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Exhibit 1 - FDEP Letter of Financial Responsibility (June 15th, 2011)

Exhibit 2 - Letter of Credit (Circa 2003)

## D.9.1 Closure of AERC.com, Inc.: West Melbourne, FL

AERC.com, Inc. (formerly Advanced Environmental Recycling Company, L.L.C. / Mercury Technologies International L.P.) is located on Fortune Place, West Melbourne Florida. The facility specializes in the recycling of mercury lamps and various mercury containing materials and wastes to remove the hazardous mercury constituent or characteristic, purify the materials, recover the mercury, and render the original material suitable for reuse as reclaimed material. Unprocessed and process materials are temporarily stored at the facility until they can be processed and/or shipped to another off-site treatment, recycling, or disposal facility.

Examples of materials handled by AERC.com, Inc. includes: fluorescent and mercury- containing lighting devices, mercury-containing and contaminated materials, objects, devices and other manufactured items.

This closure plan is prepared to meet the closure standard of 62-737, F.A.C. (and is modeled after the requirements specified in 40 CFR §264, Subparts G and H).

### D.9.1a Closure Procedures

There will be no partial closure of the facility. It is anticipated that the operations of the facility will be conducted indefinitely. Minor changes may occur in the operation or equipment, but would not effect the scope of the plan. However, for final closure the following procedures will be implemented:

- Notification to the Florida Department of Environmental Protection (FDEP) of intent to close the facility will be made at least 30 days prior to initiation of any closure activities.

- Cease acceptance of hazardous materials at the facility by redirecting them to an authorized hazardous waste or recycling facility for ultimate handling.

- Continue to process existing inventory of lamps and devices in the recycling, recovery system. For closure cost estimating however, it is assumed that all this material will be shipped off-site.

- Transport any inventory of remaining waste materials not processed by facility, co-products and recovered materials to appropriate outlets, customers and authorized off-site treatment, recycling, or disposal sites.

- Visually inspect containment systems, concrete floor storage areas inside facility, pads, trenches, storm water containment pond, and all equipment surfaces, lockers, cabinets, and shelf areas for evidence of contamination. If no visual contamination is evident, the hazardous materials containment systems will be steam washed. The resulting wash water from this activity will be sampled, analyzed, and disposed of in accordance with applicable regulations. Any areas that are suspected to be contaminated, i.e., visual contamination is evident, will be decontaminated according to procedures specified in §D.9.1c, *Decontamination Procedures*.

- All permanently mounted warning signs will be removed.

- AERC.com, Inc. will submit appropriate certification of closure to FDEP.

## D.9.1b Maximum Inventory Estimate

The maximum inventory to be stored at the facility will be estimated in drum equivalents (although, there may be whole lamps in boxes, broken lamps, and hazardous and non-hazardous lamp components, solid objects and parts of devices and plant debris that is not in drums, but is in some other type of container). AERC has used drum equivalents to simplify describing the maximum inventory in the facility because there is no way of knowing the number of containers or size of each object, so the regulatory storage limits based on physical space limitations have been used to estimate the drum equivalents for each type of waste or material. This volume is summarized below:

### Table D.9-1 Maximum Inventory Estimate

| Material[1] | Volume Estimate[2] |
|---|---|
| **1. Lighting Devices** | |
| Fluorescent and Mercury Lamps | 244,800 lamps<br>307 drum equivalents |
| Phosphor powders | 30 drums |
| **2. Mercury Containing Materials** | |
| Mercury Devices | 20 drums |
| Metallic Mercury | minor component, included above |
| **3. Lighting Ballasts** | 20 drums |
| **4. Other** | |
| Universal Waste Batteries<br>(13 pallets \| 4 Drums each) | 52 drums |
| Recyclable Electronic Scrap<br>(10 pallets \| 4 Drums each) | 40 drums |
| Cleaning materials generated during closure (wash waters) | 10 drums |
| Empty drums or other containers<br>(used for storing devices, etc.) | 50 containers |
| **MAXIMUM INVENTORY ESTIMATE** | 479 drum equivalents<br>and 50 empty containers |

[1] Includes both unprocessed and processed materials. Total lamp inventory is plant inventory maximum. Quantities of other materials represent a balanced inventory of typical materials and quantities during historical activities – both generated wastes, e.g., phosphor powder, and received materials, e.g., mercury devices.

