ORDER **1050.14A**

POLYCHLORINATED BIPHENYLS (PCBs) IN THE NATIONAL AIRSPACE SYSTEM

JUNE 20, 1991

DEPARTMENT OF TRANSPORATION
FEDERAL AVIATION ADMINISTRATION

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FOREWORD

This order provides agency policy, procedures, and responsibilities for implementation and compliance with regulations concerning the use, storage, transport, and disposal of substances that contain polychlorinated biphenyls (PCB) in the National Airspace System.

James B. Busey
Administrator

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CHAPTER 1. GENERAL

1. PURPOSE. This order updates agency policy, procedures, and responsibilities for implementation and compliance with the Environmental Protection Agency (EPA) Final Rule, 40 CFR Part 761, Polychlorinated Biphenyls (PCB's) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions (see Appendix 1).

2. DISTRIBUTION. This order is distributed to the branch level in the NAS Transition and Implementation Service, Systems Maintenance Service, Logistics Service, Office of Airport Safety and Standards, Office of Airport Planning and Programming, Office of Civil Aviation Security, Office of Environment and Energy, and Office of Aviation Medicine, and to the division level in the Regions with a branch level distribution in the Airway Facilities Division; to the division level at the FAA Technical Center; to the division level at the Aeronautical Center with a branch level distribution in the Facility Support Division and the FAA Depot at the Aeronautical Center; to the division level in the Aviation Standards National Field Office and in the Office of Advanced Design and Management Control; and a limited distribution to the Airway Facilities Field Offices.

3. CANCELLATION. Order 1050.14, Agency Compliance with Regulations Concerning Uses of Polychlorinated Biphenyls (PCB's) in the National Airspace System, dated May 18, 1983, is canceled.

4. BACKGROUND.

a. The Toxic Substances Control Act (TSCA), P.L. 94-469, designated PCB's as hazardous chemical substances. PCB's, such as askarel products, are commonly found as fluids or mixtures in such items as capacitors, transformers, fluorescent light ballasts, electric motor coolants, hydraulic machinery, and heat transfer systems. PCB's are also found in voltage regulators, switches, circuit breakers, reclosers, and cables. 40 CFR Part 761, issued by EPA, outlines procedures for use, storage, and disposal of PCB and PCB items when they are removed from service. The rule does not require removal and disposal of many of these PCB items before their service lives have ended. (Chapter 3, Section 1, discusses use authorizations of various types of PCB Items.) 40 CFR Part 761 also establishes requirements for inspection, recordkeeping, marking, and transporting of PCB's. Unless otherwise specified, the terms "PCB", "PCB's", and "PCB items" used in this order refer to chemical substances and combinations of substances that contain at least 50 ppm of PCB's (on a dry weight basis).

b. It should be noted that Section 15 of the TSCA states that failure to comply with the EPA PCB regulations is unlawful. Section 16 imposes liability for civil penalties upon any person who violates these regulations, and the EPA Administrator has established by regulation (40 CFR Part 702) a procedure for citizens to file suit to remedy these violations. Section 16 also subjects a person to criminal prosecution for a violation which is knowing or willful. In addition, Section 17 authorizes Federal district courts to enjoin activities prohibited by these EPA regulations, and to compel the taking of actions required by these EPA regulations.

5. EXPLANATION OF CHANGES. This revision:

a. Contains additional restrictions on the use of PCB Items.

b. Provides guidance on the sale and transfer of PCB equipment and requires a bill of sale to be completed for all such transactions.

c. Explains the "cradle-to-grave" tracking system that uses an EPA shipping manifest when PCB items are transported off-site.

d. Contains a cleanup policy for PCB spills. It establishes numerical cleanup standards, reporting requirements, and recordkeeping requirements.

e. Requires a PCB Coordinator for each region and center.

6. DEFINITIONS. This list of definitions pertain to this order and is abstracted from 40 CFR Part 761. The more complete list of definitions in Part 761 may be a useful, but not an essential adjunct to this order.

a. Capacitor means a device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric.

b. 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).

c. Large high voltage capacitor means a capacitor which contains 1.36 kg (3 lbs) or more of dielectric fluid and which operates at 2000 volts or above (a.c. or d.c.).

d. Large low voltage capacitor means a capacitor which contains 1.36 kg (3 lbs) or more of dielectric fluid and which operates below 2000 volts (a.c. or d.c.).

e. Disposal means to discard, throw away, or otherwise complete or terminate the useful life of PCB items, or PCB contaminated materials, whether such action is intentional or accidental.

f. Double wash/rinse means a minimum requirement to cleanse solid surfaces (both impervious and nonimpervious) two times with an appropriate solvent or other material in which PCB's are at least 5 percent soluble (by weight). The procedure for conducting this type of cleanup is contained in 40 CFR 761.

g. Facility means any building, installation, structure, equipment, aircraft, vehicle, and property owned, leased, operated, or maintained for use by the FAA.

h. High-contact industrial surface means a surface in an industrial setting which is repeatedly touched, often for relatively long periods of time. Manned machinery and control panels are examples of high-contact industrial surfaces. High-contact industrial surfaces are generally of impervious solid material. In contrast, low-contact industrial surfaces include ceilings, walls, floors, roofs, roadways and sidewalks in the industrial area, unmanned machinery, concrete pads beneath electrical equipment, curbing exterior structural building components, indoor vaults, and pipes.

i. Impervious solid surfaces means solid surfaces which are nonporous and thus unlikely to absorb spilled PCB's within the short period of time required for cleanup of spills under this policy. Impervious solid surfaces include, but are not limited to metals, glass, aluminum siding, and enameled or laminated surfaces.

j. Incinerator means an engineered device, approved by the Regional Administrator of the EPA, which uses controlled flame combustion to thermally degrade PCB's and PCB Items. Examples of

such devices are rotary kilns, liquid injection incinerators, cement kilns, and high temperature boilers.

k. In or near commercial buildings means within the interior of, on the roof of, attached to the exterior wall of, in the parking area serving, or within 100 feet of a non-industrial non-substation 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).

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

m. Manned control center means an electrical power distribution control room where the operating conditions of a PCB transformer are continuously monitored during the normal hours of operation (of the facility) and where the duty engineers, electricians, or other trained personnel have the capability to generics a PCB transformer completely within 1 minute of the receipt of a signal indicating abnormal operating conditions such as an overtemperature condition or overpressure condition in a PCB transformer.

n. Mark means the descriptive name, instructions, cautions, or other information applied to PCB's and PCB items, or other objects subject to EPA regulations.

o. Municipal solid waste means garbage, refuse, sludge, wastes, and other discarded materials resulting from residential and non-industrial operations and activities, such as household activities, office functions, and commercial housekeeping wastes.

p. Network transformer means a transformer suitable for use in a vault to feed a variable capacity system of interconnected secondaries. These are typically used in substation applications to provide primary power to an installation or several installations. The secondary distribution of this power is accomplished with the use of a radial distribution system.

q. Nonimpervious solid surfaces means solid surfaces which are porous and are more likely to absorb spilled PCB's prior to completion of the cleanup requirements prescribed in this policy. Nonimpervious solid surfaces include wood, concrete, asphalt, and plasterboard.

r. Nonrestricted access areas means any area other than outdoor electrical substations and other restricted access locations. In addition to residential/commercial areas, these areas include unrestricted access rural areas (areas of low density development and population where access is uncontrolled by either man-made barriers or naturally occurring barriers, such as rough terrain, mountains, or cliffs).

s. On site means within the boundaries of a contiguous property unit.

t. Outdoor electrical substations means outdoor, fenced-off, and restricted access areas used in the transmission and/or distribution of electrical power. Outdoor electrical substations restrict public access by being fenced or walled off as defined under 40 CFR 761.30(1)(1)(ii). For purposes of this TSCA policy, outdoor electrical substations are defined as being located at least 0.1 km from a residential or commercial area. Outdoor fenced-off and restricted access areas used in the transmissions and/or distribution of electrical power which are located less than 0.1 km from a residential/commercial area are considered to be residential/commercial areas.

u. PCB and PCB's means 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.

v. PCB article means any manufactured article other than a PCB container that contains PCB's and whose surface(s) has been in direct contact with PCB's. PCB articles include capacitors, transformers, electric motors, pumps, pipes, and any other manufactured item:

(1) Which is formed to 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.

w. PCB article container means any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB articles or PCB equipment, and whose surface(s) has not been in direct contact with PCB's.

x. PCB container means any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCB's or PCB articles and whose surface(s) has been in direct contact with PCB's.

y. PCB equipment means any manufactured item other than a PCB container or a PCB article container, which contains a PCB article or other PCB article container. This includes microwave ovens, electronic equipment, fluorescent light ballasts, and fluorescent fixtures.

z. PCB item means any PCB article, PCB container, PCB article container, or PCB equipment that deliberately or unintentionally contains or has as a part of it any PCB or PCB's at a concentration of 50 parts per million (ppm) or greater.

aa. PCB transformer means any transformer that contains PCB's at a concentration of 500 parts per million (ppm) or greater.

bb. PCB-contaminated electrical equipment means any electrical equipment, including, but not limited to, transformers, capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable that contain 50-499 ppm of PCB's. (States may have established more stringent levels than Federal levels.) Oil-filled electrical equipment other than circuit breakers, reclosers, and cable whose PCB concentration is unknown must be assumed to be PCB-contaminated electrical equipment. (See paragraphs 304a(4)(a) and 306a(3)(d) for provisions permitting reclassification of electrical equipment containing 500 ppm or greater PCB's to PCB-contaminated electrical equipment.)

cc. Posing an exposure risk to food or feed means being in any location where human food or animal feed products could be exposed to PCB's released from a PCB item. A PCB item poses an exposure risk to food or feed if PCB's released in any way from the PCB item have a potential pathway to human food or animal

feed. EPA considers human food and animal feed to include items regulated by the U.S. Department of Agriculture or the Food and Drug Administration as human food or animal feed; this includes direct additives. Food or feed is excluded from this definition if it is used or stored in private homes.

dd. Radial transformer means a unit substation which has a single stepdown transformer and which has an outgoing section for the connection of one or more outgoing radial (stub end) feeders.

ee. Rupture of a PCB transformer or PCB capacitor means a violent or non-violent break in the integrity of a PCB Transformer caused by an overtemperature and/or overpressure condition that results in the release of PCB's.

ff. Significant exposure means any exposure of human beings or the environment to PCB's as measured or detected by any scientifically acceptable analytical method.

gg. Soil means all vegetation, soils, and other ground media, including sand, grass, gravel, and oyster shells. It does not include concrete and asphalt.

hh. Spill means both intentional and unintentional spills, leaks and other uncontrolled discharges where the release results in any quantity of PCB's 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. This policy applies to spills of 50 ppm or greater PCB's. The concentration of PCB's spilled is determined by the PCB concentration of the material spilled as opposed to the concentration of PCB's in the material onto which the PCB's were spilled. Where a spill of untested mineral oil occurs, the oil is presumed to contain greater than 50 ppm, but less than 500 ppm PCB's and is subject to the relevant requirements of this policy.

ii. Spill area means the area of soil on which visible traces of the soil can be observed plus a buffer zone of 1 foot beyond the visible traces. Any surface or object within the visible trace area or on which visible traces of the spilled material are observed is included in the spill area. This area represents the minimum area assumed to be contaminated by PCB's in the absence of precleanup sampling data and is thus the minimum area which must be cleaned up.

jj. Spill boundaries means the actual area of contamination as determined by postcleanup verification sampling or by precleanup sampling to determine actual spill boundaries. EPA

can require additional cleanup when necessary to decontaminate all areas within the spill boundaries to the levels required in this policy (e.g., additional cleanup will be required if postcleanup sampling indicates that the area decontaminated by the responsible party, such as the spill area as defined in this section, did not encompass the actual boundaries of PCB concentration).

kk. Standard wipe test means, for spills of high-concentration PCB (500 ppm or greater) on solid surfaces, a cleanup to numerical surface standards and sampling by a standard wipe test to verify that the numerical standards have been met. This definition constitutes the minimum requirements for an appropriate wipe testing protocol. The procedure for conducting this test is contained in the EPA regulations (40 CFR 761).

ll. Totally enclosed manner means any manner that will ensure that any exposure of human beings or the environment to any concentration of PCB's will be insignificant; that is, not measurable or detectable by any scientifically acceptable analytical method.

mm. Waste oil means any used products primarily derived from petroleum, which include, but are not limited to, fuel oils, motor oils, gear oils, cutting oils, and transmission fluids.

7. REQUESTS FOR INFORMATION. Questions regarding compliance with 40 CFR Part 761 that are not answered by this order can be addressed to Office of Environment and Energy or the Regional EPA Offices (See Appendix 1 for EPA addresses and telephone numbers). In addition, answers can be provided by calling the EPA Industry Assistance Office on the nationwide toll free number, 800-424-9065 (persons in the Washington, D.C., area can reach this office by dialing 554-1404).

8. FORMS AND REPORTS. An annual report (PCB Record Inventory, RIS 1050-5) is required. See paragraph 332a.

9. AUTHORITY TO CHANGE THIS ORDER.

a. The Administrator reserves the authority to approve changes which establish policy, delegate authority, or assign responsibility.

b. The Director of Environment and Energy may issue changes to this order for compliance with the latest EPA policy related to polychlorinated biphenyls. Changes in 40 CFR Part 761 that take effect after the issuance of this order shall take

precedence over any part of this order with which it corresponds or conflicts. The Office of Environment and Energy will advise the responsible FAA components, listed in paragraph 9, of such changes in 40 CFR Part 761 as soon as these changes are known.

c. Changes proposed by an organizational element within FAA must be submitted to AEE. AEE will oversee the coordination of the change. After proper coordination, AEE will forward the change to the appropriate approval authority and ensure final processing authority.

10. RESPONSIBILITIES. Compliance with the policies and procedures of this order is the responsibility of the offices, services, regions, and centers.

a. Regions and FAA centers are responsible for development of implementation procedures not otherwise detailed in this order, plus assignment of personnel and other resources necessary to carry out the provisions of this order within their respective areas of responsibility.

b. The System Maintenance Service and the Regional Airway Facilities Divisions are responsible for developing implementation procedures with the assistance of the FAA Depot and the Logistics Service and/or Regional Logistics Division covering inventorying, marking, storing, disposing, and transporting PCB's and PCB items. The Regional Airway Facilities Divisions and Sector offices are also responsible for submitting a fiscal year budget item for maintenance and disposal of hazardous substances.

c. The Office of Environment and Energy (AEE) is responsible for the overall review of FAA compliance with the provisions of 40 CFR Part 761, development of policies for implementing 40 CFR Part 761, provision of assistance to offices, services, regions, and centers in development of guidelines and procedures for their program areas, interpret policies established in this order in consultation with the responsible officials in the EPA, provide advice to responsible officials in FAA concerning changes in EPA policies relative to PCB's and PCB items in the National Airspace System (NAS), and other responsibilities as defined elsewhere. Copies of implementing instructions to be provided by FAA organizational elements will be reviewed for consistency with agency policy.

d. The Logistics Service (ALG) and its counterparts in the regions and centers are responsible for necessary logistic support to the NAS Transition and Implementation Service and the

Systems Maintenance Service, Centers, other Regional Divisions, and the FAA Depot for marking, storing, disposing, and transporting of PCB's and PCB items. They are also responsible for reviewing all procurement and disposal documents to ensure that no PCB's or PCB articles are imported or exported without a special EPA exemption.

e. The Occupational Health Division of the Office of Aviation Medicine (AAM-700) and Regional Aviation Medical Divisions, in their respective areas, are responsible for: reviewing reports received from the Regional/Center Occupational Safety and Health Managers on PCB handling; providing medical guidance in the development of criteria for the safe handling of PCB's and PCB items; establishing a program (including budget requirements) for periodic physical examinations of those persons who may or have had personal contact with PCB's; and performing medical monitoring in accordance with MGL #B-5-0060 (January 13, 1986). AAM-700 is also responsible for developing the FAA Respiratory Protection Program.

f. Regional/Center Occupational Safety and Health Managers are responsible for: reviewing field reports received from Sector/facility Occupational Safety and Health officers for evidence of unsafe or unhealthy PCB handling procedures; reporting those types of inadequate PCB handling procedures to their Regional Flight Surgeon; providing copies of instructions to FAA employees so that approved procedures can be followed; notifying the Federal Air Surgeon (AAM-1) within 72 hours of significant PCB exposures.

g. The Office of Budget should use this order as the basis for developing the annual call for estimates related to costs associated with compliance with 40 CFR Part 761.

11. POLICY. FAA will comply with all EPA procedures and policies of 40 CFR Part 761 and related orders, statutes, and regulations as well as state regulations. The FAA has been required to comply with regulations regarding the use, handling, storage, disposal, and transportation of PCB's and PCB items since 1978. State standards, which are often more stringent than Federal standards, must be complied with. Although the EPA allows the majority of PCB contaminated equipment to be used throughout its service life, it is advisable to reduce the number of PCB-tainted components wherever possible in order to avoid potential hazards and liabilities associated with its use.

12. PCB COORDINATOR. Each region and center and the Aviation Standards National Field Office shall designate an individual as

a PCB Coordinator, and shall always make the designee known to the Office of Environment and Energy (AEE-20). It will be the responsibility of the coordinator to maintain required records for inspection, testing, accidental spills/cleanup, storage, disposal, transportation, and sale of PCB Items, submit budget projections for the funding of PCB compliance measures, and to act as the point of contact for PCB-related questions/problems.

13. FUNDING AND BUDGET REQUEST PROCEDURES. Regional Airway Facilities Divisions and Sector offices shall submit a fiscal year budget item for the management and disposal of hazardous substances. The estimate shall cover yearly costs for testing, disposal (transportation, storage, and incineration), and replacement components. Normal operations and facilities and equipment budget procedures for current and future budget needs shall be followed. It is the responsibility of each region and center to submit a yearly budget to the Airways Facilities Program and Planning Branch on the costs associated with compliance with PCB regulations (40 CFR Part 761), as required in the Annual Call for Estimates portion of Order 2500.24Y.

a. Operations Budget Requirements. The requirements which shall be considered under the operations budget are:

(1) Marking,
(2) Reporting,
(3) Disposing,
(4) Transporting of PCB's and PCB Items, and
(5) Minor cleanup

NOTE: These are recurring costs associated with the continuance of compliance with PCB regulations.

b. Facilities and Equipment (F&E) Requirements. Include within the scope of any routine modernization or relocation projects the replacement of equipment containing PCB's and any environmental cleanup measures.

c. A-106 Budget Requests. The Federal EPA requires a semiannual reporting of pollution abatement projects. Each region and center shall report all PCB-related budget projections on EPA Form 3500-7, Federal Agency Pollution Abatement Plan. All forms shall be submitted semiannually to AEE-1 as is currently required. The A-106 will be used as a tracking mechanism to ensure adequate funds are requested to implement the required PCB compliance measures.

14.-199. RESERVED.

CHAPTER 2. EMERGENCY PROCEDURES

200. GENERAL. This chapter describes actions that can be taken to reduce the effects of leaks, spills, or the burning of materials containing PCB's. It also provides first aid procedures (paragraph 200g below) in the event of accidental contact with PCB's. Cleanup requirements for PCB spills is contained in paragraph 362.

a. Personal contact with PCB's, regardless of its concentration, shall be reported immediately to the designated PCB Coordinator and the Regional Flight Surgeon, the Manager, Occupational Health Division, AAM-700, or the Safety/Health Official and/or the Industrial Hygienist for the local facility, through established emergency phone numbers.

b. In joint use facilities, a timely notification of the possibility of evacuating any part of the facility shall be made to, and then coordinated with, the Air Traffic Manager or his/her representative.

c. The affected areas must be restricted during emergency situations, such as a PCB equipment rupture or fire where vaporization of PCB's could expose any person. The access restriction must be strictly enforced until decontamination is complete and air monitoring results indicate levels are below the established occupational limits for airborne PCB's as described in paragraph 201c.

d. FAA employees shall not participate in cleanup operations involving spills or PCB equipment fires, as discussed in paragraphs 200d and 200e. However, FAA employees may participate in the cleanup of a PCB leak if such cleanup can be accomplished without skin or eye contact with the PCB's. Commercial firms are available on a contract basis to clean up spills. If maintenance is required on the equipment in the area, personnel entering the area must wear protective clothing and respirators, as described in 200f(3)(a) and (b), to prevent skin and eye contact as well as inhalation of toxic vapors.

e. A PCB leak should be corrected as follows:

(1) Contain the liquid to prevent loss to sewer systems, navigable waterways, and streams. The liquid can be contained by prompt use of absorbent material such as sawdust, vermiculite, dry sand, clay, dirt, etc. It can also be trapped or removed by use of drip pans or trays.

(2) Notify FAA Regional PCB Coordinator.

(3) Ensure proper cleanup and removal of the PCB's in accordance with paragraph 362.

(4) Repair or replace the defective device.

f. In the event of a PCB spill or rupture:

(1) All personnel not directly involved in the cleanup or site assessment should leave the spill area.

(2) To prevent the accumulation of vapors, the spill area must be adequately ventilated (i.e., open doors, windows, operate fans, etc.).

(3) Only trained personnel wearing appropriate protective equipment shall enter the spill area. The Safety/Health Officer or the Industrial Hygienist for the facility shall be contacted to select the proper protective equipment for each situation.

(a) Clothing shall be disposable and shall prevent skin contact with the PCB's. Clothing that becomes saturated with PCB's shall be removed promptly and any contaminated skin areas shall be washed with soap and water.

(b) Respiratory protection, as described in 29 CFR 1920.134, is required following a PCB leak, spill/rupture or fire/visible smoke, and during decontamination procedures. The Occupational Safety and Health Administration (OSHA) is responsible for establishing workplace exposure standards or permissible exposure limits (PEL's) for FAA employees. The 8-hour time-weighted overall PEL for airborne PCB containing 54 percent chlorine is 0.5 milligrams per cubic meter of air. For PCB containing 42 percent chlorine, the standard is 1.0 milligrams per cubic meter of air. The limits of both PEL's can be exceeded during any 8-hour work shift, provided the 8-hour time-weighted average level is not exceeded. Respiratory protection is required until airborne levels of PCB can be determined and exposure monitoring indicates that the OSHA permissible exposure limits have not been exceeded. When specifically dictated by the facility's Safety/Health Officer or Industrial Hygienist, eye and respiratory protection (as defined in 29 CFR 1910.134, Respiratory Protection) shall be provided with respirators approved under 30 CFR 11 by the National Institute of Occupational Safety and Health or the Mine Safety and Health Administration (MSHA). Such respirators include:

1 A self-contained breathing apparatus with full facepiece operated in pressure demand or other positive pressure mode, and

2 A combination type C supplied air respirator with full facepiece operated in pressure demand or other positive pressure mode, with an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode.

