

Summary of Class AA Biosolids 2010



Domestic Wastewater Section
Florida Department of Environmental Protection
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Class AA Biosolids Summary: 2010

Introduction

This summary presents data and information on the distribution and marketing of Class AA biosolids, as defined in Chapter 62-640, Florida Administrative Code (F.A.C.), in Florida for 2010. The data and information included in this report was compiled from reports submitted to the Department by companies and facilities in accordance with Rule 62-640.850, F.A.C.

Based on this data, during 2010, 39 companies/facilities distributed and marketed approximately 254,994 dry tons of Class AA biosolids products in 53 Florida counties. The data indicated there was a 16.3% increase in the amount of dry tons distributed and marketed in 2010 when compared with the 2009 amount of 219,270 dry tons. The data for 2010 is summarized in the appendix.

Background

Biosolids are the solid, semisolid, or liquid residue generated during the biological wastewater treatment process. Florida domestic wastewater facilities are estimated to generate greater than 320,000 dry tons of biosolids annually. Of this total, it is estimated that about 83% is used beneficially either by being distributed and marketed as Class AA biosolids products or directly land-applied as Class AA, A or B biosolids.

Section 403.702, Florida Statutes (F.S.), which promotes resource recovery and management, supports the beneficial use of biosolids such as land application and distribution and marketing of biosolids. Biosolids are typically high in organic content and contain moderate amounts of nutrients such as nitrogen and phosphorus. These properties make biosolids valuable as a fertilizer or soil amendment.

The beneficial use of biosolids in Florida is regulated by the Florida Department of Environmental Protection under Chapter 62-640, F.A.C., and by the Environmental Protection Agency under Title 40 Code of Federal Regulations (CFR) Part 503. Biosolids which are used beneficially must be treated to reduce pathogens and vector attraction. They must also meet specific pollutant concentration criteria. In addition to treatment, Chapter 62-640, F.A.C. and Title 40 CFR Part 503 contain requirements for recordkeeping, reporting, and management practices.

Distribution and marketing of Class AA biosolids products is regulated under Rule 62-640.850, F.A.C. Class AA biosolids are considered to be the highest quality of biosolids produced and may be utilized as fertilizer through commercial distribution and marketing. To achieve a Class AA status, the biosolids must be treated to a level that essentially eliminates pathogens and meets strict parameter concentration limits for heavy metals, as required by Chapter 62-640, F.A.C.

Class AA biosolids may be distributed in bulk or bagged for sale at retail garden centers. Class AA biosolids may be marketed in different physical forms. These include compost, pellets, heat-dried granular products (i.e. non-uniform size particles), alkaline-treated semi-solid forms, or liquid. Class AA biosolids products, like traditional commercial fertilizer products, are not subject to site management restrictions if the product is registered as a fertilizer or distributed and marketed to a person or entity that will sell or give-away the biosolids or biosolids products as a fertilizer or as a component of a fertilizer.

Class AA Biosolids Distribution and Marketing in Florida

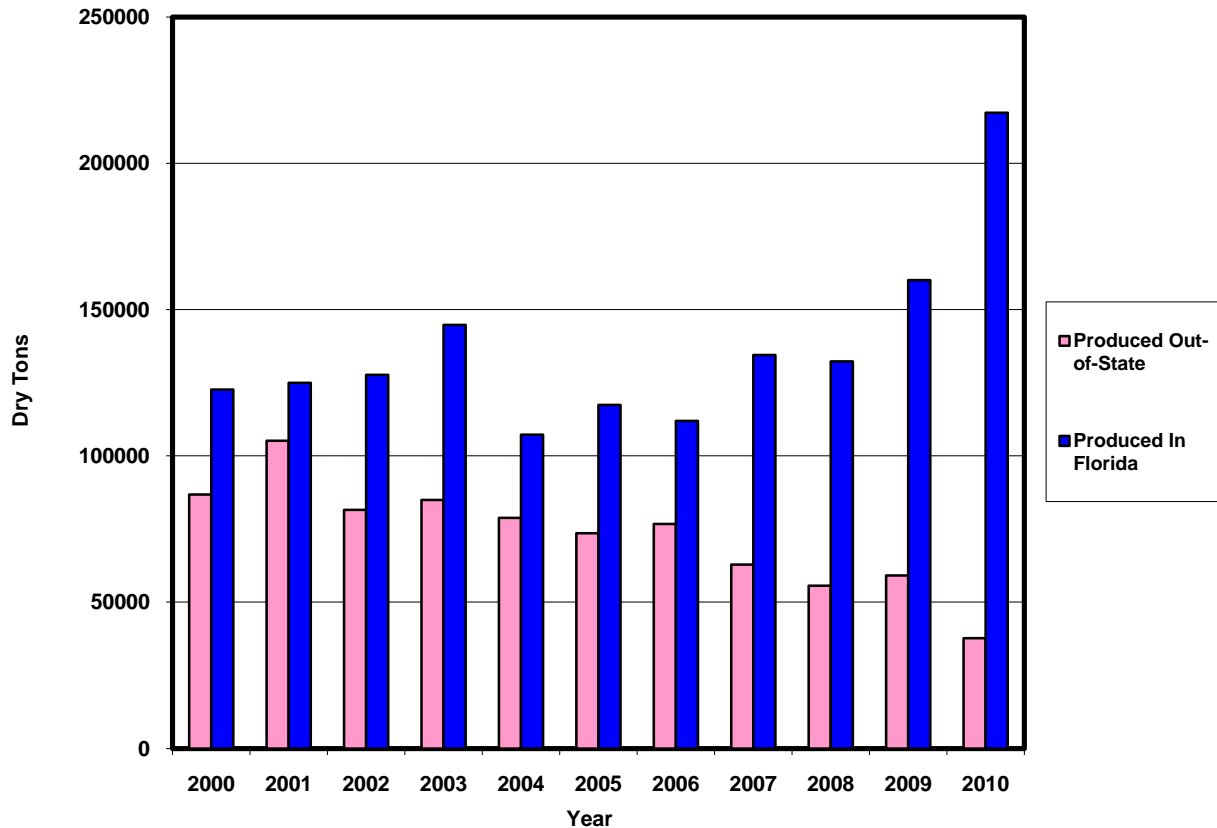
Florida Class AA Biosolids Production and Imported Class AA Biosolids

