# EXECUTIVE SUMMARY

This Application is for the renewal of a Mercury Recovery Permit. The processes described are for the fluorescent and mercury lamp recovery systems, which require a Mercury Recovery Permit. The recovery system is integral to the company's overall service of recycling mercury from lamps, devices, and other materials containing mercury. Non-specific materials such as manufactured items, debris, and aqueous material should be covered in this document. All regulated activities, therefore, would be covered under this permit.

The purpose of the Recovery Permit Application is to renew the Mercury Recovery Permit and to demonstrate that the company meets or exceeds the permitting requirements of the Florida Department of Environmental Protection, pursuant to Florida Statutes 403.7186 and Rule 62-737 F.A.C., for the Management of Spent Mercury-Containing Lamps and Devices Destined for Recycling.

AERC.com, Inc. (formerly AERC/MTI) began operating a mercury lighting recycling facility at its present location in West Melbourne, FL in November 1993. As a result of the state regulations for mercury recycling facilities, AERC.com, Inc operated under "Interim Status" until the appropriate Recovery and Reclamation Permits are issued. On December 30, 1996, a Mercury Recovery and Reclamation Permit, Operation Permit Number HOO5-275169, was issued to AERC.com, Inc. (formerly AERC/MTI). The permit was renewed in December 2001, under Number 0072959-002-HO. It was renewed again in June 27, 2007, under Number 72959-003-HO and has been operating under this since. At this time activities include:
Activities - Fluorescent and High Intensity Discharge lamp processing, recovery of lamp components for resale, removal of mercury-containing phosphor powders and ampoules. In addition to the above activities, AERC.com, Inc. also accepts MCDs debris, which are accumulated and then shipped off-site to a TSD / reclamation facility for further processing. Mercury from other sources (e.g. soils, carbons. contaminated solid materials, etc.) is accepted by the facility for accumulation and shipment off-site to a TSD / reclamation facility.

Additional Activities - In addition to Fluorescent and High Intensity Discharge lamp Processing and MCDs, AERC.com, Inc. accepts batteries and PCB and non-PCB lighting ballasts for sorting and shipment to other recycling facilities, as well as, the acceptance of electronic scrap for demanufacturing or remanufacturing for shipment back to market for reuse or recycling. The facility also serves as a 10-day transfer facility for hazardous wastes that are destined to the AERC, PA permitted TSD facility. AERC is large quantity Universal Waste Handler, a Universal Waste Transporter as well as a Florida licensed Hazardous Waste Transporter.

AERC was established in Pennsylvania in 1990 and in Florida in 1993 to address a nationwide need for more environmentally sound recycling technologies for certain "characteristic" and metals-bearing wastes. AERC recycles many waste materials containing mercury and other metals, as well as, recycling mercury-containing lamps.

AERC has a customer base of environmentally conscious Fortune 500 companies, educational institutions, government facilities, hospitals, laboratories, small businesses, and private citizens. We also offer a service to environmental and hazardous wastes management and transportation firms which provide other sources of recyclable raw materials and hazardous wastes for the development and operation of AERC's recycling technologies.

With strong emphasis on safety, industrial hygiene, and regulatory compliance, AERC has developed state-of-the-art environmentally sound processes for the recycling of metallic mercury, mercury compounds and mixtures, mercury containing materials and devices, fluorescent lamps and HID lamps. Much of the research to develop these processes is highly specialized and proprietary. In the case of mercury compounds, we are the only company in the nation that has perfected these recycling methods. Many of these mercury wastes are currently being landfilled or shipped out of the United States due to landfill prohibitions and a lack of U.S. recycling capacity.

Throughout this permit application AERC.com, Inc. has provided technical information on its processes, methods, and equipment. The company has developed several of these proprietary processes itself. Some of the process components and systems have been or will be purchased from commercial manufacturers. AERC is working with its customers and specialty equipment engineering and design firms to provide the best integration of systems and components possible. We continue to conduct R&D in order to provide the best-suited technologies for recycling. Because of this, some components and procedures used will be fundamentally similar, but may not be identical to those described in this document. Likewise, if AERC develops a more efficient method to prepare material for recycling, or to increase recovery, we intend to incorporate it into our process.

AERC.com, Inc. will provide the FDEP with the level of detail needed for specific components or methods. With this in mind, AERC wishes to work with the agency to develop procedures to insure that these changes can be incorporated into the permit and operations with minimal effort and in a timely manner.

Renewal of this permit will allow AERC to continue to process and recycle fluorescent and HID lamps, powders, MCD’s, and other materials at the facility using recovery technologies. This will enable us to offer additional employment and training opportunities, make new capital investments at the facility, and help fill the void of fully permitted and environmentally sound recycling technologies and services throughout the nation.