Attachment D-8
Quality Control Plan

8.1 Introduction

Veolia ES Technical Solutions, L.L.C. (Veolia) operates a mercury recovery and reclamation facility and in accordance with the requirements of §62-737.840(3) and §62-737.860(4) F.A.C. has developed this Quality Control Plan. The primary quality control procedures used in the recovery and reclamation of mercury from MCMA is through the prequalification of all incoming wastes, the testing of by-products and wastes generated in the recycling process and following standard operating procedures for the collection and analysis of all samples. To address these issues Veolia has developed this Quality Control Plan. The Plan contains the following sections:

- Incoming Waste Analysis Plan
- Recovered Material Testing Plan
- "Standard Operating Procedures for Sampling at Facilities Permitted Under Chapter 62-737, F.A.C., November 14, 1997 Revision"

In addition to these procedures, Veolia has also developed a detailed inspection program and air monitoring program to verify the ongoing effectiveness of the equipment and control devices. The Inspection Plan is contained in Section 12 and the Air Monitoring Plan is contained in Attachment D-5 Operations Plan.

8.2 Incoming Waste Analysis Plan

8.2.1 Incoming Material Acceptance Procedures:

All waste materials brought into or through the facility must be profiled and entered into the waste tracking system. Profiles are completed by the generator or completed by Veolia based upon information provided by the generator of the waste prior to receipt and are kept on file at the facility. Veolia uses three different types of profiles for the materials received.

Prior to receipt of a waste at the Veolia facility, specific waste evaluation and acceptance procedures are employed to qualify a generator's waste materials for acceptance and to ascertain RCRA status, chemical and physical characteristics, and compatibility with the on-site recycling operations or availability of off-site outlets for the material. Veolia has developed a tiered process to acquire the necessary data and conduct this evaluation. There are three categories of approvals under this program:

- Standard Approvals, this category applies to universal wastes. Standard material profiles have been developed for these wastes and are maintained on file at the facility.
- Generic Approvals, this category applies to materials that are not federal universal wastes, may vary slightly between generators and are subject to varying degrees of regulation, requiring additional review and evaluation.

- Case-by-case Approvals, this category applies to waste that may vary between generators and requires a detailed review of the physical and chemical properties of the material prior to approval.

The written generator notification as required under 40 CFR 264.12(b) may vary from generator to generator depending on the type of material that the generator is shipping to Veolia and the type of contract/arrangements that the generator has in place. This notification may take the form of an Approval Letter, be contained in a Quotation, printed directly on packaging materials provided to generators by Veolia, or some other form of written communication as deemed appropriate at the discretion of the facility. An example of an Approval Letter is included in Appendix D-8-I.

Since the facility only accepts mercury containing manufactured articles and clean up articles and PPE from handling of manufactured articles, generator knowledge will typically be sufficient to properly characterize the waste. If at any point during the approvals process, analytical testing is needed to provide additional information, generators will be required to submit analytical data obtained using methods specified by the US EPA or FLDEP as applicable.

8.2.2 Standard Approvals

Once Veolia has been notified by a generator that they wish to ship materials subject to the standard approvals process, the generator's information will be recorded and the generator will be notified in writing that Veolia has the appropriate licenses and processing capabilities to accept their material for recycling. Since these wastes are universally generated and will not vary from generator to generator, the generators of these types of materials will not be required to submit a site specific Wastestream Information Profile sheet for waste contained in this category.

8.2.3 Generic Approvals

Generators wishing to ship materials contained in the generic approvals category will be required to submit a site specific Wastestream Information Profile sheet. The Wastestream Information Profile sheet must contain specific information regarding the identity of the waste, physical and chemical properties of the waste, and the regulatory status of the waste. This information will then be reviewed by the operations manager or his/her designee to ensure that the material can be received at the facility. Once the material has been approved the generator will be notified in writing that the facility has the appropriate licenses and the processing capabilities to accept the waste. A sample Wastestream Information Profile sheet is included in Appendix D-8-I.