(4) The spill shall be contained as stated in 200d(1). Additional measures such as blocking floor drains, containing water runoff, and controlling and treating any water or other liquids used during cleanup shall be taken as soon as possible to prevent contamination of sewer systems or streams.

(5) Contact the FAA Regional PCB Coordinator.

(6) Ensure that further spread of PCB contamination will not occur.

(7) Residues contaminated with PCB's (wiping cloths, absorbent material, used disposable protective clothing, etc.) shall be collected, placed in proper DOT-approved containers, marked as to contents, and provided proper storage prior to disposal.

(8) Contact state and regional EPA offices. If the spill is about to enter a nearby stream and/or navigable waterway (or has the potential to), inform the National Response Center (jointly operated by the U.S. Coast Guard and EPA) by telephone on (800) 424-8802.

(9) Ensure proper cleanup, removal, and disposal of PCB contaminated material in accordance with EPA or State requirements. Paragraph 362 contains Federal EPA cleanup levels for PCB spills. State standards may more stringent. FAA personnel are not to conduct cleanup actions; commercial firms are available on a contract basis to cleanup spills.

g. Fire/Visible Smoke. Fires involving PCB electrical equipment (transformers, etc.) can be responsible for the release of PCB's. PCB's released from PCB equipment in fire situations can become volatilized and converted into substances which are much more toxic than PCB. Extreme caution should be used in this situation to prevent exposure to these substances.

(1) All personnel should vacate the fire/smoke area.

(2) The area shall not be ventilated. Shut down related air handling equipment.

(3) Call the fire department and the designated Safety/Health Officer or Industrial Hygienist for the local facility.

(4) The fire department and/or the Safety/Health Officer shall assess the need for facility evacuation. (In joint use facilities, the Air Traffic Manager shall be consulted.)

(5) Contact FAA Regional PCB Coordinator.

(6) Contact the EPA/Coast Guard's National Response Center by telephone at (800) 424-8802.

(7) Contact State or regional EPA.

(8) Ensure that proper cleanup, removal, and disposal of contaminated material is conducted according to State or regional EPA requirements. Material may be contaminated by other than PCB and should be handled accordingly. FAA personnel are not to conduct cleanup measures. Commercial firms are available to conduct cleanup operations.

h. First-Aid Procedures.

(1) Ingestion. Consult a physician. Do not induce vomiting or give oily laxatives. If a large amount of PCB's was ingested, gastric lavage (i.e., getting one's stomach "pumped") is suggested.

(2) Skin. If PCB is splashed or spilled on the skin, remove contaminated clothing and wash skin thoroughly with soap and water. Hot PCB may cause thermal burns.

(3) Eyes. If eyes have come in contact with PCB, they shall be irrigated immediately with copious quantities of water for at least 15 minutes. A petroleum based ophthalmic ointment may be applied to the eye to relieve the irritating effects of PCB. Consult a physician immediately.

(4) Inhalation. Remove to fresh air. If respiratory irritation persists, consult a physician. (When electrical

equipment arcs over, PCB's or other chlorinated hydrocarbon dielectric fluids decompose to produce hydrochloric acid, a respiratory irritant.)

201. PRECAUTIONARY MEASURES. The storage, disposal and handling of PCB's and PCB items must be undertaken with extreme caution so that exposure to PCB's is minimized. Even at very low levels, PCB's have been determined to be hazardous to health. PCB's can enter the body through the lungs, mucous membranes, and skin. While PCB's have been identified as carcinogens, their safe handling is possible with the proper precautions.

a. Protective clothing and equipment. The worker's protective clothing and equipment shall be selected to prevent skin and eye contact with PCB's, and to control respiratory exposure to PCB vapors. The degree of protection required is dictated by the circumstances involved in a potential incident, including amount of fluid that could be spilled, duration of the spill, and location of the PCB equipment and spill. In any operation where workers may come into contact with PCB's, protective clothing impervious to PCB's shall be worn. Gloves, heavy overalls, boots, and bib-type aprons that cover boot tops shall be worn when handling PCB's to provide skin protection. A full suit of non-porous cloth may be more appropriate for spill cleanup activities.

b. Eye protection. Chemical safety goggles, face shields with goggles, or safety glasses with shields shall be worn during any operation in which worker's eyes may be exposed to PCB's.

c. Respiratory protection. In normal situations involving the operation and maintenance of PCB equipment (including PCB leaks), the PCB's in dielectric fluid will not vaporize in sufficient quantities to exceed the permissible exposure limit. However, each new type of work situation should be evaluated by the Safety/Health Officer or Industrial Hygienist to determine if the limit may be exceeded, so that respiratory protection as described in paragraph 200f(3)(b) will be used.

202.-299. RESERVED

CHAPTER 3. PROCEDURES

SECTION 1. AUTHORIZED USES, INSPECTION REQUIREMENTS, AND SERVICING CONDITIONS FOR PCB EQUIPMENT

300. RESPONSIBLE AGENT. 40 CFR Part 761 places certain responsibilities for compliance on the user/owner of the PCB item. For purposes of this order, it is not necessary to consider whether the FAA is the user or the owner but only to define who is "responsible." Responsibility is determined by consideration of the following four categories:

a. The FAA is responsible if it is or was previously the owner/operator of the PCB item at a FAA facility or originally purchased the PCB Item.

b. If a tenant at an FAA facility has a PCB item which they had purchased or obtained from a non-FAA source, the tenant is the responsible agent.

c. If non-FAA PCB items (such as power company transformers) are at an FAA facility, the owner of the item is the responsible agent.

d. If the FAA is operating a private facility, the FAA is responsible only if the item is FAA-owned or if the terms under which the FAA assumed operation of the facility gave the FAA maintenance responsibilities.

301. PCB ITEMS. PCB items (as defined in paragraph 7w) are in many FAA facilities. Most PCB's in the facilities are in dielectric fluids, either those that are categorized as PCB dielectric fluids or in non-PCB mineral oil dielectric fluids that have become contaminated in manufacturing or servicing operations. This section will discuss these PCB items, including any use restrictions, inspection requirements, and servicing conditions.

302. DIELECTRIC FLUIDS AND OTHER PCB FLUIDS.

a. Dilution of PCB fluids is prohibited. Dielectric fluids containing any PCB concentration less than 500 ppm that are mixed with fluids that contain 500 ppm PCB or greater must not be used as dielectric fluid in any electrical equipment. The entire such mixture must then be considered greater than 500 ppm PCB. [40 CFR 761.30(a)(2)(iv)].

b. The trade names of various PCB dielectric fluids are listed in Appendix 2, Fluids Containing PCB's. Representative dielectric fluids which do not contain PCB's are identified under the trade names listed in Appendix 3, Dielectric Fluids That Do Not Contain PCB's. These appendices are useful in determining transformer category and may limit the need for testing. (Testing is described in section 2 of this chapter.)

303. EXPOSURE RISK TO FOOD OR FEED PRODUCTS. "Posing an exposure risk to food or feed" means being in any location where human food or animal feed products could be exposed to PCB's released from a PCB item. A PCB item poses an exposure risk to food or feed if PCB's released in any way from the PCB item have a potential pathway to human food or animal feed. EPA considers human food and animal feed to include items regulated by the U.S. Department of Agriculture or the Food and Drug Administration as human food or animal feed; this includes direct additives. As such, 40 CFR 761 dictates that PCB's or PCB-contaminated items (transformers, capacitors, etc.) shall not be used or stored in any location where it may pose an exposure risk to food or feed.

304. TRANSFORMERS. Transformers in FAA facilities may be classified into one of three categories: PCB transformers (500 ppm PCB's or greater), PCB-contaminated transformers (50 - 499 ppm PCB's), and non-PCB transformers (less than 50 ppm PCB's).

a. PCB Transformers.

(1) Definition. PCB transformer means "any transformer that contains PCB at a concentration of 500 parts per million (ppm) or greater." Since mandatory inspections are only required for PCB transformers, there may be an incentive to convert PCB transformers to another category. A transformer must be assumed to be a PCB transformer if any of the following conditions exist:

(a) The nameplate or manufacturer's documentation indicates that it contains PCB dielectric fluid and there is no test data to indicate that the concentration of PCB's is less than 500 ppm.

(b) There is reason to believe that the transformer contains PCB dielectric fluid and there is no test data.

(c) The transformer dielectric fluid has been tested and found to contain 500 ppm PCB's or greater.

(d) The transformer does not have a nameplate or manufacture's documentation, there is no information available to indicate the type of dielectric fluid in it, and the transformer has not been tested to ascertain that it contains less than 500 ppm.

(2) Use conditions.

(a) The use and storage for reuse of PCB transformers that pose an exposure risk to food or feed (as defined in paragraph 7z.) is strictly prohibited.

(b) All PCB transformers (500 ppm and greater) shall be registered with the local fire department having primary jurisdiction over the facility. Information concerning the location of PCB transformers, the principle constituent of the dielectric fluid in the transformers (e.g. PCB's, mineral oil, or silicone oil), and the name and phone number of the FAA Regional and/or Sector coordinator shall be provided to the fire personnel.

(c) All combustible materials (e.g., paints, solvents, paper, etc.) stored within a PCB transformer enclosure or within 16 feet of an unenclosed PCB transformer shall be removed except when PCB transformers and stored combustibles are separated by a wall which would act to reduce the risk of starting or feeding a fire.

(d) Any PCB transformer fire-related incident shall be immediately reported to the EPA/Coast Guard's National Response Center by calling 1-800-424-8802.

(e) The following actions apply ONLY to those PCB transformers located "in or near commercial buildings" (non-industrial non-substation buildings); i.e., in or within 100 feet of an airport terminal building:

1 The installation of PCB transformers (which have been placed in storage for reuse or which have been removed from another location) is prohibited.

2 Higher voltage network PCB transformers. Effective October 1, 1990, the use of higher secondary voltage network PCB transformers (480 volts and above, including 480/277 volt systems) was prohibited. These transformers shall be removed and disposed of.

3 Lower voltage network PCB Transformers and lower voltage radial PCB Transformers. Effective October 1, 1990, all lower secondary voltage network PCB transformers (480 volts and below, including 480/277 volt systems) and lower secondary voltage radial PCB transformers shall be equipped with electrical protection to avoid transformer failures caused by high current faults. Type of protection: Current-limiting fuses or other equivalent technology shall be used to detect sustained high current faults and provide complete deenergization of the transformer within several tenths of a second, before transformer failure occurs. Accepted engineering practices shall be used.

4 Higher voltage radial PCB transformers. As of October 1, 1990, all higher voltage radial PCB Transformers (480 volts and above, including 480/277 volt systems) shall be equipped with electrical protection to avoid transformer failures caused by low current faults. Type of protection: These transformers shall use pressure and temperature sensors and disconnect equipment which would either automatically deenergize the transformer within 1 minute of receipt of the signal indicating an abnormal condition (e.g., over pressure or overtemperature in the transformer) or manually deenergize the transformer from a manned on-site control center. The manually deenergized method must also deenergize the transformer within 1 minute of receipt of an audio or visual signal indicating an abnormal condition. If the automatic operation is selected, and a circuit breaker is used for disconnection, it shall have the capability to be manually opened if needed.

(3) Inspection.

(a) Visual inspections of PCB transformers for leaks should be only as complete as safely possible. The inspection must include investigation for any leak of dielectric fluid on or around a transformer. The extent of the inspection will vary, depending on the physical constraints of each transformer installation. No visual inspection should require an electrical shutdown of the transformer being inspected. Transformers that require electrical isolation (shutdown) to be inspected thoroughly (due to safety precautions, enclosures, etc.) may be inspected as completely as possible without disconnecting the transformer. Future inspections should then be coordinated, when possible, with equipment outages from the power system so that more thorough inspections can be completed.

(b) Frequency of inspection. Each PCB transformer in use, or stored for re-use, shall be visually

inspected at least once every three months, unless the transformer meets criteria, described in (c) below, for reduced frequency of inspection. The quarterly inspections may take place any time during the three-month periods (January-March, April-June, July-September, and October-December) as long as there is a minimum of thirty days between inspections. (Refer to the chart below).

(c) Reduced frequency of inspection. The frequency of inspections can be reduced from at least once every three months to at least once every twelve months for PCB transformers that utilize either of the risk reduction measurements described below:

1 A PCB transformer which has impervious, undrained secondary containment capacity of at least 100 percent of the total dielectric fluid volume of all transformers so contained, or

2 A PCB transformer which has been tested and found to contain less than 60,000 ppm PCB's (after three months of in service use if the transformer has been serviced for purposes of reducing the PCB concentration).

(d) These inspections may take place any time during each calendar year as long as there is a minimum of 180 days between inspections.

Transformer Inspection Schedule:

PCB Concentration	Inspection Required	Frequency
50 - 499 ppm	No	N/A
500 - 60,000 ppm	Yes	every 12 months
Greater than 60,000 ppm	Yes	every 3 months
500 ppm and greater plus secondary containment of the transformer.	Yes	every 12 months

(e) The inspection program is designed to detect leaks and prevent PCB's from entering the environment. Follow-up maintenance activities to repair a leak are required only if corrective action is necessary to stop the leak. EPA recognizes that some small leaks of dielectric fluid are unavoidable in the operation of a transformer and repairs are not always required to

stop a leak. A leak of dielectric fluid which has run off or is about to run off the external surface of a PCB transformer clearly needs repair to the transformer to prevent further leaking or replacement of the transformer. A leak of dielectric fluid which does not form a run or drip, i.e., sweat or a weep, and does not require repair to prevent further leaking, only requires proper cleanup.

(f) All leaks must be cleaned up within 48 hours of discovery and the PCB contaminated materials properly disposed of in a timely manner in accordance with the disposal requirements in section 7. Leaks must be cleaned up in accordance with the PCB cleanup requirements in paragraph 362. If dielectric fluid is actively leaking, the leak must be contained to prevent the PCB's from entering the environment or exposing humans to the PCB's. Until appropriate action is completed, the PCB transformer must be inspected daily to verify containment of the leak. Trenches, dikes, buckets, and pans are examples of proper containment measures (see paragraph 200f(4)).

(g) Records of inspection and maintenance history shall be maintained by those facilities having recordkeeping responsibilities (see section 4) for at least 3 years after disposal of the equipment and shall be made available for inspection upon EPA request (OMB Control Number 2070-0003). Such records shall contain the following information for each PCB transformer:

1 Its location.

2 The date of each visual inspection and the date that a leak was discovered, if different from the inspection date.

3 The person performing the inspection.

4 The location of any leak(s).

5 An estimate of the amount of dielectric fluid released from any leak.

6 The date of any cleanup, containment, repair, or replacement.

7 A description of any cleanup, containment, or repair performed.

8 The results of any containment and daily inspection required for uncorrected active leaks.

(4) Servicing. The servicing of any PCB transformer is prohibited unless the transformer is being converted to a transformer that is classified as PCB-contaminated electrical equipment or to a non-PCB transformer.

(a) Converting a PCB transformer to PCB-contaminated electrical equipment or to a non-PCB transformer: A PCB transformer may be converted to PCB-contaminated electrical equipment or to a non-PCB transformer by draining, refilling, and/or otherwise servicing the transformer. In order to be reclassified, the transformer's dielectric fluid must contain less than 500 ppm PCB's (for conversion to PCB-contaminated electrical equipment), or less than 50 ppm PCB's (for conversion to a non-PCB transformer), after a minimum of three months of in-service use subsequent to the last servicing conducted for the purpose of reducing the PCB concentration in the transformer. "In-service use" means that the transformer is used electrically under loaded conditions that raise the temperature of the dielectric fluid to at least 50 degrees centigrade.

NOTE: The EPA Assistant Administrator for Pesticides and Toxic Substances may grant approval for the use of alternative methods that simulate the loaded conditions of in-service use. Requests for using alternative conditions must demonstrate that these conditions result in equivalent or greater release of PCB's from internal components of the equipment into the dielectric fluid as would occur three months of in-service use.

(b) All electrical fluids, regardless of PCB concentration, removed during the reclassification of a PCB transformer must be captured and disposed of in accordance with the requirements of section 7. Under no circumstances shall PCB fluids be reused.

b. PCB-contaminated transformers and electrical equipment (50-499 ppm PCB's).

(1) Definition. PCB-contaminated electrical equipment means any electrical equipment, including but not limited to, transformers, capacitors, circuit breakers, reclosers, voltage regulators, switches, electromagnets, and cable that contain 50-499 ppm PCB's. Oil-filled electrical equipment other than circuit breakers, reclosers, and cable whose

PCB concentration is unknown must be assumed to be PCB-contaminated electrical equipment.

(2) Use Conditions. There are no time restrictions for use, or storage for use, of transformers that are PCB-contaminated electrical equipment.

(3) Inspection. There are no EPA-imposed mandatory inspection requirements, but a periodic visual inspection for leaks should be conducted as an adjunct to normal inspection and maintenance of equipment at FAA facilities.

(4) Servicing Conditions.

(a) Transformers classified as PCB-contaminated electrical equipment may only be serviced (including rebuilding) with dielectric fluid containing no PCB's.

(b) Converting a transformer from PCB-contaminated electrical equipment to a non-PCB transformer. A transformer that is classified as PCB-contaminated electrical equipment may be reclassified to a non-PCB transformer in the same manner used to convert a PCB transformer to a non-PCB transformer described in paragraph 304a(4)(a).

(c) PCB fluid concentrations of 50 ppm or greater which are removed during any servicing activity must be captured and disposed of in accordance with section 7.

305. CAPACITORS.

a. Definitions.

(1) "Large high voltage capacitors" means a capacitor which contains more than 1.36 kg (3 lbs) of dielectric fluid and which operates at 2000 volts (a.c. or d.c.) or above;

(2) "Large low voltage capacitors" means a capacitor which contains 1.36 kg (3 lbs) or more of dielectric fluid and which operates BELOW 2000 volts (a.c. or d.c.).

(3) "Small capacitor" means a capacitor which contains less than 1.36 kg (3 lbs) of dielectric fluid.

b. General.

(1) It should be noted that virtually all capacitors manufactured prior to 1978 were filled with PCB fluid at a

concentration near 100 percent, and that capacitors manufactured after 1978 did not use PCB fluid. Therefore, it is easy to categorize which capacitors contain PCB's and to estimate the PCB concentration without testing. The EPA prohibits the use of large PCB capacitors (500 ppm or greater PCB) in areas posing an exposure risk to food or feed, and in areas other than "restricted-access" areas. See 40 CFR 761.30(l)(1)(i) and (ii).

(2) A contained and restricted-access indoor facility is any installation that has a roof, walls, and floors that will contain any release of PCB's within the indoor location. This type of installation prevents precipitation from reaching the large PCB capacitors and has controlled access to these PCB capacitors. A building which prevents PCB releases from escaping, including escape through drains or expansion joints, would be acceptable. This type of contained and restricted-access installation allows proper cleanup of PCB's with very little exposure to humans or the environment.

(3) A restricted-access outdoor facility is any outdoor fenced or walled-in facility that restricts public access to the enclosed equipment.

c. PCB Large High Voltage Capacitors and PCB Large Low Voltage Capacitors.

(1) Use Conditions.

(a) These capacitors are prohibited from use or storage for reuse, after October 1, 1988, unless the capacitor is used, or intended for reuse, within a restricted access-outdoor facility or in a contained and restricted-access indoor facility as defined in 305b(2) above.

(b) Non-PCB capacitors shall be used whenever a capacitor is serviced or replaced.

(2) Inspection. Though there are no EPA-imposed mandatory inspection requirements, periodic visual inspections for leaks should be conducted as an adjunct to normal inspection and maintenance of equipment at FAA facilities.

(3) Servicing Conditions. There are no servicing restrictions since these capacitors are not designed for draining and refilling.

d. Small Capacitors.

(1) Use Conditions. PCB's are rarely released from small capacitors (as defined above) and EPA does not recommend that any risk reduction measures be taken with regard to small capacitors.

(2) Inspection. Though there are no EPA-imposed mandatory inspection requirements, periodic visual inspections for leaks should be conducted as an adjunct to normal inspection and maintenance of equipment at FAA facilities.

(3) Servicing Conditions. There are no servicing restrictions since these capacitors are not designed for draining and refilling.

306. ELECTROMAGNETS, SWITCHES, AND VOLTAGE REGULATORS.

a. General. Electromagnets are not commonly used in FAA facilities, but voltage regulators and switches (including sectionalizers and motor starters) are frequently used to control, transmit, and distribute electric power efficiently. Though most oil-filled electromagnets, switches, and voltage regulators were not designed to contain PCB's and most contain less than 50 ppm PCB's, these components must be considered to be PCB-contaminated electrical equipment unless the actual PCB concentration of the oil is known.

(1) Use conditions.

(a) Any concentration of PCB's may be used in oil filled switches, voltage regulators, and electromagnets, but there are servicing restrictions described in paragraph 306a(3), if the responsible agent knows the concentration and cannot consider the equipment to be PCB-contaminated electrical equipment.

(b) There are no restrictions on the use, or storage for reuse, of any oil filled switches or voltage regulators during the service life of such equipment.

(c) There are no restrictions on the use, or storage for reuse, of electromagnets that are classified as PCB-contaminated electrical equipment.

(2) Inspection. Although there are no EPA-imposed mandatory requirements, periodic visual inspections for leaks from oil-filled switches, voltage regulators, and other

oil-filled electromagnets should be conducted as an adjunct to normal inspection and maintenance of equipment at FAA facilities.

(3) Servicing Conditions.

(a) Servicing (including rebuilding) of any electromagnet, switch, or voltage regulator with PCB fluid is prohibited.

(b) Electromagnets, switches, and voltage regulators classified as PCB-contaminated electrical equipment may be serviced (including rebuilding) only with dielectric fluid containing no PCB's.

(c) PCB's removed during any servicing activity must be captured and disposed of in accordance with the requirements of section 7.

(d) Converting electromagnets, switches, and voltage regulators. An electromagnet, switch, or voltage regulator with a PCB concentration of at least 500 ppm may be converted to PCB-contaminated electrical equipment or to a non-PCB classification, and PCB-contaminated electrical equipment may be reclassified to a non-PCB classification by using the same methods described in paragraph 304b [see also 40 CFR 761.30 (h)(2)(v)]. In general, converting to PCB-contaminated or non-PCB status is not recommended due to expense and difficulty involved.