As stated in the introduction above, the total amount of Class AA biosolids products distributed and marketed in Florida increased by 16.3% in 2010. The amount of Florida-produced Class AA biosolids

products increased from 160,087 to 217,303 dry tons, a 36% increase. Imported biosolids products decreased by approximately 36% from 59,183 dry tons to 37,691 dry tons.

Figure 1 shows the reported quantities of Class AA biosolids products distributed and marketed in Florida by in-state facilities and out-of-state facilities from 2000 to 2010. Individual company/facility information and data for 2010 is provided in the appendix.

Figure 1. Class AA Biosolids Distribution and Marketing in Florida Based on Source of Biosolids



In 2010, more Florida-produced Class AA biosolids were distributed and marketed than ever before. The increase in distribution and marketing of Florida-produced Class AA biosolids in 2010 may not be an indicator of future production, however. The peak in 2003 was followed by a decrease the following year and was partially attributable to the closure of just one facility that produced a large volume of biosolids.

Three new generators started production in 2010, but the amount they distributed and marketed was statistically insignificant. Of the new facilities, one produces a cake product, one produces heat-dried pellets and one produces compost. Two generators stopped production in 2010. However, the amount they produced collectively was less than 400 dry tons.

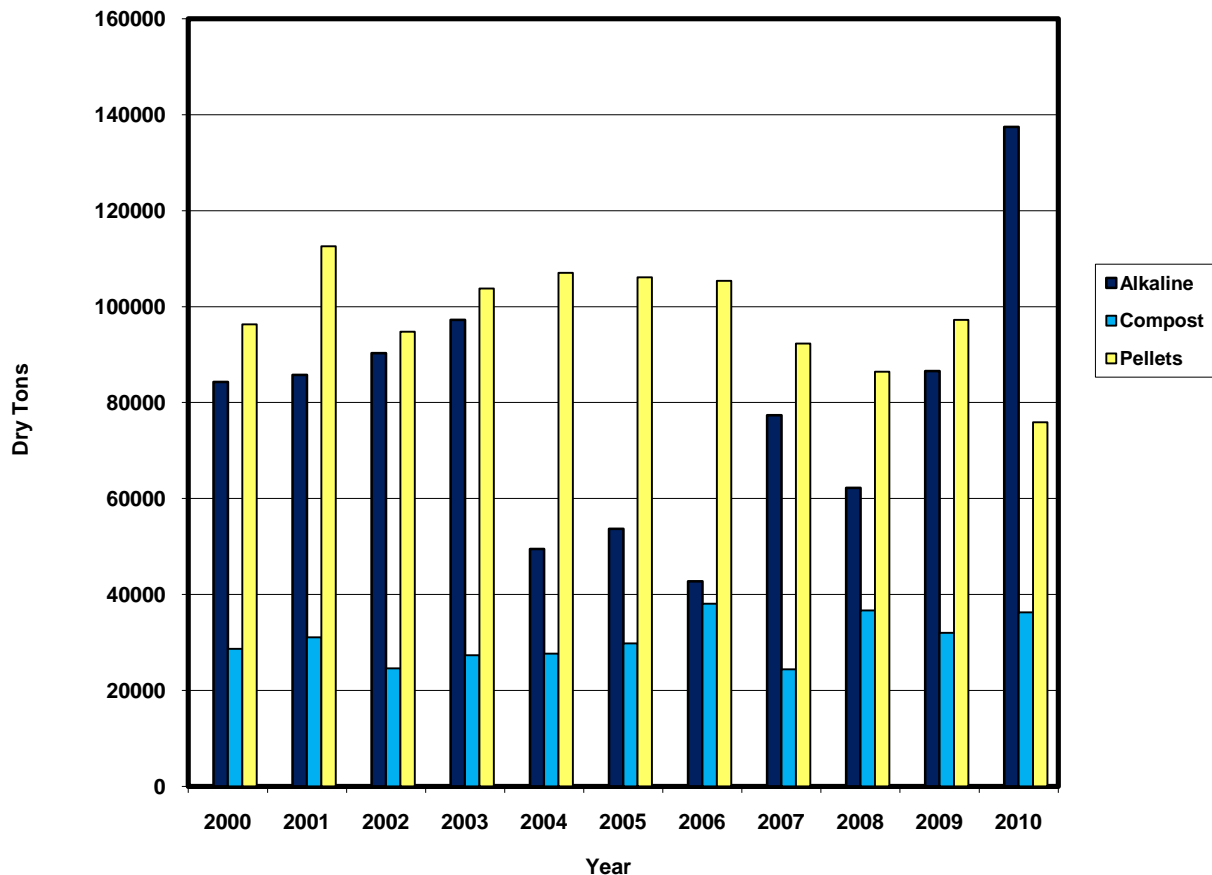
Some of the increase in production may be attributed to Section 373.4595, Florida Statutes, which was amended in 2007 to impose new restrictions for the land application of Class B biosolids in three South Florida watersheds. Many facilities that previously treated and land-applied Class B biosolids in the restricted areas now transfer their biosolids to Class AA facilities for treatment. The Palm Beach Compost Facility, Palm Beach Pelletization Facility and the Volusia County Department of Solid Waste (Tomoka Farms Landfill RMF) are three examples. These generators had the largest increase in dry tons