8.2.4 Case-by-case Approvals

Generators wishing to ship materials contained in the case-by-case approvals category will be required to submit a site specific Wastestream Information Profile sheet. The

Wastestream Information Profile sheet must contain specific information regarding the identity of the waste, physical and chemical properties of the waste, and the regulatory status of the waste. This information will then be reviewed by the operations manager or his/her designee and by corporate approvals staff to ensure that the material can be received at the facility. Once the material has been approved the generator will be notified in writing that the facility has the appropriate licenses and the processing capabilities to accept the waste. A sample Wastestream Information Profile sheet is included in Appendix D-8-I.

As part of the above referenced procedures, Veolia staff will assign a product code to each profile. The product code is an internally assigned code designating the type of material and the type of process to be used for the management of the material. A list containing common product codes, material description and approval category used by the facility is included below. An additional suffix may be added to the product code to further differentiate materials at the discretion of the facility.

8.2.5 Common Product Codes and Waste Descriptions

8.2.5.1 Lamps

Product Code	Description	Approval Category
LP-F	Fluorescent Lamps	Standard
LP-FCIRC	Circular Fluorescent Lamps	Standard
LP-FCMP	Compact Fluorescent Lamps	Standard
LP-FDM	Crushed Lamps	Standard
LP-FSS	Shielded Fluorescent Lamps	Standard
LP-FUT	U-Tube Lamps	Standard
LP-FUV	UV Fluorescent Lamps	Standard
LP-H	HID Lamps	Standard
LP-MH01	Metal Halide Lamps	Standard
LP-MISC	Miscellaneous Specialty Lamps	Generic
LP-MV01	Mercury Vapor Lamps	Standard
LP-NEON	Neon Lamps	Standard
LP-SHP	High Pressure Sodium Lamps	Standard

8.2.5.2 Mercury

Product Code	Description	Approval Category
MC-BATT	Mercury Batteries	Standard
MC-AMALG	Dental Amalgam	Generic
MC-DE	Mercury Contaminated Clean-up Articles and PPE	Generic
MC-HG	Mercury	Generic
MC-HGREG	Mercury Containing Gas Regulators	Generic
MC-MA	Mercury Containing Articles	Standard
MC-PD	Phosphor Powder	Generic

Product codes are internally generated codes which may be periodically updated or revised. However, these revisions will not alter the types of materials being received by Veolia.

8.2.6 Scheduling Material Into the Facility

There are four methods by which materials may be transported to the facility:

- Generator self transport
- Common carrier transport
- Generator arranged transport, and
- Veolia arranged transport.

8.2.6.1 Generator self transport and common carrier transport

In order to promote the recycling of fluorescent lamps from small businesses, Veolia has developed and marketed a line of packaging which includes the prepayment for the transport and recycling of the materials. Under this program, a generator purchases the container, fills the container with the designated universal waste, calls a phone number that is preprinted on the packaging to schedule the pick up of the package by a common carrier, such as FedEx Ground, and the container is transported to Veolia's facility. The delivery of these containers and generator self transported universal waste will arrive at the facility without prior notice to the facility. Due to the small volume and the nature of the material, only universal wastes, the facility has the capacity to manage these materials as they arrive.

8.2.6.2 Generator arranged transport

In the case where a generator arranges the transportation of their shipments to the facility, the generator will contact the facility and request a permission to deliver the material on a particular date. If the delivery does not conflict with other deliveries already scheduled the generator will be given an appointment. If there is a conflict an alternate date for the delivery of the material will be proposed. Under this scenario, the generator, or his/her agent is responsible for ensuring that the materials are accompanied by the appropriate shipping papers. If the material is subject to the hazardous waste manifesting requirements, the procedures outlined below will be used by the facility for the completion and distribution of the manifest.