307. CIRCUIT BREAKERS, FUSES, FILTERS, RECLOSERS, AND CABLE. These items are types of oil-filled electrical equipment that, generally, are not designed to contain PCB's. Available data indicate that a small percentage of such equipment contains some PCB's as a consequence of past servicing and manufacturing practices. All such equipment may be assumed to contain less than 50 ppm PCB's, to have no use or disposal restrictions, and to be subject to a servicing restriction that limits servicing to use of dielectric fluid containing no PCB's. If any such equipment is known to contain at least 50 ppm PCB's, there are no use restrictions, but it is subject to the same servicing conditions and disposal requirements that apply to PCB-contaminated electrical equipment, such as, electromagnets, switches, and voltage regulators (paragraph 306a(3)). Inspection procedures are limited to periodic visual inspection during normal inspection and maintenance of other equipment.

308. HEAT TRANSFER SYSTEMS. The use of heat transfer systems that have contained PCB's is prohibited.

309. HYDRAULIC SYSTEMS. The use of hydraulic systems that have contained PCB's is prohibited.

310.-314. RESERVED

SECTION 2. TESTING

315. TESTING REQUIREMENTS. Testing is required to ensure proper storage and disposal of PCB items. Testing can reduce the need for, or frequency of, EPA-mandated inspections and can eliminate unnecessary fire department coordination and emergency procedures. Tested items shall be labeled in accordance with section 3. Testing shall be conducted in the following manner:

a. Transformers and other electric equipment containing oil-type dielectric (voltage regulators, switches, reclosers, circuit breakers). EPA does not require that transformers be tested to determine the PCB concentration of the fluid. In the absence of a test, EPA requires that certain assumptions be made about the transformer. If the nameplate indicates that the transformer contains PCB dielectric fluid, or if there is any reason to believe that the transformer contains PCB dielectric, then the transformer must be assumed to be a PCB transformer. A transformer designed to use mineral oil dielectric fluids must be assumed to be contaminated with 50 to 499 ppm PCB until tests prove otherwise.

b. Hydraulic equipment and heat transfer equipment. EPA regulations [40 CFR 761.30 (d) and (e)] require that all hydraulic equipment and oil-filled heat transfer equipment be tested to determine if it contains greater than 50 ppm PCB.

c. Capacitors. Capacitors are normally sealed and not easily tested. If a capacitor was manufactured after 1978, it will state on the nameplate that it does not contain PCB's. All other capacitors should be assumed to contain PCB's unless verified by the manufacturer as non-PCB.

d. Records of the test results shall be kept at the nearest responsibly manned FAA facility. Recordkeeping requirements for test results are contained in section 4.

e. Testing to measure the concentration of PCB's shall be performed by a laboratory qualified to test PCB's. Contact regional EPA office for assistance in finding local laboratories and proper sampling methods.

316.-319. RESERVED.

SECTION 3. MARKING

320. MARKING REQUIREMENTS.

a. Marking shall be used to ensure proper inspection, storage, disposal, and sale of PCB items. All items containing, or suspected of containing, PCB's shall be tested as described in paragraph 315 and then marked in accordance with this section. (The labels to be used are pictured in figures 3-2 through 3-5.)

(1) The following marking procedure shall be used:

(a) Items containing more than 499 ppm of PCB's shall be labeled "Caution Contains PCB's".
(b) Items containing 50 - 499 ppm of PCB's shall be labeled "PCB-Contaminated"; and
(c) Items containing less than 50 ppm of PCB's shall be labeled "Certified".

(2) Figure 3-1 details the PCB marking requirements.

b. All PCB transformer (500 ppm or greater) locations shall be labeled with the "Caution Contains PCB's" mark as illustrated in Figure 3.2 (e.g., doors, hallways, fences, and other means of access to PCB transformers).

c. Equipment housing PCB capacitors containing more than 3 lbs. of dielectric fluid shall be labeled "Caution Contains PCB's" on an exterior side panel. No label is required on each of the small capacitors containing less than 3 lbs. of dielectric fluid.

d. Each storage area used to store PCB's and PCB items for disposal shall be labeled with the "Caution Contains PCB's" mark.

e. Transport vehicles shall be labeled on each end and side if they are loaded with PCB containers that contain more than 45 kg (99.4 lbs) of liquid PCB's or with one or more PCB transformers. In addition, one label is required for transport vehicles that contain PCB items and PCB containers with more than 45 kg (99.4 lbs) of liquid PCB's in concentrations of 50 to 499 ppm.

f. Where one or more large PCB high voltage capacitors are installed in a protected location (i.e., on a power pole, in a structure, or within a fence) the pole, structure, or fence shall be labeled and a record identifying the PCB capacitors shall be maintained. If these procedures are followed, the individual capacitors do not have to be marked until they are removed from service.

g. Where the label illustrated in figure 3-2 is specified but the PCB article or PCB equipment is too small to accommodate the smallest permissible size, the label illustrated in figure 3-3 may be used instead.

FIGURE 3-1. TSCA PCB MARKING REQUIREMENTS* (40 CFR 761.40)

Item	Marking Requirements
Transformers	Mark all PCB** transformers which are in service or in storage. NOTE: Marking of PCB-contaminated transformers is recommended but not required
Transformer Enclosures (for equipment with 500 ppm or greater PCB)	Owners must mark the outside of all PCB** transformer enclosures (vault or machinery room doors, fences or other means of access (except for grates and manhole covers) with the PCB mark ML (40 CFR 761.45). The mark must be placed so it is easily read by firmen responding to a fire.
Capacitors - Large High Voltage	Mark all PCB** large high voltage (LHV) capacitors which are in service or in storage. If one or more PCB LHV Capacitors are installed in a protected location such as a pole or behind a fence, then the pole or fence shall be marked and a record identifying the PCB LHV capacitor shall be maintained at the protected location.
Capacitors - Large Low Voltage	Mark all PCB large low voltage (LLV) capacitors removed from service and in storage for disposal
Capacitors - Small	After 1 JUL 1978, manufacturers must mark "NO PCBs"
Electric motors, other Heat transfer system & Hydraulic systems	For each of these items, mark if coolant or fluid has a PCB concentration of 50 ppm or greater
Equipment containing a PCB** Transformer OR PCB** LHV Capacitors	Mark all such equipment which is in service or in storage.
PCB Containers	Mark containers which fall into categories listed above, which contain cleanup debris (soil, rags, etc.), or which contain liquid with a PCB concentration of 50 ppm or greater.
Storage Areas	Mark all storage areas containing PCBs or PCB items
Transport Vehicles	Mark vehicle on all four sides if loaded with more than 45 kg (99.4 lbs) of fluid containing 50 ppm or greater PCBs OR one or more PCB** transformers.
All other items	No marking requirements

* Additional marking required prior to transportation
** Containing 500 ppm or greater PCBs.

h. All labels required by this section must be placed in a position on the exterior of the PCB items or transport vehicle so that the labels can be easily read by persons inspecting or servicing the marked PCB items or transport vehicle.

321. LABELING DESIGN. Labels shall meet the following designs outlined below. All labels shall be sufficiently durable to equal or exceed the life of the PCB item (including time in storage for disposal).

a. The "Caution Contains PCB's" mark, in figure 3-2, shall have letters and striping on a white or yellow background. The mark shall be at least 15.25 cm. (6 inches) on each side. Where the mark is too large to be accommodated on the equipment, a smaller mark, in figure 3-3, may be used which is 2 inches on each side.

b. The "PCB-contaminated" mark, figure 3-4, shall have letters and striping on yellow background. The mark shall be at least 15.25 cm. (6 inches) on each side.

c. The "Certified" mark, figure 3-5, shall have letters and striping on a blue background. The mark shall be at least 15.25 cm. (6 inches) on each side.

d. Labels may be obtained from sources recommended by local EPA regional offices or from commercial label suppliers.

322. MARKING UNIDENTIFIED ITEMS. If an item does not have a name plate, or other information from which one would know or could infer the PCB concentration to determine whether or not it requires marking, one should use the assumptions on PCB concentration discussed in paragraph 320 to determine marking requirements.

323.-329. RESERVED.

SECTION 4. RECORDS AND REPORTS

330. GENERAL RECORDKEEPING. Records shall be kept at each facility for the inspection, storage, disposal, and sale of PCB items. Inspections and records shall be performed by the field organization which performs regular maintenance on this equipment. The requirements concerning EPA inspection and maintenance records only apply to PCB transformers.

a. Annual Report. By February 15 of each year, an annual report shall be submitted to AEE-1 which shall contain

FIGURE 3-2. THRU 3-5. PCB LABELS

FIGURE 3-2. CAUTION CONTAINS PCBS
(Greater than 499 ppm)

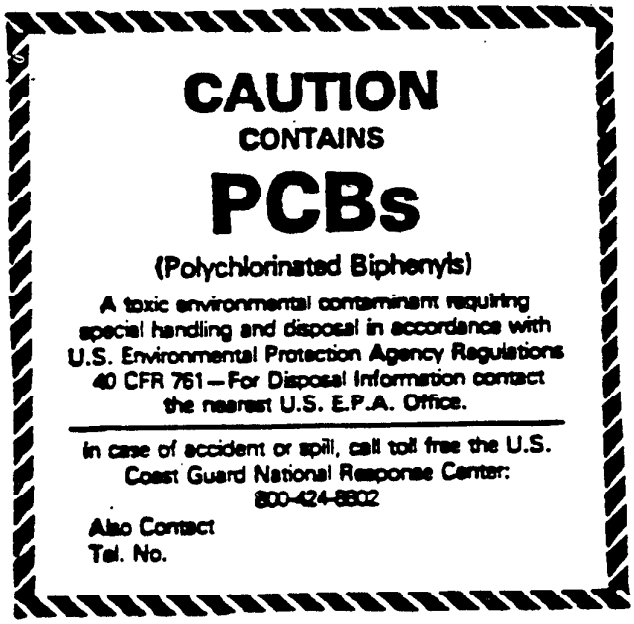


FIGURE 3-3. CAUTION CONTAINS PCBS
(Greater than 499 ppm)

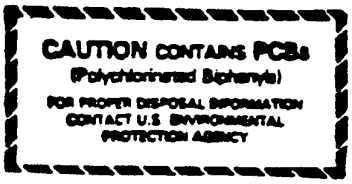


FIGURE 3-4. PCB CONTAMINATED
(50-499 ppm)

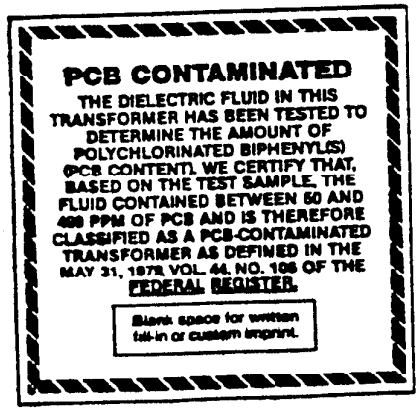
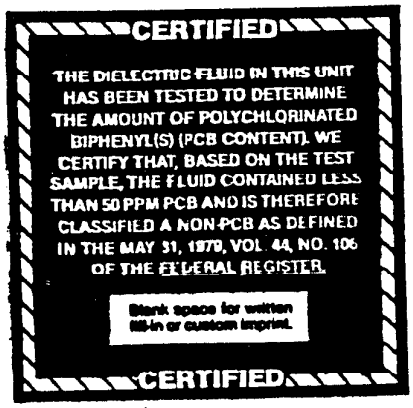


FIGURE 3-5. CERTIFIED
(Less than 50 ppm)



information on the disposition of PCB items maintained by each facility during the previous year that has on hand PCB containers containing at least 45 kilograms (99.4 pounds) of PCB fluid, or one or more PCB transformers, or at least 50 PCB large high voltage capacitors and/or large low voltage capacitors. Records shall be maintained on all PCB disposal activity, however, an annual report for AEE-1 is not required if disposal activity totals less than 45 kilograms in 1 year.

Figure 3-6 contains an example of the type of PCB inventory record that would satisfy the requirement. Reports shall contain the reports identification symbol (RIS) number reflected in the subject line of this order. The PCB inventory record shall contain the following information:

(1) The dates when the PCB Items are removed from service, placed in storage for disposal, placed into transport for disposal, or sold. The quantities of the PCB's and PCB Items shall be identified using the following breakdown:

(a) Total weight in kilograms of PCB's and of PCB items, including the identification of the contents, such as liquids and capacitors. Note that any requirements for weights in kilogram of PCB's may be calculated values, if the internal volumes of containers and transformers is known and is included in the reports together with any assumptions on the density (i.e., the "specific gravity") of the fluid contained in the containers or transformers.

(b) Total number of PCB transformers and total weight in kilograms of PCB's contained in the transformers.

(c) Total number of PCB large high and large low voltage capacitors.

PCB RECORD OF INVENTORY

Date: As of _____

Installed				Storage			Transferred[1/]			Disposal			
PCB Item Nomenclature NSN No.	Quantity Each	Total Liquid Weight PCBs (Kgs)	Facility Location Type, Number	Date Stored	Total Liquid Weight PCBs (Kgs)	Storage Location	Date Transferred	Total Liquid Weight PCBs (Kgs)	Name, Address Transfer Company, Driver Name	Date Received	Date Disposed	Total Liquid Weight PCBs (Kgs)	Name, Address Disposal Facility

1/ Transfer of PCBs or PCB Items require a Bill of Lading accompanying the shipment with sufficient copies (6 part Manifest) so that

(a) Each transfer driver signs the Bill of Lading and keeps one copy

(b) Person receiving PCB shipment at storage or disposal facility signs all copies of the Bill of Lading; distributes one copy to driver, one copy to originator of shipment; retains one copy.

Figure 3-6 PCB INVENTORY RECORD

(2) For PCB's and PCB items removed from service, the location of the storage facility and the name of the owner or operator of the facility.

(3) The total quantities of PCB's and PCB items remaining in service at the calendar year, using the same breakdown as 332a(1),(b), and (c) above.

c. Records and documents shall be maintained in the Sector, Center or airport office where the facility is located if the office is normally occupied at least 8 hours a day, and at the next higher echelon if not occupied at least 8 hours a day. Copies of this inventory shall be forwarded to the appropriate Regional or Center that has the responsibility for the administration of this program.

d. Records shall be maintained for at least five years after the facility ceases to use or to store PCB's or PCB items in the prescribed quantities.

e. These records and documents shall be available for inspection by authorized representatives of the EPA. If records and documents are not kept at the facility where PCB's or PCB items are used or stored, the facility should know the identity of the office that is maintaining records.

f. In addition to the following information required in this section, all documents, correspondence, and data concerning PCB's that are received by the FAA facility from any state or local government agency shall be kept and maintained at the office that has that assigned responsibility.

331. RECORDS FOR SALE OF PCB ITEMS.

a. If a Region chooses to sell excess PCB equipment, a bill of sale shall be completed for any transaction involving the sale of a PCB item. The same recordkeeping requirements contained in paragraph 332 shall be followed for the sale of PCB items. The guidance in this section and in Section 9, Sale of PCB Equipment, is to provide measures to ensure safe and responsible handling of PCB Equipment. However, PCB liability ultimately cannot be sold, transferred, or given away.

b. The bill of sale shall contain the following information:

(1) Buyer name, company name, address, and telephone number;

(2) Description of the PCB Item(s) sold;
(3) Number of PCB Items sold;
(4) Identification number of each PCB Item; and
(5) Signatures of the buyer and FAA representative involved in the sale.

c. Figure 4-1 in section 9 contains an example of a bill of sale that would satisfy the above requirements.

332. PCB WASTE DISPOSAL RECORDS AND REPORTS. For PCB waste disposal, the EPA also requires a tracking system, described in 40 CFR 761-Subpart K, which is similar to the "cradle-to-grave" tracking system for hazardous wastes required by EPA's regulations under the Resource Conservation and Recovery Act (RCRA). There are four parts to the system:

a. Notification. (40 CFR 761.205) Those PCB waste handlers that generate (and also have an on-site, long-term PCB storage facility), dispose, commercially store, or transport PCB wastes are required to notify the EPA of such activities.

b. Manifesting. (40 CFR 761.207) Before transporting or allowing transport of PCB wastes (50 ppm PCB or greater) off-site, all generators must manifest their waste using EPA Form 8700-22, the Uniform Hazardous Waste Manifest.

(1) On the manifest, the generator designates the EPA-permitted storage or disposal facility that will receive the waste.

(2) If the State in which the receiving facility is located also has its own version of the manifest, then that version is to be used instead of the EPA form.

(3) At least four copies of the manifest are required for each shipment:

(a) The generator's original
(b) A copy for each transporter in the chain
(c) A copy for the receiving facility and
(d) A copy for the receiving facility to sign and return to the generator.

NOTE: Some States also require a copy for the State receiving the wastes and a copy for the state in which the shipment originated.

(4) To obtain copies of the Uniform Manifest (EPA Form 8700-22), contact your PCB or hazardous waste transporter, State environmental agency, or EPA regional office (see Appendix 1).

c. EPA Identification Number. (40 CFR 761.202) Generators are to include their EPA Identification Number on the Uniform Manifest. Each Federal generator is to use the two-character State abbreviation designated by the U.S. Postal Service, followed by that facility's 10-digit General Service Administration Real Property Number.

d. Recordkeeping. (40 CFR 761.208-218) Manifest reports are to be retained for three years. Also, refer to EPA regulations concerning: exception reporting, Certificates of Disposal, unmanifested waste reports, and annual documents and reports.

333. PCB MANAGEMENT CHECKLIST. Appendix 4 contains a "PCB Management Checklist" to be used as a self-audit of compliance with 40 CFR 761. This checklist shall be completed concurrently with the annual report required by paragraph 332(a) and then kept with other PCB records at the facility.

334-339. RESERVED

SECTION 5. STORAGE

340. APPROVED STORAGE.

a. Storage of PCB items shall be avoided whenever possible. FAA facilities are not required to establish or construct storage areas. Whenever possible, alternative storage areas shall be used. Approved storage may be provided through inquiry to the following:

(1) Existing military installations
(2) Local utility companies
(3) Local manufacturers (General Electric, Westinghouse, etc.)
(4) State, county, and local government agencies
(5) Approved commercial facilities (See Appendix 1 for list of EPA-approved storage/disposal facilities)

b. If PCB items must be stored on site, the proceeding requirements shall be followed:

341. LONG TERM STORAGE. Long-term storage means the storage of PCB items for over 30 days but not exceeding one year. PCB items

that are not disposed of within the 1-year deadline will be subject to penalty fees imposed by the EPA. Sufficient lead-time is necessary in order to process disposal documents so that such liabilities can be avoided. Storage of PCB items shall meet the requirements listed in this paragraph. Storage facilities shall meet the specifications contained in paragraph 342.

a. All PCB items must be inspected for leaks every 30 days.

b. Records must be kept on the identity of each PCB item received at the storage facility. Each container must bear a notation indicating the contents of the container.

c. An inspection log shall be kept in each storage facility which indicates the date each PCB item was placed into storage and when disposal occurred.

342. LONG TERM STORAGE FACILITIES.

a. Long term storage facilities must meet the following requirements:

(1) The storage facility shall have adequate roof and walls to prevent precipitation from reaching the stored PCB items. It shall have an adequate floor which has continuous curbing with a minimum six-inch high curb. The floor and curbing shall be constructed of continuous smooth and impervious materials such as Portland cement concrete or steel which will prevent or minimize penetration of PCB's. No drain valves, floor drains, expansion joints, sewer lines, or other openings which would permit the flow out of the curbed area are allowed.

(2) The floor and curb must provide a containment volume equal to at least twice the internal volume of the largest PCB article or PCB container stored therein, or 25 percent of the total internal volume of all PCB articles or PCB containers stored therein, whichever is greater.

(3) The storage area must be located at a site which is at or above the 100-year flood water elevation.

b. Any PCB item stored for disposal shall be removed from storage and disposed of within one year from the date when it was first placed in storage and the fluid and case incinerated.

343. SHORT-TERM STORAGE. Short term storage means the temporary storage of certain PCB items for up to a period of 30 days. Temporary storage of PCB's (500 ppm or above) is prohibited.

a. Temporary 30-day storage at an indoor facility which does not meet the criteria in paragraph 342 above may be used for certain PCB items provided a notation is attached to the PCB item or PCB container which indicates the date the PCB item was removed from service. The following PCB items are authorized to be placed in temporary storage:

(1) Non-leaking PCB articles and PCB equipment.

(2) Leaking PCB articles and PCB equipment if the PCB items are placed in a DOT-approved container that has sufficient throbbing material, such as sawdust, to absorb any liquid PCB's remaining in the PCB item.

(3) PCB containers with non-liquid PCB's, such as contaminated soil, rags, and debris.

(4) PCB containers with liquid PCB concentrations of 50 to 499 ppm. Each of the containers must bear a notation that indicates that the liquid in the drum does not exceed 500 ppm PCB's.

b. Non-leaking and structurally undamaged PCB large high voltage capacitors and PCB contaminated electrical equipment that have not been drained of free flowing dielectric fluid may be stored on pallets next to a storage facility that meets the requirements set forth in paragraph 342. (PCB Contaminated electrical equipment which have been drained of free-flowing dielectric fluid are not subject to the requirements of section 5.)

c. Short-term storage (under the provisions of paragraph 343) will be permitted only when the adjacent storage facility has immediately available unfilled storage space equal to 10 percent of the volume of capacitors and equipment transformers stored outside the facility. The capacitors and equipment shall be checked for leaks at least once a week.

344. STORAGE MARKING. All storage areas subject to the requirements of paragraphs 342 or 343 shall be marked in accordance with section 3.

345. STORAGE HANDLING EQUIPMENT. No item of movable equipment that is used for handling PCB's and PCB items in storage facilities and that comes in direct contact with PCB's shall be removed from the storage facility area unless it is decontaminated in accordance with the procedures described in paragraph 351.

346. STORAGE CONTAINERS. Packaging for PCB storage shall be in accordance with the following provisions of Department of Transportation (DOT) regulations (49 CFR Part 178) shipping container specifications.

a. Liquid PCB's shall be stored in containers that comply with one of the following:

(1) Specification 5, paragraph 178.80

(2) Specification 5B, paragraph 178.82

(3) Specification 6D, paragraph 178.102

(4) Specification 25L, paragraph 178.35a

(5) Specification 17E, paragraph 178.116

b. Non-liquid PCB's shall be stored in containers that comply with one of the following:

(1) Specifications 5, paragraph 178.80

(2) Specifications 5B, paragraph 178.82

(3) Specification 17C, paragraph 178.115, or

(4) Containers larger than those specified above, if they are designed to provide as much protection against leaking and exposure to the environment as those specified above. In addition, they must be of the same relative strength and durability.

