

ATTACHMENT A
FACILITY DESCRIPTION

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Veolia ES Technical Solutions, L.L.C. (VES) stores and recycles spent fluorescent and high intensity discharge (HID) lamps and other mercury containing manufactured articles (MCMA). Lamps are disassembled in a manual and/or automated disassembly process creating recyclable metal (end caps), cullet (glass), and mercury containing phosphor powder. MCMA are disassembled and liquid mercury is recovered directly from the devices or from the retort process. This Permit authorizes the storage of mercury containing articles inside the three designated storage areas. Mercury recycling process is exempt from the permitting requirements pursuant to 40 CFR 261.6(c)(1). Map of all storage areas and mercury processing areas are provided in Exhibit A-1 and Exhibit A-2.

VES stores all the received material in three storage areas: Storage Area 1, Storage Area 2, and Storage Area 3. Storage Area 1 is a free standing storage building located to the north of building 1, measuring 80 x 30 x 14 feet. The building is positioned approximately 5 feet off the north boundary and 3 feet off the west boundary of the site and is constructed of metal beam frame with sheet metal exterior and roofing. The asphalt pavement inside the storage building has berms around the interior perimeter of the building frame to prevent precipitation run-on into the building.

Storage Area 2 and Storage Area 3 are both delineated areas within Building 1. Storage Area 2 measures 34x 14x10 feet and Storage Area 3 measures 37x26x10 feet. Map of storage areas is provided in Exhibit A-2. Building 1 is constructed of concrete masonry block exterior and separating walls. The separating wall between connecting buildings is a 30-inch thick wall with 3 hour fire rating and no opening. The roofs are constructed of plywood deck with buildup Class B roofing.

Total maximum permitted capacity of lamp storage at the facility is 100,000 units including various types of fluorescent and HID lamps. Storage Area 1 has total capacity to store 83,200 lamps. Storage area 2 can hold up to 19,500 lamps and storage area 3 can hold up to 46,800 lamps at any given time.

The maximum permitted storage capacity of mercury containing manufactured articles (MCMA) for the facility is 125 55-gallon drums (approximately 500 pounds each). Storage Area 1 has the capacity to store 448 drums, Storage Area 2 has maximum storage capacity of 140 drums and Storage Area 3 has the capacity to store 288 drums. Lamps and MCMA may be stored up to one year in accordance with A.A.C.R18-8-268.A (40 CFR 268.50).

Materials are stored in secure containers inside buildings. Storage containers are all compatible with stored material and will comply with DOT guidelines if mandated by regulatory requirements. Containers are stored on pallets with 2 feet of aisle spacing between rows.

Containers are not stored near possible ignition sources.

In the event of lamp breakage, material is cleaned up and placed into a drum, clearly marked with a hazardous waste label, located near the area. In case of a spill, a Mercury Recovery Vacuum or similar device is used to contain and clean up the spill. If a drum, box or other container holding lamp waste is observed to be in questionable condition (severe rusting, suspected structural kind weakness, etc.) or begins to leak, the facility will transfer the contents to an approved container in good condition. Shipping containers are opened in a negative pressure, exhausted space. All persons working within the exhausted enclosure wear personal protective equipment appropriate to the tasks being performed and the hazards present. A portable Jerome mercury vapor analyzer, is used to monitor mercury vapor concentrations in the air throughout the process and storage area, on a daily basis.

Storage Unit	Dimensions (ft)	Maximum Capacity ¹	Secondary Containment	Waste Stored
Storage Area 1	80x30x14	83,200 Lamps 448 Drums	No permanent secondary containment; Portable secondary containment will be used for all waste containing free liquids	Lamps, MCMA Mercury Contaminated Clean up items, phosphor powder, labpacks
Storage Area 2	34x14x10	19,500 Lamps 140 Drums	Epoxy covered concrete floors; Portable secondary containment will be use to store all wastes containing free liquids	Lamps, MCMA Mercury Contaminated Clean up items, phosphor powder, labpacks
Storage Area 3	37x26x10	46800 Lamps 288 Drums	Epoxy covered concrete floors; Portable secondary containment will be use to store all wastes containing free liquids	Lamps, MCMA Mercury Contaminated Clean up items, phosphor powder, labpacks

Table A-1. Storage Areas

¹ Total permitted capacity for the facility is 100,000 lamps and 125 55 gallon drums. Total stored waste in all three Storage Areas shall not exceed the total permitted capacities indicated.