generated from 2009 to 2010; partially attributable to receiving biosolids from facilities that formerly land applied to sites in the restricted watersheds.

Distribution and marketing of alkaline-treated materials and compost continues to represent a significant portion of Florida's in-state production. The dry tonnage of these final products can be significantly higher than the dry tonnage of the original biosolids used to produce the final products because of materials added during the treatment process. The biosolids processed with an alkaline component are produced by Cape Coral, Hollywood, Naples, Pahokee, Shelley's Environmental Systems, and Volusia County Department of Solid Waste (Tomoka Farms Landfill RMF). Florida facilities producing composted biosolids products include Lee County, Miami-Dade Water and Sewer Department, Palm Beach County, Reedy Creek Energy Services, Inc., C & C Peat Co., the City of Sarasota, and Compost USA. By contrast, all imported biosolids are pelletized products.

Figure 2 presents a graph showing the amount of Class AA biosolids products distributed and marketed in Florida between 2000 and 2010 by type of product. Only the three main categories of Class AA biosolids are shown since the quantities for liquid biosolids (2697 dry tons in 2010) and non-alkaline cake (995 dry tons in 2010) are small in comparison. The significant increase in alkaline-treated materials can be attributed to the Volusia County Department of Solid Waste (Tomoka Farms Landfill RMF). This facility produced 48,393 more dry tons in 2010 than in 2009. The decrease in the amount of pellets can be attributed to a major out-of-state generator from New York ceasing production in mid-2010.

Figure 2. Distribution and Marketing of Class AA Biosolids Product Types in Florida



Florida Class AA Biosolids Producers

The map in Figure 3 shows the general locations of the Florida facilities which produce Class AA biosolids products. As in past years, most of these facilities are located in very populated areas of Central and South Florida although some facilities in the northern half of the state have started to produce Class AA biosolids. Overall, since there is a large number of agricultural operations located in Central and South Florida, this provides a significant market for Class AA biosolids products.

Figure 3.

Florida Class AA Biosolids Producers



Distribution and Marketing by County

The quantities of biosolids products distributed and marketed in each Florida county from 2000-2010 are shown in Table 1. The highest concentration of biosolids distributed and marketed in 2010 occurred in Central and South Florida; close to the majority of Class AA biosolids producers and close to large agricultural markets. Only counties to which Class AA biosolids products have been delivered are listed in Table 1. Figure 4 on page 7 is a map that illustrates how quantities of Class AA products were distributed and marketed county by county in 2010.

