

VI. POLYCHLORINATED BIPHENYL (PCB) SELF-AUDIT CHECKLIST

This section contains a checklist and associated background information on the U.S. Environmental Protection Agency's (EPA) PCB processing and use prohibitions for construction projects. PCBs are regulated under 40 CFR Part 761 as a part of the Toxic Substances Control Act (TSCA). The PCB regulations and requirements apply to both PCB waste materials and PCBs still in use. States and the Federal Government regulate the use, storage, and disposal of equipment containing PCBs, depending upon the concentration of PCBs present. EPA's Office of Prevention, Pesticides and Toxic Substances provides interpretive guidance on PCB waste regulations including the *PCB Questions and Answers Manual* at <http://www.epa.gov/pcb/guidance.html>.

Because they are regulated under TSCA, PCBs are not considered *hazardous wastes* under Subtitle C of the Resource Conservation and Recovery Act (RCRA). PCB wastes can become *hazardous wastes* if they are mixed with a listed hazardous waste (regulated under the RCRA mixture rule) or they exhibit a characteristic of hazardous waste (regulated under RCRA). Under 40 CFR Part 261.8, the disposal of PCB-containing dielectric fluids regulated under TSCA, that are hazardous only for the toxicity characteristic, is exempt from RCRA. If hazardous debris is also a waste PCB and covered by both RCRA and TSCA, the debris is covered by the most stringent requirement. Refer to the *Hazardous Solid Waste Self-Audit Checklist* (Section IV, Part II of this guide) for more information on RCRA Subtitle C requirements.

This section includes a checklist for TSCA requirements for generators of **PCB waste**. Operators of construction projects can use the checklist to identify who will be responsible for addressing each requirement, and to conduct a self-audit of their construction site. The checklist also can be used by compliance inspectors to conduct an inspection of a construction project.

Construction projects may be subject to state or local regulations. Check with the EPA Region or state in which the construction project is located to determine the PCB-handling requirements that apply to the site.

More information on PCB waste requirements can be found in Section VIII in Part I of this guide and in the Background section following the checklist. Attachment A provides a list of potential PCB-containing wastes at construction sites. Attachment B lists PCB trade names and other synonyms to help the site identify PCB-containing equipment. Attachment C includes PCB concentration assumptions for use (for equipment manufactured prior to July 2, 1979).

CHECKLIST FOR PCB REQUIREMENTS FOR CONSTRUCTION PROJECTS

BACKGROUND INFORMATION

Name of Auditor: _____

Date of Audit: _____

Name of Project/Site: _____

A “notes” area is provided at the end of each section of this checklist. For every “No” answer, enter a description of the missing information and the action required to bring the site into compliance in the “notes” area.

IDENTIFYING PCB MATERIALS

Yes No

Prior to Demolition

<input type="checkbox"/>	<input type="checkbox"/>	1. Do the construction activities involve demolition of a building or structure constructed prior to July 2, 1979? If so, PCB-containing materials may be present.
<input type="checkbox"/>	<input type="checkbox"/>	2. Were the building and structures inspected to determine if any materials containing PCBs are present at the site prior to demolition? (See Attachments A and B for additional information to use in identifying PCBs.)
<input type="checkbox"/>	<input type="checkbox"/>	3. Are there any PCB transformers registered for this structure? PCB transformers located within a commercial building, including those in storage for reuse, and any PCB transformer within 30 meters of a commercial building must be registered with the building owner.
<input type="checkbox"/>	<input type="checkbox"/>	4. Are there any facility records such as annual records required by 40 CFR Part 761.180(a) for PCB articles in storage?
<input type="checkbox"/>	<input type="checkbox"/>	5. Are there any inspection logs for PCB transformers or PCB voltage regulators?

PCB Wastes Identified:

Yes No

During Demolition or Construction

<input type="checkbox"/>	<input type="checkbox"/>	6. If unidentified, potentially hazardous, or PCB-containing materials were discovered during construction or demolition, were the proper parties (e.g., construction manager and property owner) informed?
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Material Identification

<input type="checkbox"/>	<input type="checkbox"/>	7. If the contractor/developer/owner could not determine if materials containing PCBs are present, was a company specializing in PCB identification and remediation services hired?
<input type="checkbox"/>	<input type="checkbox"/>	8. If materials containing PCBs were found, were the concentrations of PCBs determined? Concentrations can be estimated using the EPA assumptions provided in Appendix C, through laboratory testing of the PCB-containing material, or through use of the “worst case” assumption that the materials are above the regulated concentration of 50 ppm.
<input type="checkbox"/>	<input type="checkbox"/>	9. Was a record kept of all regulated PCB-containing materials found at the site and was a Notification of PCB Activity Form completed prior to storage or disposal? (A copy of the form can be found at http://www.epa.gov/pcb/data.html .)

