Mcgurk, Tracey

| From: | Tucci, Michael <mtucci@iesengineers.com></mtucci@iesengineers.com> |
|--------------|---|
| Sent: | Thursday, March 07, 2013 2:33 PM |
| To: | Walters, Scott (DEP) |
| Cc: | Daugherty, Stacy; Mcgurk, Tracey; Robert Van Naarden; 'Marco Bonilla'; JBolstein@foxrothschild.com: Schlosser, Robert: Soni, Achok |
| Subject: | EV120894.03 - Delta Thermo Energy - Revised Waste Volumos |
| Attachments: | 1203-09all.pdf |

Scott:

Please see attached .PDF which contains the revised waste volumes for Delta Thermo Energy's proposed Allentown Facility. A hard copy will follow in the mail. If you have any questions, please let me know.

Thanks,

Mike

Michael J. Tucci, P.E. Project Manager

IES Engineers

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March 7, 2013

E-MAIL & CERTIFIED MAIL; RETURN RECEIPT REQUESTED Certified No.: 7007 0710 0001 9383 7362 Scott E. Walters, Ph.D. Environmental Group Manager Bureau of Waste Management Pennsylvania Department of Environmental Protection Rachel Carson State Office Building, 14th Floor P.O. Box 8472 Harrisburg, PA 17105-8472

Subject:

Revised Waste Volumes Delta Thermo Energy, A, LLC 112 Union Street Allentown, Pennsylvania IES Project No. EV120894.03

Dear Dr. Walters:

On behalf of Delta Thermo Energy, A, LLC (DTE), IES Engineers (IES) is pleased to provide the Department with a revised estimate of waste volumes that will be received by the proposed Allentown facility on a daily basis.

In our application submitted to Department on December 11, 2012, the facility anticipated receiving 120 tons per day of MSW and 47 tons per day of wastewater treatment plant (WWTP) sludge. DTE would like to revise these quantities so they are aligned with the company's contractual obligations with the City of Allentown as well as the delivery schedule of the City. The City has recently changed the number of days per week they plan on delivering MSW and Sewage Sludge from 6 days/week to 5 days/week. The quantities should be revised as follows: On an average, DTE will receive 160 tons of MSW and 62 tons of WWTP sludge per day. Table 1 provides a summary of the waste volumes required for the Allentown Facility:



Scott E. Walters, Ph.D. March 7, 2013 Page 2

| | | Table | 1 | | | | |
|--------------------------|-----------------------------------|---------------------|-----------------------------------|----------------------------------|-------------------|--|--|
| Summary of Waste Volumes | | | | | | | |
| Waste Type | Waste Delivery | | | | | | |
| | Contract Volume (tons/week) | Contingency | Contract Volume (tons/week) | Daily Delivery (tons/day)* | Storage (tons) | | |
| MSW | 714 | +12% | 800 | 160 | 640 | | |
| WWTP Sludge | 275 | + <mark>1</mark> 2% | 308 | 62 | 62 | | |
| Total | 989 | | 1108 | 222 | 702 | | |

* Based on 5 days/week of delivery

These quantities should be treated as "Confidential" under 25 Pa. Code Section 271.5(d), inasmuch as the application contains trade secrets and intellectual property rights, the disclosure of which could potentially impact the competitive position of the applicant adversely.

Pages 2 and 4 of the original application submission were affected by these revisions. New pages reflecting these changes are presented in Attachment A. We request the Department to replace the originally submitted pages with these new pages.

Should you have any questions, please feel free to contact me.

Very truly yours,

Michael J. Tucci /e/ Michael J. Tucci, P.E. Project Manager

Attachment cc: S. Dougherty, PADEP T. McGurk, PADEP NERO R. Van Naarden, DTE M. Bonilla, DTE J. Bolstein, Fox-Rothschild, LLP R. Schlosser, IES A. Soni, IES

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ATTACHMENT A

REVISED SOLID WASTE APPLICATION NARRATIVE PAGES



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2.0 PROCESS DESCRIPTION

DTE proposes to receive an average of 160 tons per day of MSW and 62 tons per day of WWTP sludge based on 5 days per week of delivery. DTE proposes to process the MSW (less metals and glass recyclables) and WWTP sludge to generate between 3 and 4 gross megawatts (MW) of electricity for internal use and sale based on 7 days per week of processing operations. The process is described below:

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The process flow diagram is provided in Figure 1.



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From a solid waste perspective, there are a number of unit operations that need to be incorporated into the proposed general permit. Each distinct solid waste unit operation is described in detail below:

MSW Delivery

Under normal operating conditions, the City of Allentown will collect 160 tons per day of MSW, which will be delivered daily (5 days per week) to the facility on an average basis. The waste will arrive by trucks of various capacities and will end up on the tipping floor located inside of the building. The waste will be accumulated and sorted temporarily for bulk items until it is moved to the sorting, shredding and transferring operation. DTE estimates that there will be approximately 640 tons (4 days of feedstock) of unprocessed MSW on site at any one time during normal operating conditions.

Sorting, Shredding and Transferring

After the MSW is delivered, and the bulk items are separated and removed, it will be manually sorted to remove metals and glass. Bulk deliveries of MSW (such as mattresses, furniture, white goods) will be periodically delivered to the facility. All white good materials (refrigerators, ranges, and other appliances) will be sent offsite for recycling. Any refrigerant-containing equipment, such as refrigerators and window air conditioning units, will have the refrigerant recovered by an EPA-certified technician at the offsite recycling facility. Oversized waste, such as mattresses, furniture and other non-recyclable bulk items, will be resized by a primary bulk shredder or taken to an offsite facility and disposed of. After all of the MSW is sorted, it will be shredded by the secondary shredder at the end of the sorting line.

Sludge Delivery

Sludge will be delivered to the plant by truck from the City of Allentown's wastewater treatment plant; which is adjacent to DTE's proposed facility. On average, approximately 62 tons per day will be delivered to the plant via truck per day. Sludge will be mixed with the sorted and resized MSW at this point. DTE estimates that there will be 62 tons (about 1 day of feedstock) of unmixed sludge on site at any one time during normal operations that will be accumulated in the facility's receiving bunker.

Storage of unprocessed MSW and Sludge will be kept to a minimum since it is the objective of the plant to process incoming waste the same day or within a 24-hour period.

Sludge and MSW Mixing

Shredded, resized, and sorted MSW and sludge will be mixed together during the loading process of the RRS as the feedstock is moved by crane (approximately two loads of MSW for each load of sludge) to the next step, which converts this mixture into the renewable fuel.