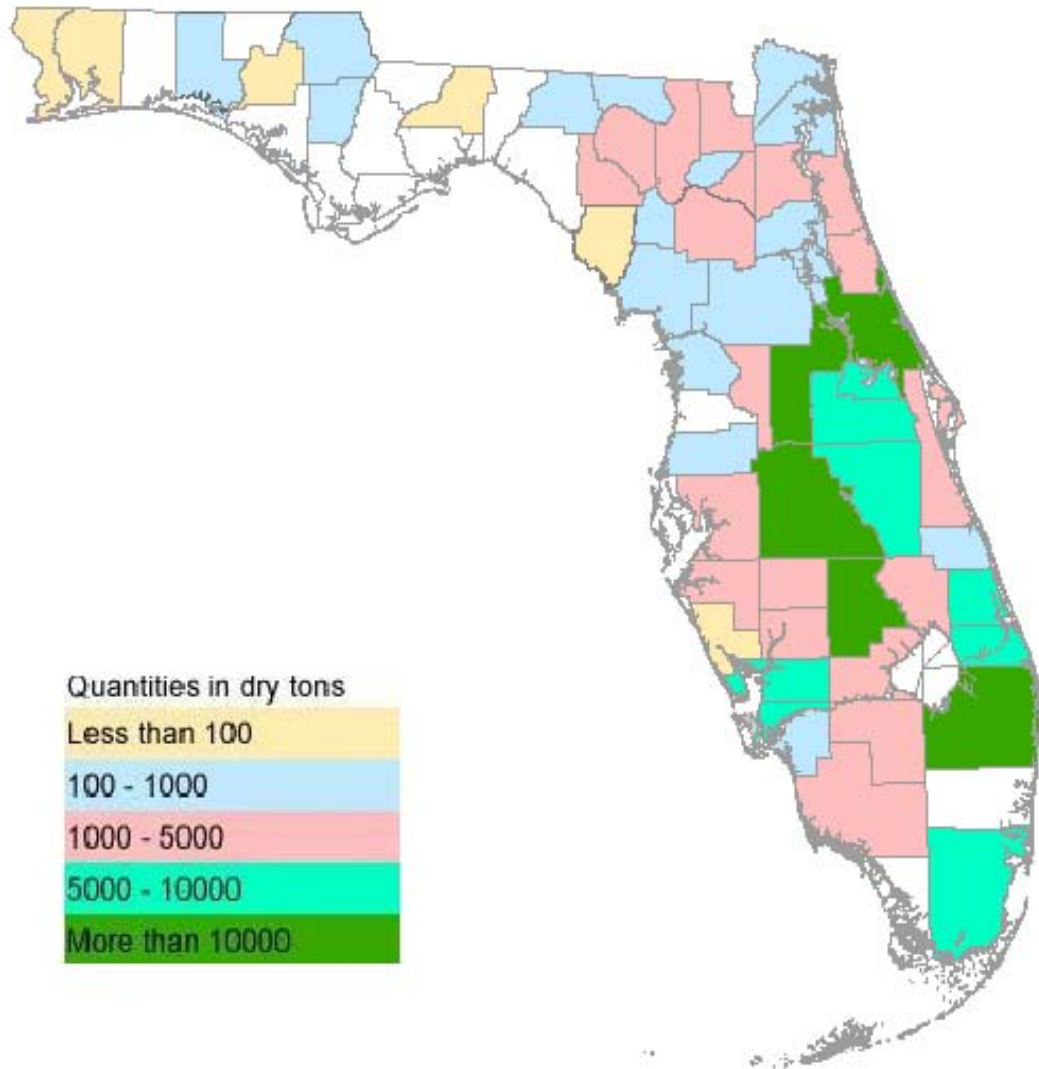
Table 1. Dry Tons of Class AA Biosolids Distributed and Marketed in Florida¹

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alachua	1336.64		121.99	72.46	3561.57	13159.72	15525.37	1220.00	2484.09	1845.03	1832.5
Baker								81.24	211.43	1124.24	1301.07
Bay				32.00						52.44	
Bradford	336.55	193.18				251.43		80.51	423.35	3036.24	1710.53
Brevard	6338.27	744.48	1404.14	479.95	2733.43	1195.57	1371.06	2504.00	1648.9	576.08	4366.34
Broward	201.81	242.58		353.88	0.20	5.60			21.1		
Calhoun									206.921	530.51	629.11
Charlotte	1013.27	941.12	1501.10	1378.94	2517.88	6922.04	1348.87	3574.89	6690.958	1588.90	7900.847
Citrus				25.17		49.04	14.10	25.72	44.6	661.75	622.2
Clay							402.99	403.36	439.03	1306.16	3173.65
Collier	3400.53	12722.66	9939.00	10497.68	2562.35	8442.08	1689.21	2260.70	2647.15	2510.00	2731
Columbia				177.29		122.86	621.94		2190.05	8090.35	2908.48
Dade	1763.33	2799.55	2504.18	3943.98	3128.25	2822.10	4093.09	8023.07	8652.1	9597.46	8044.25
De Soto	19995.21	32907.52	43179.04	38134.38	6685.69	2420.63	1267.98	1753.79	1760.29	7564.73	4321.2
Duval	5524.33	4568.07	10177.58	7836.04	4360.97			142.78	698.03	190.00	22.66
Escambia	97.72	531.11	1253.09	178.00	1169.10	361.00				1628.58	682.45
Flagler		494.61	446.91	541.54		198.64			346.9	73.80	76.8
Gadsden					6.00	2.00		6.21			1535.26
Gilchrist								44.61	17.93	2433.78	
Glades	1532.66	3610.40	8075.72	5838.76	4910.95	3968.22	3330.82	3998.87	500.78		889.78
Hamilton			16.00						6.57	48.59	1402.08
Hardee	2639.31	5804.78	4071.25	4335.43	4776.15	5039.44	4899.34	5896.02	6827.26	5077.20	989.35
Hendry	1955.62	3017.57	5170.85	1609.62	1908.58	6108.95	2252.90	2052.92	3044.29	1330.04	4562.53
Hernando					1156.04	395.43		15.90			2933.47
Highlands	16093.57	13903.09	14122.40	24442.86	18935.77	21673.60	17670.84	12640.02	14181.94	18725.00	
Hillsborough	7253.90	5342.95	5765.36	5849.86	5121.72	6119.61	6588.81	6258.36	4758.95	4674.70	11867.97
Holmes						279.92					3473.08
Indian River	3970.81	3308.43	2026.18	1749.08	811.94	695.17	2819.01	1677.57	545.86	526.64	
Jackson									149.712	61.07	435.78
Lafayette				364.33	1639.70	1105.37	19.54	27.78	114.977	3384.20	269.22
Lake	8218.96	8505.49	7279.63	7672.68	9178.25	6477.94	8417.22	19537.75	9722.72	12900.53	4878.445

