




CITY OF STAMFORD
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May 1, 2009

To: Randall Skigen, Chairman, Board of Representatives Fiscal Committee\
From: Ben Barnes, Director of Operations 
Re: Response to Waste-to-Energy questions

Please see below for responses from the WPCA to the questions raised by Mr. Stadel and the Stamford Taxpayers PAC.

1. **\$1 million in increased utility costs:** Utility costs have indeed risen at the WPCA, as they have for everyone else. This rise is a principal justification in support of the waste-to-energy project in my opinion. The use of natural gas has risen because of the dryer now in operation, but more significantly because of the odor control systems in place there now. The Board of the WPCA decided to pursue the dryer project because of rapidly rising transport and disposal costs for sludge. We believed then, and I still do, that trading a volatile and rising haulaway expense for a stable budget of debt service and natural gas was a good deal for rate payers in the long run. We anticipated that the new approach would be more expensive for a few years, but would be cheaper later, as shown on the attached pro-forma from 2006. While we are “behind” our projection today (see updated pro-forma, also attached,) it would be foolish to abandon the project, pay both debt service AND haulaway costs, and ignore beneficial reuse of our residuals.

Let me be clear, there would be no budgetary savings from discontinuing our sludge pelletization process, since debt service would remain, haulaway costs would increase, and the staffing costs for the dewatering process would also remain. A \$2.5million reduction to the WPCA budget, as suggested by Mr. Stadel, would likely result in a default of our indenture obligations, our DEP permits, and our mission to treat sewage in a safe and environmentally responsible manner.

2. **WPCA planning more rate increases:** This statement was taken out of context. In fact, our Board has worked hard in recent years to balance the operating needs of the agency with the goal of keeping rates as low as possible. They made a significant cut to the budget (about \$250,000) prior to submitting to the Board of Finance and the Board of Representatives. The Board is very concerned with even a small increase, but also realizes that the plant must be operated and maintained and that the cost of spare parts and equipment are constantly increasing. We had considered the possibility of mailing four bills per year rather than two in order to ease the burden of sewer bills on rate-payers.
3. **No revenue from sludge pellets:** During contract negotiations with Synagro, the WPCA opted to have a lower annual operating fee rather than rely on revenue from the pellets. These contract terms were contemplated by the Board when it evaluated the financial merits of the project. The terms on which Synagro disposes of the pellets to end users is beyond the scope of the WPCA's contract with Synagro.
4. **Energy-intensive and environmentally unfriendly:** The pelletizing facility uses natural gas to dry the sludge and also for odor control with the majority going to odor control. There are CO2 emissions from the odor control process but those emissions have been permitted by the State of Connecticut DEP. The former method of disposal had much more greenhouse gas emission. We were hauling up to six trucks per day of wet, unstabilized sludge, considered a hazardous material, anywhere from 90 miles to 300 miles away to either a landfill or an incinerator. The sludge incinerator produces much more air pollutants and green house gas than the pelletizing odor control system. Furthermore, there was a significant environmental risk and liability in case any of those trucks were in an accident and the sludge spilled.
5. **NO to sewage sludge from the South Bronx:** The WPCA Board has not approved nor contemplated importation of any sludge or biosolids as described by Mr. Stadel. The Board has contemplated a system in which natural gas is used to supplement syngas from sewage sludge for electricity generation.
6. **No feasibility studies conducted:** That is untrue. The WPCA evaluated the financial viability of the palletizing plant on a stand-alone basis (see attached pro-forma from August, 2006.) With respect to the waste-to-energy project, we have and are continuing to complete our feasibility study. We expect to have the final report completed by the end of May. Attached is the Table of Contents for that report.
7. **WPCA Board unqualified:** We have on the Board a very well qualified financial professional, Alan Barnet. Until six months ago, we also had an engineer, Chris Maggio, but he had to resign because of health issues. We expect that position to be filled in the near future. In addition, the other at-large members are well qualified with two of them having served on the former Sewer Commission and other City Boards and one being the former Director of Operations, Tim Curtin.

Attachments

cc: Jeanette Brown
WPCA Board of Directors

Sludge Pelletization Pro-Forma, Aug. 7, 2006

Assumptions:

1. As of October 2005, haulaway contracts are bidding at \$90/wet ton. Escalating that at 15%/year, FY 07-08 haulaway would be \$119/wet ton. \$ 2,199,120
2. Use 4620 dry tons @ 25% solids as baseline
3. O&M Costs under the new method are escalated at 7.5% per year.
4. Haulaway costs are escalated at 10 % every third year and 5% on the other years. The 10% is for the years in which the contract would be re-bid.