8.2.6.3 Veolia arranged transport

Generators will contact Veolia to request the pick up of approved materials. Customer Services Representatives will then enter all of the pertinent customer information into our waste tracking system. The system tracks the customer's location of pickup, billing address, pickup contacts phone numbers, and what material is scheduled to be picked up. Once this information is entered into the waste tracking system it creates an open sales order which transportation can then put onto the

schedule for pickup. Customers are then notified of the date and approximate time that the material will be picked up. Veolia will normally assist the customer is preparation of the shipping documents for the pickup.

8.2.6.4 Completion of the Uniform Hazardous Waste Manifest

All shipments of hazardous waste subject to the manifesting requirements of 40 CFR 262 will be accompanied by a properly completed Uniform Hazardous Waste Manifest. The manifest will be prepared by the generator of the waste prior to pick up or with the assistance of Veolia. When assisting a generator with the completion of the manifest the customer will provide Veolia with the following information:

Type and quantity of containers
Material classification(s)
Scaled or estimated weight(s) and/or lamp counts
Labels, placards and markings on containers
Generator's USEPA ID number
Generator's State ID number (if applicable)
State hazardous waste permit number (if applicable)
Transporter ID numbers, dates, and times

At the time of pick up the manifest will be signed and dated by the generator and transporter according to procedures under 40 CFR 262.20-23. Upon receipt of material by Veolia, the manifest is signed and dated by the receiving agent and significant discrepancies are noted, pursuant to 40 CFR 264.70-72.

Shipments of waste that are not subject to hazardous waste manifesting requirements will be accompanied by shipping paper that documents the transfer of the waste from the generator to Veolia.

8.2.7 Receipt of Material Into the Facility

Upon arrival of a shipment at the Veolia facility, the following sequence of events occurs:

a. The driver presents the paperwork for the load to the shipping and receiving coordinator or designated representative trained to receive material into the facility.
    1. Driver will bring Shipping documents to the office where it is reviewed to ensure that there is no unscheduled manifested waste on the trailer. If there is manifested hazardous waste destined for Tallahassee facility the trailer will be backed into the loading dock for unloading. The manifested waste will be removed before it can go to the transfer yard.
    2. For trailers that are delivered to the transfer yard the receiving clerk will enter trailer information onto a log that is maintained electronically. The following entries will be made on every trailer.

- Trailer Number
- Arrival Date

- Generator Name
- Shipping Paper Number

3. Unload Deadline. This will be 10 days from the date the trailer is placed in transfer yard.
4. Transfer Yard will be checked daily to ensure Log matches physical inventory in Transfer Yard. Trailers should be checked to ensure that they are secure while in the yard. Any discrepancies should be immediately reported to the Operations Manager.
5. The receiving clerk will update the log each time a change is made to the inventory of material in transfer, additions or removals. Entries will be made in a timely manner and without delay.
6. The Operations Supervisor or designee will review the log on a daily basis. This review will be completed to ensure the log is current and for use in planning the production schedule for the day.

   If any of the personnel listed above are absent from the facility there will be a trained designated employee to oversee the 10 Day log and ensure timely entries are made to the log.

b. When the trailer is moved from the transfer lot to the loading dock Veolia personnel will compare shipping documents and material description against the material profiles, and the material actually received.
c. All containers are visually inspected to verify that the shipment contains only the waste material as described in the material profile and shipping document.
d. If the shipment conforms to the material profile, the shipping document is signed and the truck unloaded by trained personnel. A copy of the signed shipping document/hazardous waste manifest is then sent to the generator (and customer if they are not the same) within 30 days. Should Veolia deny acceptance of the delivery, the shipment will be returned to the generator or shipped to an alternate facility selected by the generator.
e. Upon off-loading, each container is logged into the waste tracking system and placed into the storage area or transferred directly to a processing area. A Veolia receiving record is executed to record all pertinent information. Sample Receiving Reports are included in Appendix D-8-I.

