



PROJECT SPECIFICATIONS
FOR THE REMOVAL OF PCB AND MERCURY

**MARSHALL COURTS – PHASE IV AND V
741 34TH STREET
NEWPORT NEWS, VIRGINIA**

ECS PROJECT NO. 47:3961

FOR

VIA DESIGN ARCHITECTS, PC

JUNE 9, 2017

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For

Marshall Courts – Phase IV and V
741 34th Street
Newport News, Virginia

ECS Project No. 47:3961

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SECTION 02084
REMOVAL OF BUILDING COMPONENTS CONTAINING PCBs AND MERCURY

PART 1 – GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910.1000	Air Contaminants
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
40 CFR 262	Generators of Hazardous Waste
40 CFR 263	Transporters of Hazardous Waste
49 CFR 172	Hazardous Materials, Table, and Hazardous Materials Communications Regulations
49 CFR 178	Shipping Container Specification

1.2 REQUIREMENTS

1.2.1 Base Bid Scope of Work

As part of the base bid the Contractor will be responsible for having a valid EPA Identification Number issued by the Virginia Department of Environmental Quality site specific for this work. The Contractor will be the **GENERATOR** of all hazardous waste generated and be subject to regulations set forth by the Virginia Department of Environmental Quality and the United States Environmental Protection Agency. If the generation of hazardous waste is greater than 2,200 lbs in a month, the generator is considered a Large Quantity Generator. A Large Quantity Generator must pay a \$1,000.00 fee to the Virginia Department of Environmental Quality. Generation of less than 2,200 lbs in a month is classified as a Small Quantity Generator and is not subject to a fee. The Contractor shall be responsible for determination of classification.

Under the base bid scope of work the Contractor will shall remove and place in disposal or recycle containers all hazardous waste generate for this project and manage, handle, ship, and dispose/recycle all hazardous waste in accordance with all applicable regulations.

Copies of all Hazardous Waste Manifests and Certificates of Destruction signed by the final disposal facility will be provided to the Owner within 60 days of shipment.

The Contractor has the responsibility for determining actual quantities of materials to be recycled and reviewing the scope of work. No additional contract price adjustments will be allowed due to variances between actual quantities and the estimated quantities listed herein (unless otherwise specified in this document).

The Contractor shall be responsible for proper removal of the following as part of the base bid:

- A. All mercury fluorescent light tubes, screw in house hold type mercury containing light bulbs, and HID lamps and mercury containing vapor lamps – in the structures, hallways/common areas, and exterior lighting (approximately 6-8 lamps of various sizes per unit).*
- B. All mercury thermostats located in each unit approximately 30 thermostats located throughout Phase IV and V renovations buildings.
- C. All PCB/suspect PCB containing light ballasts.**

* Includes exterior lights and parking lot lights, and any stored lights. Incandescent bulbs may be disposed of a normal construction waste.

** It is anticipated that some of the ballast will be non-PCB containing labeled ballast. Non-PCB containing ballast may be disposed of as construction waste. The Contractor will need to remove and inspect all ballast – and segregate Non PCB containing ballasts as part of his scope of work. Note: It is ECS' understanding that ballast located throughout the site will remain in place.

1.3 DEFINITIONS

1.3.1 Certified Industrial Hygienist (CIH)

An industrial hygienist who shall be certified by the American Board of Industrial Hygiene.

1.3.2 Leak

Leak or leaking means any instance in which a PCB article, PCB container, or PCB equipment has any PCBs on any portion of its external surface.

1.3.3 Mercury-Containing Lamps

As used in this specification shall mean all fluorescent and high-intensity discharge (HID) lamps scheduled for demolition and/or removal as indicated in the Contract documents that:

- a. Fails the TCLP test for mercury, or
- b. According to the Manufacturer, would fail the TCLP test for mercury

- c. By calculation of equivalent TCLP mercury level from total metal analysis would fail the TCLP test for mercury.

1.3.4 Polychlorinated Biphenyls (PCBs)

PCBs as used in this specification shall mean the same as PCBs, PCB containing lighting ballast, and PCB container, as defined in 40 CFR 761, Section 3, Definitions.

1.3.5 Spill

Spill means both intentional and unintentional spills, leaks, and other uncontrolled discharges when the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases.