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Lee	1101.68	2090.37	1629.16	4711.89	5292.53	2135.24	5540.82	3667.71	2127.345	5546.51	16295.57
Leon					14.00	111.63				54.615	9.85
Levy	51.08		69.22		299.15	3605.75	232.47		501.89	5877.36	126.4
Madison										45.74	858.06
Manatee	1697.50	781.46	406.15	779.89	537.89	717.72	198.34	389.65	1542.17	1644.18	1520.48
Marion	343.33	683.67	37.97	470.55	903.81	97.93	131.44	1575.06	1904.35	170.45	520.998
Martin	3801.01	3588.37	1566.45	173.47	233.87	265.24	12240.93	12395.90	15493.03	4513.51	6176.37
Monroe			1122.83	6.46							
Nassau								10.34			202.5
Okaloosa	163.29	14.06	1623.62	367.90	675.70	618.00	1230.63				
Okeechobee	8164.94	7595.90	7906.37	6833.15	5012.62	9166.20	6652.07	8728.88	7330	5486.57	3065.63
Orange	16525.21	28628.25	12677.44	14043.13	18824.18	18024.99	18367.30	10239.83	18389.86	17991.44	9661.44
Osceola	3130.69	3130.69	3335.05	627.02	4555.43	1042.84	3494.79	5345.19	4628.025	10615.48	7318.29
Palm Beach	16934.80	17000.54	6521.05	6983.09	8008.12	7679.40	14656.75	9102.79	2293.86	14087.71	19414.96
Pasco	15965.53	7650.13	8824.18	9664.61	9877.04	4742.31	205.34			48.43	417.53
Pinellas					0.50						
Polk	27502.23	22229.16	24372.24	23101.60	25842.96	27785.37	29940.03	30752.11	23400.37	26379.56	20277.91
Putnam		207.5	161.18	108.09	166.17	72.11	97.93	218.36	1079.61	135.92	204.71
Santa Rosa		1.00	752.23		410.20	19.00				20	84.74
Sarasota	1084.81	767.08	139.63	113.77	43.06		621.51	34.93	110.84	11.11	38.79
Seminole	11007.56	15775.01	7050.07	8127.71	9277.69	6674.72	7771.63	6300.68	7056.18	7586.335	7538.85
St. Johns				42.08	371.65	185.82	159.20	6743.42	8286.32	2378.08	2261.6
St. Lucie	8363.73	14285.45	13171.52	10332.77	7624.11	5810.71	6918.35	5629.88	6566.28	5003.955	8958.745
Sumter	139.26		290.07	1481.66	242.87	84.12	253.35	13029.08	194.44	367.64	4581.83
Suwannee				78.58	95.99	653.87	242.71	736.95	74.29	2422.97	2742.59
Taylor				27.88							
Union				97.65		683.82	98.10		134.79	447.94	288.77
Volusia	11854.03	5652.18	325.27	26023.78	11930.39	9868.28	4540.54	5529.18	13477.27	15426.71	67519.64
Walton					672.00	3183.30	2695.80	4769.86	5021.978	3469.818	776.597
Washington			164.50								46.5

¹Based on reports on file with the FDEP

Figure 4. Class AA Distributed and Marketed in 2010



The map above illustrates the 2010 distributed and marketed quantities of Class AA biosolids by county as provided in Table 1.

Analytical Averages

The data below presents a general perspective of Class AA biosolids metals concentrations. However, data for some of the parameters is limited, and the averages presented are not weighted averages. If a facility reported an analysis result of “below detectable limits”, the minimum detection limit was entered as the value when possible. Additionally, the averages cannot be compared across years because facilities producing Class AA biosolids constantly change from year to year. Some facilities choose to start producing Class AA biosolids while others may close or choose to stop producing Class AA biosolids. Lastly, because of the small number of facilities producing Class AA biosolids, one facility’s analytical results can significantly affect the overall averages.

Table 2. 2010 Class AA Analysis Arithmetic Averages (mg/kg, dry weight basis)¹

Parameter	Limit (monthly average)	FL Average	Non-FL Average	Overall Average
As	41	4.51	5.21	4.62
Cd	39	1.95	2.68	2.07
Cu	1500	326.14	400.80	338.20
Pb	300	18.15	67.40	26.08
Hg	17	.68	.88	.71
Mo ²	-	10.71	10.68	10.71
Ni	420	18.17	22.68	18.70
Se	100	6.50	4.99	6.26
Zn	2800	613.88	731.43	632.83

¹ Available data may have been limited and may not accurately reflect the true averages of these parameters. Additionally, these are not weighted averages.

² Although there is not a monthly average limit for molybdenum, Class AA biosolids must still meet 75 mg/kg maximum ceiling concentration limit for molybdenum.

References

Florida Department of Environmental Protection, Biosolids
Chapter 62-640, Florida Administrative Code, Tallahassee, Florida. 2010.