8.2.7.1 Waste Rejection

Wastes will be rejected for the following reasons:

Waste does not conform to the material profile and the waste contains materials that the facility is not permitted to accept.

Other wastes that cannot be accepted by Veolia are included in the shipment.

Unscheduled load that would cause Veolia to exceed a permitted storage limit

Rejection Procedures

Upon discovery of the material that cannot be accepted at the facility, a generator will be contacted and notified of the unacceptable material. The facility will request direction from the generator as to whether the material is to be forwarded to an alternate facility or returned to the generator. Based on the instructions from the generator the following procedures will be used to document the rejected shipment.

For materials shipped to the facility on a uniform hazardous waste manifest, the facility will follow the procedure contained in 40 CFR 264.72 for the manifesting of rejected shipments. Any material designated to be rejected that cannot immediately be reloaded for off-site shipment will be marked with a label noting the material as non-conforming and will be placed into one of the container storage areas. If the material is a liquid it will be placed on a spill containment pallet for storage. Once a material is designated for rejection the facility will have 60 days to arrange for the transport of the material to an alternate facility or back to the generator.

If a non-conforming material is discovered after the material has been accepted by the facility, the generator will be notified and the material will be rejected in accordance with the above rejection procedures.

For materials that are not subject to uniform hazardous waste manifesting, the facility will note that the material is being rejected on the original bill-of-lading and complete a new bill-of-lading for use in shipping the material back to the generator or to an alternate facility.

8.2.7.2 Manifest Discrepancies

Upon receipt of materials at the Veolia facility, shipments are checked for significant discrepancies, according to 40 CFR 264.72. Discrepancies are noted on the manifest by the receiving personnel. Discrepancies in quantity or type of hazardous waste are reconciled with the generator through telephone calls by Veolia personnel within 15 days following receipt at the Veolia facility. If a significant discrepancy cannot be resolved within 15 days after receipt of the waste, Veolia shall immediately submit a letter report, including a copy of the manifest to the Department.

8.2.7.3 Un-manifested Waste Report

If Veolia were to receive an un-manifested shipment of hazardous waste not specifically authorized by the regulations, Veolia would prepare and submit an un-manifested waste report to the Department within 15 days of receipt of the un-manifested waste.

8.3. Recovered Material Testing Plan

This section describes testing methods, laboratory qualifications, testing frequency, sampling procedures, sampling equipment decontamination and documentation procedures. The sampling programs contained in this document have been developed to demonstrate the

ongoing effectiveness of the mercury recovery and mercury reclamation processes and equipment. The sampling plans have also been developed to demonstrate compliance with the residual contaminant levels specified in §62-737.840(3) F.A.C. for mercury recovery facilities and the reclamation rate requirements of §62-737.860(4) F.A.C. for mercury reclamation facilities.

8.3.1 Sampling and Testing Methods

All sampling of materials covered by this plan will be performed in accordance with the procedures defined in Sections 6 through 8 and in accordance with the procedures contained in *Quality Assurance Standard Operating Procedures for Sampling at Facilities Permitted Under Chapter 62-737, Florida Administrative Code*, November 14, 1997 Revision (Reformatted April 15, 2010) copy of which is included in Appendix D-8-II.

All analysis of samples covered by this plan will be conducted in accordance with the procedures contained in *Test Methods for evaluating solid Wastes, Physical/Chemical Methods*, EPA publication SW-846.

8.3.2 Laboratory

All analysis will be performed by an independent laboratory that is certified by the State of Florida.

8.3.3 Testing Frequency – Mercury Recovery Operations

Table 8.1 indicates the schedule for testing recovered materials from the mercury recovery operation. A sample of each material type will be collected on a daily basis. Following the completion of each weeks processing, the daily samples will be combined to form a weekly composite sample.