NOTES / ACTIONS NEEDED TO BRING SITE INTO COMPLIANCE: _____

PCB MATERIAL LABELING, STORAGE, AND TRANSFER

<u>Yes</u>	<u>No</u>	
<input type="checkbox"/>	<input type="checkbox"/>	10. Is the PCB-containing material labeled as required ¹ ?
<input type="checkbox"/>	<input type="checkbox"/>	11. Is the material labeled with either a large mark (M _L) label (square from 6 inch by 6 inch to 2 inch by 2 inch) or a small mark (M _S) label (rectangular from 1 inch by 2 inch to 0.4 inch by 0.8 inch) that has letters and striping on a white or yellow background and is sufficiently durable to exceed the life of the PCB item it is marking?
<input type="checkbox"/>	<input type="checkbox"/>	12. Is the site inspected for old spills or leaks from PCB-containing equipment?
<input type="checkbox"/>	<input type="checkbox"/>	13. Are materials prepared properly for storage or disposal?
<input type="checkbox"/>	<input type="checkbox"/>	14. Are nonleaking and structurally undamaged large PCB capacitors and PCB-contaminated electrical equipment containing free flowing dielectric fluid stored on pallets in a storage facility? This is only allowed if the storage facility contains available storage equivalent to 10 percent of the volume of equipment stored on the pallet. If the equipment is drained of dielectric fluid, there is no available storage requirement.
<input type="checkbox"/>	<input type="checkbox"/>	15. Is PCB waste in storage for disposal marked with the date removed from service?
<input type="checkbox"/>	<input type="checkbox"/>	16. Is a permanent storage facility used for materials stored for more than 30 days?

¹ The following items must be labeled: PCB containers; large PCB transformers, PCB low and high voltage capacitors, and equipment containing these transformers or capacitors at the time of removal from use if not already marked; large PCB high voltage capacitors at the time of manufacture, at the time of distribution in commerce if not already marked, and at the time of removal from use if not already marked; electric motors using PCB coolants; hydraulic systems using PCB hydraulic fluid; heat transfer systems (other than PCB transformers) using PCBs; PCB article containers containing articles or equipment that must be marked; and each storage area used to store PCBs and PCB items for disposal.

Yes No

Temporary Storage

		17. Does the temporary storage for disposal area meet the following requirements?
<input type="checkbox"/>	<input type="checkbox"/>	Marked with a PCB M _L label.
<input type="checkbox"/>	<input type="checkbox"/>	Have a roof and walls to protect the materials from rain or snow.
<input type="checkbox"/>	<input type="checkbox"/>	Have impermeable floor with six-inch curbing and no drains.
<input type="checkbox"/>	<input type="checkbox"/>	Have containment volume equal to at least two times the volume of the largest PCB article or 25 percent of the total volume of all PCB articles, whichever is greater.
<input type="checkbox"/>	<input type="checkbox"/>	Not located in a 100-year flood plain.
<input type="checkbox"/>	<input type="checkbox"/>	Have all leaking equipment stored in a nonleaking PCB container with absorbents and have nonleaking equipment on pallets.
<input type="checkbox"/>	<input type="checkbox"/>	18. If PCB material is stored in a RCRA-permitted facility, has a Notification of PCB Activity Form been completed?
<input type="checkbox"/>	<input type="checkbox"/>	19. Is the waste storage area inspected every 30 days and records of the inspections maintained?

Transportation and Disposal

<input type="checkbox"/>	<input type="checkbox"/>	<p>20. Is the manifest complete and signed? The manifest is complete if it contains the following information:</p> <p>For each bulk load of PCBs, the identity of the PCB waste, the earliest date of removal from service for disposal, and the weight in kilograms of the PCB waste.</p> <p>For each PCB article container or PCB container, the unique identifying number, type of PCB waste, earliest date of removal from service for disposal, and weight in kilograms of the PCB waste contained.</p> <p>For each PCB article not in a PCB container or PCB article container, the serial number if available or other identification if there is no serial number, the date of removal from service for disposal, and weight in kilograms of the PCB waste in each PCB article.</p>
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<u>Yes</u>	<u>No</u>	
<input type="checkbox"/>	<input type="checkbox"/>	21. Are all of the records including the activity form, the manifest, the certification of disposal, and any on-site inspection reports being kept? A copy of each signed manifest must be kept until the generator receives a signed copy from the designated commercial storage or disposal facility that received the PCB waste. The copy signed by the commercial storer or disposer shall be retained for at least three years from the date the PCB waste was accepted by the initial transporter.
<input type="checkbox"/>	<input type="checkbox"/>	22. Did the site hire an approved PCB waste disposal company?
<input type="checkbox"/>	<input type="checkbox"/>	23. Will the transporter properly dispose of PCB waste?
<input type="checkbox"/>	<input type="checkbox"/>	24. Were the labeled items and transport vehicles inspected to ensure that the markings are visible and contain all of the necessary information?
<input type="checkbox"/>	<input type="checkbox"/>	25. Was a signed copy of the manifest received from the operator of the designated disposal site within 35 days of the date the waste was accepted by the initial transporter? If not, was the transporter and/or the owner or operator of the designated disposal site contacted to determine the status of the waste shipment?
<input type="checkbox"/>	<input type="checkbox"/>	26. Was a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, received within 45 days of the date the waste was accepted by the initial transporter? If not, was an Exception Report submitted to the EPA Regional Administrator? If not, did this report include a copy of the manifest for which a confirmation of delivery was not received and a cover letter signed by the waste generator explaining the efforts taken to locate the PCB waste shipment and the results of those efforts?