Florida Department of Environmental Protection, Inventory of Domestic Wastewater Residuals in Florida: A Summary Report. Tallahassee, Florida. 1996.

Florida Department of Environmental Protection, Summary of Class AA Residuals Report. Monthly reports from 2000 – 2010, Tallahassee, Florida; 2000 – 2010.

Summary of Class AA Domestic Wastewater Residuals

Summary of Monthly Residuals Distribution and Marketing Reports

Calendar Year 2010

January 1, 2010 to December 31, 2010

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
<hr/>				
Bonita Springs, City of	P.O. Box 1696, Windermere, FL 34786-1696 Clifford W. Morris, Lead Operator - (239) 495-4247	Pellets		
			Glades	561.35
			Hardee	109.46
			Highlands	38.14
			Lee	11.38
			Osceola	43.03
			Subtotal	763.36
C & C Peat Company	1650 CR 470, Okahumpka, FL 34762- Michael Wolfe, Division Manager - (352) 365-0367	Compost		
			Lake	3542.73
			Subtotal	3542.73
Cape Coral, City of	P.O. Box 390, Cape Coral, FL 32008- Martin Buerk, Residuals Manager/VP - (561) 274-4840	Alkaline Cake "RDP Process"		
			Charlotte	6273.31
			Lee	76.26
			Subtotal	6349.57
CCUA Fleming Island	2120 Corporate Square Blvd, Suite 17, Jacksonville, FL 32216- Fred Mussari, - (904) 819-9170	Cake Residuals Neutralizer Biosolids		
			Baker	45.70
			Clay	235.40
			Subtotal	281.10
CCUA Ridaught	2120 Corporate Square Blvd., Jacksonville, FL 32216- Fred Musari, - (904) 819-9170	Cake Residuals Neutralizer Biosolids		
			Baker	52.00
			Clay	302.80
			Subtotal	354.80

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
CCUA Spencers Biochem 3540 Agricultural Center Drive, St. Augustine, FL 32092- Fred Mussari, - (904) 819-9170		Cake Residuals Neutralizer Biosolids	Baker	44.50
			Clay	281.60
			Subtotal	326.10
Clayton County GA. Water Authority 1600 Battle Creek Road, Morrow, GA 30260 James A. Perkins, Water Reclamation Manager - (770) 478-7496		Pellets "Agri-Plus 650"	Hillsborough	2692.00
			Subtotal	2692.00
Compost USA 4400 SE 73rd St., Ocala, FL 34480- Glen Stewart, COO - (352) 351-0666		Compost	Alachua	35.30
			Brevard	25.35
			Lake	830.89
			Marion	75.66
			Orange	890.46
			Sumter	16.48
			Subtotal	1874.14
Escambia County Utilities Authority 2980 Old Chemstrand Road, Cantonment, FL 32533- Donald C. Palmer, Water Reclamation Director - (850) 969-3380		Pellets	Calhoun	255.98
			Escambia	76.80
			Santa Rosa	84.74
			Walton	306.98
			Subtotal	724.50
Hillsborough County Water Resource Services 925 East Twiggs Street, Tampa, FL 33602- Luke Armstrong, General Manager II - (813) 264-3850		Pellets	De Soto	4116.86
			Subtotal	4116.86
Hollywood, City of 39347 Flink Avenue, North Branch, MN 55056- Bobby Boston, - (651) 674-4481		Alkaline Cake	Martin	14.60
			Palm Beach	13242.43
			Subtotal	13257.03

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
Jacksonville Electric Authority - Buckman RRTF	2221 Buckman Street, Jacksonville, FL 32206-3396 Arthur D. Nettles Jr., Operations Coordinator - (904) 665-8376	Pellets	Clay	1992.48
			Duval	238.00
			Highlands	1350.04
			Orange	1093.37
			Osceola	644.00
			Polk	1368.16
			Seminole	452.52
			St. Lucie	812.38
			Subtotal	7950.95
Lakeland, City of (Glendale WWTP)	1825 Glendale Street, Lakeland, FL 33801-5079 R. Scott Lewis, Manager of Wastewater Treatment - (863) 834-8272	Liquid	Polk	1680.15
			Subtotal	1680.15
Lakeland, City of (Northside WWTP)	1825 Glendale Street, Lakeland, FL 33803 R. Scott Lewis, Manager of Wastewater Treatment - (863) 834-8272	Liquid	Polk	699.94
			Subtotal	699.94
Largo, City of	5000 150th Ave. N., Largo, FL 33760- Gary Glascock, Asst. Director - (727) 518-3079	Pellets	Polk	1853.24
			Subtotal	1853.24
Lee County Solid Waste Division	10500 Buckingham Road, Ft. Myers, FL 33905- Laura Gray, Engineering Manager - (239) 533-8930	Compost	Hendry	1367.79
			Lee	309.81
			Subtotal	1677.60