	<u>Current Method</u>	<u>30-yr Revenue Bond</u> <u>Pelletizing @5%</u>	<u>Net Loss/(Savings)</u>
<u>Fiscal Year 06/07</u>			
Debt service	\$	591,051.25	591,051
O&M Cost (includes salaries, benefits, utilities, chemicals)			-
Administrative			-
Haulaway			-
Total Costs	\$ -	\$ 591,051	591,051
<u>Fiscal Year 07/08</u>			
Debt service	\$ -	\$ 1,246,050	1,246,050
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 570,000	\$ 546,250	(23,750)
Haulaway (Sludge Haulaway with escalation summaries)	\$ 1,649,340	-	(1,649,340)
Total Costs	\$ 2,219,340	\$ 1,792,300	(427,040)
<u>Fiscal Year 08/09</u>			
Debt service	\$ -	\$ 1,243,250	1,243,250
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 612,750	\$ 2,250,550	1,637,800
Haulaway	\$ 2,309,076	-	(2,309,076)
Total Costs	\$ 2,921,826	\$ 3,493,800	571,974
<u>Fiscal Year 09/10</u>			
Debt service	\$ -	\$ 1,244,950	1,244,950
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 658,706	\$ 2,318,067	1,659,360
Haulaway	\$ 2,424,530	-	(2,424,530)
Total Costs	\$ 3,083,236	\$ 3,563,017	479,780
<u>Fiscal Year 10/11</u>			
Debt service	\$ -	\$ 1,241,150	1,241,150
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 708,109	\$ 2,387,608	1,679,499
Haulaway	\$ 2,666,983	-	(2,666,983)
Total Costs	\$ 3,375,092	\$ 3,628,758	253,666
<u>Fiscal Year 11/12</u>			
Debt service	\$ -	\$ 1,241,850	1,241,850
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 761,217	\$ 2,459,237	1,698,019
Haulaway	\$ 2,800,332	-	(2,800,332)
Total Costs	\$ 3,561,549	\$ 3,701,087	139,537
<u>Fiscal Year 12/13</u>			
Debt service	\$ -	\$ 1,241,950	1,241,950
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 818,309	\$ 2,533,014	1,714,705
Haulaway	\$ 2,940,349	-	(2,940,349)
Total Costs	\$ 3,758,657	\$ 3,774,964	16,307
<u>Fiscal Year 13/14</u>			
Debt service	\$ -	\$ 1,241,450	1,241,450
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 879,682	\$ 2,609,004	1,729,322
Haulaway	\$ 3,234,383	-	(3,234,383)
Total Costs	\$ 4,114,065	\$ 3,850,454	(263,611)
<u>Fiscal Year 14/15</u>			
Debt service	\$ -	\$ 1,245,250	1,245,250
O&M Cost (includes salaries, benefits, utilities, chemicals)	\$ 945,658	\$ 2,687,274	1,741,616
Haulaway	\$ 3,396,103	-	(3,396,103)
Total Costs	\$ 4,341,761	\$ 3,932,524	(409,236)
Grand Total	\$ 27,375,526	\$ 28,327,956	952,429

Sludge Pelletization Pro-Forma, Aug. 8, 2007 and Updated

Assumptions:

1. As of October 2005, haulaway contracts are bidding at \$90/wet ton. Escalating that at 15%/year, FY 07-08 haulaway would be \$119/wet ton.

Pelletizing Pro-Forma, as projected in 2006

\$ 2,199,120 18,480

Pelletizing Pro-Forma, Actuals for Comparison

Using actual of 5000 tons @23% solids 21739

2. Use 4620 dry tons @ 25% solids as baseline
 3. O&M Costs under the new method are escalated at 7.5% per year.
 4. Haulaway costs are escalated at 10 % every third year and 5% on the other years. The 10% is for the years in which the contract would be re-bid.