347.-349. RESERVED

SECTION 6. DECONTAMINATION

350. PCB CONTAINERS. Decontamination of any PCB item shall be achieved by flushing the material surfaces of the item three times with a solvent (such as kerosene, xylene, and toluene) containing less than 50 ppm PCB's. Where possible, detergents (less volatile) should be used instead of solvents. The solubility of PCB's in the solvent must be at least five percent or more by weight. Each rinse shall use a volume of the normal diluent equal to approximately ten percent of the PCB Item's capacity. The solvent may be reused for decontamination until it reaches a concentration of 50 ppm PCB's. Disposal of the solvent

or non-liquid PCB's resulting from decontamination procedures shall be performed in accordance with the pertinent provisions of section 7. Precautionary measures are covered in paragraph 201.

351. MOBILE EQUIPMENT. Movable equipment used in the storage areas shall be decontaminated by swabbing surfaces with a solvent meeting the criteria in paragraph 350.

352.-359. RESERVED.

SECTION 7. DISPOSAL

360. GENERAL.

a. Regions shall comply with local, State, and Federal regulations. A directory shall be established which contains a local, State, and Federal listing of contacts by name, telephone number, and location. A file of applicable local, State, and Federal regulations shall be maintained.

b. In general, 40 CFR Part 761 does not require PCB's and PCB items to be removed from service for disposal until the items no longer serve their intended purpose. Exceptions to the above are transformers containing PCB's which are discussed in paragraphs 304a, b, and c.

c. EPA and some states require an EPA ID number when disposing of PCB's. An ID number can be obtained by completing EPA Form 8700-12, Notification of Hazardous Waste Activity. See paragraphs 332a and c.

d. Transporters and Disposal Sites. In addition to licensing by Federal agencies, carriers and disposal sites require licensing by State EPA and DOT. Lists of approved contractors may be obtained from the responsible State agency. Regions with multi-State responsibility should subscribe to a commercial directory of Hazardous Waste Services. A directory should provide updating services at least semiannually. Listings shall be maintained by regional coordinators. A list of EPA-approved disposal companies is contained in Appendix 1.

NOTE: Materials shipped for disposal must be documented by supplying the FAA with a copy of the Uniform Hazardous Waste Manifest--EPA Form 8700-22, which indicates that the PCB materials were shipped for final disposition. See paragraph 332b.

e. Method of Disposal:

(1) All materials contaminated with PCB's (50 ppm or more, including rags, gloves, etc.) requiring disposal, shall be disposed of in an EPA-approved incinerator except those items listed below which may be disposed as municipal waste (Note: Regions are to follow State and local regulations regarding disposal of items less than 50 ppm):

(a) Small PCB capacitors (containing less than 3 pounds of dielectric fluid), unless there are 10 or more capacitors present. (Check local regulations for quantity of capacitors);

(b) Hydraulic equipment that has been drained of its dielectric fluid. (Machines whose liquid contains 1000 ppm PCB's or greater, must be flushed with solvent containing less than 50 ppm PCB's. The drained fluid and rinse fluid must be disposed of in an EPA-approved incinerator).

(c) Empty PCB containers which stored items containing 500 ppm or less of PCB's.

(d) PCB-contaminated transformers (50-499 ppm) that have been drained of its dielectric fluid.

(2) If incineration is not possible, PCB materials may be disposed in a chemical waste landfill, in a high efficiency boiler, or in an EPA-approved alternative method of disposal which would destroy PCB's as effectively as an incinerator or high efficiency boiler. Specific requirements for these types of disposal methods are contained in 40 CFR part 761.70 and 761.75.

(3) Waste oil that contains a quantifiable level of PCB's (2 ppm or greater) is not to be burned in oilburning spaceheaters. Transformer oil must be assumed to contain 2 ppm PCB's or greater unless chemical analysis proves otherwise. The EPA regulations that govern the burning of waste oil are 40 CFR 266.41 (if containing hazardous waste) and 40 CFR 761.20(e).

361. SPILLS, LEAKS, AND OTHER UNCONTROLLED DISCHARGES. Spills, leaks, and other uncontrolled discharges of PCB's constitute disposal of PCB's.

a. PCB Mishap Reporting:

(1) PCB mishaps (leaks, spills, rupture, fire, personnel exposure, etc.) shall be recorded in the Safety

Management Information System (SMIS). FAA Form 3900-6, FAA Mishap Report, shall be filled out and forwarded to the Regional Safety and Health Manager within 24 hours after the incident. To ensure retrieval of only the PCB mishaps, the narrative of the incident shall begin with: PCB mishaps. It must be entered that way for all cases to ensure retrieval of all PCB mishaps. While completions of the form is self-explanatory, instructions are contained in Chapter 14, Order 3900.19A, Occupational Safety and Health.

(2) PCB spills that meet the criteria in subparagraph b. below shall be reported to the EPA Regional Office (Pesticides and Toxic Substances Branch) within 24 hours, to the Office of Aviation Medicine, Occupational Health and Division, AAM-700, Oklahoma City, OK, FTS 747-3711 or (405) 680-3711, and to the EPA/Coast Guard's National Response Center (at 800-424-8802, or at 426-2675 calling from Washington, DC).

b. Spills are to be reported when:

(1) the PCB concentration of the spill is 50 ppm or greater and involves more than 10 pounds of PCB-containing fluid (generally 1 gallon or more of PCB dielectric fluid);

(2) people come into direct and uncontrolled contact with PCB's, or if the extent of the spill is large enough to expose significant numbers of animals;

(3) the extent or volume of the spill is unknown, such as spills that enter drainage systems; or

(4) the spill directly contaminates surface waters, sewers, drinking water supplies, or grazing lands.

c. Spills involving less than 10 pounds of PCB's by weight do not require EPA notification; however, the spill must be cleaned up in accordance with the requirements contained in paragraph 362.

d. As a general rule, spills involving a single capacitor do not have to be reported unless PCB's threaten or enter a watercourse. Generally, transformer spills should be reported unless it is only a minor leak that is not running onto the ground. All leaks that require repair to prevent further leaking should be reported and repaired within 48 hours.

e. The FAA is required to take measures to contain a spill, but shall not clean up a spill. Qualified professionals shall conduct cleanups.

f. Spill Containment Measures: A spill shall be contained by damming or diking, plugging the leaks, and soaking up the liquid with an absorbent material such as dirt, rags, or a commercial product. (See paragraph 200d(4). Once a spill is contained, cleanup measures can begin.

362. PCB CLEANUP REQUIREMENTS. The PCB spill cleanup policy applies to spills/releases that contain 50 ppm PCB's or more. (Individual States may have more stringent threshold levels.) Spills which have occurred before May 4, 1987, are excluded from the scope of this policy.

a. The following cleanup actions must be taken after the discovery and containment of a PCB spill (Note: Cleanup measures are to be conducted by qualified professionals):

(1) Delineate and restrict the spill area 3 feet beyond any visible traces of the spill and post warning signs at the site.

(2) Notify the FAA Regional PCB Coordinator.

(3) Notify the regional EPA office.

(4) Document the area of visible contamination, noting the extent of the visible traces and the center of the visible trace area. If there are no visible traces, this should be noted and the EPA should be contacted for guidance on conducting a statistical sampling of the spill area to establish spill boundaries.

(5) Initiate cleanup of all visible traces on hard surfaces and soil within 24 hours of discovery of a spill. Spills directly into surface waters, drinking water supplies, sewers, or grazing lands shall be reported to the EPA Regional Office (Pesticides and Toxic Substances Branch) where guidance shall be obtained on the appropriate cleanup measures.

(6) Cleanup actions must be completed within 48 hours for low concentration spills (less than 500 ppm PCB's) involving less than 1 pound of PCB's by weight. Time limits for high concentration spills (500 ppm or greater) involving 1 pound or more of PCB's by weight, will be determined by EPA regional offices on a case-by-case basis; EPA should be contacted as soon

as possible to negotiate time limits for completing cleanup actions for high concentration spills.

b. The level of cleanup required will vary depending upon the concentration of PCB's spilled, the type of material contaminated, and whether the spill occurred in a restricted or non-restricted area. FAA facilities are generally considered to be restricted access areas. If there is a situation where a PCB spill occurs in a non-restricted access area, cleanup requirements contained in 40 CFR Part 761.125 shall be followed. Figure 3-7 provides the cleanup requirements for PCB spills.

c. When there is any doubt about the level of cleanup required, consult with the appropriate EPA Regional Federal Facility Coordinator to obtain information on sampling methods and analytical procedures to determine whether the contaminated area has been cleaned up to the appropriate level.

d. After the completion of a cleanup, records shall be kept to certify that an area has been decontaminated. Records shall be kept for a period of 5 years. The records shall contain the following information:

(1) Source of the spill (e.g., type of equipment)
(2) Date and time spill occurred
(3) Date and time cleanup was completed
(4) Location of spill
(5) Pre-cleanup sampling data used to establish the spill boundaries (which is required when there is insufficient visible traces of liquid PCB's after a suspected leak or spill).
(6) Amount and depth of soil excavated
(7) Statement signed by the facility manager certifying that the cleanup requirements have been met.
(8) Post-cleanup sampling data to verify the level of cleanup for high concentration spills (500 ppm and greater) involving 1 pound or more of PCB's by weight. A brief description of the sampling methodology and analytical technique used is required. For guidance on selecting an appropriate sampling method, refer to 40 CFR Part 761.130 or contact the Regional EPA Office (Pesticides and Toxic Substances Branch).

e. PCB shall be placed in containers as described in paragraph 346a and disposed of in accordance with paragraph 360.

f. PCB items in the form of contaminated soil, rags, cloth, etc., shall be placed in containers as described in paragraph 346b and disposed of in accordance with paragraph 360.

363.-369. RESERVED.

FIGURE 3-7. PCB CLEANUP REQUIREMENTS

CONCENTRATION & QUANTITY OF PCB SPILL	LOCATION & TYPE OF MATERIAL CONTAMINATED	REQUIRED CLEANUP LEVEL & METHOD
I. Low Concentration spill (less than 500 ppm) involving less than 1 lb. of PCB's (i.e., less than 270 gallons of untested mineral oil)		
	A. Indoor Commercial Areas, Solid Surface	10 micro-grams/ 100 cm2 using "standard wipe test"
	B. Soil	excavate "spill area" & backfill with clean soil
	C. Solid Surfaces in all Other Locations	"double wash/ rinse" surfaces
II. High Concentration spills (500 ppm or more) involving 1 lb or more PCB's (i.e., 270 gallons or more of untested mineral oil)		
	A. Outdoor Electrical Substations	
	1. Solid Surfaces	100 micrograms/ 100 cm2
	2. Soil	25 ppm or 50 ppm plus posting a notice of contamination at the site

FIGURE 3-7 (CONT.) PCB CLEANUP REQUIREMENTS:

CONCENTRATION & QUANTITY OF PCB SPILL	LOCATION & TYPE OF MATERIAL CONTAMINATED	REQUIRED CLEANUP LEVEL & METHOD
	B. Restricted-access Areas	
	1. "High-contact solid"	10 micrograms/ 100 cm2 surfaces as measured by a "standard wipe test"
	2. "Low-contact" indoor impervious solid surfaces	10 micrograms/ 100 cm2
	3. "Low-contact outdoor" surfaces (both impervious and nonimpervious)	100 micrograms/ 100 cm2
	4. Soil	25 ppm

SECTION 8. TRANSPORT

370. VEHICLE MARKING. Each vehicle used for transportation of PCB's and PCB items shall be marked in accordance with the provisions of paragraph 320 if it is loaded with one or more PCB transformers or with PCB containers that contain more than 45 kg (99.4 lbs) of PCB's in the liquid phase in concentrations greater than 50 ppm.

371. LIQUID PCB PACKAGING. PCB shall be transported in containers that comply with the Shipping Containers Specifications of the Department of Transportation listed in paragraph 346a. Containers holding liquid wastes shall be packed with sufficient absorbent material (such as sawdust or soil) to absorb the liquid.

372. NON-LIQUID PCB PACKAGING. Containers used for transporting waste PCB Items that comply with one of the DOT Shipping Container Specifications listed in paragraph 346b.

373. MARKING. All shipping containers shall bear the large PCB mark (figure 3-2), except that containers holding items that contain fluid or material with a concentration of less than 50 ppm PCB shall have the "ORM-E sticker" (i.e., Other Regulated Material) required under DOT regulations (Title 49 CFR) for transportation of hazardous materials.

374. MANIFESTS. A manifest which documents the transportation of PCB and PCB Items shall be supplied to the FAA. See paragraph 332b.

375-399. RESERVED.

SECTION 9. SALE OF PCB ITEMS

400. REQUIREMENTS. All PCB items (as defined in paragraph 7w) that are sold shall be totally enclosed and marked with the appropriate PCB label.

401. UNMARKED ITEMS. As a condition for any sale, any unmarked item containing dielectric fluid shall be tested for PCB's and marked accordingly, i.e., "Caution Contains PCB's," or "PCB-Contaminated."

402. PROHIBITED SALES. The sale of any hydraulic system or heat transfer system that contains or had contained PCB's is strictly prohibited.

403. BILL OF SALE.

a. A bill of sale shall be completed for all transactions and kept on file. It should be noted that PCB liability cannot be sold, transferred, or given away. The intent of the bill of sale is to clarify that the buyer is responsible for the proper use and disposal of PCB items and must comply with EPA regulations. The bill of sale shall contain the following information:

(1) Buyer name, company name, address, and telephone number;
(2) Description of the PCB item(s) sold;
(3) Quantity of PCB items sold;
(4) Identification number of each PCB item sold; and
(5) Signature of the buyer and FAA representative involved in the sale.

b. Figure 4-1 contains an example of a bill of sale that meets the requirements of this section.

FIGURE 4-1.

BILL OF SALE FOR PCB EQUIPMENT

The FAA hereby sells the following items for the price of $_____to the undersigned buyer (Each item to be listed individually.)

ITEM NO.	ITEM	IDENTIFICATION NO.	QUANTITY
	(e.g., Capacitor, Transformer)	(Serial, Spec. or Part No. as it appears on item)	1 Each
1.			
2.			
3.			

(List additional items on another copy of Bill of Sale.)

The above listed items are suspected of containing PCB (Polychlorinated Biphenyls) oil, a substance whose use and disposal is regulated by the U.S. Environmental Protection Agency (EPA) and the Toxic Substance Control Act (TSCA) of 1976. The FAA declares that at the time of this sale, of the above listed items, all items are intact and not leaking any oil.

The buyer of the above listed items agrees as a condition of this sale that he will use the items (e.g., voltage transformers or voltage storing capacitors) only for their designed purposes and not for the purpose of scrapping for salvage value. If at some future date the buyer decides to dispose of the above listed items, the buyer is hereby notified and does hereby acknowledge his obligation to comply with the EPA requirements in effect at the time of disposal regarding the approved methods of disposal of PCB articles. Information regarding the approved methods of disposal of PCB articles is available on request from the EPA Regional Office in _____.

Phone: _____

Date:_____

Seller:

_____
(Signature - FAA Representative)

_____
(Title)

Buyer:

_____
(Signature)

Address:_____

_____

APPENDIX 1. EPA RULES FOR CONTROLLING POLYCHLORINATED BIPHENYLS UNDER THE TOXIC SUBSTANCES CONTROL ACT (40 CFR 761);

APPROVED DISPOSAL COMPANIES; AND

REGIONAL EPA CONTACTS ON PCB

ENVIRONMENTAL PROTECTION AGENCY RULES FOR CONTROLLING POLYCHLORINATED BIPHENYLS UNDER THE TOXIC SUBSTANCES CONTROL ACT

(40 CFR 761, adopted at 43 FR 7150, Feb. 17, 1978; revised as of July 1, 1987; amended at 53 FR 10391, March 31, 1988; 53 FR 12524, April 15, 1988; 53 FR 21641, June 9, 1988; 53 FR 24219, June 27, 1988; 53 FR 27322, July 19, 1988; 53 FR 40882, Oct. 19, 1988; 54 FR 22594, May 25, 1989; 54 FR 28419, July 6, 1989; 54 FR 52716, Dec. 21, 1989, effective Feb. 5, 1990)

Authority: 15 U.S.C. 2605, 2607, 2611, 2614, and 2616.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

Subpart A—General

§ 761.1 Applicability.

(a) This part establishes prohibitions of, and requirements for, the manufacture, processing, distribution in commerce, use, disposal, storage, and marking of PCBs and PCB Items.

(b) This part applies to all persons who manufacture, process, distribute in commerce, use, or dispose of PCBs or PCB Items. Substances that are regulated by this rule include, but are not limited to, dielectric fluids, contaminated solvents, oils, waste oils, heat transfer fluids, hydraulic fluids, paints, sludges, slurries, dredge spoils, soils, materials contaminated as a result of spills, and other chemical substances or combination of substances, including impurities and byproducts and any byproduct, intermediate or impurity manufactured at any point in a process. Most of the provisions of this part apply to PCBs only if PCBs are present in concentrations above a specified level. For example, Subpart D applies generally to materials at concentrations of 50 parts per million (ppm) and above. Also certain provisions of Subpart B apply to PCBs inadvertently generated in manufacturing processes at concentrations specified in the definition of "PCB" under § 761.3. No provision specifying a PCB concentration may be avoided as a result of any dilution, unless otherwise specifically provided.
[49 FR 25239, June 20, 1984; 49 FR 28172, July 10, 1984]

(c) Definitions of the terms used in these regulations are in Subpart A. The basic requirements applicable to disposal and marking of PCBs and PCB Items are set forth in Subpart D—Disposal of PCBs and PCB Items and in Subpart C—Marking of PCBs and PCB Items. Prohibitions applicable to PCB activities are set forth in Subpart B—Manufacture, Processing, Distribution in Commerce, and Use of PCBs and PCB Items. Subpart B also includes authorizations from the prohibitions. Subparts C and D set forth the specific requirements for disposal and marking of PCBs and PCB Items.

(d) Section 15 of the Toxic Substances Control Act (TSCA) states that failure to comply with these regulations is unlawful. Section 16 imposes liability for civil penalties upon any person who violates these regulations, and the Administrator can establish appropriate remedies for any violations subject to any limitations included in section 16 of TSCA. Section 16 also subjects a person to criminal prosecution for a violation which is knowing or willful. In addition, section 17 authorizes Federal district courts to enjoin activities prohibited by these regulations, compel the taking of actions required by these regulations, and issue orders to seize PCBs and PCB Items manufactured, processed or distributed in violation of these regulations.

(e) These regulations do not preempt other more stringent Federal statutes and regulations.

(f) Unless and until superseded by any new more stringent regulations issued under EPA authorities, or any permits or any pretreatment requirements issued by EPA, a state or local government that affect release of PCBs to any particular medium:

(1) Persons who inadvertently manufacture or import PCBs generated as unintentional impurities in excluded manufacturing processes, as defined in § 761.3, are exempt from the requirements of Subpart B of this part, provided that such persons comply with Subpart J of this part, as applicable.

(2) Persons who process, distribute in commerce, or use products containing PCBs generated in excluded manufacturing processes defined in

§ 761.3 are exempt from the requirements of Subpart B provided that such persons comply with Subpart J of this part, as applicable.

(3) Persons who process, distribute in commerce, or use products containing recycled PCBs defined in § 761.3, are exempt from the requirements of Subpart B of this part, provided that such persons comply with Subpart J of this part, as applicable.

[47 FR 46980, Oct. 21, 1982; 49 FR 25239, June 20, 1984; 49 FR 28172, July 10, 1984]

(4) Except as provided in § 761.20 (d) and (e), persons who process, distribute in commerce, or use products containing excluded PCB products as defined in § 761.3, are exempt from the requirements of Subpart B of this Part.

[53 FR 24220, June 27, 1988]

§ 761.3 Definitions.

[49 FR 25239, June 20, 1984; 49 FR 29066, July 18, 1984]

For the purpose of this part:

"Administrator" means the Administrator of the Environmental Protection Agency, or any employee of the Agency to whom the Administrator may either herein or by order delegate his authority to carry out his functions, or any person who shall by operation of law be authorized to carry out such functions.

"Agency" means the United States Environmental Protection Agency.

"Annual document log" means the detailed information maintained at the facility on the PCB waste handling at the facility.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Annual report" means the written document submitted each year by each disposer and commercial storer of PCB waste to the appropriate EPA Regional Administrator. The annual report is a brief summary of the information included in the annual document log.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Byproduct" means a chemical substance produced without separate commercial intent during the manufacturing or processing of another chemical substance(s) or mixture(s).

"Capacitor" means a device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:

(1) "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 kgs (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 then 1.36 kg (3 lbs.) of dielectric fluid if the total weight of the capacitor is less than 4.08 kg (9 lbs.).

(2) "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.

(3) "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.).

"Certification" means a written statement regarding a specific fact or representation that contains the following language:

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Chemical substance", (1) except as provided in paragraph (2) of this definition, means any organic or inorganic substance of a particular molecular identity, including: any combination of such substances occurring in whole or part as a result of a chemical reaction or occurring in nature, and any element or uncombined radical.

(2) Such term does not include: any mixture; any pesticide (as defined in the Federal Insecticide, Fungicide, and Rodenticide Act) when manufactured, processed, or distributed in commerce for use as a pesticide; tobacco or any tobacco product; any source material, special nuclear material, or byproduct material (as such terms are defined in the Atomic Energy Act of 1954 and regulations issued under such Act); any article the sale of which is subject to the tax imposed by section 4181 of the Internal Revenue Code of 1954 (determined without regard to any exemptions from such tax provided by section 4182 or section 4221 or any provisions of such Code); and any food, food additive, drug, cosmetic, or device (as such terms are defined in section 201 of the Federal Food, Drug, and Cosmetic Act) when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic, or device.

"Chemical waste landfill" means a 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 § 761.75.

"Commerce" means trade, traffic, transportation, or other commerce:

(1) Between a place in a State and any place outside of such State, or

(2) Which affects trade, traffic, transportation, or commerce described in paragraph (1) of this definition.

"Commercial storer of PCB waste" means the owner or operator of each facility which is subject to the PCB storage facility standards of Sec. 761.65, and who engages in storage activities involving PCB waste generated by others or PCB waste 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. It is sufficient under this definition that the facility stores PCB waste generated by others or the facility removed the PCB waste while servicing equipment owned by others. A generator who stores only the generator's own waste is subject to the storage requirements of Sec. 761.65, but is not required to seek approval as a commercial storer. If a facility's storage of PCB waste at no time exceeds 500 gallons of PCBs, the owner or operator is not required to seek approval as a commercial storer of PCB waste.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Designated facility" means the off-site disposer or commercial storer of PCB waste designated on the manifest as the facility that will receive a manifested shipment of PCB waste.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Disposal" means 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.

"Disposer of PCB waste," as the term is used in subparts J and K of this part, means any person who owns or operates a facility approved by EPA for the disposal of PCB waste which is regulated for disposal under the requirements of subpart D of this part.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"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.

"Emergency Situation" for continuing use of a PCB Transformer exists when:

(1) Neither a non-PCB Transformer nor a PCB-Contaminated transformer is currently in storage for reuse or readily available (i.e., available within 24 hours) for installation.