On days when equipment is not operational, no daily sample will be taken. Daily samples will not be "doubled up", i.e., two daily samples collected on the same day, to make up for daily samples when the equipment is not operational. The weekly composite will consist of equal aliquots of daily samples collected on days when the equipment is operational. For example, if the equipment is operational for only three days during a particular week, that week's weekly composite sample shall consist of equal aliquots of the daily samples collected during the three days when the equipment was operational.

It is recommended that daily samples be collected during maximum daily throughput and when equipment has been operating for at least 30 minutes. However, daily samples will be collected if the equipment is operated for any period of time during that day. If the equipment is operational for 2 days or less in a particular week, no weekly composite sample is required for that week. However, the daily samples for those one or two days will still be collected and used as part of the next weekly composite sample.

Based on the analytical testing history for materials generated from the mercury recovery operations, the average total mercury concentration is less than 4 mg/kg. As such, the total concentration is less than twenty times the TCLP limit. Based on the 20:1 dilution of the extraction procedure defined in the TCLP, these materials would not exceed the toxicity characteristic level for mercury of 0.2 mg/l. As such, TCLP testing will not be performed in these samples unless the 12 week rolling average of total mercury analytical results exceeds 4.0 mg/kg.

Table 8.1
Testing Frequency for Mercury Recovery Operation

ITEM	TESTING PARAMETER	TEST FREQUENCY
Glass	Total Mercury	Weekly Composite Sample
Metals	Total Mercury	Weekly Composite Sample
Plastics[1]	Total Mercury	Weekly Composite Sample if Processed
Glass	TCLP Mercury	Annual, as necessary
Metals	TCLP Mercury	Annual, as necessary
Plastics	TCLP Mercury	Annual, as necessary

1. Refers to plastics that have been in direct contact with mercury or phosphor powder.

8.3.4 Testing Frequency – Mercury Recovery Operations

Table 8.2 indicates the schedule for testing recovered materials from the mercury reclamation operation. The following paragraphs describe the testing frequency for recovered materials from the mercury reclamation operation.

It is recommended by DEP that a sample be collected during maximum daily throughput and when equipment has been operating for at least 30-minutes. However, a sample can be collected if the equipment is operated for any period of time during a day.

8.3.4.1 Powder

The term Powder is used in this section generically to describe the phosphor powder derived from the recycling of fluorescent lamps. This material is comprised of the calcium phosphate based phosphor powder, glass fines and mercury. The normal concentration range for mercury in the powder generated at this facility ranges from 150 to 1500 mg/kg.

A minimum of one sample per month will be collected from a batch of pre-retort powder. A sample will also be collected from this batch following retort processing. These samples will be analyzed for total mercury and evaluated to determine the effectiveness of the reclamation process.

In order to achieve the recovery rate specified by the regulations, the allowable post-retort concentration of mercury will typically be less than 15 mg/kg. Past analytical history indicates that powder at this concentration will not leach significant levels of mercury. However, at least one sample per year will be submitted to the laboratory for TCLP mercury testing.

8.3.4.2 Arc Tubes and MCMA

Arc Tubes and MCMA are derived from crushed HID arc tubes, crushed neon lamp glass and glass from drained mercury containing devices. The normal concentration range for mercury in this material is 25 to 250 mg/kg.

Prior to retort processing, the glass derived from the processing of HID lamp arc tubes, neon lamps and drained mercury containing devices are consolidated to form a batch. A minimum of one sample per month will be collected from a batch of pre-retort glass. A sample will also be collected from this batch following retort processing. These samples will be analyzed for total mercury and evaluated to determine the effectiveness of the reclamation process. In the event that this material is not processed in the retort during any month, a sample will not be collected and a notation will be made to the facility operating recording noting that no glass was retorted.

At least one sample of post-retort glass will be collected and analyzed for TCLP mercury on an annual basis.

Table 8.2
Testing Frequency for Mercury Reclamation Operations

CATEGORY	TEST FREQUENCY
Powder	Monthly pre-retort and post-retort total mercury tests if processed. Annual TCLP mercury.
Arc Tubes and MCMA	Monthly pre-retort and post-retort total mercury tests if processed. Annual TCLP mercury.

