0.109
		Winter Springs E	0.062	6.136	2.333	0.769	0.000	0.000	0.082	0.002	0.000	0.001	0.001	0.088
		New Smyrna	0.156	13.570	7.721	2.277	0.001	0.000	0.086	0.004	0.000	0.003	0.002	0.133
		Palm Bay	0.018	2.471	1.262	0.460	0.000	0.017	0.010	0.001	0.000	0.001	0.000	0.036
		Annual Total		216.98	77.448	36.254	0.014	0.022	1.383	0.154	0.002	0.093	0.044	4.257
		Cumulative Total					0.018	0.025	1.818	0.164	0.003	0.107	0.053	4.985
		Annual Total												
		Cumulative Total												

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

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): Sanchez Ranch aka "Wilson Ranch"

Site Address (as shown in Agricultural Use Plan): 14024 CR 757, Center Hill, FL 33514

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
3B	BAHIA	HCU: Glen Lakes	0.126	27.803	8.594	2.426	0.001	0.000	0.278	0.004	0.000	0.003	0.003	0.240
		HCU: Spring Hill	0.977	76.233	28.343	10.751	0.007	0.001	0.889	0.016	0.002	0.020	0.012	1.124
		Shelley's Cake	2.672	205.19	74.812	0.160	0.019	0.000	1.149	0.000	0.000	0.215	0.030	3.404
		Shelley's Liquid	1.506	73.804	14.038	13.827	0.003	0.000	0.125	0.004	0.000	0.028	0.005	0.183
		Winter Garden	0.505	76.806	33.097	7.074	0.005	0.001	0.141	0.021	0.000	0.009	0.005	0.485
		Annual Total			459.84	158.88	34.239	0.035	0.002	2.582	0.045	0.004	0.275	0.055
Cumulative Total						0.035	0.002	2.582	0.045	0.004	0.275	0.055	5.437	
		Annual Total												
Cumulative Total														
		Annual Total												
Cumulative Total														

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

[illegible]

INSTRUCTIONS FOR ANNUAL SUMMARY FORM

This form shall be completed for each permitted facility in accordance with Chapter 62-640, Florida Administrative Code, (F.A.C.). The permittee, by no later than February 19 of the year following the calendar year (January 1 through December 31) being reported, shall submit the original completed form to the appropriate Department District Office. Use additional sheets if necessary. All information shall be typed or printed in ink.

Part I - Facility Information

Facility Name/Address: Enter the facility name as shown on the facility wastewater permit. Complete the mailing address.

Facility ID: This is the identification number of the facility as it appears on the facility wastewater permit.

Monitoring Period: This is the period that the data on this report represents and shall be the calendar year, January 1 through December 31. A new facility will report all information from the start of operation through December 31 of its first year.

Total Quantity of Residuals Applied During Reporting Period: Enter the total quantity of residuals applied by the facility during the reporting period in dry tons (1 ton = 2000 lb).

Total Number of Residuals Application Sites Used During Reporting Period: Enter the total number of residuals application sites used during this reporting period. These sites should all be addressed in Parts II and III of this report.

Residuals Characteristics: Calculate the arithmetic average of all analyses taken during the reporting period. All units are in dry weight basis except for total solids and pH.

Pathogen Reduction Class: Enter the pathogen reduction class provided by this facility. Choose only one.

Vector Attraction Option: Mark the VAR option used by this facility for its residuals. Choose only one from the table below.

Summary of Options for Meeting Vector Attraction Reduction

Option Number	Description
1	Meet 38 percent reduction in volatile solids content.
2	Demonstrate vector attraction reduction with additional anaerobic digestion in a bench-scale unit.
3	Demonstrate vector attraction reduction with additional aerobic digestion in a bench-scale unit.
4	Meet a specific oxygen uptake rate for aerobically digested biosolids.
5	Use aerobic processes at greater than 40°C for 14 days or longer.
6	Alkali addition under specified conditions.
7	Dry biosolids with no unstabilized solids to at least 75 percent solids.
8	Dry biosolids with unstabilized solids to at least 90 percent solids.
9	Inject biosolids beneath the soil surface.
10	Incorporate biosolids into the soil within 6 hours of application to or placement on the land.

Note: Table is derived from Table 5-8, *A Plain English Guide to the EPA Part 503 Biosolids Rule*, EPA/832/R-93/003, U.S. Environmental Protection Agency, 1993.

Certification: This report must be signed in accordance with Chapter 62-640, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached. Date that the report is signed.

Part II - Total Application of Residuals or Septage, Nutrients, and Trace Elements for Application Zones Used Only By This Facility: Enter the appropriate information for application zones used solely by this facility. Attach a separate sheet for "other solids."

Site Name: Enter the site name exactly as it is listed in Part II, Item 1 of the Agricultural Use Plan for the site. A new page should be used for each different site. Attach additional pages as necessary.

Site Address: Enter the site's actual location address exactly as it is shown in Part II, Item 1 of the Agricultural Use Plan for the site.

Application Zone(s): Enter the application zone ID(s) used during the reporting period. One application zone per row is preferred but more than one application zone may be entered if and only if the rest of the corresponding row information is identical for all zones entered in the block.

Crop(s): Enter the names of the crops grown on the zone(s) during the reported period.

Dry Tons Applied per Acre: Enter the calculated amount of residuals or septage applied to the applicable agricultural zone(s) in dry tons per acre (1 ton = 2000 lb).

Nutrients and Metals: Enter the calculated amount of each item applied in lbs/acre on an annual and cumulative basis. Cumulative values are not applicable for the nutrients. These calculations shall be made using the appropriate analyses for each application of residuals.

Part III - Total of Residuals or Septage, Nutrients, and Trace Elements Applied to Application Zones Used By Multiple Facilities: Enter the appropriate information for application zones used by other facilities in addition to this facility. Use a separate sheet for "other solids."

Site Name/Site Address/Application Zone(s)/Crop(s): Follow the instructions given for these categories in Part II.

Facility/Dry Tons per Acre Applied: Enter this facility and each other facility applying to this zone (multiple zones may only be entered if all facilities applied to the same identical zones and the row information for each facility is identical for each zone. Enter dry/tons per acre applied by each facility (1 ton = 2000 lb).

Nutrients and Metals: Enter the calculated amount of each item per facility. Sum each facility's contribution and enter the amount applied during the reported period, then determine and enter the annual and cumulative amounts for the zone(s).

Part IV - Hauling Records Summary - To be completed only by residuals management facilities.
Enter the appropriate information for the yearly summary from each source wastewater treatment facility.