(2) Immediate replacement is necessary to continue service to power users.

[53 FR 27327, July 19, 1988]

"EPA identification number" means the 12-digit number assigned to a facility by EPA upon notification of PCB waste activity under § 761.205.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Excluded manufacturing process" means a manufacturing process in which quantities of PCBs, as determined in accordance with the definition of inadvertently generated PCBs, calculated as defined, and from which releases to products, air, and water meet the requirements of paragraphs (1) through (5) of this definition, or the importation of products containing PCBs as unintentional impurities, which products meet the requirements of paragraph (1) and (2) of this definition.

(1) The concentration of inadvertently generated PCBs in products leaving any manufacturing site or imported into the United States must have an annual average of less than 25 ppm, with a 50 ppm maximum.

(2) The concentration of inadvertently generated PCBs in the components of detergent bars leaving the manufacturing site or imported into the United States must be less than 5 ppm.

(3) The release of inadvertently generated PCBs at the point at which emissions are vented to ambient air must be less than 10 ppm.

(4) The amount of inadvertently generated PCBs added to water discharged from a manufacturing site must be less than 100 micrograms per resolvable gas chromatographic peak per liter of water discharged.

(5) Disposal of any other process wastes above concentrations of 50 ppm PCB must be in accordance with Subpart D of this part.

"Excluded PCB products" means PCB materials which appear at concentrations less than 50 ppm, including but not limited to:

(1) Non-Aroclor inadvertently generated PCBs as a byproduct or impurity resulting from a chemical manufacturing process.

(2) Products contaminated with Aroclor or other PCB materials from historic PCB uses (investment casting waxes are one example).

(3) Recycled fluids and/or equipment contaminated during use involving the products described in paragraphs (1) and (2) of this definition (heat transfer and hydraulic fluids and equipment and other electrical equipment components and fluids are examples).

(4) Used oils, provided that in the cases of paragraphs (1) through (4) of this definition:

(i) The products or source of the products containing < 50 ppm concentration PCBs were legally manufactured, processed, distributed in commerce, or used before October 1, 1984.

(ii) The products or source of the products containing < 50 ppm concentrations PCBs were legally manufactured, processed, distributed in commerce, or used, i.e., pursuant to authority granted by EPA regulation, by exemption petition, by settlement agreement, or pursuant to other Agency-approved programs;

(iii) The resulting PCB concentration (i.e. below 50 ppm) is not a result of dilution, or leaks and spills of PCBs in concentrations over 50 ppm.

[53 FR 24220, June 27, 1988]

"Fluorescent light ballast" means a device that electrically controls fluorescent light fixtures and that includes a capacitor containing 0.1 kg or less of dielectric.

"Generator of PCB waste" means 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.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Impurity" means a chemical substance which is unintentionally present with another chemical substance.

"In or Near Commercial Buildings" means 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 non-industrial non-substation 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).

[50 FR 29170, July 17, 1985]

"Incinerator" means an engineered device using controlled flame combustion to thermally degrade PCBs and PCB Items. Examples of devices used for incineration include rotary kilns, liquid injection incinerators, cement kilns, and high temperature boilers.

"Industrial building" means a building directly used in manufacturing or technically productive enterprises. Industrial buildings are not generally or typically accessible to other than workers. Industrial buildings include buildings used directly in the production of power, the manufacture of products, the mining of raw materials, and the storage of textiles, petroleum products, wood and paper products, chemicals, plastics, and metals.

[50 FR 29170, July 17, 1985; 50 FR 32176, Aug. 9, 1985]

"Laboratory" means a facility that analyzes samples for PCBs and is unaffiliated with any entity whose activities involve PCBs.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"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.

"Manifest" means the 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.

[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Manned Control Center" means an electrical power distribution control room where the operating conditions of a PCB Transformer are continuously monitored during the normal hours of operation (of the facility), and, where the duty engineers, electricians, or other trained personnel have the capability to deenergize a PCB Transformer completely within 1 minute of the receipt

of a signal indicating abnormal operating conditions such as an overtemperature condition or overpressure condition in a PCB Transformer.
[50 FR 29170, July 17, 1985]

"Manufacture" means to produce, manufacture, or import into the customs territory of the United States.

"Manufacturing process" means all of a series of unit operations operating at a site, resulting in the production of a product.

"Mark" means the descriptive name, instructions, cautions, or other information applied to PCBs and PCB Items, or other objects subject to these regulations.

"Marked" means the marking of PCB Items and PCB storage areas and transport vehicles by means of applying a legible mark by painting, fixation of an adhesive label, or by any other method that meets the requirements of these regulations.

"Market/Marketers" means the processing or distributing in commerce, or the person who processes or distributes in commerce, used oil fuels to burners or other marketers, and may include the generator of the fuel if it markets the fuel directly to the burner.
[53 FR 24220, June 27, 1988]

"Mineral Oil PCB Transformer" means 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.

[53 FR 27328, July 19, 1988]

"Mixture" means any combination of two or more chemical substances if the combination does not occur in nature and is not, in whole or in part, the result of a chemical reaction; except that such term does include any combination which occurs, in whole or in part, as a result of a chemical reaction if none of the chemical substances comprising the combination is a new chemical substance and if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined.

"Municipal solid wastes" means garbage, refuse, sludges, wastes, and other discarded materials resulting from residential and non-industrial operations and activities, such as household activities, office functions, and commercial housekeeping wastes.

"Non-PCB Transformer" means any transformer that contains less than 50 ppm PCB; except that any transformer that has been converted from a PCB Transformer or a PCB-Contaminated transformer cannot be classified as a non-PCB Transformer until reclassification has occurred, in accordance with the requirements of § 761.30(a)(2)(v).
[53 FR 27328, July 19, 1988]

"On site" means within the boundaries of a contiguous property unit.
[50 FR 29170, July 17, 1985]

"PCB" and "PCBs" means 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 § 761.1(b) for applicable concentrations of PCBs. PCB and PCBs as contained in PCB items are defined in § 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 Article Container" means any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB Articles or PCB Equipment, and whose surface(s) has not been in direct contact with PCBs.

"PCB Container" means any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB Articles and whose surface(s) has been in direct contact with PCBs.

"PCB Equipment" means any manufactured item, other than a PCB Container or a PCB Article Container, which contains a PCB Article or other PCB Equipment, and includes microwave ovens, electronic equipment, and fluorescent light ballasts and fixtures.

"PCB Item" is defined as any PCB Article, PCB Article Container, PCB Container, or PCB Equipment, that deliberately or unintentionally contains or has a part of it any PCB or PCBs.

"PCB Transformer" means any transformer that contains 500 ppm PCB or greater.

"PCB waste(s)" means those PCBs and PCB Items that are subject to the disposal requirements of subpart D of this part.
[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"PCB-Contaminated Electrical Equipment" means any electrical equipment, including but not limited to transformers (including those used in railway locomotives and self-propelled cars), capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable, that contain 50 ppm or greater PCB, but less than 500 ppm PCB. Oil-filled electrical equipment other than circuit breakers, reclosers, and cable whose PCB concentration is unknown must be assumed to be PCB-Contaminated Electrical Equipment. (See § 761.30(a) and (h) for provisions permitting reclassification of electrical equipment containing 500 ppm or greater PCBs to PCB-Contaminated Electrical Equipment).

"Person" means any natural or judicial person including any individual, corporation, partnership, or association; any State or political subdivision thereof; any interstate body; and any department, agency, or instrumentality of the Federal Government.

"Posing an exposure risk to food or feed" means being in any location where human food or animal feed products could be exposed to PCBs released from a PCB Item. A PCB Item poses an exposure risk to food or feed if PCBs released in any way from the PCB Item have a potential pathway to human food or animal feed. EPA considers human food or animal feed to include items regulated by the U.S. Department of Agriculture or the Food and Drug Administration as human food or animal feed; this includes direct additives. Food or feed is excluded from this definition if it is used or stored in private homes.

"Process" means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce:

(1) In the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance or mixture, or

(2) As part of an article containing the chemical substance or mixture.

"Qualified incinerator" means one of the following:

(1) An incinerator approved under the provisions of § 761.70. Any level of PCB concentration can be destroyed in an incinerator approved under § 761.70.
[53 FR 24220, June 27, 1988]

(2) A high efficiency boiler which complies with the criteria of § 761.60(a)(2)(iii)(A), and for which the operator has given written notice to the appropriate EPA Regional Administrator in accordance with the notification requirements for the burning of mineral oil dielectric fluid under § 761.60(a)(2)(iii)(B).
[53 FR 24220, June 27, 1988]

(3) An incinerator approved under section 3005(c) of the Resource Conservation and Recovery Act (42 U.S.C. 6925(c)) (RCRA).
[53 FR 24220, June 27, 1988]

(4) Industrial furnaces and boilers which are identified in 40 CFR 260.10 and 40 CFR 266.41(b) when operating at their normal operating temperatures (this prohibits feeding fluids, above the level of detection, during either startup or shutdown operations).
[53 FR 24220, June 27, 1988]

"Quantifiable Level/Level of Detection" means 2 micrograms per gram from any resolvable gas chromatographic peak, i.e. 2 ppm.
[53 FR 24220, June 27, 1988]

"Recycled PCBs" means those PCBs which appear in the processing of paper products or asphalt roofing materials from PCB-contaminated raw materials. Processes which recycle PCBs must meet the following requirements:

(1) There are no detectable concentrations of PCBs in asphalt roofing material products leaving the processing site.

(2) The concentration of PCBs in paper products leaving any manufacturing site processing paper products, or in paper products imported into the United States, must have an annual average of less than 25 ppm with a 50 ppm maximum.

(3) The release of PCBs at the point at which emissions are vented to ambient air must be less than 10 ppm.

(4) The amount of Aroclor PCBs added to water discharged from an asphalt roofing processing site must at all times be less than 3 micrograms per liter (ug/L) for total Aroclors (roughly 3 parts per billion (3 ppb)). Water discharges from the processing of paper products must at all times be less than 3 micrograms per liter (ug/1) for total Aroclors (roughly 3 ppb), or comply with the equivalent mass-based limitation.

(5) Disposal of any other process wastes at concentrations of 50 ppm or greater must be in accordance with Subpart D of this part.
[53 FR 24220, June 27, 1988]

"Retrofill" means to remove PCB or PCB-contaminated dielectric fluid and to replace it with either PCB, PCB-contaminated, or non-PCB dielectric fluid.
[53 FR 27328, July 19, 1988]

"Rupture of a PCB Transformer" means a violent or non-violent break in the integrity of a PCB Transformer caused by an overtemperature and/or overpressure condition that results in the release of PCBs.
[50 FR 29170, July 17, 1985]

"Sale for purposes other than resale" means sale of PCBs for purposes of disposal and for purposes of use, except where use involves sale for distribution in commerce. PCB Equipment which is first leased for purposes of use any time before July 1, 1070, will be considered sold for purposes other than resale.

"Small quantities for research and development" means any quantity of PCBs (1) that is originally packaged in one or more hermetically sealed containers of a volume of no more than five (5.0) milliliters, and (2) that is used only for purposes of scientific experimentation or analysis, or chemical research on, or analysis of, PCBs, but not for research or analysis for the development of a PCB product.

"Storage for disposal" means temporary storage of PCBs that have been designated for disposal.

"Transfer facility" means any transportation-related facility including loading docks, parking areas, and other similar areas where shipments of PCB waste are held during the normal course of transportation. Transport vehicles are not transfer facilities under this definition, unless they are used for the storage of PCB waste, rather than for actual transport activities. Storage areas for PCB waste at transfer facilities are subject to the storage facility standards of § 761.65, but such storage areas are exempt from the approval requirements of § 761.65(d) and the recordkeeping requirements of § 761.180, unless the same PCB waste is stored there for a period of more than 10 consecutive days between destinations.
[54 FR 52745, Dec. 21, 1989, effective Feb. 5, 1990]

"Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (e.g., trailer, railroad freight car) is a separate transport vehicle.

"Transporter of PCB waste" means, for the purposes of subpart K of this part, any person engaged in the transportation of regulated PCB waste by air, rail, highway, or water for purposes other than consolidation by a generator.
[54 FR 52746, Dec. 21, 1989, effective Feb. 5, 1990]

"Totally enclosed manner" means any manner that will ensure no exposure of human beings or the environment to any concentration of PCBs.

"Waste Oil" means used products primarily derived from petroleum, which include, but are not limited to, fuel oils, motor oils, gear oils, cutting oils transmission fluids, hydraulic fluids, and dielectric fluids.
[49 FR 28172, July 10, 1984; 49 FR 44638, Nov. 8, 1984]

§ 761.19 References.

[47 FR 22098, May 21, 1982]

(a) [Reserved]

(b) *Incorporations by reference.* The following material is incorporated by reference, and is available for inspection at the Office of the Federal Register Information Center, Rm. 8301, 1100 L St. NW., Washington, DC 20408. These incorporations by reference were approved by the Director of the Office of the Federal Register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the **Federal Register**. Copies of the

incorporated material may be obtained from the TSCA Public Docket Office (TS-793), Rm. NE-G004, Office of Toxic Substances, Environmental Protection Agency, 401 M St., SW., Washington, D.C. 20460, or from the American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103.

References	CFR Citation
ASTM D-93-85 Standard Test Method for Flash Point by Pensky-Martens Closed Tester.	§ 761.60(a)(3)(iii)(B)(6); § 761.75(b)(8)(iii).
ASTM D-129-64 (Reapproved 1978) Standard Test Method for Sulfur in Petroleum Products (General Bomb Method).	§ 761.60(a)(3)(iii)(B)(6).
ASTM D 240-87 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuel by Bomb Calorimeter.	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-482-80 Standard Test Method for Ash from Petroleum Products.	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-524-81 Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products.	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-808-81 Standard Test Method for Chlorine in New and Used Petroleum Products (Bomb Method).	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-923-86 Standard Test Method for Sampling Electrical Insulating Liquids.	§ 761.60(g)(1)(ii); § 761.60(g)(2)(ii).
ASTM D-1266-80 (Reapproved 1981) Standard Test Method for Sulfur in Petroleum Products (Lamp Method).	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-1796-83 (Reapproved 1977) Methods for Water and Sediment in Crude Oils and Fuel Oils by Centrifuge.	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-2158-85 Standard Test Method for Residues in Liquefied Petroleum (LP) Gas.	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-2709-68 (Reapproved 1982) Standard Test Method for Water and Sediment in Distillate Fuel by Centrifuge.	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-2784-80 Standard Test Method for Sulfur in Liquefied Petroleum Gases (Oxyhydrogen Burner or Lamp).	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-3178-84 Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coke and Coal.	§ 761.60(a)(3)(iii)(B)(6).
ASTM D-3278-78 (Reapproved 1982) Standard Test Methods for Flash Point of Liquid by Setaflash Closed Tester.	§ 761.75(b)(8)(iii).
ASTM E-258-67 (Reapproved 1987) Standard Test Method for Total Nitrogen Inorganic Material by Modified KJELDAHL Method.	§ 761.60(a)(3)(iii)(B)(6).

[49 FR 29066, July 18, 1984; 49 FR 36648, Sept. 19, 1984; 53 FR 10391, March 31, 1988; 53 FR 12524, April 15, 1988; 53 FR 21641, June 9, 1988]

Subpart B—Manufacturing, Processing, Distribution in Commerce, and Use of PCBs and PCB Items

§ 761.20 Prohibitions.

[49 FR 25239, June 20, 1984; 49 FR 28172, July 10, 1984]

Except as authorized in § 761.30, the activities listed in paragraphs (a) and (d) of this section are prohibited pursuant to section 6(e)(2) of TSCA. The requirements set forth in paragraphs (b) and (c) of this section concerning export and import of PCBs for purposes of disposal and PCB Items for purposes of disposal are established pursuant to section 6(e)(1) of TSCA. Subject to any exemptions granted pursuant to section 6(e)(3)(B) of TSCA, the activities listed in paragraphs (b) and (c) of this section are prohibited pursuant to section (6)(e)(3)(A) of TSCA. In addition, the Administrator hereby finds, under the authority of section 12(a)(2) of TSCA, that the manufacture, processing, and distribution in commerce of PCBs at concentrations of 50 ppm or greater and PCB Items with PCB concentrations of 50 ppm or greater present an unreasonable risk of injury to health within the United States. This finding is based upon the well-documented human health and environmental hazard of PCB exposure, the high probability of human and environmental exposure to PCBs and PCB Items from manufacturing, processing, or distribution activities; the potential hazard of PCB exposure posed by the transportation of PCBs or PCB Items within the United States; and the evidence that contamination of the environment by PCBs is spread far beyond the areas where they are used. In addition, the Administrator hereby finds, for purposes of section 6(e)(2)(C) of TSCA, that any exposure of human beings or the environment to PCBs, as measured or detected by any scientifically acceptable analytical method, may be significant, depending on such factors as the quantity of PCBs involved in the exposure, the likelihood of exposure to humans and the environment, and the effect of exposure. For purposes of determining which PCB Items are totally enclosed, pursuant to section 6(e)(2)(C) of TSCA, since exposure to such Items may be significant, the Administrator further finds that a totally enclosed manner is a manner which results in no exposure to humans or the environment to PCBs. The following activities are considered totally enclosed: distribution in commerce of intact, nonleaking electrical equipment such as transformers (including transformers used in railway locomotives and self-propelled cars), capacitors, electromagnets, voltage regulators, switches (including sectionalizers and motor starters), circuit breakers, reclosers, and cable that contain PCBs at any concentration and processing and distribution in commerce of PCB Equipment containing an intact, nonleaking PCB Capacitor. See paragraph (c)(1) of this section for provisions allowing the distribution in commerce of PCBs and PCB Items.
[47 FR 37342, Aug. 25, 1982; 49 FR 44638, Nov. 8, 1984]

(a) No persons may use any PCB, or any PCB Item regardless of concentration, in any manner other than in a totally enclosed manner within the United States unless authorized under § 761.30, except that:

(1) An authorization is not required to use those PCBs or PCB Items which consist of excluded PCB products as defined in § 761.3.

(2) An authorization is not required to use those PCBs or PCB Items resulting from an excluded manufacturing process or recycled PCBs as defined in § 761.3, provided all applicable conditions of § 761.1(l) are met.

(3) An authorization is not required to use those PCB Items which contain or whose surfaces have been in contact with excluded PCB products as defined in § 761.3.

(4) An authorization is not required to apply sewage sludges, contaminated with PCBs below 50 ppm, to land when regulated by authorities under the Clean Water Act and the Resource Conservation and Recovery Act.
[49 FR 28172, July 10, 1984; 53 FR 24220, June 27, 1988]

(b) No person may manufacture PCBs for use within the United States or manufacture PCBs for export from the United States without an exemption except that:

(1) No person may manufacture PCBs for use within the United States or manufacture PCBs for export from the United States without an exemption, except that an exemption is not required for PCBs manufactured in an excluded manufacturing process as defined in § 761.3, provided that all applicable conditions of § 761.1(f) are met.

(2) PCBs at concentrations less than 50 ppm may be imported or exported for purposes of disposal.
[49 FR 28172, July 10, 1984]

(c) No persons may process or distribute in commerce any PCB, or any PCB Item regardless of concentration, for use within the United States or for export from the United States without an exemption, except that an exemption is not required to process or distribute in commerce PCBs or PCB Items resulting from an excluded manufacturing process as defined in § 761.3, or to process or

distribute in commerce recycled PCBs as defined in § 761.3, or to process or distribute in commerce excluded PCB products as defined in § 761.3, provided that all applicable conditions of § 761.1(f) are met. In addition, the activities described in paragraphs (c) (1) through (5) of this section may also be conducted without an exemption, under the conditions specified therein.
[53 FR 24220, June 27, 1988]

(1) PCBs at concentrations of 50 ppm or greater, or PCB Items with PCB concentrations of 50 ppm or greater, sold before July 1, 1979 for purposes other than resale may be distributed in commerce only in a totally enclosed manner after that date.

(2) PCBs at concentrations of 50 ppm or greater, or PCB Items with PCB concentrations of 50 ppm or greater may be processed and distributed in commerce in compliance with the requirements of this Part for purposes of disposal in accordance with the requirements of § 761.60.
[49 FR 28172, July 10, 1984]

(3) PCBs or PCB Items may be exported for disposal until May 1, 1980, if an export notice is submitted at least thirty (30) days before the first shipment in any calendar year leaves the customs territory of the United States. Export notices must be submitted to the TSCA Document Processing Center (TS-790), Rm. L-100, Office of Toxic Substances, Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460. The generator of the PCB waste material intended for disposal, or an agent acting on his behalf, must certify to the best of his knowledge and belief that the information is complete and accurate. Each notice should contain the following information:
[53 FR 12524, April 15, 1988]

(i) Name, company name, address, and telephone number of the owner of the PCB waste material to be exported and the name and address of any person or agent acting on his behalf;

(ii) Estimated quantity of wastes to be shipped during the calendar year and the estimated number of shipments to be made and the dates when such shipments are expected to leave the customs territory of the United States;

(iii) Description of the PCBs or PCB Items being exported;

(iv) Country(s) of destination for the shipments;

(v) Name and address of facility(s) receiving the shipment and person(s) responsible for receiving the shipment(s).

(vi) Method(s) of disposal and precautions taken to control release into the environment.

(vii) No less than 30 days after the end of each calendar quarter (March 31, June 30, September 30, and December 31) during which PCBs were exported for disposal, each person exporting the PCBs must submit a report to the TSCA Document Processing Center (TS-790), Rm. L-100, Office of Toxic Substances, Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460. The report shall list the quantity of PCB wastes in each shipment made during the quarter and include the date when each shipment left the customs territory of the United States and the information specified in paragraphs (c)(3)(i) and (iii) through (vi) of this section. If the quantity of wastes shipped during the calendar year exceeds by 25 percent or more the estimated quantities reported in paragraph (c)(3)(ii) of this section, a special export notice must be submitted to the TSCA Document Processing Center (TS-790) at the address given in paragraph (c)(3) at least 30 days before any additional shipments leave the customs territory of the United States and the notice shall include the information specified in paragraphs (c)(3)(i) through (vi) of this section.
[53 FR 12524, April 15, 1988]

(viii) Any person expecting to export PCB wastes for disposal in calendar year 1980 must submit an export notice at least thirty (30) days before the first shipment leaves the customs territory of the United States to the TSCA Document Processing Center (TS-790) at the address given in paragraph (c)(3) of this section, and the notice shall contain the information listed in paragraphs (c)(3)(i) through (vi) of this section.
[53 FR 12524, April 15, 1988]

(4) PCBs, at concentrations of less than 50 ppm, or PCB Items, with concentrations of less than 50 ppm, may be processed and distributed in commerce for purposes of disposal.
[49 FR 28172, July 10, 1984]

(5) Equipment, structures, or other materials that were contaminated with PCBs because of spills from, or proximity to, a PCB Item >50 ppm, and which are not otherwise authorized for use or distribution in commerce under this part, may be distributed in commerce, provided that these materials were decontaminated in accordance with applicable EPA PCB spill cleanup policies in effect at the time of the decontamination or, if not previously decontaminated, at the time of the distribution in commerce.
[53 FR 24229, June 27, 1988]

(d) The use of waste oil that contains any detectable concentration of PCB as a sealant, coating, or dust control agent is prohibited. Prohibited uses include, but are not limited to, road oiling, general dust control, use as a pesticide or herbicide carrier, and use as a rust preventative on pipes.