NOTES / ACTIONS NEEDED TO BRING SITE INTO COMPLIANCE: _____

PCB REMEDIATION WASTES

<u>Yes</u>	<u>No</u>	
		27. Did the person in charge of the cleanup or the owner of the property where the PCB remediation waste is located notify, in writing, the proper agencies 30 days prior to startup of remediation? The notice is complete if it contains the following:
<input type="checkbox"/>	<input type="checkbox"/>	The nature of the contamination, including kinds of materials contaminated.
<input type="checkbox"/>	<input type="checkbox"/>	A summary of the procedures used to sample contaminated and adjacent areas and a table or cleanup site map showing PCB concentrations measured in all precleanup characterization samples.
<input type="checkbox"/>	<input type="checkbox"/>	The location and extent of the identified contaminated area, including topographic maps with sample collection sites cross-referenced to the sample identification numbers in the data summary.
<input type="checkbox"/>	<input type="checkbox"/>	A cleanup plan for the site, including schedule, disposal technology, and approach.
<input type="checkbox"/>	<input type="checkbox"/>	A written certification signed by the owner of the property where the cleanup site is located and the party conducting the cleanup. The certification must state that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection.
		<i>Notice Submittal Date(s):</i> _____
<input type="checkbox"/>	<input type="checkbox"/>	28. Does the area meet the cleanup levels specified in 40 CFR Part 761 Subpart 61?

NOTES / ACTIONS NEEDED TO BRING SITE INTO COMPLIANCE: _____

PCB SPILLS

Date of Spill: _____

Name & Location of Project/Site: _____

PCB Waste/Material: _____

<u>Yes</u>	<u>No</u>	
<input type="checkbox"/>	<input type="checkbox"/>	29. Did the site contact the EPA Regional Administrator, the Director of the state or tribal environmental protection agency, and the Director of the county or local environmental protection agency as soon as possible once a spill is discovered, as required?
<input type="checkbox"/>	<input type="checkbox"/>	30. Did the site call a PCB waste remediation company to clean up any existing (more than 72 hours old) spills? (If the sites chose to cleanup the remediation waste, see the Remediation Waste section above.)
<input type="checkbox"/>	<input type="checkbox"/>	31. Where a spill directly contaminates surface water, sewers, drinking water supplies, grazing lands, or vegetable gardens, or for releases more than 10 pounds of PCBs, did the site notify the appropriate EPA Regional office and the Office of Prevention, Pesticides and Toxic Substances Branch and obtain guidance for appropriate cleanup measures in the shortest possible time after discovery, but in no case later than 24 hours after discovery?
<input type="checkbox"/>	<input type="checkbox"/>	32. Did the site contact the National Response Center [(800) 424-8802] and the state and local agencies if the spill involved 10 pounds or more by weight of PCBs as required?

<u>Yes</u>	<u>No</u>	
		33. For <u>high concentration spills</u> (defined as 500 ppm or greater of PCBs, or low concentration spills involving more than one pound of PCBs by weight, or more than 270 gallons of untested material) within 24 hours of the spill or within 48 hours for spills involving PCB transformers did the site:
<input type="checkbox"/>	<input type="checkbox"/>	Notify the National Response Center at (800) 424-8802 if the spill involved 10 pounds or more by weight of PCBs?
<input type="checkbox"/>	<input type="checkbox"/>	Notify local environmental agencies?
<input type="checkbox"/>	<input type="checkbox"/>	Notify local authorities immediately if there was a fire?
<input type="checkbox"/>	<input type="checkbox"/>	Restrict and label the visible spill area?
<input type="checkbox"/>	<input type="checkbox"/>	Record and document the extent of PCB contamination of the estimated spill area?
<input type="checkbox"/>	<input type="checkbox"/>	Immediately begin cleanup of the visible spill area and then, once the concentration level of the PCB spill was determined, begin the appropriate cleanup depending upon the release location, exposure risk, PCB concentration, and future use of the site?
<input type="checkbox"/>	<input type="checkbox"/>	Test the area to confirm that the PCB concentration met EPA-specified levels?
		34. For <u>low concentration spills</u> (defined as less than 500 ppm PCB, or less than one pound of PCBs by weight, or less than 270 gallons of untested material) did the site:
<input type="checkbox"/>	<input type="checkbox"/>	Double wash/rinse all contaminated surfaces within 48 hours of the spill?
<input type="checkbox"/>	<input type="checkbox"/>	Collect a standard wipe test sample from smooth surfaces, using hexane wipe samples to detect PCB contamination and confirm that the concentration is not more than 10 micrograms per 100 square centimeters?

