

# University of California, Santa Barbara Environmental Health and Safety

## Polychlorinated Biphenyl (PCB) Management Program

### **1. Program Description**

The University of California, Santa Barbara PCB Management Plan is to be implemented for the purpose of removing and managing the disposal of wastes containing PCBs. Environmental Health and Safety provides campus compliance assistance with PCB disposal management regulated under the Toxic Substance Control Act (TSCA), Resource Conservation Recovery Act (RCRA), and Department of Toxic Substance Control (DTSC).

### **2. History**

PCBs were used in the manufacture of electrical transformers, capacitors, light ballasts, X-Ray machines and vacuum pumps. Its quality as a great fire retardant and insulator made them useful in high temperature applications. However, concern over the toxicity and persistence in the environment of PCBs led to a ban of the use of the substance for most applications in 1979.

UCSB Facilities Management removed all PCB transformers in the late 1980's and have systematically removed PCB containing light ballasts when performing the relamping of existing buildings. There are still some PCB light ballasts on campus and possibly laboratory equipment manufactured prior to 1979 that may contain PCB oils which will be removed when they become obsolete or are upgraded.

### **3. Roles and Responsibilities**

Design and Construction, Physical Facilities, and lab personnel are responsible to identify PCB wastes or potential PCB wastes and to follow the UCSB Chemical Hazardous Waste Disposal Procedures. EH&S is responsible to assist the campus with regulatory compliance, help identify PCB waste material, and arrange for the disposal of Hazardous Waste. If the PCB waste is generated as part of a Design and Construction Project the contract must contain language requiring the Contractor to manage and dispose of the PCB waste in accordance with all applicable regulations.

### **4. Regulatory Requirements**

PCB wastes are regulated by DTSC Title 22 CCR 66261.24, RCRA Title 40 CFR 761, and TSCA 15 USC 2695. California has the most stringent regulatory requirement for PCB wastes, so we will address the campus' action levels according to their definition. *DTSC has classified PCBs as a hazardous waste when the concentrations are equal to or*

*greater than 5mg/l in liquids or when the total concentrations are equal to or greater than 50 mg/kg in nonliquids (Title 22, CCR, 66261.24). If the PCB waste is greater than 50mg/l then it is also to be managed under the RCRA and TSCA requirements.*

<u>Level</u>	<u>Classification</u>
<5mg/l	Non-PCB (Recycle)
5mg/l – 50mg/l	California Hazardous Waste
50mg/l – 500mg/l	TSCA - PCB Contaminated Waste
>500mg/l	TSCA - PCB Waste

## **5. Disposal Requirements and Procedures**

### Transformers

Although UCSB has removed all PCB containing transformers from campus, most disposal or recycling facilities require analysis from a certified laboratory to accompany any shipment of a used transformer. EH&S should be notified to assist with the test and disposal of the transformer.

### Light Ballasts

Fluorescent light ballasts that were manufactured before January 1, 1978 and do not have the words “no pcbs” printed on their label shall be managed as a PCB waste and managed according to the UCSB Chemical Hazardous Waste Disposal Procedures. All other light ballasts shall be managed and disposed according to applicable regulations.

### Laboratory Equipment and Chemicals

As mentioned previously some old laboratory equipment may contain PCB oils, if manufactured prior to January 1, 1979. The disposal of the equipment must follow all applicable regulations and be managed according to the UCSB Chemical Hazardous Waste Disposal Procedures. Unwanted PCB chemicals in the laboratories being used for research must also be managed according to the UCSB Chemical Hazardous Waste Disposal Procedures.

## **6. Storage**

### 5mg/l – 50mg/l

Any used transformer, ballast, laboratory equipment, or chemical that contains greater than 5mg/l, but less than 50mg/l of liquid PCBs is to be stored in secondary containment and sent to an approved disposal facility within 1 year of becoming a waste or 90 days if received at the EH&S Hazardous Waste Facility. All Used PCB transformers, ballasts, equipment, or chemicals must be labeled with a PCB Label and a UCSB Hazardous Waste Label.

### >50mg/l

Any used transformer, ballast, laboratory equipment, or chemical that contains greater than 50mg/l of liquid PCBs is to be stored in secondary containment and sent to an approved disposal facility within 30 days of becoming a waste. All Used PCB

transformers, ballasts, equipment, or chemicals must be labeled with a PCB Label and a UCSB Hazardous Waste Label.

## **7. Documentation**

All shipping papers, bill of ladings and hazardous waste manifests, must be provided to EH&S for recordkeeping purposes. All weights of PCB wastes on the hazardous waste manifests must in kilograms (kg) and the out of service date must be listed on the manifest. Certificate of Disposals (CODs) must be received by EH&S within one year of shipment and 30 days of when the material was disposed (incinerated).

## **8. Spill Control**

In case of a spill, follow the EH&S Chemical Spill Cleanup Procedures that are posted on the Lab Safety Website. EH&S will implement the Campus Hazardous Materials Emergency Response Plan (Contingency Plan) and notify the appropriate agencies.