	Current Method	30-yr Revenue Bond Pelletizing @5%	Net Loss/(Savings)	Haulaway per wet ton	without pelletizing	W/Pelletizing	Net Loss/(Savings)	Haulaway per wet ton
Fiscal Year 07/08								
Debt service	\$ -	\$ 1,246,050	1,246,050		\$ -	\$ 907,585	907,585	
O&M Cost (includes salaries, benefit)	\$ 570,000	\$ 546,250	(23,750)		\$ 206,536	\$ 656,536	450,000	
Haulaway (Sludge Haulaway with es)	\$ 1,649,340	\$ -	(1,649,340)	\$ 89	\$ 1,934,783	\$ 942,142	(992,641)	
Total Costs	\$ 2,219,340	\$ 1,792,300	(427,040)		\$ 2,141,319	\$ 2,506,263	364,944	\$ 89
Fiscal Year 08/09								
Debt service	\$ -	\$ 1,243,250	1,243,250		\$ -	\$ 897,257	897,257	
O&M Cost (includes salaries, benefit)	\$ 612,750	\$ 2,250,550	1,637,800		\$ 217,265	\$ 2,153,271	1,936,006	
Haulaway	\$ 2,309,076	\$ -	(2,309,076)	\$ 125	\$ 2,173,913	\$ 229,208	(1,944,705)	
Total Costs	\$ 2,921,826	\$ 3,493,800	571,974		\$ 2,391,178	\$ 3,279,736	888,558	\$ 100
Fiscal Year 09/10								
Debt service	\$ -	\$ 1,244,950	1,244,950		\$ -	\$ 909,092	909,092	
O&M Cost (includes salaries, benefit)	\$ 658,706	\$ 2,318,067	1,659,360		\$ 333,935	\$ 2,440,997	2,107,062	
Haulaway	\$ 2,424,530	\$ -	(2,424,530)	\$ 131	\$ 2,304,348	\$ 70,000	(2,234,348)	
Total Costs	\$ 3,083,236	\$ 3,563,017	479,780		\$ 2,638,283	\$ 3,420,089	781,806	\$ 106
Fiscal Year 10/11								
Debt service	\$ -	\$ 1,241,150	1,241,150		\$ -	\$ 908,451	908,451	
O&M Cost (includes salaries, benefit)	\$ 708,109	\$ 2,387,608	1,679,499		\$ 343,953	\$ 2,514,227	2,170,274	
Haulaway	\$ 2,666,983	\$ -	(2,666,983)		\$ 2,442,609	\$ 72,100	(2,370,509)	
Total Costs	\$ 3,375,092	\$ 3,628,758	253,666	\$ 183	\$ 2,786,562	\$ 3,494,778	708,217	\$ 112
Fiscal Year 11/12								
Debt service	\$ -	\$ 1,241,850	1,241,850		\$ -	\$ 907,358	907,358	
O&M Cost (includes salaries, benefit)	\$ 761,217	\$ 2,459,237	1,698,019		\$ 354,272	\$ 2,589,654	2,235,382	
Haulaway	\$ 2,800,332	\$ -	(2,800,332)		\$ 2,589,165	\$ 74,263	(2,514,902)	
Total Costs	\$ 3,561,549	\$ 3,701,087	139,537	\$ 193	\$ 2,943,437	\$ 3,571,275	627,838	\$ 119
Fiscal Year 12/13								
Debt service	\$ -	\$ 1,241,950	1,241,950		\$ -	\$ 906,529	906,529	
O&M Cost (includes salaries, benefit)	\$ 818,309	\$ 2,533,014	1,714,705		\$ 364,900	\$ 2,667,343	2,302,444	
Haulaway	\$ 2,940,349	\$ -	(2,940,349)		\$ 2,744,515	\$ 76,491	(2,668,024)	
Total Costs	\$ 3,758,657	\$ 3,774,964	16,307	\$ 203	\$ 3,109,415	\$ 3,650,363	540,948	\$ 126
Fiscal Year 13/14								
Debt service	\$ -	\$ 1,241,450	1,241,450		\$ -	\$ 908,941	908,941	
O&M Cost (includes salaries, benefit)	\$ 879,682	\$ 2,609,004	1,729,322		\$ 375,847	\$ 2,747,364	2,371,517	
Haulaway	\$ 3,234,383	\$ -	(3,234,383)		\$ 2,909,186	\$ 78,786	(2,830,400)	
Total Costs	\$ 4,114,065	\$ 3,850,454	(263,611)	\$ 223	\$ 3,285,033	\$ 3,735,091	450,058	\$ 134
Fiscal Year 14/15								
Debt service	\$ -	\$ 1,245,250	1,245,250		\$ -	\$ 907,057	907,057	
O&M Cost (includes salaries, benefit)	\$ 945,658	\$ 2,687,274	1,741,616		\$ 387,122	\$ 2,829,785	2,442,662	
Haulaway	\$ 3,396,103	\$ -	(3,396,103)		\$ 3,083,737	\$ 81,149	(3,002,588)	
Total Costs	\$ 4,341,761	\$ 3,932,524	(409,236)	\$ 235	\$ 3,470,859	\$ 3,817,991	347,131	\$ 142
Grand Total	\$ 27,375,526	\$ 28,327,956	952,429		\$ 22,766,085	\$ 27,475,585	4,709,500	

Stamford Waste to Energy Final Interim Report

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