<u>Yes</u>	<u>No</u>	
		35. At the completion of cleanup, did the site properly document the cleanup with records and certification of decontamination? The records and certification must be maintained for a period of five years. The records are complete if they contain the following:
<input type="checkbox"/>	<input type="checkbox"/>	Identification of the source of the spill (e.g., type of equipment).
<input type="checkbox"/>	<input type="checkbox"/>	Estimated or actual date and time of the spill.
<input type="checkbox"/>	<input type="checkbox"/>	The date and time cleanup was completed or terminated (if cleanup was delayed by emergency or adverse weather: the nature and duration of the delay).
<input type="checkbox"/>	<input type="checkbox"/>	A brief description of the spill location.
<input type="checkbox"/>	<input type="checkbox"/>	Precleanup sampling data used to establish the spill boundaries if required.
<input type="checkbox"/>	<input type="checkbox"/>	A brief description of the sampling methodology used to establish the spill boundaries.
<input type="checkbox"/>	<input type="checkbox"/>	A brief description of the solid surfaces cleaned and of the double wash/rinse method used.
<input type="checkbox"/>	<input type="checkbox"/>	Approximate depth of soil excavation and the amount of soil removed.
<input type="checkbox"/>	<input type="checkbox"/>	A certification statement signed by the responsible party stating that the cleanup requirements have been met and that the information contained in the record is true to the best of his/her knowledge.

NOTES / ACTIONS NEEDED TO BRING SITE INTO COMPLIANCE: _____

BACKGROUND ON PCB WASTE REQUIREMENTS FOR CONSTRUCTION PROJECTS

DEFINITIONS

- **Capacitor.** Device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:
 - Small capacitor means a capacitor which contains less than 1.36 kg (3 lbs) of dielectric fluid. The following assumptions may be used if the actual weight of the dielectric fluid is unknown. A capacitor whose total volume is less than 1,639 cubic centimeters (100 cubic inches) may be considered to contain less than 1.36 kg (3 lbs) of dielectric fluid and a capacitor whose total volume is more than 3,278 cubic centimeters (200 cubic inches) must be considered to contain more than 1.36 kg (3 lbs) of dielectric fluid. A capacitor whose volume is between 1,639 and 3,278 cubic centimeters may be considered to contain less than 1.36 kg (3 lbs) of dielectric fluid if the total weight of the capacitor is less than 4.08 kg (9 lbs).
 - Large high voltage capacitor means a capacitor which contains 1.36 kg (3 lbs) or more of dielectric fluid and which operates at 2,000 volts (a.c. or d.c.) or above.
 - Large low voltage capacitor means a capacitor which contains 1.36 kg (3 lbs) or more of dielectric fluid and which operates below 2,000 volts (a.c. or d.c.).
- **Chemical Waste Landfill.** Landfill at which protection against risk of injury to health or the environment from migration of PCBs to land, water, or the atmosphere is provided from PCBs and PCB items deposited therein by locating, engineering, and operating the landfill as specified in 40 CFR Part 761.75.
- **Commercial Storer of PCB Waste.** Owner or operator of each facility that is subject to the PCB storage unit standards of 40 CFR Part 761.65(b)(1) or (c)(7) or meets the alternate storage criteria of 40 CFR Part 761.65(b)(2), and who engages in storage activities involving either PCB waste generated by others or that was removed while servicing the equipment owned by others and brokered for disposal. The receipt of a fee or any other form of compensation for storage services is not necessary to qualify as a commercial storer of PCB waste. A

generator who only stores its own waste is subject to the storage requirements of 40 CFR Part 761.65, but is not required to obtain approval as a commercial storer. If a facility's storage of PCB waste generated by others at no time exceeds a total of 500 gallons of liquid and/or nonliquid material containing PCBs at regulated levels, the owner or operator is a commercial storer but is not required to seek EPA approval as a commercial storer of PCB waste. Storage of one company's PCB waste by a related company is not considered commercial storage. A "related company" includes, but is not limited to: a parent company and its subsidiaries; sibling companies owned by the same parent company; companies owned by a common holding company; members of electric cooperatives; entities within the same executive agency as defined at 5 U.S.C. 105; and a company having a joint ownership interest in a facility from which PCB waste is generated (such as a jointly owned electric power generating station) where the PCB waste is stored by one of the co-owners of the facility. A "related company" does not include another voluntary member of the same trade association. Change in ownership or title of a generator's facility, where the generator is storing PCB waste, does not make the new owner of the facility a commercial storer of PCB waste.

