



1715 North Westshore Blvd, Suite 875  
Tampa, Florida 33607  
tel: 813 281-2900  
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March 29, 2013

Mr. John Power  
Solid Waste Manager  
Pasco County Solid Waste  
14230 Hays Road  
Spring Hill, FL 34610

Subject: West Pasco Class III Landfill – WACS ID No. SWD/51/45920  
Annual Remaining Disposal Capacity and Site Life Calculations

Dear Mr. Power:

CDM Smith is submitting four (4) copies of the remaining disposal capacity and annual site life estimate for the subject landfill.

Please forward one signed and sealed original to the FDEP division listed below. If you have any questions or comments regarding this letter or the data presented herein, please call me at (813) 281-2900.

Sincerely,

Aamod Sonawane, P.E., BCEE  
Senior Project Manager  
CDM Smith Inc.

Enclosures

- 1) Mr. Steve Morgan  
Solid Waste Section  
Florida Department of Environmental Protection  
Southwest District Office  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637

Dept. Of Environmental Protection

APR 11 2013

Southwest District





**Pasco County Utilities**

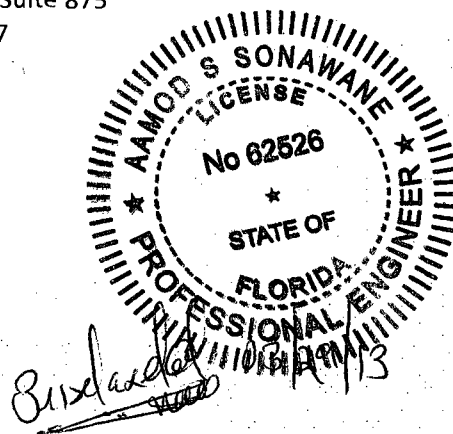
**West Pasco Class III Landfill – WACS ID SWD/51/45920  
Annual Remaining Disposal Capacity and Site Life Calculations**

**14230 Hays Road  
Spring Hill, Pasco County, Florida**

**March 2013**

**Prepared for:**  
Pasco County Utilities  
7530 Little Road  
New Port Richey, FL 34654

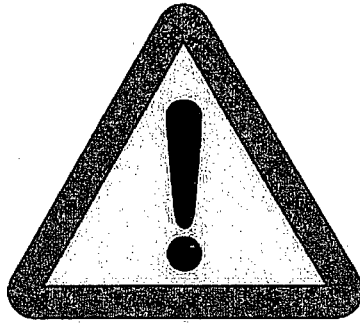
**Prepared by:**  
CDM Smith Inc.  
Certification of Authorization Number 20  
1715 North Westshore Blvd., Suite 875  
Tampa, Florida 33607



Aamod Sonawane, P.E.  
Florida Registered  
Professional Engineer No. 62526

<b>CDM Smith</b>	Calculation Form (Excel)      Job # 6104-94747.WA4 Client: Pasco County, FL Project: West Pasco Class III Landfill Detail: Annual Site Life Estimate	Calc By: <u>RV</u> Date: 3/15/13 Checked By: <u>AS</u> Date: 3/18/13
<b>Landfill Capacity/Remaining Site Life Calculation</b>		
<b>1.0 Purpose/Objective</b>	Calculate the remaining site life of West Pasco Class III Landfill.	
<b>2.0 Procedure</b>	(a) Calculate the remaining capacity consistent with the permitted build out and current topographic survey (provided by Pasco County). (b) Estimate remaining site life based on historical disposal rate in the landfill.	
<b>3.0 References/Data Sources</b>	(a) Current Topographical Survey of the landfill updated in 2013 (Attachment 2). (b) Permitted buildout of the landfill from the Operations Permit Renewal (2007).	
<b>4.0 Assumptions and Limitations</b>	(a) Estimated average disposal rate = 2,820 tons/year (tpy) per Attachment 1. The top 3 feet of the buildout is deducted from the available air-space as a provision for final cover. (b) Assume a density of 1000 lbs/CY for Class III waste. (c) Assume a weekly cover of 6 inches for approximate 5 foot lifts. Weekly cover is approximately 0.5 ft/ 5 ft = 10% by volume.	
<b>5.0 Calculations</b>	(a) Air space remaining for West Pasco Class III Landfill (from AutoCAD computations) = <span style="float: right;">241,234      CY</span> (b) Divide remaining volume by disposal rate  <div style="margin-left: 40px;">                     Assume density of Class III Waste = 1,000 lbs/C.Y.                      Estimated Disposal rate = 2,820 tons/year                      Estimated air space consumption = 5,640 CY/year                      10% volume for weekly cover = 564 CY/year                      Total estimated air space consumption = 6,204 CY/year                      Estimated remaining site life = 38.88 years                 </div>	
<b>6.0 Conclusions/Results</b>	The remaining Site life of West Pasco Class III Landfill is approximately 39 years from February 2013.	