1.4 QUALITY ASSURANCE

1.4.1 Regulatory Requirements

Perform PCB related work in accordance with 40 CFR 761, 9 VAC 20-60, and 9 VAC 20-80. Perform mercury-containing lamps storage and transport in accordance with 40 CFR 262, 40 CFR 263, 9 VAC 20-60, and 9 VAC 20-80.

1.4.2 Training

All workers shall have training in accordance with 29 CFR 1910.140 (HAZWOPER). The instruction shall include: The dangers of PCB and mercury exposure, decontamination, safe work practices, and applicable OSHA and EPA regulations. The Owner or their representative shall review and approve the PCB and Mercury-Containing Lamp Removal Work Plans.

1.4.3 Regulation Documents

Maintain at all times one copy each at the office and one copy each in view at the job site of 29 CFR 1910.1000, 40 CFR 761, 40 CFR 262, 40 CFR 263, 9 VAC 20-60, 9 VAC 20-80 and of the Contractor removal work plan and disposal plan for PCB and for associated mercury-containing lamps.

1.5 SUBMITTALS

Submit two copies of the following documentation:

Certificates

Training Certification

PCB and Mercury-Containing Lamp Removal Work Plan

PCB and Mercury-Containing Lamp Disposal Plan

Closeout Submittals

Transporter certification of notification to EPA of their PCB waste activities and EPA ID numbers
Certification of Decontamination

Certificate of Disposal and/or recycling. Submit to The Owner before application for payment within 30 days of the date that the disposal of the PCB and mercury-containing lamp waste identified on the manifest was completed.

1.6 ENVIRONMENTAL REQUIREMENTS

Use special clothing:

- a. Disposable gloves (polyethylene)
- b. Eye protection
- c. PPE

1.7 SCHEDULING

Notify The Owner 10 days prior to the start of PCB and mercury-containing lamp removal work.

1.8 QUALITY ASSURANCE

1.8.1 PCB and Mercury-Containing Lamp Removal Work Plan

Submit a job-specific plan within 20 calendar days after award of contract of the work procedures to be used in the removal, packaging, and storage of PCB-containing lighting ballasts and associated mercury-containing lamps. Include in the plan: Requirements for U.C. Personal Protective Equipment (PPE), spill cleanup procedures and equipment, eating, smoking and restroom procedures. Obtain approval of the plan by The Owner prior to the start of PCB and/or lamp removal work.

1.8.2 PCB and Mercury-Containing Lamp Disposal Plan

Submit two copies of a PCB and mercury-containing lamp Disposal Plan within 20 calendar days after award of contract. The PCB and Mercury-Containing Lamp Disposal Plan shall comply with applicable requirements of federal, state, and local PCB and RCRA waste regulations and address:

- a. Estimated quantities of wastes to be generated, disposed of, and recycled.

- b. Names and qualifications of each Contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location. Furnish two copies of EPA and state PCB and mercury-containing lamp waste permit applications and EPA identification numbers.
- c. Names and qualifications (experience and training) of personnel who will be working on-site with PCB and mercury-containing lamp wastes.
- d. Spill prevention, containment, and cleanup contingency measures to be implemented.
- e. Work plan and schedule for PCB and mercury-containing lamp waste removal, containment, storage, transportation, disposal and or recycling. Wastes shall be cleaned up and containerize daily.

PART 2 – EXECUTION

2.1 WORK PROCEDURE

Furnish labor, materials, services, and equipment necessary for the removal of PCB containing lighting ballasts, associated mercury-containing fluorescent lamps, and high intensity discharge (HID) lamps in accordance with local, state, or federal regulations. Do not expose PCBs to open flames or other high temperature sources since toxic decomposition by-products may be produced. Do not break mercury containing fluorescent lamps or high intensity discharge lamps.

2.1.1 Work Operations

Ensure that work operations or processes involving PCB or PCB-contaminated materials are conducted in accordance with 40 CFR 761, 40 CFR 262 40 CFR 263, and the applicable requirements of this section, including but not limited to:

- a. Obtaining suitable PCB and mercury-containing lamp storage sites.
- b. Notifying the Owner prior to commencing the operation.
- c. Reporting leaks and spills to The Owner.
- d. Cleaning up spills.
- e. Inspecting PCB and PCB-contaminated items and waste containers for leaks and forwarding two copies of inspection reports to The Owner.
- f. Maintaining inspection, inventory and spill records.