(e) In addition to any applicable requirements under 40 CFR Part 266, Subpart E, marketers and burners of used oil who market (process or distribute in commerce) for energy recovery, used oil containing any quantifiable level of PCBs are subject to the following requirements:

(1) *Restrictions on marketing.* Used oil containing any quantifiable level of PCBs (2 ppm) may be marketed only to:

(i) Qualified incinerators as defined in 40 CFR 761.3.

(ii) Other marketers identified in 40 CFR 266.41(a)(1)

(iii) Burners identified in 40 CFR 266.41(b). Only burners in the automotive industry may burn used oil generated from automotive sources in used oil-fired space heaters provided the provisions of 40 CFR 266.41(b)(2)(iii) (A), (B) and (C) are met. The Regional Administrator may grant a variance for a boiler that does not meet the 40 CFR 266.41(b) criteria after considering the criteria listed in 40 CFR 260.32 (a) through (f). The applicant must address the relevant criteria contained in 40 CFR 260.32 (a) through (f) in an application to the Regional Administrator.

(2) *Testing of used oil fuel.* Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(i) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(ii) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in § 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(iii) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

(3) *Restrictions on burning.* (i) Used oil containing any quantifiable levels of PCB may be burned for energy recovery only in the combustion facilities identified in paragraph (e)(1) of this section when such facilities are operating at normal operating temperatures (this prohibits

feeding these fuels during either startup or shutdown operations). Owners and operators of such facilities are "burners" of used oil fuels.

(ii) Before a burner accepts from a marketer the first shipment of used oil fuel containing detectable PCBs (2 ppm), the burner must provide the marketer a one-time written and signed notice certifying that:

(A) The burner has complied with any notification requirements applicable to "qualified incinerators" (§ 761.3) or to "burners" regulated under 40 CFR Part 266, Subpart E.

(B) The burner will burn the used oil only in a combustion facility identified in paragraph (e)(1) of this section and identify the class of burner he qualifies.

(4) *Recordkeeping requirements.* The following recordkeeping requirements are in addition to the recordkeeping requirements for marketers found in 40 CFR 266.43(b)(6) (i) and (ii), and for burners found in 40 CFR 266.44(e).

(i) *Marketers.* Marketers who first claim that the used oil fuel contains no detectable PCBs must include among the records required by 40 CFR 266.43(b)(6)(i), copies of the analysis or other information documenting his claim, and he must include among the records required by 40 CFR 266.43(b)(6)(ii), a copy of each certification notice received or prepared relating to transactions involving PCB-containing used oil.

(ii) *Burners.* Burners must include among the records required by 40 CFR 266.44(e), a copy of each certification notice required by paragraph (e)(3)(iii) of this section that he sends to a marketer.

[53 FR 24221, June 27, 1988]

(Approved by the office of Management of Budget under OMB control number 2050-0047)

§ 761.30 Authorizations.

[49 FR 25239, June 20, 1984; 50 FR 29170, July 17, 1985]

The following non-totally enclosed PCB activities are authorized pursuant to section 6(e)(2)(B) of TSCA:

(a) *Use in and servicing of transformers (other than railroad transformers).* PCBs at any concentration may be used in transformers (other than in railroad locomotives and self-propelled railroad cars) and may be used for purposes of servicing including rebuilding these transformers for the remainder of their useful lives, subject to the following conditions:
[49 FR 25239, June 20, 1984; 50 FR 29170, July 17, 1985]

(1) *Use conditions.* (i) As of October 1, 1985, the use and storage for reuse of PCB Transformers that pose an exposure risk to food or feed is prohibited.
[49 FR 25239, June 20, 1984; 50 FR 29170, July 17, 1985]

(ii) As of October 1, 1990, the use of network PCB Transformers with higher secondary voltages (secondary voltages equal to or greater than 480 volts, including 480/277 volt systems) in or near commercial buildings is prohibited. Network PCB Transformers with higher secondary voltages which are removed from service in accordance with this requirement must either be reclassified to PCB Contaminated or non PCB status, placed into storage for disposal, or disposed.

(iii) Except as otherwise provided, as of October 1, 1985, the installation of PCB Transformers, which have been placed into storage for reuse or which have been removed from another location, in or near commercial buildings is prohibited.

(A) The installation of PCB Transformers on or after October 1, 1985, however, and their use thereafter, is permitted either in an emergency situation, as defined in § 761.3, or in situations where the transformer has been retrofilled and is being placed into service in order to qualify for reclassification under paragraph (a)(2)(v) of this section.

(B) Installation of a PCB Transformer in an emergency situation is permitted when done in accordance with the following:

(1) Documentation to support the reason for the emergency installation of a PCB Transformer must be maintained at the owner's facility and completed within 30 days after installation of the PCB Transformer. The documentation must include, but is not limited to:

(*i*) The type of transformer, i.e., radial or lower or higher network, that requires replacement.

(*ii*) The type(s) of transformers, i.e., radial or lower or higher network, that must be used for replacement.

(*iii*) The date of transformer failure.

(*iv*) The date of subsequent replacement.

(*v*) The type of transformer, i.e., radial or lower or higher network, installed as a replacement.

(*vi*) A statement describing actions taken to locate a non-PCB or PCB-Contaminated transformer replacement.

(2) Such emergency installation is permitted until October 1, 1990, and the use of any PCB Transformer installed on such an emergency basis is permitted for 1 year from the date of installation or until October 1, 1990, whichever is earlier.

(3) PCB Transformers installed for emergency purposes may be subsequently reclassified; however, the transformer must be effectively reclassified to a non-PCB or PCB-Contaminated status within 1 year after installation or by October 1, 1990, whichever is earlier because the transformer was initially installed in an emergency situation.

(C) Installation of a retrofilled PCB Transformer for reclassification purposes is permitted when it is done in accordance with the following:

(1) Those who installed transformers for reclassification purposes must maintain on the owner's premises, completed within 30 days of installation, the following information:

(*i*) The date of installation.

(*ii*) The type of transformer, i.e., radial or lower or higher network, installed.

(*iii*) The PCB concentration, if known, at the time of installation.

(*iv*) The retrofill and reclassification schedule.

(2) For purposes of this paragraph, the installation of retrofilled PCB Transformers for purposes of reclassification under paragraph (a)(2)(v) of this section is permitted until October 1, 1990.

(*i*) However, the use of a retrofilled PCB Transformer installed for reclassification purposes is limited to 18 months after installation or until October 1, 1990, whichever is earlier.

(*ii*) Retrofilled mineral oil PCB Transformers may be installed for reclassification purposes indefinitely after October 1, 1990.

(*iii*) Once a retrofilled transformer has been installed for reclassification purposes, it must be tested 3 months after installation to ascertain the concentration of PCBs. If the PCB concentration is below 50 ppm, the transformer can be reclassified as a non-PCB Transformer. If the PCB concentration is between 50 and 500 ppm, the transformer can be reclassified as a PCB-Contaminated transformer. If the PCB concentration remains at 500 ppm or greater, the entire process must either be repeated until the transformer has been reclassified to a non-PCB or PCB-Contaminated transformer in accordance with paragraph (a)(2)(v) of this section or the transformer must be removed from service.

(D) Owners who installed PCB Transformers in emergency situations or for reclassification purposes between October 1, 1985 and September 1, 1988 must notify the Regional Administrator in writing by October 3, 1988 of such installation. The notification for emergency installation must include the information in paragraph (a)(1)(iii)(B)(1)(*i*) through (*vi*) of this section. The notification for reclassification must include the information in paragraph (a)(1)(iii)(C)(1)(*i*) through (*iv*) of this

section. All PCB Transformers installed in an emergency situation or installed for reclassification purposes are subject to the requirements of this Part 761.

(iv) As of October 1, 1990, all radial PCB Transformers, in use in or near commercial buildings, and lower secondary voltage network PCB Transformers not located in sidewalk vaults in or near commercial buildings (network transformers with secondary voltages below 480 volts) that have not been removed from service as provided in paragraph (a)(1)(iv)(B) of this section, must be equipped with electrical protection to avoid transformer ruptures caused by high current faults.
[54 FR 28419, July 6, 1989]

(A) Current-limiting fuses or other equivalent technology must be used to detect sustained high current faults and provide for complete deenergization of the transformer (within several hundredths of a second in the case of radial PCB Transformers and within tenths of a second in the case of lower secondary voltage network PCB Transformers), before transformer rupture occurs. The installation, setting, and maintenance of current-limiting fuses or other equivalent technology to avoid PCB Transformer ruptures from sustained high current faults must be completed in accordance with good engineering practices.

(B) All lower secondary voltage network PCB Transformers not located in sidewalk vaults (network transformers with secondary voltages below 480 volts), in use in or near commercial buildings, which have not been protected as specified in paragraph (a)(1)(iv)(A) of this section by October 1, 1990, must be removed from service by October 1, 1993.

(C) As of October 1, 1990, owners of lower secondary voltage network PCB Transformers, in use in or near commercial buildings which have not been protected as specified in paragraph (a)(1)(iv)(A) of this section and which are not located in sidewalk vaults, must register in writing those transformers with the EPA Regional Administrator in the appropriate region. The information required to be provided in writing to the Regional Administrator includes:

(1) The specific location of the PCB Transformer(s).

(2) The address(es) of the building(s) and the physical location of the PCB Transformer(s) on the building site(s).

(3) The identification number(s) of the PCB Transformer(s).

(D) As of October 1, 1993, all lower secondary voltage network PCB Transformers located in sidewalk vaults (network transformers with secondary voltages below 480 volts) in use near commercial buildings must be removed from service.

(v) As of October 1, 1990, all radial PCB Transformers with higher secondary voltages (480 volts and above, including 480/277 volt systems) in use in or near commercial buildings must, in addition to the requirements of paragraph (a)(1)(iv)(A) of this section, be equipped with protection to avoid transformer ruptures caused by sustained low current faults.
[53 FR 27328, July 19, 1988]

(vi) As of December 1, 1985, all PCB Transformers (including PCB Transformers in storage for reuse) must be registered with fire response personnel with primary jurisdiction (that is, the fire department or fire brigade which would normally be called upon for the initial response to a fire involving the equipment). Information required to be provided to fire response personnel includes:

(A) The location of the PCB Transformer(s) (the address(es) of the building(s) and the physical location of the PCB Transformer(s) on the building site(s) and for outdoor PCB Transformers, the location of the outdoor substation).

(B) The principal constituent of the dielectric fluid in the transformer(s) (e.g., PCBs, mineral oil, or silicone oil).

(C) The name and telephone number of the person to contact in the event of a fire involving the equipment.

(vii) As of December 1, 1985, PCB Transformers in use in or near commercial buildings must be registered with building owners. For PCB Transformers located in commercial buildings, PCB Transformer owners must register the transformers with the building owner of record. For PCB Transformers located near commercial buildings, PCB Transformer owners must register the transformers with the building owner of record. For PCB Transformers located near commercial buildings, PCB Transformer owners must register the transformers with all owners of buildings located within 30 meters of the PCB Transformer(s). Information required to be provided to building owners by PCB Transformer owners includes but is not limited to:

(A) The specific location of the PCB Transformer(s).

(B) The principal constituent of the dielectric fluid in the transformer(s) (e.g., PCBs, mineral oil, or silicone oil).

(C) The type of transformer installation (e.g., 208/120 volt network, 280/120 volt radial, 208 volt radial, 480 volt network, 480/277 volt network, 480 volt radial, 480/277 volt radial).

(viii) As of December 1, 1985, combustible materials, including, but not limited to paints, solvents, plastics, paper, and sawn wood must not be stored within a PCB Transformer enclosure (i.e., in a transformer vault or in a partitioned area housing a transformer); within 5 meters of a transformer enclosure, or, if unenclosed (unpartitioned), within 5 meters of a PCB Transformer.

(ix) A visual inspection of each PCB Transformer (as defined in the definition of "PCB Transformer" under § 761.3) in use or stored for reuse shall be performed at least once every 3 months. These inspections may take place any time during the 3-month periods: January-March, April-June, July-September, and October-December as long as there is a minimum of 30 days between inspections. The visual inspection must include investigation for any leak of dielectric fluid on or around the transformer. The extent of the visual inspections will depend on the physical constraints of each transformer installation and should not require an electrical shutdown of the transformer being inspected.

(x) If a PCB Transformer is found to have a leak which results in any quantity of PCBs running off or about to run off the external surface of the transformer, then the transformer must be repaired or replaced to eliminate the source of the leak. In all cases any leaking material must be cleaned up and properly disposed of according to disposal requirements of § 761.60. Cleanup of the released PCBs must be initiated as soon as possible, but in no case later than 48 hours of its discovery. Until appropriate action is completed, any active leak of PCBs must be contained to prevent exposure of humans or the environment and inspected daily to verify containment of the leak. Trenches, dikes, buckets, and pans are examples of proper containment measures.

(xi) If a PCB Transformer is involved in a fire-related incident, the owner of the transformer must immediately report the incident to the National Response Center (toll-free 1-800-424-8802; in Washington, D.C. 202-426-2675). A fire-related incident is defined as any incident involving a PCB Transformer which involves the generation of sufficient heat and/or pressure (by any source) to result in the violent or non-violent rupture of a PCB Transformer and the release of PCBs. Information must be provided regarding the type of PCB Transformer installation involved in the fire-related incident (e.g., high or low secondary voltage network transformer, high or low secondary voltage simple radial system, expanded radial system, primary selective system, primary loop system, or secondary selective system or other systems) and the readily ascertainable cause of the fire-related incident (e.g., high current fault in the primary or secondary or low current fault in secondary). The owner of the PCB Transformer must also take

measures as soon as practically and safely possible to contain and control any potential releases of PCBs and incomplete combustion products into water. These measures include, but are not limited to:

(A) The blocking of all floor drains in the vicinity of the transformer.

(B) The containment of water runoff.

(C) The control and treatment (prior to release) of any water used in subsequent cleanup operations.

(xii) Records of inspection and maintenance history shall be maintained at least 3 years after disposing of the transformer and shall be made available for inspection, upon request by EPA. Such records shall contain the following information for each PCB Transformer:

(A) Its location.

(B) The date of each visual inspection and the date that leak was discovered, if different from the inspection date.

(C) The person performing the inspection.

(D) The location of any leak(s).

(E) An estimate of the amount of dielectric fluid released from any leak.

(F) The date of any cleanup, containment, repair, or replacement.

(G) A description of any cleanup, containment, or repair performed.

(H) The results of any containment and daily inspection required for uncorrected active leaks.

(xiii) A reduced visual inspection frequency of at least once every 12 months applies to PCB Transformers that utilize either of the following risk reduction measures. These inspections may take place any time during the calendar year as long as there is a minimum of 180 days between inspections.

(A) A PCB Transformer which has impervious, undrained, secondary containment capacity of at least 100 percent of the total dielectric fluid volume of all transformers so contained or

(B) A PCB Transformer which has been tested and found to contain less than 60,000 ppm PCBs (after 3 months of in service use if the transformer has been serviced for purposes of reducing the PCB concentration).

(xiv) An increased visual inspection frequency of at least once every week applies to any PCB Transformer in use or stored for reuse which poses an exposure risk to food or feed. The user of a PCB Transformer posing an exposure risk to food is responsible for the inspection, recordkeeping, and maintenance requirements under this section until the user notifies the owner that the transformer may pose an exposure risk to food or feed. Following such notification, it is the owner's ultimate responsibility to determine whether the PCB Transformer poses an exposure risk to food or feed.

(xv) In the event a mineral oil transformer, assumed to contain less than 500 ppm of PCBs as provided in § 761.3, is tested and found to be contaminated at 500 ppm or greater PCBs, it will be subject to all the requirements of this Part 761. In addition, efforts must be initiated immediately to bring the transformer into compliance in accordance with the following schedule:

(A) Report fire-related incidents, effective immediately after discovery.

(B) Mark the PCB transformer within 7 days after discovery.

(C) Mark the vault door, machinery room door, fence, hallway or other means of access to the PCB Transformer within 7 days after discovery.

(D) Register the PCB Transformer in writing with fire response personnel with primary jurisdiction and with the building owner, within 30 days of discovery.

(E) Install electrical protective equipment on a radial PCB Transformer and a non-sidewalk vault, lower secondary voltage network PCB Transformer in or near a commercial building within 18 months of discovery or by October 1, 1990, whichever is later.

(F) Remove a non-sidewalk vault, lower secondary voltage network PCB Transformer in or near a commercial building, if electrical protective equipment is not installed, within 18 months of discovery or by October 1, 1993, whichever is later.

(G) Remove a lower secondary voltage network PCB Transformer located in a sidewalk vault in or near a commercial building, within 18 months of discovery or by October 1, 1993, whichever is later.

(H) Retrofill and reclassify a radial PCB Transformer or a lower or higher secondary voltage network PCB Transformer, located in other than a sidewalk vault in or near a commercial building, within 18 months or by October 1, 1990, whichever is later. This is an option in lieu of installing electrical protective equipment on a radial or lower secondary voltage network PCB Transformer located in other than a sidewalk vault or of removing a higher secondary voltage network PCB Transformer or a lower secondary voltage network PCB Transformer, located in a sidewalk vault, from service.

(I) Retrofill and reclassify a lower secondary voltage network PCB Transformer, located in a sidewalk vault, in or near a commercial building within 18 months or by October 1, 1993, whichever is later. This is an option in lieu of installing electrical protective equipment or removing the transformer from service.

(J) Retrofill and reclassify a higher secondary voltage network PCB Transformer, located in a sidewalk vault, in or near a commercial building within 18 months or by October 1, 1990, whichever is later. This is an option in lieu of other requirements.
[53 FR 27329, July 19, 1988]

(Approved by the Office of Management and Budget under control number 2070-0003; the recordkeeping requirements of paragraph (a)(1)(xii) were approved by the Office of Management and Budget under control number 2070-0007)
[53 FR 27329, July 19, 1988]

(2) *Servicing conditions.* (i) Transformers classified as PCB-Contaminated Electrical Equipment (as defined in the definition of "PCB-Contaminated Electrical Equipment" under § 761.3) may be serviced (including rebuilding) only with dielectric fluid containing less than 500 ppm PCB.

(ii) Any servicing (including rebuilding) of PCB Transformers (as defined in the definition of "PCB Transformer" under § 761.3) that requires the removal of the transformer coil from the transformer casing is prohibited. PCB Transformers may be serviced (including topping off) with dielectric fluid at any PCB concentration.

(iii) PCBs removed during any servicing activity must be captured and either reused as dielectric fluid or disposed of in accordance with the requirements of § 761.60. PCBs from PCB Transformers must not be mixed with or added to dielectric fluid from PCB-Contaminated Electrical Equipment.

(iv) Regardless of its PCB concentration, dielectric fluids containing less than 500 ppm PCB that are mixed with fluids that contain 500 ppm or greater PCB must not be used as dielectric fluid in any electrical equipment. The entire mixture of dielectric fluid must be considered to be greater than 500 ppm PCB and must be disposed of in an incinerator that meets the requirements in § 761.70.

(v) A PCB Transformer may be converted to PCB-Contaminated Electrical Equipment or to a non-PCB Transformer and a transformer that is classified as PCB-Contaminated Electrical Equipment may be reclassifie to a non-PCB Transformer by draining, refilling and/or otherwise servicing the transformer. In order to reclassify, the transformer's dielectric fluid must contain less than 500 ppm PCB (for conversion to PCB-Contaminated Electrical Equipment) or less than 50 ppm PCB (for conversion to a non-PCB Transformer) after a minimum of three months of in-service use subsequent to the last servicing conducted for the

purpose of reducing the PCB concentration in the transformer. In-service means that the transformer is used electrically under loaded conditions that raise the temperature of the dielectric fluid to at least 50° Centigrade. The Director, Exposure Evaluation Division may grant, without further rulemaking, approval for the use of alternative methods that simulate the loaded conditions of in-service use. All PCBs removed from transformers for purposes of reducing PCB concentrations are subject to the disposal requirements of § 761.60.

[53 FR 12524, April 15, 1988]

(vi) Any dielectric fluid containing 50 ppm or greater PCB used for servicing transformers must be stored in accordance with the storage for disposal requirements of § 761.65.

(vii) Processing and distribution in commerce of PCBs for purposes of servicing transformers is permitted only for persons who are granted an exemption under TSCA 6(e)(3)(B).

(b) *Use in and servicing of railroad transformers.* PCBs may be used in transformers in railroad locomotives or railroad self-propelled cars ("railroad transformers") and may be processed and distributed in commerce for purposes of servicing these transformers in a manner other than a totally enclosed manner subject to the following conditions:

(1) *Use restrictions.*

[48 FR 124, Jan. 3, 1983]

(i) After July 1, 1983, the number of railroad transformers containing a PCB concentration greater than 60,000 ppm (6.0 percent on a dry weight basis) in use by any affected railroad organization may not exceed two-thirds of the total railroad transformers containing PCBs in use by that organization on January 1, 1982.

(ii) After January 1, 1984, the number of railroad transformers containing a PCB concentration greater than 60,000 ppm in use by any affected railroad organization may not exceed one-third of the total railroad transformers containing PCBs in use by that organization on January 1, 1982.

(iii) After July 1, 1984, use of railroad transformers that contain dielectric fluids with a PCB concentration greater than 60,000 ppm is prohibited.

(iv) After July 1, 1985, the number of railroad transformers containing a PCB concentration greater than 1,000 ppm (0.1 percent on a dry weight basis) in use by any affected railroad organization may not exceed two-thirds of the total railroad transformers containing PCBs in use by that organization on July 1, 1984.

(v) After January 1, 1986, the number of railroad transformers containing a PCB concentration greater than 1,000 ppm in use by any affected railroad organization may not exceed one-third of the total railroad transformers containing PCBs in use by that organization on July 1, 1984.

(vi) After July 1, 1986, use of railroad transformers that contain dielectric fluids with a PCB concentration greater than 1,000 ppm is prohibited.

(vii) The concentration of PCBs in the dielectric fluid contained in railroad transformers must be measured.