8.3.4.3 Other Mercury Materials

In addition to the above listed materials the facility will also receive a small amount of mercury containing batteries and dental amalgam. Due to the small volume of these types of materials received, these materials will be consolidated with the Arc Tubes and MCMA for retort processing and will be represented by the samples collected from those materials.

8.4 Sampling Procedures – Mercury Recovery Operations

The following describes the procedures for sampling recovered materials from the Mercury Recovery operation. The minimum weekly composite sample size is 150-grams.

8.4.1 Glass

A. A daily sample must be taken if any lamps are processed during the day.
B. The sample container must be glass or polyethylene with a screw top lid.
C. Using the designated stainless steel or plastic scoop or spoon, a 50 gram sample of glass will be taken from the discharge point of the equipment. Excess material will be raked off with a spatula or knife.
D. The daily sample will be placed into the weekly composite sample container provided by the lab. The container will be closed immediately following sample collection.
E. The Daily Facility Inspection Form will be used to document dates on which samples are collected.
F. At the end of each week, a sample label provided by the lab will be placed on the sample container.
G. A Chain of Custody (COC) Record for the weekly composite sample must be filled out. A copy of the COC form must accompany the sample to the laboratory. Once the laboratory receives the samples and signs the COC, they will return a copy to Veolia. Copies of the COC records are maintained for a period of at least three years. A sample chain of custody is included as Appendix D-8-I.

8.4.2 Metals

A. A daily sample must be taken if any lamps are processed during the day.
B. The sample container must be glass or polyethylene with a screw top lid.
C. Using the designated stainless steel or plastic scoop or spoon, a 50 gram sample of metal will be taken from the discharge point of the equipment or from the accumulation container from manual processing operations. Excess material will be raked off with a spatula or knife. When multiple processing operations are conducted, the daily sample will be comprised of a mixture of materials representative of the overall volume of metals generated on that date.
D. The daily sample will be placed into the weekly composite sample container provided by the lab. The container will be closed immediately following sample collection.
E. The Daily Facility Inspection Form will be used to document dates on which samples are collected.
F. At the end of each week, a sample label provided by the lab will be placed on the sample container.
G. A Chain of Custody (COC) Record for the weekly composite sample must be filled out. A copy of the COC form must accompany the sample to the laboratory. Once the laboratory receives the samples and signs the COC, they will return a copy to Veolia. Copies of the COC records are maintained for a period of at least three years. A sample chain of custody is included as Appendix D-8-I.

8.5 Sampling Procedures – Mercury Reclamation Operations

Prior to retort processing, individual batches of material will be sampled in accordance with the sampling frequency specified above. The batch will be flagged as having been sampled and held pending the receipt of the analytical results. Pre-retort material samples should be collected in the same physical and chemical state in which they are fed into the process equipment. The goal of the sampling methodology contained below is generate a sample that is truly representative of the waste stream.

The following paragraphs describe the procedures for sampling recovered materials from the Mercury Reclamation operation. The minimum sample size is 50-grams.

8.5.1 Powder

A. Collect a sample of pre-retort powder and post-retort powder from a single batch.
B. The sample container must be glass or polyethylene with a screw top lid.
C. Using a clean stainless steel or plastic scoop or spoon, collect an aliquot of powder from various points within each drum contained in the batch. A total mass of 150 grams should be collected for each sample.
D. The sample will be placed into a sample container provided by the lab. The sample container will be closed immediately following sampling.
E. The sample label provided by the lab will be placed on the sample container.

F. A Chain of Custody (COC) Record must be filled out for each sample. If multiple samples are collected on the same date a single chain of custody may be used for all samples. A copy of the COC form must accompany the sample to the laboratory. Once the laboratory receives the samples and signs the COC, they will return a copy to Veolia. Copies of the COC records are maintained for a period of at least 3-years. A sample chain of custody is included as Appendix D-8-I.