2.2 PCB SPILL CLEANUP REQUIREMENTS

2.2.1 PCB Spills

Immediately report to the Contracting Officer any PCB spills.

2.2.2 PCB Spill Control Area

Rope off an area around the edges of a PCB leak or spill and post a "PCB Spill Authorized Personnel Only" caution sign. Immediately transfer leaking items to a drip pan or other container.

2.2.3 PCB Spill Cleanup

40 CFR 761, subpart G. Initiate cleanup of spills as soon as possible, but no later than 24 hours of its discovery. Mop up the liquid with rags or other conventional absorbent. The spent absorbent shall be properly contained and disposed of as solid PCB waste.

2.2.4 Records and Certification

Document the cleanup with records of decontamination in accordance with 40 CFR 761, Section 125, Requirements for PCB Spill Cleanup. Provide two copies of test results of cleanup and certification of decontamination.

2.3 REMOVAL

2.3.1 Ballasts

As ballast is removed from the lighting fixture, inspect label on ballast. Ballasts without a "No PCB" label shall be assumed to contain PCBs and containerized and disposed of as required under paragraphs STORAGE FOR DISPOSAL and DISPOSAL. Ballasts with a "No PCB" label may be disposed of as normal construction debris.

2.3.2 Lighting Lamps

Remove all lighting tubes/lamps from the lighting fixture and carefully place (unbroken) into appropriate containers (original transport boxes or equivalent). In the event of a lighting tube/lamp breaking, sweep and place waste in double plastic taped bags and dispose of as hazardous waste as specified herein. The Contractor shall also be required to properly comply with all OSHA and EPA guidance documents on mercury clean-up and properly clean and decontaminate any areas where mercury containing light tubes have been broken.

2.4 STORAGE FOR DISPOSAL

2.4.1 Storage Containers for PCBs

49 CFR 178. Store PCB in containers approved by DOT for PCB.

2.4.2 Storage Containers for lamps

Store mercury-containing lamps in appropriate DOT containers. The boxes shall be stored and labeled for transport in accordance with 40 CFR 262, 40 CFR 263, 9 VAC 20-60, and 9 VAC 20-80.

2.4.3 Labeling of Waste Containers

Label with the following:

- a. Date the item was placed in storage and the name of the cognizant activity/building.
- b. "Caution Contains PCB," conforming to 40 CFR 761, CFR Subpart C. Affix labels to PCB waste containers.
- c. Label mercury-containing lamp waste in accordance with 49 CFR 172, 40 CFR 262, and 40 CFR 263. Affix labels to all lighting waste containers.

2.5 DISPOSAL

Intact PCB ballasts and mercury containing lamps will be transported and disposed of by the Contractor. Broken or leaking ballasts/lamps will be treated as hazardous waste and disposed of by the Contractor according to all applicable regulations.

2.5.1 Identification Number

Federal regulations 40 CFR 761 and 40 CFR 263 require that generators, transporters, commercial stores, and disposers of PCB and mercury-containing waste possess U.S. EPA identification numbers. The contractor shall verify that the activity has a U.S. EPA generator identification number for use on the Uniform Hazardous Waste manifest. If not, the contractor shall advise the activity that it must file and obtain an I.D. number with EPA prior to commencement of removal work.

2.5.2 Transporter Certification

Comply with disposal and transportation requirements outlined in 40 CFR 761 and 40 CFR 263. Before transporting the PCB and lamp waste, sign and date the manifest-acknowledging acceptance of the PCB and mercury-containing waste from The Owner. Return two signed copies to The Owner before leaving the job site. Ensure that the manifest accompanies the PCB and lamp waste at all times. Submit transporter certification of notification to EPA of their PCB and lamp waste activities (EPA Form 7710-53).

2.5.2.1 Certificate of Disposal and/or Recycling

40 CFR 761. Certificate for the PCBs and PCB items, and lamps disposed shall include:

- a. The identity of the disposal and or recycling facility, by name, address, and EPA identification number.
- b. The identity of the PCB and lamp waste affected by the Certificate of Disposal including reference to the manifest number for the shipment.
- c. A statement certifying the fact of disposal and or recycling of the identified PCB and/or lamp waste, including the date(s) of disposal, and identifying the disposal process used.
- d. A certification as defined in 40 CFR 761.

-- End of Section --