- **Disposal.** Intentionally or accidentally to discard, throw away, or otherwise complete or terminate the useful life of PCBs and PCB items. Disposal includes spills, leaks, and other uncontrolled discharges of PCBs as well as actions related to containing, transporting, destroying, degrading, decontaminating, or confining PCBs and PCB items.
- **Distribute in Commerce and Distribution in Commerce.** When used to describe an action taken with respect to a chemical substance, mixture, or article containing a substance or mixture means to sell, or the sale of, the substance, mixture, or article in commerce; to introduce or deliver for introduction into commerce, or the introduction or delivery for introduction into commerce of the substance, mixture, or article; or to hold or the holding of, the substance, mixture, or article after its introduction into commerce.
- **Double Wash/Rinse.** Solid surfaces must be cleaned two times with an appropriate solvent or other material in which PCBs are at least 5 percent soluble by weight. The cleanser must cover the contaminated surface completely in both wash/rinses. The runoff must be contained and disposed of properly.
- **EPA Identification Number.** 12-digit number assigned to a facility by EPA upon notification of PCB waste activity under 40 CFR Part 761.205.

- **Generator of PCB Waste.** Any person whose act or process produces PCBs that are regulated for disposal under Subpart D of this part, or whose act first causes PCBs or PCB items to become subject to the disposal requirements of Subpart D of this part, or who has physical control over the PCBs when a decision is made that the use of the PCBs has been terminated and therefore is subject to the disposal requirements of Subpart D of this part. Unless another provision of this part specifically requires a site-specific meaning, “generator of PCB waste” includes all of the sites of PCB waste generation owned or operated by the person who generates PCB waste.
- **In or Near Commercial Buildings.** Within the interior of, on the roof of, attached to the exterior wall of, in the parking area serving, or within 30 meters of a nonindustrial nonsubstation building. Commercial buildings are typically accessible to both members of the general public and employees, and include: (1) public assembly properties, (2) educational properties, (3) institutional properties, (4) residential properties, (5) stores, (6) office buildings, and (7) transportation centers (e.g., airport terminal buildings, subway stations, bus stations, or train stations).
- **Leak or Leaking.** Any instance in which a PCB article, PCB container, or PCB equipment has any PCBs on any portion of its external surface.
- **Manifest.** Shipping document EPA Form 8700–22 and any continuation sheet attached to EPA Form 8700–22, originated and signed by the generator of PCB waste in accordance with the instructions included with the form and Subpart K of this part.
- **Mineral Oil PCB Transformer.** Any transformer originally designed to contain mineral oil as the dielectric fluid and which has been tested and found to contain 500 ppm or greater PCBs.
- **PCB and PCBs.** Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance. Refer to 40 CFR Part 761.1(b) for applicable concentrations of PCBs. PCB and PCBs as contained in PCB items are defined in 40 CFR Part 761.3. For any purposes under this part, inadvertently generated non-Aroclor PCBs are defined as the total PCBs calculated following division of the quantity of monochlorinated biphenyls by 50 and dichlorinated biphenyls by 5. PCB article means any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. “PCB article” includes capacitors, transformers, electric motors, pumps, pipes and any

other manufactured item (1) which is formed to a specific shape or design during manufacture, (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the PCB article.

- **PCB Bulk Product Waste.** Waste derived from manufactured products containing PCBs in a nonliquid state, at any concentration where the concentration at the time of designation for disposal was \geq 50 ppm PCBs. PCB bulk product waste does not include PCBs or PCB items regulated for disposal under 40 CFR Part 761.60(a) through (c), 40 CFR Part 761.61, 40 CFR Part 761.63, or 40 CFR Part 761.64. PCB bulk product waste includes, but is not limited to:
 - (1) Nonliquid bulk wastes or debris from the demolition of buildings and other manmade structures manufactured, coated, or serviced with PCBs. PCB bulk product waste does not include debris from the demolition of buildings or other manmade structures that is contaminated by spills from regulated PCBs which have not been disposed of, decontaminated, or otherwise cleaned up in accordance with Subpart D of this part.
 - (2) PCB-containing wastes from the shredding of automobiles, household appliances, or industrial appliances.
 - (3) Plastics (such as plastic insulation from wire or cable; radio, television and computer casings; vehicle parts; or furniture laminates); preformed or molded rubber parts and components; applied dried paints, varnishes, waxes or other similar coatings or sealants; caulking; adhesives; paper; Galbestos; sound deadening or other types of insulation; and felt or fabric products such as gaskets.
 - (4) Fluorescent light ballasts containing PCBs in the potting material.

