



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Waste Management Program

Waste
LE
Delta Thermo
Application

April 16, 2013

Mr. Robert Van Naarden
Delta Thermo Energy, A, LLC
One Northbrook Drive
1210 Northbrook Corporate Circle, Suite 100
Trevose, PA 19053

Re: Technical Deficiency Letter
Delta Thermo Energy, A, LLC - Allentown Facility
APS ID# 799226, AUTH ID# 955622
City of Allentown
Lehigh County

Dear Mr. Van Naarden:

The Department of Environmental Protection (DEP) has reviewed the above referenced application and has identified the following significant technical deficiencies. The deficiencies are based on applicable laws and regulations.

Technical Deficiencies

1. A large portion of the application is marked as confidential. However, it does not contain sufficient detail to be giving... confidential information in order to have the information remain confidential. The way that the information is confidential according to 25 Pa Code Chapter 102.1 must be included as a separate document for review.
2. The application states that 10 tons of municipal solid waste and 62 tons of wastewater treatment plant sludge will be received each day. The applicant must ensure that the Lehigh County Plan allows for the materials to be sent to the Delta Thermo facility for processing. Please provide documentation from Lehigh County that shows this operation will not violate the plan.
3. Project Description
 - a. A more detailed project description must be provided to the Department.
 1. The waste receipt and storage operations does not include details to explain how unacceptable materials (i.e. hazardous waste) will be handled if found during sorting. What procedures will be developed to determine appropriate actions when these materials are present?
 2. The sorting process must be identified...

Technical Deficiencies

including pulverized fuel, bottom ash, etc.

- 3. During periods of shut-down or maintenance, the application states that on-site material will be transferred to appropriate sites. More information must be included in the project description to explain this process.
- 4. The process description states that municipal waste and sludge will be thermally treated by injecting pressurized steam. The wastewater generated will be pretreated to meet basic treatment standards. Because the steam will extract many chemicals from the sludge and municipal waste, an expanded sampling program and waste characterization is needed for the wastewater being generated.
- 5. The facility will install a dry scrubber system using hydrated lime. The ash generated will be stored separately. The fly ash and bottom ash generated will need to be characterized with separate analyses.

4. General Information Form

Question 12 of the general information form asks for air emissions and amounts of emissions. The application states that the information is included as Attachment 13. Attachment 13 includes an RFD plan approval letter from the Department to the applicant for the original request for exemption for a research project. The types of air emissions and amounts must be included as part of the general information form.

5. Form E-GP

The Form E-GP identifies the applicant as Delta Thermo Energy, Inc.; however, the rest of the application identifies the applicant as Delta Thermo Energy, A, LLC. The company name must be consistent throughout the application because this form must be reviewed with the county Record professionals, the correct company name must be identified.

6. Form HW-C

Several questions were not answered in Section B of the Form HW-C. Please provide the information requested to the Department for review.

7. Contingency Plan

The contingency plan provided as Attachment 12 of the application was very general. The contingency plan should be developed following the requirements of Form L to ensure enough detail is provided to address for handling emergency situations.

8. Maps

- a. Set back criteria is not delineated on the map provided in the application. Please provide this information on the map which includes in the submittal.
- b. The drawings for the building layout is not an. Please provide updated drawings showing all building layout, storage areas, equipment, flow patterns, dimensions,

Technical Deficiencies

capacity, etc.

9. **Air Exemption**

An RFD approval from the Air Program was included in the application. However, the facility will require a plan approval. This approval request must be submitted to the Northeast Regional Office for review.

10. **Form X – The deficiencies noted below for the Radiation Plan have been provided by the Department’s Bureau of Radiation Protection. In order to ensure all deficiencies have been addressed, you may contact the Bureau of Radiation Protection directly.**

- a. The radiation training and education plan for work staff must be provided in more detail.
- b. Instrument specifications for portal truck monitors are needed.
- c. The calibration technique was provided in Section 11.4.2. Will the applicant perform calibrations of the instrument in-house?
- d. A detailed procedure for loose or fixed contamination detection must be provided.
- e. The worker health and safety radiation plan must include more detail. Include projected gamma doses, EDE, CEDE, and TEDE from TENORM generation by your processes. If the facility is not using dosimetry, describe the program that would include routine monitoring and recording time of stay in elevated radiation areas. Specify the guidelines that would be used.
- f. A page that includes emergency contact numbers including local fire, police, consulting Health Physicist, emergency personnel, and DEP regional contacts must be included in the Radiation Plan.
- g. A procedure to check radiation content for out-going ash must be included in the Radiation Plan.
- h. A procedure for detection of non-gamma emitting radionuclides or weak gamma emitting radionuclides (i.e. tritium exit signs) must be included.

11. **Bonding Worksheets**

- a. Costs to remove processed waste must be included in the bonding calculations.
- b. Costs for trucking material did not include quotes from the contracted haulers. This information must be provided to support the cost calculations.
- c. The bond amount should reflect the maximum amount of material that can be located on-site at any given time. The application stated 600 tons of MW and 50 tons of sewage sludge may be stored on-site. The Department is unsure, based on the submitted diagrams and maps, if these numbers were the maximum amounts that could be located on-site.
- d. The bond should include an allowance for engineering oversight as well as dismantling of the on-site water treatment plant.

SOP for QAQC
Very task - very expensive
is decontamination of ?
if leave in place

April 16, 2013

You must submit a response fully addressing each of the **significant technical** deficiencies set forth above within 90 business days or DEP may deny the **application**.

If you believe that any of the stated deficiencies is not **significant**, instead of submitting a response to that deficiency, you have the option of asking DEP to make a decision based on the information with regard to the subject matter of that deficiency that you have already made available. If you choose this option with regard to any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be denied.

Should you have any questions regarding the identified deficiencies, please contact Stacy Daugherty at the telephone number referenced above, and refer to Application No. 799226, Authorization No. 955622 to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the [number of days allotted for reply]-day period allotted for your reply, unless otherwise extended by DEP. You may also follow your application through the review process via *eFACTS on the Web* at: <http://www.ahs2.dep.state.pa.us/eFactsWeb/default.aspx>.

Sincerely,

Stacy L. Daugherty

Stacy L. Daugherty
Environmental Chemist
Permits Section, Bureau of Waste Management

Cc: Michael Tucci
IES Engineers
1720 Walton Road
Blue Bell, PA 19422

April 16, 2013

Bcc: Scott Walters
Stacy Daugherty
Bill Tomayko - NERO
Tracey McGurk - NERO
General Permit File
File

SEW:SLD:pa

Mr. [Name]
[Address]
[City, State, Zip]

Dear Mr. [Name]:

On behalf of the State of Connecticut, I am writing to you regarding the [Subject].

1. A copy of the [Subject] has been provided to you for your review. It is requested that you have the [Subject] reviewed and return it to the [Subject] by [Date].

2. If you have any questions or need further information, please contact the [Subject] at [Phone Number].

3. Please advise the [Subject] of any changes or updates to the [Subject] as soon as possible.

4. Thank you for your attention to this matter.

Sincerely,
[Signature]