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
Manatee County Southeast Biosolids Facility 3331 Lena Road, Bradenton, FL 34202- Christian Collins, Biosolids Supervisor - (941) 792-8811		Pellets	Bradford	26.55
			Duval	369.25
			Highlands	49.42
			Jackson	24.12
			Lee	23.04
			Manatee	13.17
			Polk	189.14
			Subtotal	694.69
Miami-Dade Water and Sewer Department 8950 SW 232 St., Miami, FL 33190- Steve Kronheim, Chief Water and Sewer Plant Operator - (786) 268-5603		Compost	Dade	4570.83
			Hendry	385.38
			Lee	104.24
			Subtotal	5060.45
Milwaukee Metropolitan Sewerage District 260 West Seeboth St., Milwaukee, WI 53204- Thomas J. Crawford, Biosolids Barrister, Authorized Agent - (414) 225-2243		Pellets "Milorganite"	Dade	280.11
			Hillsborough	608.33
			Lake	84.00
			Manatee	63.00
			Orange	325.46
			Polk	582.68
			Seminole	5571.66
			St. Lucie	707.58
Subtotal	8222.82			
Naples, City of 58610 Van Dyke, Washington, MI 48094 Bob Rogers, Owner - (810) 560-9077		Alkaline Cake "RDP Process"	Collier	2731.00
			Subtotal	2731.00

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
NEFCO Palm Beach	6600 45th Street, West Palm Beach, FL 33412- Craven Askew, Plant Manager - (561) 961-1455	Pellets Green Power Organic Fert.		
			Alachua	23.00
			Charlotte	1347.36
			Citrus	622.20
			Clay	143.52
			Columbia	343.62
			Dade	240.59
			De Soto	66.30
			Glades	634.37
			Hamilton	255.80
			Hardee	360.10
			Hendry	1173.30
			Highlands	113.92
			Indian River	116.80
			Jackson	245.10
			Lafayette	222.10
			Lake	136.61
			Madison	13.30
			Marion	345.10
			Martin	175.00
			Nassau	202.50
			Okeechobee	1479.96
			Orange	511.45
			Osceola	141.30
			Polk	776.92
			Putnam	96.26
			St. Lucie	1133.76
			Suwannee	333.40
			Volusia	505.38
			Washington	46.50
			Subtotal	11805.52
NEFCO Quincy, MA	97 East Howard Street, Quincy, MA 02169 Jim Sullivan, General Manager - (617) 376-2500	Pellets "Econogrow 4-2-0"		
			Hardee	1367.83
			Lafayette	864.26
			Lake	607.80
			Okeechobee	140.50
			St. Lucie	222.43
			Subtotal	3202.81

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
Ocala, City of	2100 NE 30th Ave., Building H, Ocala, FL 34470-4875 Jeff Halcomb, Director - (352) 351-6770	Heat-Dried Granular		
			Clay	117.10
			Lake	778.63
			Marion	8.00
			Orange	14.36
			Osceola	43.19
			Subtotal	961.28
Pahokee, City of	1001 Rim Canal Road, Pahokee, FL 33476 Catherine E. Nance, Chief Operator WWTP - (561) 924-2926	Alkaline Cake NaturalLime TM		
			Charlotte	3.20
			Hendry	7.00
			Okeechobee	3.00
			Pasco	34.33
			Subtotal	47.53
Reedy Creek Improvement District	P.O. Box 10170, Lake Buena Vista, FL 32830-0170 Jerry Vollenweider, Supervisor, Wastewater and Compost - (407) 824-7137	Compost		
			Charlotte	20.95
			De Soto	38.93
			Gilchrist	208.75
			Glades	96.30
			Highlands	349.20
			Lake	4114.86
			Marion	19.65
			Okeechobee	11.64
			Orange	2334.00
			Osceola	488.89
			Polk	266.59
			Sarasota	38.79
			Seminole	26.46
			Sumter	0.50
			Suwannee	972.21
			Subtotal	8987.72

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
Sarasota, City of	1750 12th Street, Sarasota, FL 34236 Javier Vargas, General Manager - (941) 955-2325	Compost		
			De Soto	77.81
			Glades	64.72
			Hardee	212.99
			Highlands	336.05
			Hillsborough	130.75
			Lake	1593.20
			Orange	16.33
			Osceola	144.27
			Polk	631.90
			Subtotal	3208.02
Shelley's Environmental Systems	P.O. BOX 249, Zellwood, FL 32798 David Shelley, President/Owner - (407) 889-8042	Alkaline Cake		
			Lake	1560.07
			Osceola	1590.00
			Sumter	4564.85
			Subtotal	7714.92
Solid Waste Authority of Palm Beach County	7501 North Jog Road, West Palm Beach, FL 33412 Patrick D. Byers, Director - (561) 640-4000	Compost "AllGro Compost"		
			Martin	5778.00
			Palm Beach	6172.53
			Subtotal	11950.53
Starke BCR	11235 St. Johns Industrial Suite 2, Jacksonville, FL 32246- Fred Mussari, - (904) 819-9170	Cake Residuals Neutralizer Biosolids		
			Bradford	33.00
			Subtotal	33.00