(A) Immediately upon completion of any authorized servicing of a railroad transformer conducted for the purpose of reducing the PCB concentration in the dielectric fluid in the transformer, and

(B) Between 12 and 24 months after each servicing conducted in accordance with paragraph (b)(1)(vii)(A) of this section;

(C) The data obtained as a result of paragraphs (b)(1)(vii)(A) and (B) of this section shall be retained until January 1, 1991.

(2) *Servicing restrictions.*

(i) If the coil is removed from the casing of a railroad transformer (e.g., the transformer is rebuilt), after January 1, 1982, the railroad transformer may not be refilled with dielectric fluid containing a PCB concentration greater than 50 ppm.

(ii) After January 1, 1982, railroad transformers may only be serviced with dielectric fluid containing less than 60,000 ppm PCBs, except as provided in paragraph (b)(2)(i) of this section;

(iii) After January 1, 1984, railroad transformers may only be serviced with dielectric fluid containing less than 1000 ppm PCB, except as provided in paragraph (b)(2)(i) of this section;

(iv) Dielectric fluid may be filtered through activated carbon or otherwise industrially processed for the purpose of reducing the PCB concentration in the fluid;

(v) Any PCB dielectric fluid that is used to service PCB railroad transformers must be stored in accordance with the storage for disposal requirements of § 761.65;

(vi) After July 1, 1979, processing and distribution in commerce of PCBs for purposes of servicing railroad transformers is permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(vii) A PCB Transformer may be converted to a PCB-Contaminated Transformer or to a non-PCB Transformer by draining, refilling, and/or otherwise servicing the railroad transformer. In order to reclassify, the railroad transformer's dielectric fluid must contain less than 500 ppm (for conversion to PCB-Contaminated Transformer) or less than 50 ppm PCB (for conversion to a non-PCB Transformer) after a minimum of three months of inservice use subsequent to the last servicing conducted for the purpose of reducing the PCB concentration in the transformer.

[48 FR 124, Jan. 3, 1983]

(c) *Use in and servicing of mining equipment.* PCBs may be used in mining equipment and may be processed and distributed in commerce for purposes of servicing mining equipment in a manner other than a totally enclosed manner until January 1, 1982, subject to the following conditions:

(1) PCBs may be added to motors in mining equipment in mines or mining areas until January 1, 1982;

(2) PCB motors in loader-type mining equipment must be rebuilt as air-cooled or other non-PCB-containing motors whenever the motor is returned to a service shop for servicing;

(3) PCB motors in continuous miner-type equipment may be rebuilt as PCB motors until January 1, 1980;

(4) Any PCBs that are on hand to service or repair mining equipment must be stored in accordance with the storage for disposal requirements of § 761.65;

(5) After July 1, 1979, processing and distribution in commerce of PCBs for purposes of servicing mining equipment is permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(d) *Use in heat transfer systems.* After July 1, 1984, intentionally manufactured PCBs may be used in heat transfer systems in a manner other than a totally enclosed manner at a concentration level of less than 50 ppm provided that the requirements of paragraphs (d)(1) through (5) of this section are met.

[53 FR 24221, June 27, 1988]

(1) Each person who owns a heat transfer system that ever contained PCBs at concentrations above 50 ppm must test for the concentration of PCBs in the heat transfer fluid of such a system no later than November 1, 1979, and at least annually thereafter. All test sampling must be performed at least three months after the most recent fluid refilling. When a test shows that the PCB concentration is less than 50 ppm, testing under this paragraph is no longer required.

(2) Within six months of a test performed under paragraph (d)(1) of this section that indicates that a system's fluid contains 50 ppm or greater PCB (0.005% on a dry weight basis), the system must be drained of the PCBs and refilled with fluid containing less than 50 ppm PCB. Topping-off with heat transfer fluids containing PCB concentrations of less than 50 ppm is permitted.

(3) After November 1, 1979, no heat transfer system that is used in the manufacture or processing of any food, drug, cosmetic or device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act, may contain transfer

(l) *Use in capacitors.* PCBs at any concentration may be used in capacitors, subject to the following conditions:
[47 FR 37342, Aug. 25, 1982]

(1) *Use conditions.* (i) After October 1, 1988, the use and storage for reuse of PCB Large High Voltage Capacitors and PCB Large Low Voltage Capacitors which pose an exposure risk to food or feed is prohibited.

(ii) After October 1, 1988, the use of PCB Large High Voltage Capacitors and PCB Large Low Voltage Capacitors is prohibited unless the capacitor is used within a restricted-access electrical substation or in a contained and restricted-access indoor installation. A restricted-access electrical substation is an outdoor, fenced or walled-in facility that restricts public access and is used in the transmission or distribution of electric power. A contained and restricted-access indoor installation does not have public access and has an adequate roof, walls, and floor to contain any release of PCBs within the indoor location.

(2) [Reserved]

(m) *Use in and servicing of circuit breakers, reclosers and cable.* PCBs at any concentration may be used in circuit breakers, reclosers, and cable and may be used for purposes of servicing this electrical equipment (including rebuilding) for the remainder of their useful lives, subject to the following conditions:
[47 FR 37342, Aug. 25, 1982]

(1) *Servicing conditions.* (i) Circuit breakers, reclosers, and cable may be serviced (including rebuilding) only with dielectric fluid containing less than 50 ppm PCB.

(ii) Any circuit breaker, recloser or cable found to contain at least 50 ppm PCBs may be serviced only in accordance with the conditions contained in 40 CFR 761.30(h)(2).

(2) [Reserved]

(n) *Microscopy immersion oil.* PCBs may be used as an immersion oil in fluorescence microscopy, in a manner other than a totally enclosed manner indefinitely. Manufacture, processing, and distribution in commerce of PCBs for purposes of use as a low fluorescence immersion oil are permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).
[49 FR 28193, July 10, 1984]

(o) *Optical liquids.* PCBs may be used as optical liquids in a manner other than a totally enclosed manner indefinitely. Manufacture, processing, and distribution in commerce of PCBs for purposes of use as optical liquids are permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).
[49 FR 28193, July 10, 1984]

[Approved by the Office of Management and Budget under control number 2070-003; the recordkeeping requirements of paragraphs (a)(1)(vi), (vii), and (xi) were approved by the Office of Management and Budget under control number 2070-0073; the recordkeeping requirements of paragraph (xii) were approved by the Office of Management and Budget under control number 2070-0007]

Subpart C—Marking of PCBs and PCB Items

§ 761.40 Marking requirements.

(a) Each of the following items in existence on or after July 1, 1978 shall be marked as illustrated in Figure 1 in § 761.44(a): The mark illustrated in Figure 1 is referred to as M_L throughout this subpart.
[53 FR 12524, April 15, 1988]

(1) PCB Containers;

(2) PCB Transformers 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. [Marking of PCB-Contaminated Electrical Equipment is not required];

(3) PCB Large 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;

(4) Equipment containing a PCB Transformer or a PCB Large High Voltage Capacitor at the time of manufacture, at the time of distribution in commerce if not already marked, and at the time of removal of the equipment from use if not already marked;

(5) PCB Large Low Voltage Capacitors at the time of removal from use;

(6) Electric motors using PCB coolants (See also paragraph (e) of this section)

(7) Hydraulic systems using PCB hydraulic fluid (See also paragraph (e) of this section);

(8) Heat transfer systems (other than PCB Transformers) using PCBs (See also paragraph (e) of this section);

(9) PCB Article Containers containing articles or equipment that must be marked under paragraph (a)(1) through (8) of this section;

(10) Each storage area used to store PCBs and PCB Items for disposal.

(b) As of October 1, 1978, each transport vehicle shall be marked on each end and side with M_L as described in § 761.45(a) if it is loaded with PCB Containers that contain more than 45 kg (99.4 lbs.) of PCBs in the liquid phase or with one or more PCB Transformers (See also paragraph (e) of this section).

(c) As of January 1, 1979, the following PCB Articles shall be marked with mark M_L as described in § 761.45(a):

(1) All PCB Transformers not marked under paragraph (a) of this section [marking of PCB-Contaminated Electrical Equipment is not required];

(2) All PCB Large High Voltage Capacitors not marked under paragraph (a) of this section.

(i) Will be marked individually with mark M_L, or

(ii) If one or more PCB Large High Voltage Capacitors are installed in a protected location such as on a power pole, or structure, or behind a fence; the pole, structure, or fence shall be marked with mark M_L, and a record or procedure identifying the PCB Capacitors shall be maintained by the owner or operator at the protected location.

(d) As of January 1, 1979, all PCB Equipment containing a PCB Small Capacitor shall be marked at the time of manufacture with the statement, "This equipment contains PCB Capacitor(s)". The mark shall be of the same size as the mark M_L.

(e) As of October 1, 1979, applicable PCB Items in paragraph (a)(1), (6), (7), and (8) of this section containing PCBs in concentrations of 50 to 500 ppm and applicable transport vehicles in paragraph (b) of this section loaded with PCB Containers that contain more than 45 kg (99.4 lbs.) of liquid PCBs in concentrations of 50 ppm to 500 ppm shall be marked with mark M_L as described in § 761.45(a).

(f) Where mark M_L is specified but the PCB Article or PCB Equipment is too small to accomodate the smallest permissible size of mark M_L, mark M_S as described in § 761.45(b), may be used instead of mark M_L.

(g) Each large low voltage capacitor, each small capacitor normally used in alternating current circuits, and each fluorescent light ballast manufactured ("manufactured", for purposes of this sentence, means built) between July 1, 1978 and July 1, 1998 that do not contain PCBs shall be marked by the manufacturer at the time of manufacture with the statement, "No PCBs". The mark shall be of similar durability and readability as other marking that indicate electrical information, part numbers, or the manufacturer's name. For purposes of this paragraph marking requirement only is applicable to items built domestically or abroad after June 30, 1978.

(h) All marks required by this subpart must be placed in a position on the exterior of the PCB Items or transport vehicles so that the marks can be easily read by any persons inspecting or servicing the marked PCB Items or transport vehicles.

(i) Any chemical substance or mixture that is manufactured after the effective date of this rule and that contains less than 500 ppm PCB (0.05% on a dry weight basis), including PCB that is a byproduct or impurity, must be marked

fluid with 50 ppm or greater PCB (0.005% on a dry weight basis).

(4) Addition of fluids containing PCB concentrations greater than 50 ppm is prohibited.

(5) Data obtained as a result of paragraph (d)(1) of this section must be retained for five years after the heat transfer system reaches 50 ppm PCB.

(6) [Removed]

[53 FR 24221, June 27, 1988]

(7) [Removed]

[53 FR 24221, June 27, 1988]

(e) *Use in hydraulic systems.* After July 1, 1984, intentionally manufactured PCBs may be used in hydraulic systems in a manner other than a totally enclosed manner at a concentration level of less than 50 ppm provided that the requirements in paragraphs (e)(1) through (5) of this section are met.

[53 FR 24221, June 27, 1988]

(1) Each person who owns a hydraulic system that ever contained PCBs at concentrations above 50 ppm must test for the concentration of PCBs in the hydraulic fluid of each system no later than November 1, 1979, and at least annually thereafter. All test sampling must be performed at least three months after the most recent fluid refilling. When a test shows that the PCB concentration is less than 50 ppm, testing under this paragraph is no longer required.

(2) Within six months of a test under paragraph (e)(1) of this section that indicates that a system's fluid contains 50 ppm or greater PCB (0.005% on a dry weight basis), the system must be drained of the PCBs and refilled with fluid containing less than 50 ppm PCB. Topping-off with hydraulic fluids containing PCB concentrations less than 50 ppm to reduce PCB concentrations is permitted.

(3) Addition of PCBs at concentrations of greater than 50 ppm is prohibited.

(4) Hydraulic fluid may be drained from a hydraulic system and filtered, distilled, or otherwise serviced in order to reduce the PCB concentration below 50 ppm.

(5) Data obtained as a result of paragraph (e)(1) of this section must be retained for five years after the hydraulic system reaches 50 ppm.

(6) [Removed]

[53 FR 24221, June 27, 1988]

(7) [Removed]

[53 FR 24221, June 27, 1988]

(f) *Use in carbonless copy paper.* Carbonless copy paper containing PCBs may be used in a manner other than a totally enclosed manner indefinitely.

(g) *Pigments.* Diarylide and Phthalocyanin pigments that contain 50 ppm or greater PCB may be processed, distributed in commerce, and used in a manner other than a totally enclosed manner until January 1, 1982, except that after July 1, 1979, processing and distribution in commerce of diarylide or phthalocyanin pigments that contain 50 ppm or greater PCB is permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

(h) *Use in and servicing of electromagnets, switches and voltage regulators.* PCBs at any concentration may be used in electromagnets, switches (including sectionalizers and motor starters), and voltage regulators and may be used for purposes of servicing this equipment (including rebuilding) for the remainder of their useful lives, subject to the following conditions:

[47 FR 37342, Aug. 25, 1982]

(1) *Use conditions.* (i) After October 1, 1985, the use and storage for reuse of any electromagnet which poses an exposure risk to food or feed is prohibited if the electromagnet contains greater tha 500 ppm PCBs.

(ii) A visual inspection of each electromagnet subject to paragraph (h)(1)(i) shall be performed at least once every week according to the conditions contained in § 761.30(a)(1)(iii) and (iv).

(2) *Servicing conditions.* (i) Servicing (including rebuilding) any electromagnet, switch, or voltage regulator with a PCB concentration of 500 ppm or greater which requires the removal and rework of the internal components is prohibited.

(ii) Electromagnets, switches, and voltage regulators classified as PCB-Contaminated Electrical Equipment (as defined in the definition of "PCB-Contaminated Electrical Equipment" under § 761.3) may be serviced (including rebuilding) only with dielectric fluid containing less than 500 ppm PCB.

(iii) PCBs removed during any servicing activity must be captured and either reused as dielectric fluid or disposed of in accordance with the requirements of § 761.60. PCBs from electromagnets switches, and voltage regulators with a PCB concentration of at least 500 ppm must not be mixed with or added to dielectric fluid from PCB-Contaminated Electrical Equipment.

(iv) Regardless of its PCB concentration, dielectric fluids containing less than 500 ppm PCB that are mixed with fluids that contain 500 ppm or greater PCB must not be used as dielectric fluid in any electrical equipment. The entire mixture of dielectric fluid must be considered to be greater than 500 ppm PCB and must be disposed of in an incinerator that meets the requirements of § 761.70.

[53 FR 12524, April 15, 1988]

(v) An electromagnet, switch or voltage regulator with a PCB concentration of at least 500 ppm may be converted to PCB-Contaminated Electrical Equipment or to a non-PCB classification and PCB-Contaminated Electrical Equipment may be reclassified to a non-PCB classification by draining, refilling and/or otherwise servicing the equipment. In order to be reclassified, the equipment's dielectric fluid must contain less than 500 ppm PCB (for conversion to PCB-Contaminated Electrical Equipment) or less than 50 ppm PCB (for conversion to a non-PCB classification) after a minimum of three months of in-service use subsequent to the last servicing conducted for the purpose of reducing the PCB concentration in the equipment. In-service use means the equipment is used electrically under loaded conditions. The Assistant Administrator may grant, without further rulemaking, approval for the use of alternative methods that simulate the loaded conditions of in-service use. All PCBs removed from this equipment for purposes of reducing PCB concentrations are subject to the disposal requirements of § 761.60.

(vi) Any dielectric fluid containing 50 ppm or greater PCB used for servicing electromagnets, switches, or voltage regulators must be stored in accordance with the storage for disposal requirements of § 761.65.

(vii) Processing and distribution in commerce of PCBs for purposes of servicing electromagnets, switches or voltage regulators is permitted only for persons who are granted an exemption under TSCA 6(e)(3)(B).

(i) *Use in compressors and in the liquid of natural gas pipelines.* PCBs may be used indefinitely in the compressors and in the liquids of natural gas pipelines at a concentration level of less than 50 ppm provided that they are marked in accordance with § 761.45(a).

[49 FR 28172, July 10, 1984]

(j) *Small quantities for research and development.* PCBs may be used in small quantities for research and development, as defined in § 761.3(ee), in a manner other than a totally enclosed manner, indefinitely. Manufacture, processing, and distribution in commerce of PCBs in small quantities for research and development is permitted only for persons who have been granted an exemption under TSCA section 6(e)(3)(B).

[49 FR 28193, July 10, 1984]

(k) *Microscopy mounting medium.* PCBs may be used as a permanent microscopic mounting medium in a manner other than a totally enclosed manner indefinitely. Manufacture, processing, and distribution in commerce of PCBs for purposes of use as a mounting medium are permitted only for persons who are granted an exemption under TSCA section 6(e)(3)(B).

[49 FR 28193, July 10, 1984]

in accordance with any requirements contained in the exemption granted by EPA to permit such manufacture and is not subject to any other requirement in this subpart unless so specified in the exemption. This paragraph applies only to containers of chemical substances or mixtures. PCB articles and equipment into which the chemical substances or mixtures are processed, are subject to the marking requirements contained elsewhere in this subpart.

(j) PCB Transformer locations shall be marked as follows:

(1) Except as provided in paragraph (j)(2) of this section, as of December 1, 1985, the vault door, machinery room door, fence, hallway, or means of access, other than grates and manhole covers, to a PCB Transformer must be marked with the mark M_L as required by paragraph (a) of this section.

(2) A mark other than the M_L mark may be used provided all of the following conditions are met:

(i) The program using such an alternative mark was initiated prior to August 15, 1985, and can be substantiated with documentation.

(ii) Prior to August 15, 1985, coordination between the transformer owner and the primary fire department occurred, and the primary fire department knows, accepts, and recognizes what the alternative mark means, and that this can be substantiated with documentation.

(iii) The EPA Regional Administrator in the appropriate region is informed in writing of the use of the alternative mark by October 3, 1988 and is provided with documentation that the program began before August 15, 1985, and documentation that demonstrates that prior to that date the primary fire department knew, accepted and recognized the meaning of the mark, and included this information in firefighting training.

(iv) The Regional Administrator will either approve or disapprove in writing the use of an alternative mark within 30 days of receipt of the documentation of a program.

(3) Any mark placed in accordance with the requirements of this section must be placed in the locations described in paragraph (j)(1) of this section and in a manner that can be easily read by emergency response personnel fighting a fire involving this equipment.

[50 FR 29170, July 17, 1985; 50 FR 32176, Aug. 9, 1985; 53 FR 27329, July 19, 1988]

§ 761.45 Marking formats.

The following formats shall be used for marking:

(a) *Large PCB Mark—M_L.* Mark M_L shall be as shown in Figure 1, letters and striping on a white or yellow background and shall be sufficiently durable to equal or exceed the life (including storage for disposal) of the PCB Article, PCB Equipment or PCB Container. The size of the mark shall be at least 15.25 cm (6 inches) on each side. If the PCB Article or PCB Equipment is too small to accommodate this size, the mark may be reduced in size proportionately down to a minimum of 5 cm (2 inches) on each side.

Figure 1

(b) *Small PCB Mark—MS.* Mark M_S shall be as shown in Figure 2, letters and striping on a white or yellow background, and shall be sufficiently durable to equal or exceed the life (including storage for disposal) of the PCB Article, PCB Equipment, or PCB Container. The mark shall be a rectangle 2.5 by 5 cm (1 inch by 2 inches). If the PCB Article or PCB Equipment is too small to accommodate this size, the mark may be reduced in size proportionately down to a minimum of 1 by 2 cm (.4 by .8 inches).

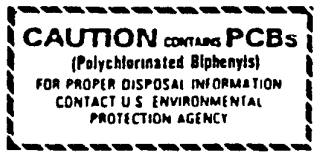


Figure 2

Subpart D—Storage and Disposal

Note: This subpart does not require removal of PCBs and PCB Items from service and disposal earlier than would normally be the case. However, when PCBs and PCB Items are removed from service and disposed of, disposal must be undertaken in accordance with these regulations. PCBs (including soils and debris) and PCB Items which have been placed in a disposal site are considered to be "in service" for purposes of the applicability of this subpart. This subpart does not require PCBs and PCB Items landfilled prior to February 17, 1978 to be removed for disposal. However, if such PCBs or PCB Items are removed from the disposal site, they must be disposed of in accordance with this subpart. Other subparts are directed to the manufacture, processing, distribution in commerce, and use of PCBs and may result in some cases in disposal at an earlier date than would otherwise occur.

§ 761.60—Disposal requirements.

(a) *PCBs.* (1) Except as provided in paragraphs (a)(2), (3), (4), and (5) of this section, PCBs at concentrations of 50 ppm or greater must be disposed of in an incinerator which complies with § 761.70.

[49 FR 28172, July 10, 1984; 54 FR 22595, May 25, 1989]

(2) Mineral oil dielectric fluid from PCB-Contaminated Electrical Equipment containing a PCB concentration of 50 ppm or greater, but less than 500 ppm, must be disposed of in one of the following:

[47 FR 37342, Aug. 25, 1982]

(i) In an incinerator that complies with § 761.70;

(ii) In a chemical waste landfill that complies with § 761.75 if information is provided to the owner or operator of the chemical waste landfill that shows that the mineral oil dielectric fluid does not exceed 500 ppm PCB and is not an ignitable waste as described in § 761.75(b)(8)(iii);

(iii) In a high efficiency boiler provided that:

(A) The boiler complies with the following criteria:

(1) The boiler is rated at a minimum of 50 million BTU hours;

(2) If the boiler uses natural gas or oil as the primary fuel, the carbon monoxide concentration in the stack is 50 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(3) If the boiler uses coal as the primary fuel, the carbon monoxide concentration in the stack is 100 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(4) The mineral oil dielectric fluid does not comprise more than ten (10) percent (on a volume basis) of the total fuel feed rate;

(5) The mineral oil dielectric fluid is not fed into the boiler unless the boiler is operating at its normal operating temperature (this prohibits feeding these fluids during either start up or shut down operations);

(6) The owner or operator of the boiler:

(*i*) Continuously monitors and records the carbon monoxide concentration and excess oxygen percentage in the stack gas while burning mineral oil dielectric fluid; or

(*ii*) If the boiler will burn less than 30,000 gallons of mineral oil dielectric fluid per year, measures and records the carbon monoxide concentration and excess oxygen percentage in the stack gas at regular intervals of no longer than 60

minutes while burning mineral oil dielectric fluid.

(7) The primary fuel feed rates, mineral oil dielectric fluid feed rates, and total quantities of both primary fuel and mineral oil dielectric fluid fed to the boiler are measured and recorded at regular intervals of no longer than 15 minutes while burning mineral oil dielectric fluid.

(8) The carbon monoxide concentration and the excess oxygen percentage are checked at least once every hour that mineral oil dielectric fluid is burned. If either measurement falls below the levels specified in this rule, the flow of mineral oil dielectric fluid to the boiler shall be stopped immediately.