APPLICABILITY

The PCB waste regulation applies to:

- Generators of PCB waste;
- Transporters of PCB waste; and

- Treatment, storage, and disposal facilities for PCB waste (typically not applicable to construction sites).

In these situations, the contractor or subcontractor who first discovers the PCB-containing material typically is responsible for notifying the general contractor, developer, and/or owner. Because the PCB-containing material was present on the site prior to construction activities, the developer or owner typically is responsible for ensuring that all PCB wastes are handled and disposed of properly.

In a typical construction project, PCB wastes are generated in one of two ways:

- PCB-contaminated soils and materials are discovered during grading or digging (i.e., remediation wastes); or
- PCB-contaminated buildings or equipment are discovered during demolition.

Items with a concentration of 50 ppm or greater PCBs are regulated by TSCA. Note that states may regulate PCBs differently. Therefore, the state environmental department should be contacted to determine the site PCB waste requirements.

PCB WASTE HANDLING AND DISPOSAL REQUIREMENTS

When handling or disposing of PCB wastes, these requirements must be followed:

- **Identify and Label.** Identify and label all PCB-containing equipment or material that will be disturbed. There are two approved PCB labels that can be found in 40 CFR Part 761.45; “M_L” is the larger, preferred label and “M_S” is the smaller label that should be used only on items that will not accommodate the M_L.
- **Label Location.** Transport and storage areas should be marked on all sides. Any equipment or container containing PCB materials should be marked at a minimum on the side where access is available.
- **Determine the PCB Concentrations.** Determine the concentration of any items that will be removed either for storage or disposal. To do this either:
 - Assume “worst case” (greater than or equal to 50 ppm) and remove the suspect item(s), or
 - Analyze samples of the items for PCB concentration.

- **Get an EPA Identification Number and Notification of PCB Activity Form.** If the site is storing or disposing of PCB waste, a Notification of PCB Activity Form must be completed (see <http://www.epa.gov/pcb/data.html>) and mailed to the Fibers and Organics Branch of EPA's Office of Pollution Prevention and Toxic Substances (OPPTS). EPA will assign an ID number to the construction site for the handling of PCBs. This ID number is for activities involving PCBs and may not be used for any other waste activities. If the construction site has already received an ID number for other regulated wastes (e.g., RCRA), EPA will verify the number and assign the same ID number for the site's PCB activities. It is not necessary to have a RCRA ID number to receive a PCB ID number.
- **Storage and Disposal.** Materials can be stored for *reuse* for up to five years in an approved, permanent, PCB storage area. (Note - The storage-for-reuse provisions at 40 CFR Part 761.35 are meant to capture equipment such as transformers, and natural gas systems. The equipment must be manufactured for a particular use. It is not meant for any item or material containing PCBs. See the definition of PCB Article at 40 CFR Part 761.30.) The site can store materials for *disposal* for up to 30 days in a temporary storage area or for up to one year in a permanent PCB storage location. In all cases, the items must be marked with the date they were removed from service and the area must be inspected every 30 days for any spills or leaks.

A temporary storage area must meet the following requirements:

- Be marked with a PCB M_L label,
- Have a roof and walls to protect the materials from rain or snow,
- Have impermeable floor with six-inch curbing and no drains,
- Not be located in the 100-year flood plain, and
- Have a Spill Prevention Control and Countermeasure (SPCC) Plan.

In temporary storage place all leaking equipment in a nonleaking PCB container with absorbents. Nonleaking equipment may be stored on pallets.

For more specific details on PCB storage, see 40 CFR Part 761.65. For information specific to fluorescent light ballast disposal, see EPA's summary guidance table located at <http://www.epa.gov/pcb/Ballastchart.pdf>.

If the site plans to install or use a permanent PCB waste storage area, a Notification of PCB Activity Form must be completed and submitted prior to handling any waste. If the site plans only to temporarily store materials (<30 days) prior to disposal, the form does not need to be completed. If the storage plans change or the 30-day temporary storage limit is exceeded, the

form must then be completed. The Activity Form requests general information about the site and related activities and is designed to inform EPA of site activities. For more specific details on PCB storage, see 40 CFR Part 761.65.

For PCB waste disposal, an approved PCB waste disposer must be used. (Note - transporters do not need to be approved, but the generator or whoever is offering the waste for shipment must ensure that the transporter has submitted a Notification of PCB Activity Form and received an ID number for their PCB activities. In addition to the waste going to an approved disposer, that disposer must also have notified and received an ID number for their PCB activities.) To transport the waste for either commercial storage or disposal, complete a hazardous waste manifest. If the site is exempt from having an EPA identification number, it can use the generic identification number "40 CFR Part 761" on manifests, records, and reports. A hazardous waste manifest can be obtained from either the hazardous waste transporter or from the state hazardous waste coordinator. A copy of the completed, signed manifest should be kept in the site records. Once the waste has reached its final destination, the hazardous waste storer/disposer will sign the manifest and return a copy to the site.