# **ATTENTION**



**Blueprints were  
removed from this  
location in the file and  
inserted separately.**

Attachment 1  
Tonnage Data  
(Reporting Year 2012)

**PASCO COUNTY UTILITIES - SOLID WASTE  
YEAR 2012 TONNAGE SUMMARY FROM COUNTY DATA**

<b>Period</b>	<b>West Pasco Class III</b>	<b>West Pasco Class I - ASH</b>	<b>West Pasco Class I - MSW</b>
Jan-12	222.14	6,908.97	53.77
Feb-12	248.56	5,951.54	107.01
Mar-12	269.35	5,655.72	37.65
Apr-12	231.76	6,815.60	291.05
May-12	200.89	7,157.43	284.08
Jun-12	214.42	6,790.95	22.05
Jul-12	253.34	6,623.27	78.26
Aug-12	306.52	5,953.22	246.85
Sep-12	187.69	5,776.06	103.32
Oct-12	336.40	5,040.41	87.76
Nov-12	189.03	6,731.67	20.61
Dec-12	162.10	7,238.16	124.96
<b>2012 Total (tons)</b>	<b>2,822.20</b>	<b>76,643.00</b>	<b>1,457.37</b>
<b>* Historical Total (tons)</b>	<b>9,864.36</b>	<b>289,210.25</b>	<b>5,997.07</b>
<b>Total of above two rows**</b>	<b>12,686.56</b>	<b>365,853.25</b>	<b>7,454.44</b>
<b>Average landfilled tonnage (tons/year)</b>	<b>2,819.24</b>	<b>81,300.72</b>	<b>1,656.54</b>

\* Denotes Total landfilled tonnage from July 2008 through December 2011. This was reported in Attachment 1 of 'West Pasco Class III Site Life Estimate' dated March 30, 2012 for reporting year 2011 by CDM Smith.

\*\* Denotes tonnage values for period from July 2008 through December 2012 (54 Months)

PASCO COUNTY UTILITIES - SOLID WASTE

TONNAGE SUMMARY - FY 2012

Quarter Ending March 31, 2012

MATERIAL	West Pasco Class III Tonnage			West Pasco Class I Tonnage			WTE Tonnage			EPTS Tonnage		
	JANUARY	FEBRUARY	MARCH	JANUARY	FEBRUARY	MARCH	JANUARY	FEBRUARY	MARCH	JANUARY	FEBRUARY	MARCH
1 Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	26,248.88	25,563.91	28,821.76	5,451.30	5,277.71	6,050.52
2 Class III Waste	355.90	375.44	456.02	0.00	0.00	0.00	0.00	0.00	0.00	9.08	6.21	11.33
3 Ash Residue	0.00	0.00	0.00	6,908.97	5,951.54	5,655.72	0.00	0.00	0.00	0.00	0.00	0.00
4 Other Wastes	83.91	81.50	55.26	53.77	107.01	37.65	0.00	86.91	0.00	7.25	3.71	4.47
<b>Total Tonnage Weighted IN</b>	<b>439.81</b>	<b>456.94</b>	<b>511.28</b>	<b>6,962.74</b>	<b>6,058.55</b>	<b>5,693.37</b>	<b>26,248.88</b>	<b>25,650.82</b>	<b>28,821.76</b>	<b>5,467.63</b>	<b>5,287.63</b>	<b>6,066.32</b>
LESS: Yard Trash Stored/Mulched/to WTE	(133.76)	(126.88)	(186.67)									
Waste Tires Stored/Chipped/to WTE	(83.91)	(81.50)	(55.26)									
<b>Total Tonnage Landfilled</b>	<b>222.14</b>	<b>248.56</b>	<b>269.35</b>	<b>6,962.74</b>	<b>6,058.55</b>	<b>5,693.37</b>						
<b>Total Tonnage Processed by WTE</b>							<b>26,248.88</b>	<b>25,650.82</b>	<b>28,821.76</b>			
<b>Total Tonnage Received @ Transfer Station</b>										<b>5,467.63</b>	<b>5,287.63</b>	<b>6,066.32</b>