[2] Estimate as drum equivalents.

Drum Equivalent Conversion Factors for estimates:

| | | |
|---|---|---|
| 1 drum | = | 750 lbs, powdered material |
| 1 gallon | = | 8.3 lbs |
| 1 lamp | = | 0.6 lbs per 4ft lamp |
| 1 pallet | = | 900 whole lamps, most lamps are stored this way. |
| 1 day | = | 24 operating hours; facility operated 300 days per year. |

## D.9.1c Decontamination Procedures

During decontamination activities associated with closure, documentation, including use of field logs, will be done in accordance with Section IV, *Facility Closure* of the current revision of the FDEP *Quality Assurance Standard Operating Procedures for Sampling of Facilities Permitted under Chapter 62-737, F.A.C.* (dated November 14, 1997 Revision | Reformatted April 15, 2010) - referred to as "Mercury SOPs" hereinafter.

- If contamination is not observed, the storage areas will be cleaned using the best available method for proper decontamination. The lamp processing and storage areas will be cleaned using a combination of wiping with water and vacuuming with a treated carbon system. Walls, floors, shelves cabinets, and counter surfaces, surfaces of electrical panels, electrical conduits, light switches, electrical outlets and tops of suspended lighting fixtures will be wiped swept, vacuumed and water or steam washed. if needed, solutions of dilute nitric acid, bleach, or degreasing compound will be used. The rinsate from washing will be collected, sampled, analyzed, and disposed of in accordance with applicable regulations.

- Process equipment from the lamp recycling systems, materials disassembly areas, and associated components will be disassembled, cleaned, using the methods described above, and either sold to third parties for reuse, or as recycled scrap materials. Any contaminated systems or components that cannot be decontaminated or are not reused will be disassembled and shipped to an appropriate hazardous waste processing facility.

- Wipe tests from various locations throughout the facility will be analyzed. If there are hazardous levels of Hg, a solution of water or nitric acid and mercury cleaning chemicals will be used for additional wiping and mopping. Similar procedures will be used for the other process equipment and storage areas of the facility, e.g. wiping, testing, additional cleaning if needed. If there are contaminants other then mercury present in hazardous levels, appropriate cleaning materials will be used to wash and remove them.

**Confirmation of Sampling Plan for Structures, Equipment, Buildings and Outdoor Areas**

Sampling and testing will be performed in accordance with the procedures outlined in Section IV of the Mercury SOPs.

To ensure the process and storage area has been completely decontaminated, a series of wipe tests will be performed. A complete "scope of project" for closure, which includes methods of sampling and analysis, can be submitted to the Department prior to beginning the actual closure procedures, if requested.

**The "scope of project" will consist of a sampling grid for 5% nitric acid wipe samples. At a minimum, ten (10) 100 sq. cm. samples will be taken from various locations and analyzed for Hg to ensure the site is not contaminated prior to final closure.**

**Confirmation of Soil and Surface Water Sampling-**

Collection and analysis of the final FDEP (NPDES) water discharge sample will be done and AERC.com, Inc. will submit a report to the appropriate agencies.

Soil sampling confirmation is not applicable since no activities or hazardous materials storage occur outside the building, there is no run-off from hazardous materials storage areas, and there are no soils within several feet of where any of the facility activities occur.

**Analytical Test Methods/Standards-**

Analytical methods for testing mercury or other contamination shall follow the current revision of EPA publication SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. Wash waters or rinseates will be appropriately managed based on a comparison of sampling results to the surface water quality criteria set forth in 62-302.350, F.A.C.. Specifically, discharge to surface waters will only occur when the concentration of mercury in these waters is ≤ 0.2 ppb (ug/l) – the defined Class V industrial use criterion.

For other indoor and outdoor areas the standard of Total Hg:BDL or not greater than baseline will be used.

