



Department of Environmental Protection

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September 28, 1995

CERTIFIED
Z-188-599-751

Mr. Frank Saltine
Advanced Environmental Recycling Corp./
Mercury Technologies International
4317 L Fortune Place
West Melbourne, Florida 32904

OCD-HW/P-95-0374

Brevard County - HW
Advanced Environmental Recycling Corp./
Mercury Technologies International, L.P.
Operation Permit Application #HO05-275169
First Notice of Deficiencies

Dear Mr. Saltine:

The Department has reviewed the Operation Permit Application #HO05-275169 for the recycling and reclamation of mercury containing devices. Recognizing that submission of the application was under less than favorable conditions, a meeting is suggested to discuss response to the following items the Department considers deficient or in need of further explanation.

GENERAL:

EXECUTIVE SUMMARY - We concur that both reclamation and recovery systems be combined in one application and agree that "other non-specific materials such as manufactured items, debris, aqueous material and soil containing mercury should be covered in this document". However, the application must differentiate from materials and processes in place at the time of the application and other processes or equipment planned for installation at a future date.

Each waste streams listed in the application must contain adequate information to explain how they are to be managed in the operating plan, contingency plan, employee training, etc.

CONFIDENTIALITY - employees of the Department will not be able to sign a non-disclosure agreement. The document becomes public record and should not include trade secret information unless a specific request of confidentiality is made in accordance with Florida statutes. Review of the application does not indicate information is enclosed that would qualify as confidential or trade secret.

OPERATING INFORMATION - All activities, capacities and processing volumes should be based upon reasonable assumptions rather than "maximum theoretical volumes of materials which can be processed annually".

Part 1:

- A.5. Facility name - please clarify the name to be used in the permit. State Corporate records list "Mercury Technologies International, L.P., Limited Partnership" at the West Melbourne address. Is Advanced Environmental Recycling, Corp., to be included in the facility name?

The application refers variously to MTI, AERC or MTI/AERC together. If two separate entities exist in the same facility, please advise and clarify the relationship for purposes of the permit.

- A.8. Please verify the zip code; corporate records indicate the zip code to be 32934.
- A.14. Legal structure - please clarify whether the entity is to be treated as corporation or partnership. Since MTI, L.P. is registered with the Attorney General's Office, we assume it will function as a corporation and not a partnership. Both items are checked.
- A.18. Site ownership status - please complete this information to include status of lease and expiration date.
- B.1. Site information - Please correct the latitude and longitude. The latitude contains an "S" instead of a digit.
- D.1. Waste Generation on Site - Include a summary from Section D.3, including EPA waste code and the annual amounts of hazardous waste generated.
- D.2. Facility Operations, etc. - Summarize briefly in the blanks, from -5. the various Sections, a description of operations at this facility, omitting services provided off-site.

It is generally agreed by the reviewers that process descriptions are substantially adequate but may need reorganization to have complete information in the appropriate sections. There are also the following questions or additional information needed:

- D.3. Process Design Capacity, etc. -

Design capacities need to be addressed in terms of what is being done and what is being additionally proposed in the application. The application requires facility to demonstrate by using manufacturers specs or other specific engineering data. Clarification of waste streams to be processed is needed .

There appears to be some discrepancy in page numbers referenced in D.3.

- D.4. Total Maximum Storage Capacity - since storage capacity is a function of processing capacity, this section should be adjusted in accordance with final agreed upon processing capacity.

Definitions and terms should be consistent with industry standards or explained using examples in the text, i.e. "semi-pure metallic mercury liquid", "non-specific mercury bearing wastes". Is staging the same as temporary storage?

- D.5. Operations Plans and Descriptions - the application should distinguish between existing and proposed systems that will not be in place when the permit is issued. A permit cannot be issued for systems to be installed at a future date.

Description of the processes must include information demonstrating the processes or equipment in use can remove required amounts of hg from the glass and metal end caps. The information may be included in other sections or appendices, but should be consolidated here.

Lamp Processing - loading/unloading procedures reads as if breakage or spillage during unloading is expected. How much breakage is considered to be "excessive"? Since the unloading area is outside the building, procedures should include provision to prevent waste reaching the ground.

Wastes accepted for consolidation and short term storage for direct shipment to other recyclers should be addressed in the application even if the intent is to treat these items as a "transfer waste".

HID Lamps - section is well organized, but is the process in place or planned?

Powder Processing Unit - need to note the amounts and processing times for the powder input. This information may be included in an appendix but should be included here.

Retort Unit - need to provide additional detail on what will or will not be put in the system for processing, define the materials to be accepted, and demonstrate the process can recover 99% of the hg contained in the material.

Triple Distillation System - is this system in place?

D.6. Contingency Plan - might wish to address mitigating effects of equipment failure or releases to the environment beyond spilled material in the plant.

D.8. QA Plan - this plan should be modified to reflect any adjustments in other sections of the application resulting from these comments.

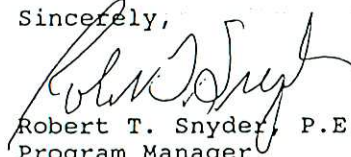
Reference to and use of inspection checklists, training checklists, etc. might be useful to incorporate into QA Plan.

D.9. Closure - need to include decon and disposition of processing equipment not specifically described. Description of decon procedures would rectify this minor point. Sampling and Analytical: Show number x unit costs and justify.

Applicant needs to submit LOC and Standby Trust Agreement for the \$152 K now and update it as necessary after closure cost estimate is agreed upon. If they do wait, they can't accept waste for 60 days after financial assurance is provided.

If you have any questions, please contact me at (407) 893-3323.

Sincerely,



Robert T. Snyder, P.E.
Program Manager
Hazardous Waste Program

RTS/rs

cc: Satish Kastury
Raoul Clark