An annual documentation log must also be kept for certain storage and disposal activities. For details on the specific requirements of the annual documentation log, see 40 CFR Part 761.180.

Disposal Requirements

The PCB waste transporter must dispose of the waste using the following criteria:

- Proper disposal of PCB-containing liquids:
 - PCB liquids at concentrations of ≥ 50 ppm must be disposed of in an incinerator, OR
 - Mineral oil and other liquid dielectric fluids with PCB liquid concentrations of between ≥ 50 ppm and < 500 ppm can be disposed of in a high efficiency boiler.
- Proper disposal of PCB containers and large PCB capacitors containing PCBs with concentrations of > 500 ppm or transformers:
 - Disposed of in an incinerator, OR

- Disposed of in a chemical waste landfill after being properly treated. Proper treatment usually includes removal of free flowing liquids and treatment with a solvent.
- Nonliquid PCB remediation waste, soil, rags, debris, sludges, and sediment can also be disposed of in this manner. Small PCB capacitors or containers storing PCBs with concentrations of < 500 ppm may be disposed of as municipal solid waste.
- Proper disposal of PCB-contaminated electrical equipment, PCB hydraulic machine, or large PCB capacitors containing PCBs with concentrations of ≥ 50 ppm and < 500:
 - Disposed of in an incinerator, OR
 - Disposed of in a chemical waste landfill after being properly treated; proper treatment usually includes removing free flowing liquids and treating with a solvent, OR
 - Decontaminated in accordance to 40 CFR Part 761.79, OR
 - In a scrap metal recovery oven, OR
 - A licensed municipal solid waste or nonmunicipal nonhazardous waste management or other approved facility.
- Small PCB capacitors may be disposed of as municipal solid waste.
- If the PCBs are being transported, is the transport vehicle properly marked? A transport vehicle requires marking on all sides with the M_L mark (Appendix A) if it meets the following requirements:
 - Loaded with PCB containers that contain more than 45 kilograms (kg) of liquid PCBs at concentrations of ≥ 50 ppm, OR
 - Loaded with one or more PCB transformer.

Spills and Remediation Waste

If at any time during site inspection or material handling a spill or leak is discovered, it must be cleaned up within 72 hours of discovery. EPA has provided a detailed spill cleanup policy in 40 CFR Part 761, Subpart G. The requirements of this plan vary depending on the size and concentration of the spill but can include spill testing to determine the concentration of PCBs that were spilled, double wash/rinsing of the contaminated surfaces, soil excavating, and even contacting the National Response Center. If during construction activities any preexisting PCB spills or disposals are discovered, the local EPA Administrator should be contacted to determine the best way to handle these “remediation” wastes.

Self-implementing on-site cleanup and disposal of remediation waste is allowed for moderately sized sites since there should be low residual environmental impact. It is not allowed to clean up the following:

- Surface or ground waters;
- Sediments in marine and freshwater ecosystems;
- Sewers or sewage treatment systems;
- Any private or public drinking water sources or distribution systems;
- Grazing lands; or
- Vegetable gardens.

At least 30 days prior to the date that the cleanup of a site begins, the person in charge of the cleanup or the owner of the property where the PCB remediation waste is located shall notify, in writing, the EPA Regional Administrator, the Director of the state or tribal environmental protection agency, and the Director of the county or local environmental protection agency where the cleanup will be conducted. Within 30 calendar days of receiving the notification, the EPA Regional Administrator will respond in writing to the request. If the EPA Regional Administrator does not respond within 30 calendar days of receiving the notice, the site may assume that it is complete and acceptable and proceed with the cleanup. Once cleanup is underway, the site must notify the EPA Regional Administrator, in writing, within 14 calendar days of any proposed changes.

Remediation Cleanup Requirements

The area must meet specific cleanup levels based on the occupancy levels in the area. A more detailed procedure for remediating the site is provided in 40 CFR Part 761, Subpart 61. The requirements for disposing of the remediated waste are described in 40 CFR Part 761, Subpart 62.

- For high-occupancy areas, the remediation activity must meet the following cleanup levels:
 - Bulk remediation wastes, porous surfaces, or liquids ≤ 1 ppm, OR
 - Bulk remediation wastes, porous surfaces, or liquids > 1 ppm and ≤ 10 ppm and covered with a cap, OR
 - Nonporous surfaces $\leq 10 \mu\text{g}/100 \text{ cm}^2$.