Reclaimed Materials, Waste Collection, Storage, and Disposal

VES produces three categories of secondary reclaimed materials: crushed glass, prepared metals, and elemental mercury. The prepared metals, consisting primarily of aluminum but containing small amounts of copper, ferrous and miscellaneous metals and non-metallic debris, and glass are packaged meeting industry specifications and are sent off site. The facility has entered into written agreements with third-party vendors to provide containers, transport and purchase of

metal and glass materials generated by the facility.

Waste materials generated by on-site activities are staged in Building 4 (Exhibit E-6) until a sufficient quantity is accumulated for cost-effective shipping. Separated glass and metal by-products are collected and packaged in 55-gallon drums, 1-cubic-yard corrugated cardboard (or similar) containers or roll-off containers ranging in size from 20 to 30 cubic yards. Storage capacity for containerized glass and metals is 50 tons. Elemental mercury recovered from manufactured articles or from the retort process is sold to industrial purchasers. VES maintains records of the products and wastes generated by recycling process, and dates and quantities of products shipped from the facility.

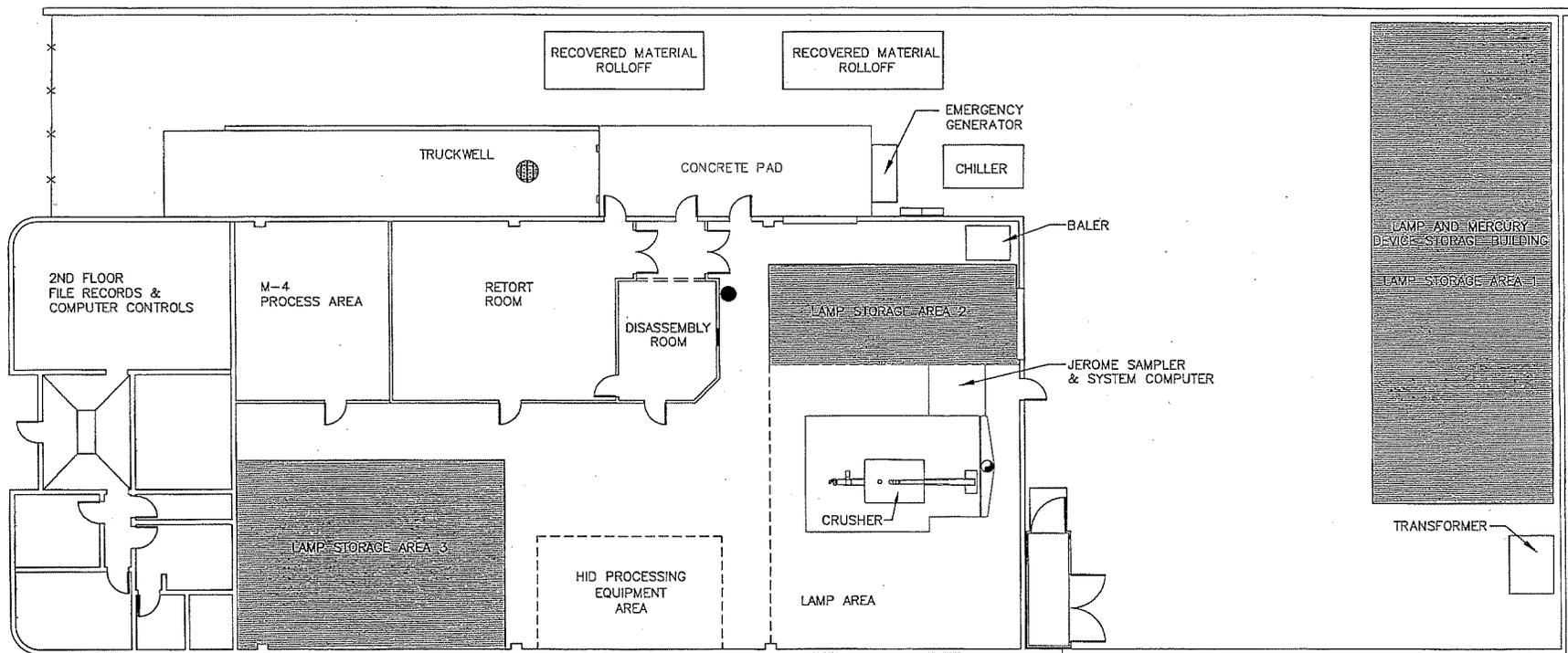
VES requires its delivery truck operators going to/from the VES facility to avoid as much as practicable the use of any routes that pass through residential areas or that pass by schools. VES notifies the truck operators of this requirement in the training provided to them as part of the training plan.