- If, after cleaning the facility, analysis still indicates contamination, the concrete or other storage container will be cleaned again, or removed and shipped off-site for treatment and disposal.
- After decontamination, all process equipment, vehicles, drums, other containers will be removed from the building, and any waste materials, hazardous or non-hazardous will be managed in accordance with applicable regulations.

## D.9.1d Closure Schedule

It is anticipated that the operations at the facility will continue indefinitely. However, for the purpose of this plan, January of 2020 has been selected as the date when the appropriate agencies will be notified that the facility will be closed. The following schedule outlines the activities and the dates of completion.

| Activity | Date of Completion |
|---|---|
| Notification to FDEP that the facility will be closed | January 2020 |
| Final volume of wastes received | July 2020 |
| Begin closure procedures | September 2020 |

| | |
|---|---|
| Final volume of products and materials removed from the facility | October 2020 |
| Complete inspection of equipment, storage and process areas decontamination, and removal of any contamination, conduct sampling and analysis at various locations within the facility | November 2020 |
| Submit appropriate certification to FDEP | January 2021 |

The total time for closure activities has been estimated at 180 days with the first 90 days primarily utilized for the removal of inventory from the site. Due to the operations of the facility, it is anticipated that the actual time needed for the removal of inventory would actually be less than the time frames established by the regulations. Therefore, the facility does not foresee any problems complying with the time frames required.

## D.9.1e Closure Cost Estimate

The closure cost estimate for the West Melbourne facility has been prepared based on the worst case conditions detailed within the table found in §D.9.1b, which is the maximum storage of 721-55 gallon drums of processed and unprocessed materials and up to 50 empty containers used by the facility. As explained in this section, drums also means drum equivalents, including up to 244,800 whole lamps or processed lamp components. No disposal activities will be conducted at this facility. The estimate, therefore, is based on a worst-case of having to ship the materials off-site to a third party treatment, recycling, or disposal facility, and not the cost to the operator supplying its own equipment and labor.

The closure cost estimate will be adjusted annually for inflation using an inflation factor. This factor is derived from the annual implicit price deflator for Gross National Product as published by the U.S. Department of Commerce in its survey of current business.

The closure cost estimate will not incorporate any salvage value from the sale of hazardous wastes, structures, or equipment. Materials with potential economic value are not assumed as zero costs for the closure estimate. All unprocessed materials remaining on site will be treated as hazardous and disposed of according to regulations.

The closure cost estimate may also be amended whenever there are changes in operating plans or facility design that may affect the closure plan.

The current revision of the closure cost estimate, as presented in Table D.9-2, includes updated costs from third party providers for labor and materials to conduct project support activities for the physical decontamination of the facility and packaging of materials for off-site management.

## Financial Mechanism

Presently, financial assurance established for the closure of the facility is an Irrevocable Standby Letter of Credit. This will be included in this section as Attachment D.9., Financial Assurance, after DEP reviews the closure plan and at the time the permit is issued. During the life of the facility, a revised Letter of Credit will be updated in accordance with permit modifications or changes in the closure cost estimate.

**Post-closure care** will not be included in the closure cost estimate because AERC.com, Inc. is operating a storage and recycling facility. Therefore, no waste residues or contaminated soils will remain at the facility after the closure activities are completed.