- For low-occupancy areas, the remediation activity must meet the following cleanup levels:
 - Bulk remediation wastes, porous surfaces, or liquids ≤ 25 ppm, OR
 - Bulk remediation wastes, porous surfaces, or liquids > 25 ppm and ≤ 50 ppm and the area is secured with a fence and marked with the M_L mark, OR
 - Bulk remediation wastes > 25 ppm and ≤ 100 ppm and covered with a cap, OR
 - Non-porous surfaces $\leq 100 \mu\text{g}/100 \text{ cm}^2$.

Attachment A. Potential PCB-Containing Wastes at Construction Sites

- Mineral-oil filled electrical equipment such as motors or pumps manufactured prior to July 2, 1979;
- Capacitors or transformers manufactured prior to July 2, 1979;
- Plastics², molded rubber parts, applied dried paints, coatings or sealants, caulking, adhesives, paper, Galbestos, sound-deadening materials, insulation, or felt or fabric products such as gaskets manufactured prior to July 2, 1979;
- Fluorescent light ballasts manufactured prior to July 2, 1979;
- Waste or debris from the demolition of buildings and equipment manufactured, serviced, or coated with PCBs; and
- PCB remediation waste such as materials disposed of prior to May 4, 1987, or waste containing PCBs from spills, such as floors or walls contaminated by a leaking transformer.

Excluded PCB products are materials with PCB concentrations below 50 ppm. The PCB concentration can not be a result of dilution, leaks, or spills of PCBs with concentrations greater than 50 ppm. These products are exempt from TSCA regulations. These materials may include the following:

- Products contaminated with PCB materials;
- Recycled fluids or equipment contaminated during use of PCB-containing products; and
- Used oils.

To identify PCB wastes, contact the state or EPA Region for assistance (EPA's *Notification of Regulated Waste Activities: Instructions and Forms* includes a list of state contacts).

²Plastics can include a variety of products including insulation from wire or cable; radio, television, and computer casings; vehicle parts; or furniture laminates.

Attachment B. PCB Trade Names and Other Synonyms To Help Identify PCB-Containing Equipment

Aceclor	Dicolor	Orophene PCB
Adkarel	Diconal	PCB's
ALC	Diphenyl, chlorinated	PCBs
Apirolio	DK	Pheaoclor
Apirorlio	Duconal	Phenochlor
Arochlor	Dykanol	Phenoclor
Arochlors	Educarel	Plastivar
Aroclor	EEC-18	Polychlorinated biphenyl
Aroclors	Elaol	Polychlorinated biphenyls
Arubren	Electrophenyl	Polychlorinated diphenyl
Asbestol	Elemex	Polychlorinated diphenyls
ASK	Elinol	Polychlorobiphenyl
Askael	Eucarel	Polychlorodiphenyl
Askarel	Fenchlor	Prodelec
Auxol	Fenclor	Pydraul
Bakola	Fenocloro	Pyraclor
Biphenyl, chlorinated	Gilotherm	Pyralene
Chlophen	Hydol	Pyranol
Chloretol	Hyrol	Pyroclor
Chlorentol	Hyvol	Pyronol
Chlorinated biphenyl	Inclor	Saf-T-Kuhl
Chlorinated diphenyl	Inerteen	Saf-T-Kohl
Chlorinol	Inertenn	Santosol
Chlorobiphenyl	Kanechlor	Santotherm
Chlorodiphenyl	Kaneclor	Santothern
Chlorphen	Kennechlor	Santovac
Chorextol	Kenneclor	Solvol
Chorinol	Leromoll	Sorol
Clophen	Magvar	Soval
Clophenharz	MCS 1489	Sovol
Cloresil	Montar	Sovtol
Clorinal	Nepolin	Terphenychlore
Clorphen	No-Flamol	Therminal
Decachlorodiphenyl	NoFlamol	Therminol
Delor	Non-Flamol	Turbinol
Delorene Diaclor	Olex-sf-d	

**Attachment C. PCB Concentration Assumptions for Use
(for Equipment Manufactured Prior to July 2, 1979)**

Item	Concentration Assumption
Transformers with <3 lbs of fluid Circuit breakers Reclosers Oil-filled cable Rectifiers with unestablished PCB concentrations	<50 ppm PCB (not regulated by TSCA)
Mineral-oil filled electrical equipment without any established PCB concentration (pole-top and pad-mounted distribution transformers are considered mineral-oil filled)	>= 50 ppm and <500 ppm
Transformers with >3 lbs of fluid other than mineral oil Capacitors	>= 500 ppm

Any person may assume that mineral oil-filled electrical equipment, transformers, or circuit breakers manufactured after July 2, 1979 are non-PCB and contain less than 50 ppm PCB. If a transformer contains more than 3 pounds of fluid and the date of manufacture as well as the type of dielectric fluid for the transformer are unknown, one must assume the concentration of PCB in the transformer is >= 500 ppm. If the date of manufacture for a capacitor is unknown, one must assume the concentration of PCB in the capacitor is >= 500 ppm.