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
Synagro-WWT, Inc. - Baltimore Pelletech	3501 Asiatic Avenue, P.O. Box 2828, Baltimore, MD 21226 Gwen Kraus, Technical Services Manager - Product Marketing - (410) 354-2381	Pellets "Granulite"		
			Dade	1039.03
			Highlands	1315.33
			Hillsborough	42.00
			Okeechobee	244.81
			Orange	544.09
			Polk	1228.36
			Seminole	383.11
			St. Lucie	286.89
			Subtotal	5083.62
Synagro-WWT, Inc. - Hagerstown, MD	3501 Asiatic Avenue, P.O. Box 2828, Baltimore, MD 21226 Gwen Kraus, Technical Services Manager - Product Marketing - (410) 354-2381	Pellets "Granulite"		
			Okeechobee	25.57
			Orange	24.78
			Subtotal	50.35
Synagro-WWT, Inc. - New York, NY	3501 Asiatic Avenue, P.O. Box 2828, Baltimore, MD 21226 Gwen Kraus, Technical Services Manager - Product Marketing - (410) 354-2381	Pellets "Granulite"		
			Columbia	465.10
			Dade	184.48
			Highlands	8118.58
			Okeechobee	926.15
			Orange	932.65
			Polk	6053.44
			St. Lucie	839.25
			Subtotal	17519.65
Synagro-WWT, Inc. - Patapsco Pelletizer	3501 Asiatic Avenue, P.O. Box 2828, Baltimore, MD 21226 Gwen Kraus, Technical Services Manager - Product Marketing - (410) 354-2381	Pellets "Granulite"		
			Dade	96.17
			Okeechobee	74.03
			Orange	50.64
			Polk	297.41
			Subtotal	518.25

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
Synagro-WWT, Inc. UOSA	3501 Asiatic Avenue, P.O. Box 2828, Baltimore, MD 21226 Gwen Kraus, Technical Services Manager - Product Marketing - (410) 354-2381	Pellets "Granulite"		
			Orange	24.09
			Polk	197.13
			Seminole	180.08
			Subtotal	401.30
Synagro-WWT, Inc., Pinellas County Pelletizer	3501 Asiatic Avenue, P.O. Box 2828, Baltimore, MD 21226 Gwen Kraus, Technical Services Manager - Product Marketing - (410) 354-2381	Pellets "Granulite"		
			Dade	1611.59
			Hardee	165.94
			Highlands	51.57
			Manatee	23.80
			Orange	2769.06
			Polk	1254.91
			Seminole	170.99
			Subtotal	6047.86
Tallahassee, City of	1815 Lake Bradford Road, Tallahassee, FL 32310 Joe Cheatham, Wastewater Supervisor, Treatment Manager - (850) 891-1009	Heat-Dried Granular "Nutri-Source"		
			Calhoun	373.13
			Dixie	22.66
			Duval	75.20
			Lafayette	791.23
			Leon	9.85
			Walton	469.62
			Subtotal	1741.69
Tampa, City of	2700 Maritime Blvd., Tampa, FL 33605 Timothy Ware, Plant Administrator - (813) 247-3451	Pellets "Vital-Cycle"		
			Dade	21.45
			Glades	45.34
			Highlands	69.56
			Orange	130.70
			Polk	2205.71
			Seminole	693.35
			Subtotal	3166.11

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
Titusville, City of	4800 Deep Marsh Road, Titusville, FL 32780 Matt Hixson, Chief Operator, Pretreatment Field Coordinator - (321) 383-5642	Liquid	Brevard	311.93
			Volusia	4.60
			Subtotal	316.53
VCDSW/Tomoka Farms Road Landfill RMF	1990 Tomoka Farms Road, Daytona Beach, FL 32124 Tom Otermat, Operations Manager - (386) 253-7721	Alkaline Cake "N-Viro Soil"	Alachua	1774.20
			Baker	1158.87
			Bradford	1650.98
			Brevard	4029.06
			Charlotte	256.03
			Clay	100.75
			Columbia	2099.76
			De Soto	21.30
			Flagler	1535.26
			Gilchrist	681.03
			Hamilton	733.55
			Hardee	2346.21
			Highlands	76.16
			Indian River	318.98
			Lafayette	3000.86
			Lake	3046.78
			Levy	126.40
			Madison	844.76
			Manatee	1420.51
			Marion	72.59
			Martin	208.77
			Okeechobee	159.97
			Osceola	4223.61
			Pasco	383.20
			Polk	992.23
			Putnam	108.45
			Seminole	60.68
			St. Johns	2261.60
			St. Lucie	4956.46
			Suwannee	1436.98
			Union	288.77
			Volusia	67009.66
				Subtotal

Company	Address and Point of Contact	Product Type/Name	County Where Distributed	Quantity Delivered (Dry Tons)
			TOTAL	254994.13

Notes:

Number of Florida Companies/Facilities Reporting:	31
Number of Out-of-State Companies/Facilities Reporting:	8
Number of Florida Counties Receiving Class AA Residuals in Report:	53
Quantity Distributed and Marketed by Florida Companies in Florida (dry tons):	217303.33
Quantity Distributed and Marketed by Out-of-State Companies in Florida (dry tons):	37690.80

Quantities Exported by Florida Companies (not included in data given above)

Company Name	State	Quantity (dry tons)
Escambia County Utilities Authority	AL	814.27
Tampa, City of	AL	95.33
Tampa, City of	GA	141.21
Total Exported:		1050.81