# Table D.9-2 Closure Plan Cost Estimate

**AERC.com, Inc., 4317 J Fortune Place, West Melbourne, FL 32904-1509**

**FLD984262782**

## Material Inventory - Management & Disposal

| Item # | Material | Basis: Description \| Activity Details | Quantity | Unit | Unit Cost | Line Item Total |
|---|---|---|---|---|---|---|
| **1.0** | **Lighting Devices** | | | | | |
| | Mercury Lamps | Disposal and transportation to remove inventory of lamps (244,800 lamps) unprocessed and processed material including glass and end-caps. | 307 | DE | $ 130.00 | $ 39,910.00 |
| | Phosphor Powder | Disposal and transportation of unprocessed drums. | 30 | DM | $ 225.00 | $ 6,750.00 |
| **2.0** | **Mercury-containing Materials** | | | | | |
| | Mercury Devices | Disposal and transportation to remove inventory of unprocessed and processed materials. | 20 | DM | $ 300.00 | $ 6,000.00 |
| | Metallic Mercury | Included with mercury-devices (above line item) | | DM | | Incl. |
| **3.0** | **PCB Lighting Ballasts** | | | | | |
| | PCB Ballasts | Disposal and transportation to remove inventory of unprocessed material. [750 Lb / Drum \| 20 Drums] | 15,000 | LBS | $ 0.41 | $ 6,150.00 |
| **4.0** | **Other Materials** | | | | | |
| | UW Batteries | Disposal and transportation to remove inventory of unprocessed and processed materials. | 52 | DM | $ 525.00 | $ 27,300.00 |
| | Electronic Scrap & CRT's | Disposal and transportation to remove inventory of unprocessed materials - materials for recycle by Com-Cycle. | 10 | Pallets | $ 40.00 | $ 400.00 |
| | Empty Drums | Disposal and transportation to remove empty containers. | 50 | DM | $ 17.70 | $ 885.00 |
| **5.0** | **Materials Generated During Closure** | | | | | |
| | Wash water | Disposal and transportation to remove inventory of drums of wash water residuals (water & dirt) generated from decontamination of facility & equipment. | 10 | DM | $ 595.00 | $ 5,950.00 |
| | Equipment | Decontaminated process equipment - transportation & disposal. | 1 | Lot | $ 1,016.00 | $ 1,016.00 |
| | **SUBTOTAL** | | | | | $ 94,361.00 |

## Project Support Activities (Labor & Materials)

| Item # | Activity | Basis: Description \| Activity Details | Quantity | Unit | Unit Cost | Line Item Total |
|---|---|---|---|---|---|---|
| **6.0** | **Project Management** | Field Supervision \| Project Management/Field H&S Oversight | 40 | Hours | $ 65.00 | $ 2,600.00 |
| **7.0** | **Facility Decontamination** | Foreman\| Oversight of crew | 32 | Hours | $ 55.00 | $ 1,760.00 |
| | **Facility Decontamination** | Skilled Labor \| Hourly Staff completing physical cleaning of the facility and equipment. [Four (4) field personnel - 40-hr trained techs] | 32 | Hours | $ 168.00 | $ 5,376.00 |
| **8.0** | **Material Preparation** | Foreman\| Oversight of crew | 8 | Hours | $ 55.00 | $ 440.00 |
| | **Material Preparation** | Skilled Labor \| Hourly Staff completing accumulation, packaging and preparation of materials for transport off-site. [Four (4) field personnel - 40-hr trained techs] | 8 | Hours | $ 168.00 | $ 1,344.00 |
| **9.0** | **Supplies** | One-time use materials/expendable items, e.g., PPE, plastic, etc… | 1 | Lot | $ 400.00 | $ 400.00 |
| **10.0** | **Mob/Demob** | Mobilization / Demobilization for completing field activities. [Contractor within 20 minutes of AERC \| No charge] | 1 | Lot | $0.00 | $0.00 |
| **11.0** | **Sampling and Analytical** | Required field sampling and analysis to achieve clean closure. | 1 | Lot | $ 5,088.00 | $ 5,088.00 |
| | **SUBTOTAL** | | | | | $ 17,008.00 |

## Other Costs | Contingency

| Item # | Activity | Basis: Description \| Activity Details | Quantity | | | Line Item Total |
|---|---|---|---|---|---|---|
| **12.0** | **Administrative Costs** | General Administrative Costs | 10% | [of above items subtotaled] | | $ 11,136.90 |
| **13.0** | **Facility Decontamination** | Skilled Labor \| Hourly Staff completing physical cleaning of the facility and equipment. | 20% | [of above items subtotaled] | | $ 22,273.80 |
| **14.0** | **Certification** | Independent professional review of "clean closure" results \| CIH or PE | 1 | Lot | $ 2,212.00 | $ 2,212.00 |
| | **SUBTOTAL** | | | | | $ 35,622.70 |

## COST ESTIMATE TOTAL

**$ 146,991.70**

**Key:**

"DE" = Drum Equivalents

"DM" = 55-gallon \| open-head steel (1A2)