EXHIBIT A-1

MAP OF STORAGE AREA LOCATIONS



0 15 30
SCALE IN FEET



LEGEND:

-  Storage Areas
-  Drywell
-  Satellite Accumulation Area

SOURCE:
PIPING SYSTEM ENGINEERING, INC.
MESA, ARIZONA

Building 1 Storage Area Map

Figure 7

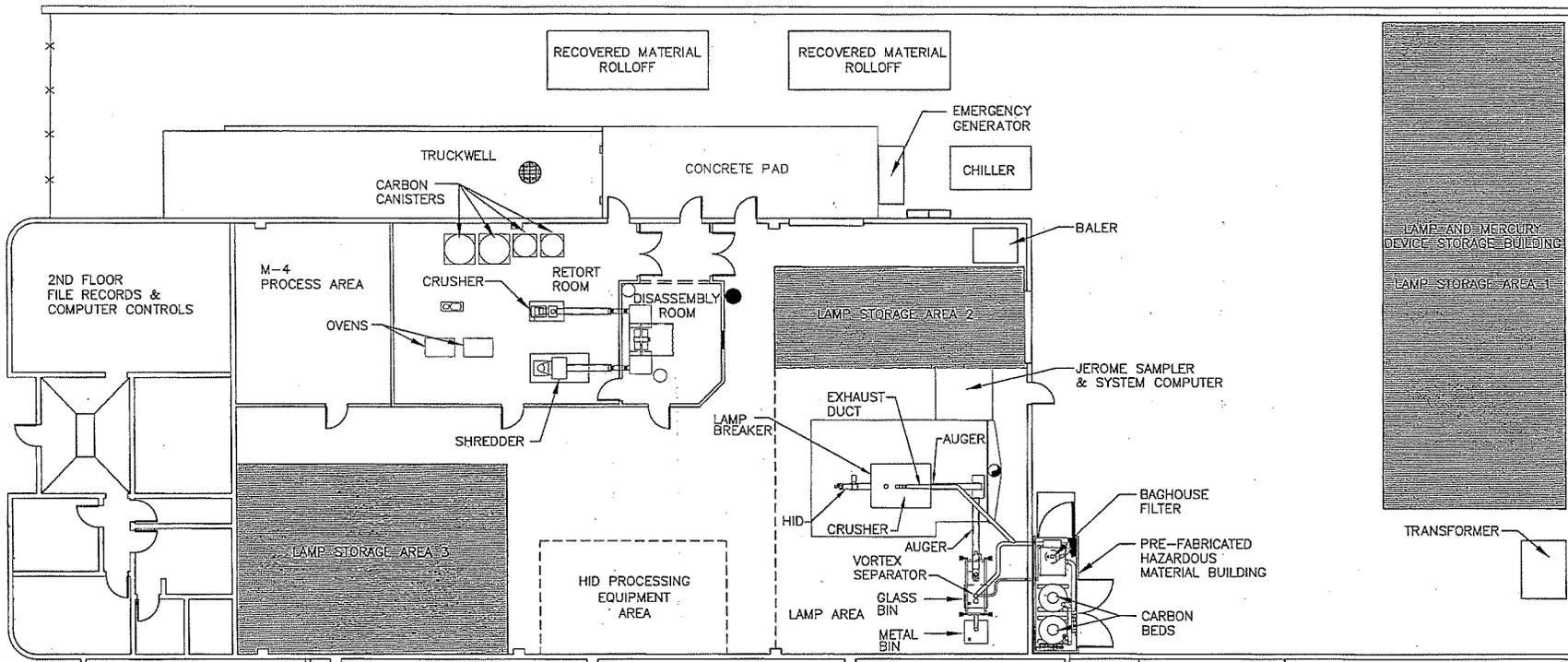

SPECIAL SERVICES

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EXHIBIT A-2
MAP OF PROCESSING AND
STORAGE AREAS



0 15 30
SCALE IN FEET



LEGEND:
Storage Areas
Drywell
Satellite Accumulation Area

SOURCE:
PIPING SYSTEM ENGINEERING, INC.
MESA, ARIZONA

Building 1 Mercury Process Area Map

Figure 5

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