ASH CELL **	6,908.97	5,951.54	5,655.72
SOLID WASTE CELL	53.77	107.01	37.65

\*\* = Ash Residue is the only Material Disposed of in the Ash Landfill.

PASCO COUNTY UTILITIES - SOLID WASTE

TONNAGE SUMMARY - FY 2012

Quarter Ending June 30, 2012

MATERIAL	West Pasco Class III Tonnage			West Pasco Class I Tonnage			WTE Tonnage			EPTS Tonnage		
	APRIL	MAY	JUNE	APRIL	MAY	JUNE	APRIL	MAY	JUNE	APRIL	MAY	JUNE
1 Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	26,246.24	26,107.60	27,261.32	5,393.95	5,057.24	4,978.70
2 Class III Waste	392.11	362.20	374.59	0.00	0.00	0.00	176.36	304.34	461.48	10.15	7.00	5.16
3 Ash Residue	0.00	0.00	0.00	6,815.60	7,157.43	6,790.95	0.00	0.00	0.00	0.00	0.00	0.00
4 Other Wastes	77.20	57.71	69.05	291.05	284.08	22.05	0.00	325.63	176.36	6.40	5.69	9.50
<b>Total Tonnage Weighted IN</b>	<b>469.31</b>	<b>419.91</b>	<b>443.64</b>	<b>7,106.65</b>	<b>7,441.51</b>	<b>6,813.00</b>	<b>26,422.60</b>	<b>26,737.57</b>	<b>27,899.16</b>	<b>5,410.50</b>	<b>5,069.93</b>	<b>4,993.36</b>
LESS: Yard Trash Stored/Mulched/to WTE	(160.35)	(161.31)	(160.17)									
Waste Tires Stored/Chipped/to WTE	(77.20)	(57.71)	(69.05)									
<b>Total Tonnage Landfilled</b>	<b>231.76</b>	<b>200.89</b>	<b>214.42</b>	<b>7,106.65</b>	<b>7,441.51</b>	<b>6,813.00</b>						
<b>Total Tonnage Processed by WTE</b>							<b>26,422.60</b>	<b>26,737.57</b>	<b>27,899.16</b>			
<b>Total Tonnage Received @ Transfer Station</b>										<b>5,410.50</b>	<b>5,069.93</b>	<b>4,993.36</b>

ASH CELL **	6,815.60	7,157.43	6,790.95
SOLID WASTE CELL	291.05	284.08	22.05

\*\* = Ash Residue is the only Material Disposed of in the Ash Landfill.