8.5.2 Arc Tubes and MCMA

A. Collect a sample of pre-retort arc tubes and MCMA and post-retort arc tubes and MCMA from a single batch.
B. The sample container must be glass or polyethylene with a screw top lid.
C. Using a clean stainless steel or plastic scoop or spoon, collect an aliquot of glass from various depths within each drum contained in the batch. A total mass of 150 grams should be collected for each sample.
D. The sample will be placed into a sample container provided by the lab. The sample container will be closed immediately following sampling.
E. The sample label provided by the lab will be placed on the sample container.
F. A Chain of Custody (COC) Record must be filled out for each sample. If multiple samples are collected on the same date a single chain of custody may be used for all samples. A copy of the COC form must accompany the sample to the laboratory. Once the laboratory receives the samples and signs the COC, they will return a copy to Veolia. Copies of the COC records are maintained for a period of at least 3-years. A sample chain of custody is included as Appendix D-8-I.

8.6 Sampling Equipment Decontamination (Cleaning)

The reusable sampling tools will be cleaned in accordance with the following procedures. Single use tools will be disposed following use and new tools will be used at the beginning of every week.

A. Disassemble equipment if possible and if necessary.
B. Wash thoroughly with a mild detergent and hot tap water using a brush to remove any particulate matter or surface film.
C. Rinse thoroughly with hot tap water.
D. Place the sampling equipment in a plastic storage container or wrap with plastic wrap to prevent contamination during storage or prior to use.

8.7 Documentation Requirements

The following sections address Veolia's documentation procedures for recovered materials.

8.7.1 Chain of Custody Record

A Chain of Custody Record will be filled out for all samples submitted for laboratory analysis recording the following information:

(1) Unique sample identification number;
(2) Sampling site name and address;
(3) Name of person collecting sample;
(4) Time and date of the sample collection when final weekly sample is filed;
(5) Clear indication of number of sample containers;
(6) Chemical analysis which is to be performed on the sample (either Hg Total or TCLP);
(7) Appropriate places for signatures of sampler and all subsequent persons accepting custody.
(8) Time of day and calendar date of all custody transfers;
(9) Comments or remarks section, e.g., unusual ambient conditions; and

8.7.2 Weekly Values of Mercury Totals

Weekly Sampling Log will be used to record the weekly values and the 12-week rolling average sample analytical results for the weekly composite samples for metal end caps and glass. A copy of the Weekly Sampling Log is included in Appendix D-8-I.

8.7.3 Mercury Reclamation Rate Log

A Mercury Reclamation Rate Log will be filled out for powder and Arc Tube and MCMA that is reclaimed. The log sheet summarizes the effectiveness of the reclamation process for powder and the different categories of items described in the log. A copy of the Mercury Reclamation Rate Log is included in Appendix D-8-I.

8.8 Quality Control Procedures

Materials sampled to verify the effectiveness of the mercury reclamation process will not be processed until the pre-retort analytical results have been obtained from the laboratory. If any samples are found to lie outside the normal concentration range for the material type, the batch will be resampled and a second batch will be sampled. This requirement has been included to ensure that percent recovery rates are calculated based on valid laboratory results and are not skewed either high or low.

Recovered materials, with the exception of glass derived from the mercury recovery operation, will not be shipped off-site until the required testing and analytical results (i.e., mercury totals) indicate that the material is fit for such deliveries.

Any material that exceeds a regulatory limit will be, resampled, reprocessed, or sent to a mercury reclamation facility.

Appendix D-8-I

Sampling Forms and Logs

Appendix D-8-II

Quality Assurance Standard Operating Procedures for Sampling at Facilities Permitted Under Chapter 62-737, Florida Administrative Code,
November 14, 1997 Revision (Reformatted April 15, 2010)