**PASCO COUNTY UTILITIES - SOLID WASTE**

TONNAGE SUMMARY - FY 2012

Quarter Ending September 30, 2012

MATERIAL	West Pasco Class III Tonnage			West Pasco Class I Tonnage			WTE Tonnage			EPTS Tonnage		
	JULY	AUGUST	SEPTEMBER	JULY	AUGUST	SEPTEMBER	JULY	AUGUST	SEPTEMBER	JULY	AUGUST	SEPTEMBER
<b>1 Municipal Solid Waste</b>	0.00	0.00	0.00	0.00	0.00	0.00	28,021.14	27,236.44	23,922.12	5,061.49	5,022.33	4,383.66
<b>2 Class III Waste</b>	441.55	434.97	325.60	0.00	0.00	0.00	266.07	318.06	160.59	11.45	9.89	10.20
<b>3 Ash Residue</b>	0.00	0.00	0.00	6,623.27	5,953.22	5,776.06	0.00	0.00	0.00	0.00	0.00	0.00
<b>4 Other Wastes</b>	56.07	46.95	64.81	78.26	246.85	103.32	0.00	13.30	42.64	5.66	7.12	4.09
<b>Total Tonnage Weighted IN</b>	<b>497.62</b>	<b>481.92</b>	<b>390.41</b>	<b>6,701.53</b>	<b>6,200.07</b>	<b>5,879.38</b>	<b>28,287.21</b>	<b>27,567.80</b>	<b>24,125.35</b>	<b>5,078.60</b>	<b>5,039.34</b>	<b>4,397.95</b>
LESS: Yard Trash Stored/Mulched/to WTE	(188.21)	(128.45)	(137.91)									
Waste Tires Stored/Chipped/to WTE	(56.07)	(46.95)	(64.81)									
<b>Total Tonnage Landfilled</b>	<b>253.34</b>	<b>306.52</b>	<b>187.69</b>	<b>6,701.53</b>	<b>6,200.07</b>	<b>5,879.38</b>						
<b>Total Tonnage Processed by WTE</b>							<b>28,287.21</b>	<b>27,567.80</b>	<b>24,125.35</b>			
<b>Total Tonnage Received @ Transfer Station</b>										<b>5,078.60</b>	<b>5,039.34</b>	<b>4,397.95</b>

<b>ASH CELL **</b>	6,623.27	5,953.22	5,776.06
<b>SOLID WASTE CELL</b>	78.26	246.85	103.32

\*\* = Ash Residue is the only Material Disposed of in the Ash Landfill.

PASCO COUNTY UTILITIES - SOLID WASTE

TONNAGE SUMMARY - FY 2013

Quarter Ending December 31, 2012

MATERIAL	West Pasco Class III Tonnage			West Pasco Class I Tonnage			WTE Tonnage			EPTS Tonnage		
	OCTOBER	NOVEMBER	DECEMBER	OCTOBER	NOVEMBER	DECEMBER	OCTOBER	NOVEMBER	DECEMBER	OCTOBER	NOVEMBER	DECEMBER
1 Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	26,364.82	25,550.53	25,394.91	5,055.93	4,965.76	4,985.57
2 Class III Waste	515.66	303.00	257.04	0.00	0.00	0.00	184.45	198.80	191.15	7.99	13.33	10.61
3 Ash Residue	0.00	0.00	0.00	5,040.41	6,731.67	7,238.16	0.00	0.00	0.00	0.00	0.00	0.00
4 Other Wastes	80.83	48.53	98.95	87.76	20.61	124.96	4.68	60.47	128.99	6.08	5.52	5.71
<b>Total Tonnage Weighted IN</b>	<b>596.49</b>	<b>351.53</b>	<b>355.99</b>	<b>5,128.17</b>	<b>6,752.28</b>	<b>7,363.12</b>	<b>26,553.95</b>	<b>25,809.80</b>	<b>25,715.05</b>	<b>5,070.00</b>	<b>4,984.61</b>	<b>5,001.89</b>
LESS: Yard Trash Stored/Mulched/to WTE	(179.26)	(113.97)	(94.94)									
Waste Tires Stored/Chipped/to WTE	(80.83)	(48.53)	(98.95)									
<b>Total Tonnage Landfilled</b>	<b>336.40</b>	<b>189.03</b>	<b>162.10</b>	<b>5,128.17</b>	<b>6,752.28</b>	<b>7,363.12</b>						
<b>Total Tonnage Processed by WTE</b>							<b>26,553.95</b>	<b>25,809.80</b>	<b>25,715.05</b>			
<b>Total Tonnage Received @ Transfer Station</b>										<b>5,070.00</b>	<b>4,984.61</b>	<b>5,001.89</b>

ASH CELL **	5,040.41	6,731.67	7,238.16
SOLID WASTE CELL	87.76	20.61	124.96

\*\* = Ash Residue is the only Material Disposed of in the Ash Landfill.

Attachment 2  
Topographic Survey  
(January 30, 2013)

# **ATTENTION**



**Blueprints were  
removed from this  
location in the file and  
inserted separately.**

**CDM  
Smith**

cdmsmith.com