(B) Thirty days before any person burns mineral oil dielectric fluid in the boiler, the person gives written notice to the EPA Regional Administrator for the EPA Region in which the boiler is located and that the notice contains the following information:

(1) The name and address of the owner or operator of the boiler and the address of the boiler;

(2) The boiler rating in units of BTU/hour;

(3) The carbon monoxide concentration and the excess oxygen percentage in the stack of the boiler when it is operated in a manner similar to the manner in which it will be operated when mineral oil dielectric fluid is burned; and

(4) The type of equipment, apparatus, and procedures to be used to control the feed of mineral oil dielectric fluid to the boiler and to monitor and record the carbon monoxide concentration and excess oxygen percentage in the stack.

(C) When burning mineral oil dielectric fluid, the boiler must operate at a level of output no less than the output at which the measurements required under paragraph (b)(2)(iii)(B)(3) of this section were taken.

[53 FR 12524, April 15, 1988]

(D) Any person burning mineral oil dielectric fluid in a boiler obtains the following information and retains the information for five years at the boiler location:

(1) The data required to be collected under paragraphs (a)(2)(A) (6) and (7) of this section; and

(2) The quantity of mineral oil dielectric fluid burned in the boiler each month;

(iv) In a facility that is approved in accordance with § 761.60(e). For the purpose of burning mineral oil dielectric fluid, an applicant under § 761.60(e) must show that his combustion process destroys PCBs as efficiently as does a high efficiency boiler, as defined in paragraph (a)(2)(iii) of this section, or a § 761.70 approved incinerator.

[53 FR 12624, April 15, 1988]

(3) Liquids, other than mineral oil dielectric fluid, containing a PCB concentration of 50 ppm or greater, but less than 500 ppm, shall be disposed of:

(i) In an incinerator which complies with § 761.70;

(ii) In a chemical waste landfill which complies with § 761.75 if information is provided to the owner or operator of the chemical waste landfill that shows that the waste does not exceed 500 ppm PCB and is not an ignitable waste as described in § 761.75(b)(8)(iii);

(iii) In a high efficiency boiler provided that:

(A) The boiler complies with the following criteria:

(1) The boiler is rated at a minimum of 50 million BTU/hour;

(2) If the boiler uses natural gas or oil as the primary fuel, the carbon monoxide concentration in the stack is 50 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(3) If the boiler uses coal as the primary fuel, the carbon monoxide concentration in the stack is 100 ppm or less and the excess oxygen is at least three (3) percent when PCBs are being burned;

(4) The waste does not comprise more than ten (10) percent (on a volume basis) of the total fuel feed rate;

(5) The waste is not fed into the boiler unless the boiler is operating at its normal operating temperature (this prohibits feeding these fluids during either start up or shut down operations);

(6) The owner or operator of the boiler must:

(i) Continuously monitor and record the carbon monoxide concentration and excess oxygen percentage in the stack gas while burning waste fluid; or

(ii) If the boiler will burn less than 30,000 gallons of waste fluid per year, measure and record the carbon monoxide concentration and excess oxygen percentage in the stack gas at regular intervals of no longer than 60 minutes while burning waste fluid;

(7) The primary fuel feed rate, waste fluid feed rate, and total quantities of both primary fuel and waste fluid fed to the boiler must be measured and recorded at regular intervals of no longer than 15 minutes while burning waste fluid; and

(8) The carbon monoxide concentration and the excess oxygen percentage must be checked at least once every hour that the waste is burned. If either measurement falls below the levels specified in this rule, the flow of waste to the boiler shall be stopped immediately.

(B) Prior to any person burning these liquids in the boiler, approval must be obtained from the EPA Regional Administrator for the EPA Region in which the boiler is located and any persons seeking such approval must submit to the EPA Regional Administrator a request containing at least the following information:

(1) The name and address of the owner or operator of the boiler and the address of the boiler;

(2) The boiler rating in units of BTU/hour;

(3) The carbon monoxide concentration and the excess oxygen percentage in the stack of the boiler when it is operated in a manner similar to the manner in which it will be operated when low concentration PCB liquid is burned;

(4) The type of equipment, apparatus, and procedures to be used to control the feed of mineral oil dielectric fluid to the boiler and to monitor and record the carbon monoxide concentration and excess oxygen percentage in the stack;

(5) The type of waste to be burned (e.g., hydraulic fluid, contaminated fuel oil, heat transfer fluid, etc.);

(6) The concentration of PCBs and of any other chlorinated hydrocarbon in the waste and the results of analyses using the American Society of Testing and Materials (ASTM) methods as follows: carbon and hydrogen content using ASTM-D 3178-84, nitrogen content using ASTM E-258-67 (Reapproved 1987), sulfur content using ASTM-D-2784-80, D-1266-80, or D-129-64, chlorine content using ASTM D-808-81, water and sediment content using either ASTM-D 2709-68 or D-1796-83, ash content using D-482-80, calorific value using ASTM-D 240-87, carbon residue using either ASTM D-2158-85 or D-524-81, and flash point using ASTM D-93-85.

[48 FR 5729, Feb. 8, 1983; 49 FR 36648, Sept. 19, 1984; 53 FR 10391, March 31, 1988; 53 FR 21641, June 9, 1988]

(7) The quantity of wastes estimated to be burned in a thirty (30) day period;

(8) An explanation of the procedures to be followed to insure that burning the waste will not adversely affect the operation of the boiler such that combustion efficiency will decrease.

(C) On the basis of the information in paragraph (a)(3)(iii)(B) of this section and any other available information, the Regional Administrator may, at his discretion, find that the alternate disposal method will not present an unreasonable risk of injury to health or the environment and approve the use of the boiler.

(D) When burning PCB wastes, the boiler must operate at a level of output no less than the output at which the measurements required under paragraph (a)(3)(iii)(B)(3) of this section were taken; and

(E) Any person burning liquids in boilers approved as provided in paragraph (a)(3)(iii)(C) of this section,

must obtain the following information and retain the information for five years at the boiler location:

(1) The data required to be collected in paragraphs (a)(3)(iii)(A)(6) and (7) of this section;

(2) The quantity of low concentration PCB liquid burned in the boiler each month.

(3) The analysis of the waste required by paragraph (a)(3)(iii)(B)(6) of this section taken once a month for each month during which low concentration PCB liquid is burned in the boiler.

(iv) In a facility that is approved in accordance with § 761.60(e). For the purpose of burning liquids, other than mineral oil dielectric fluid, containing 50 ppm or greater PCB, but less than 500 ppm PCB, an applicant under § 761.60(e) must show that his combustion process destroys PCBs as efficiently as does a high efficiency boiler, as defined in § 761.60(a)(2)(iii), or a § 761.70 incinerator.

(4) Any non-liquid PCBs at concentrations of 50 ppm or greater in the form of contaminated soil, rags, or other debris shall be disposed of:
[49 FR 28172, July 10, 1984]

(i) In an incinerator which complies with § 761.70; or

(ii) In a chemical waste landfill which complies with § 761.75.

Note: Except as provided in § 761.75(b)(8)(ii), liquid PCBs shall not be processed into non-liquid forms to circumvent the high temperature incineration requirements of § 761.60(a).

(5) All dredged materials and municipal sewage treatment sludges that contain PCBs at concentrations of 50 ppm or greater shall be disposed of:
[49 FR 28172, July 10, 1984]

(i) In an incinerator which complies with § 761.70,

(ii) In a chemical waste landfill which complies with § 761.75; or
[53 FR 12524, April 15, 1988]

(iii) Upon application, using a disposal method to be approved by the Agency's Regional Administrator in the EPA Region in which the PCBs are located. Applications for disposal in a manner other than prescribed in (i) or (ii) of this section must be made in writing to the Regional Administrator. The application must contain information that, based on technical, environmental, and economic considerations, indicates that disposal in an incinerator or chemical waste landfill is not reasonable and appropriate, and that the alternate disposal method will provide adequate protection to health and the environment. The Regional Administrator may request other information that he or she believes to be necessary for evaluation of the alternate disposal method. Any approval by the Regional Administrator shall be in writing and may contain any appropriate limitations on the approved alternate method for disposal. In addition to these regulations, the Regional Administrator shall consider other applicable Agency guidelines, criteria, and regulations to ensure that the discharges of dredged material and sludges that contain PCBs and other contaminants are adequately controlled to protect the environment. The person to whom such approval is issued must comply with all limitations contained in the approval.

(6) When storage is desired prior to disposal, PCBs at concentrations of 50 ppm or greater shall be stored in a facility which complies with § 761.65.
[49 FR 28172, July 10, 1984]

(b) *PCB Articles*—(1) Transformers.

(i) PCB Transformers shall be disposed of in accordance with either of the following:

(A) In an incinerator that complies with § 761.70; or

(B) In a chemical waste landfill which complies with § 761.75; provided, That the transformer is first drained of all free flowing liquid, filled with solvent, allowed to stand for at least 18 hours, and then drained thoroughly. PCB liquids that are removed shall be disposed of in accordance with paragraph (a) of this section. Solvents may include kerosene, xylene, toluene and other solvents in which PCBs are readily soluble. Precautionary measures should be taken, however, that the solvent flushing procedure is conducted in accordance with applicable safety and health standards as required by Federal or State regulations.

(ii) [Reserved]

(2) *PCB Capacitors.* (i) The disposal of any capacitor shall comply with all requirements of this subpart unless it is known from label or nameplate information, manufacturer's literature (including documented communications with the manufacturer), or chemical analysis that the capacitor does not contain PCBs.
[47 FR 37342, Aug. 25, 1982]

(ii) Any person may dispose of PCB Small Capacitors as municipal solid waste, unless that person is subject to the requirements of paragraph (b)(2)(iv) of this section.

(iii) Any PCB Large High or Low Voltage Capacitor which contains 500 ppm or greater PCBs, owned by any person, shall be disposed of in accordance with either of the following:
[47 FR 37342, Aug. 25, 1982]

(A) Disposal in an incinerator that complies with § 761.70; or

(B) Until March 1, 1981, disposal in a chemical waste landfill that complies with § 761.75.
[45 FR 20473, March 28, 1980]

(iv) Any PCB Small Capacitor owned by any person who manufactures or at any time manufactured PCB Capacitors or PCB Equipment and acquired the PCB Capacitors in the course of such manufacturing shall be disposed of in accordance with either of the following:

(A) Disposal in an incinerator which complies with § 761.70; or

(B) Until March 1, 1981, disposal in a chemical waste landfill which complies with § 761.75.
[45 FR 20473, March 28, 1980]

(v) Notwithstanding the restrictions imposed by paragraph (b)(2)(iii)(B) or (b)(2)(iv)(B) of this section, PCB capacitors may be disposed of in PCB chemical waste landfills that comply with § 761.75 subsequent to March 1, 1981, if the Assistant Administrator for Pesticides and Toxic Substances publishes a notice in the **Federal Register** declaring that those landfills are available for such disposal and explaining the reasons for the extension or reopening. An extension or reopening for disposal of PCB capacitors that is granted under this subsection shall be subject to such terms and conditions as the Assistant Administrator may prescribe and shall be in effect for such period as the Assistant Administrator may prescribe. The Assistant Administrator may permit disposal of PCB capacitors in EPA approved chemical waste landfills after March 1, 1981, if in his opinion,

(A) Adequate incineration capability for PCB capacitors is not available, or

(B) The incineration of PCB capacitors will significantly interfere with the incineration of liquid PCBs, or

(C) There is other good cause shown. As part of this evaluation, the Assistant Administrator will consider the impact of his action on the incentives to construct or expand PCB incinerators.
[45 FR 20473, March 28, 1980]

(vi) Prior to disposal in a § 761.75 chemical waste landfill, all large PCB capacitors, and all small PCB capacitors described in paragraph (b)(2)(iv) of this section, shall be placed in one of the Department of Transportation specification containers identified in § 761.65(c)(6) or in containers that comply with 49 CFR 178.118 (specification 17H containers). Large PCB capacitors which are too big to fit inside one of these containers shall be placed in a container with strength and durability equivalent to the DOT specification containers. In all cases, interstitial space in the container shall be filled with sufficient absorbent material (such as sawdust or soil) to absorb any liquid PCBs remaining in the capacitors.
[45 FR 20473, March 28, 1980]

(3) *PCB hydraulic machines.* PCB hydraulic machines containing PCBs at concentrations of 50 ppm or greater such

as die casting machines may be disposed of as municipal solid waste or salvage provided that the machines are drained of all free-flowing liquid and the liquid is disposed of in accordance with the provisions of paragraph (a) of this section. If the PCB liquid contains 1000 ppm PCB or greater, then the hydraulic machine must be flushed prior to disposal with a solvent containing less than 50 ppm PCB under transformer solvents at paragraph (b)(1)(i)(B) of this section and the solvent disposed of in accordance with paragraph (a) of this section.
[49 FR 28172, July 10, 1984]

(4) *PCB-Contaminated Electrical Equipment.* All PCB-Contaminated Electrical Equipment except capacitors shall be disposed of by draining all free flowing liquid from the electrical equipment and disposing of the liquid in accordance with paragraph (a)(2) or (3) of this section. The disposal of the drained electrical equipment is not regulated by this rule. Capacitors that contain between 50 and 500 ppm PCBs shall be disposed of in an incinerator that complies with § 761.70 or in a chemical waste landfill that complies with § 761.75.
[47 FR 37342, Aug. 25, 1982]

(5) *Other PCB Articles.* (i) PCB articles with concentrations at 500 ppm or greater must be disposed of:
[47 FR 37342, Aug. 25, 1982; 49 FR 28172, July 10, 1984; 53 FR 12524, April 15, 1988]

(A) In an incinerator that complies with § 761.70; or

(B) In a chemical waste landfill that complies with § 761.75, provided that all free-flowing liquid PCBs have been thoroughly drained from any articles before the articles are placed in the chemical waste landfill and that the drained liquids are disposed of in an incinerator that complies with § 761.70.

(ii) PCB Articles with a PCB concentration between 50 and 500 ppm must be disposed of by draining all free flowing liquid from the article and disposing of the liquid in accordance with paragraph (a)(2) or (3) of this section. The disposal of the drained article is not regulated by this rule.

(6) *Storage of PCB Articles.* Except for a PCB Article described in paragraph (b)(2)(ii) of this section and hydraulic machines that comply with the municipal solid waste disposal provisions described in paragraph (b)(3) of this section, any PCB Article, with PCB concentrations at 50 ppm or greater, shall be stored in accordance with § 761.65 prior to disposal.
[47 FR 37342, Aug. 25, 1982; 49 FR 28172, July 10, 1984]

(c) *PCB Containers.* (1) Unless decontaminated in compliance with § 761.79 or as provided in paragraph (c)(2) of this section, a PCB container with PCB concentrations at 500 ppm or greater shall be disposed of:
[49 FR 28172, July 10, 1984; 53 FR 12524, April 15, 1988]

(i) In an incinerator which complies with § 761.70, or

(ii) In a chemical waste landfill that complies with § 761.75; provided that if there are PCBs in a liquid state, the PCB Container shall first be drained and the PCB liquid disposed of in accordance with paragraph (a) of this section.

(2) Any PCB Container used to contain only PCBs at a concentration less than 500 ppm shall be disposed of as municipal solid wastes; provided that if the PCBs are in a liquid state, the PCB Container shall first be drained and the PCB liquid shall be disposed of in accordance with paragraph (a) of this section.

(3) Prior to disposal, a PCB container with PCB concentrations at 50 ppm or greater shall be stored in a facility which complies with § 761.65.
[49 FR 28172, July 10, 1984]

(d) *Spills.* (1) Spills and other uncontrolled discharges of PCBs at concentrations of 50 ppm or greater constitute the disposal of PCBs.
[47 FR 37342, Aug. 25 1982; 49 FR 28172, July 10, 1984]

(2) PCBs resulting from the clean-up and removal of spills, leaks, or other uncontrolled discharges, must be stored and disposed of in accordance with paragraph (a) of this section.
[47 FR 37342, Aug. 25, 1982]

(3) These regulations do not exempt any person from any actions or liability under other statutory authorities, including but not limited to the Clean Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.
[47 FR 37342, Aug. 25, 1982]

(e) Any person who is required to incinerate any PCBs and PCB Items under this subpart and who can demonstrate that an alternative method of destroying PCBs and PCB Items exists and that this alternative method can achieve a level of performance equivalent to § 761.70 incinerators or high efficiency boilers as provided in paragraph (a)(2)(iv) and (a)(3)(iv) of this section, may submit a written request to either the Regional Administrator or the Director, Exposure Evaluation Division for an exemption from the incineration requirements of § 761.70 or § 761.60. Requests for approval of alternate methods that will be operated in more than one region must be submitted to the Director, Exposure Evaluation Division except for research and development involving less than 500 pounds of PCB material (see paragraph (i)(2) of this section). Requests for approval of alternate methods that will be operated in only one region must be submitted to the appropriate Regional Administrator. The applicant must show that his method of destroying PCBs will not present an unreasonable risk of injury to health or the environment. On the basis of such information and any available information, the Regional Administrator or Director, Exposure Evaluation Division may, in his discretion, approve the use of the alternate method if he finds that the alternate disposal method provides PCB destruction equivalent to disposal in a § 761.70 incinerator or a § 761.60 high efficiency boiler and will not present an unreasonable risk of injury to health or the environment. Any approval must be stated in writing and may contain such conditions and provisions as the Regional Administrator or Director, Exposure Evaluation Division deems appropriate. The person to whom such waiver is issued must comply with all limitations contained in such determination.
[48 FR 13181, March, 30, 1983; 53 FR 12524, April 15, 1988]

(f)(1) Each operator of a chemical waste landfill, incinerator, or alternative to incineration approved under paragraph (e) of this section shall give the following written notices to the state and local governments within whose jurisdiction the disposal facility is located:

(i) Notice at least thirty (30) days before a facility is first used for disposal of PCBs required by these regulations; and

(ii) At the request of any state or local government, annual notice of the quantities and general description of PCBs disposed of during the year. This annual notice shall be given no more than thirty (30) days after the end of the year covered.

(iii) The Regional Administrator may reduce the notice period required by paragraph (f)(1)(i) of this section from thirty days to a period of no less than five days in order to expedite interim approval of the chemical waste landfill located in Sedgwick County, Kansas.
[44 FR 54296, Sept. 19, 1979]

(2) Any person who disposes of PCBs under a paragraph (a)(5)(iii) of this section incineration or chemical waste landfilling waiver shall give written notice at least thirty (30) days prior to conducting the disposal activities to the state and local governments within whose jurisdiction the disposal is to take place.

(g) *Testing procedures.* (1) Owners or users of mineral oil dielectric fluid electrical equipment may use the following procedures to determine the concentration of PCBs in the dielectric fluid:
[47 FR 37342, Aug. 25, 1982]

(i) Dielectric fluid removed from mineral oil dielectric fluid electrical equipment may be collected in a

common container, provided that no other chemical substances or mixtures are added to the container. This common container option does not permit dilution of the collected oil. Mineral oil that is assumed or known to contain at least 50 ppm PCBs must not be mixed with mineral oil that is known or assumed to contain less than 50 ppm PCBs to reduce the concentration of PCBs in the common container. If dielectric fluid from untested, oil-filled circuit breakers, reclosers, or cable is collected in a common container with dielectric fluid from other oil-filled electrical equipment, the entire contents of the container must be treated as PCBs at a concentration of at least 50 ppm, unless all of the fluid from the other oil-filled electrical equipment has been tested and shown to contain less than 50 ppm PCBs.

(ii) For purposes of complying with the marking and disposal requirements, representative samples may be taken from either the common containers or the individual electrical equipment to determine the PCB concentration. *Except that* if any PCBs at a concentration of 500 ppm or greater have been added to the container or equipment then the total container contents must be considered as having a PCB concentration of 500 ppm or greater for purposes of complying with the disposal requirements of this subpart. For purposes of this subparagraph, representative samples of mineral oil dielectric fluid are either samples taken in accordance with ASTM D 923-86 or samples taken from a container that has been thoroughly mixed in a manner such that any PCBs in the container are uniformly distributed throughout the liquid in the container.
[48 FR 5729, Feb. 8, 1983; 48 FR 15125, April 7, 1983; 53 FR 21641, June 9, 1988]

(2) Owners or users of waste oil may use the following procedures to determine the PCB concentration of waste oil:

(i) Waste oil from more than one source may be collected in a common container, provided that no other chemical substances or mixtures, such as non-waste oils, are added to the container.

(ii) For purposes of complying with the marking and disposal requirements, representative samples may be taken from either the common containers or the individual electrical equipment to determine the PCB concentration *Except that* if any PCBs at a concentration of 500 ppm or greater have been added to the container or equipment then the total container contents must be considered as having a PCB concentration of 500 ppm or greater for purposes of complying with the disposal requirements of this Subpart. For purposes of this paragraph, representative samples of mineral oil dielectric fluid are either samples taken in accordance with ASTM D 923-86 or samples taken from a container that has been thoroughly mixed in a manner such that any PCBs in the container are uniformly distributed throughout the liquid in the container.
[48 FR 5729, Feb. 8, 1983; 53 FR 21641, June 9, 1988]

(h) Requirements for export and import of PCBs for purposes of disposal and PCB Items for purposes of disposal are found in § 761.20.

(i) *Approval authority for disposal methods.* (1) The officials (the Director, Exposure Evaluation Division and the Regional Administrators) designated in § 761.60(e) and § 761.70(a) and (b) to receive requests for approval of PCB disposal activities are the primary approval authorities for these activities. Notwithstanding, the Assistant Administrator for Pesticides and Toxic Substances may, at his/her discretion, assign the authority to review and approve any aspect of a disposal system to the Office of Pesticides and Toxic Substances or to a Regional Administrator.
[48 FR 13181, March 30, 1983; 53 FR 12524; April 15, 1988]

(2) Except for activity authorized under § 761.30(j), research and development (R and D) into PCB disposal methods using a total of less than 500 pounds of PCB material (regardless of PCB concentration) will be reviewed and approved by the appropriate EPA Regional Administrator and research and development using 500 pounds or more of PCB material (regardless of PCB concentration) will be reviewed by the approval authorities set out in § 761.60(e) and § 761.70(a) and (b).
[48 FR 13181, March 30, 1983]

§ 761.65 Storage for disposal.

This section applies to the storage for disposal of PCBs at concentrations of 50 ppm or greater and PCB Items with PCB concentrations of 50 ppm or greater.
[49 FR 28172, July 10, 1984]

(a) Any PCB Article or PCB Container stored for disposal before January 1, 1983, shall be removed from storage and disposed of as required by this part before January 1, 1984. Any PCB Article or PCB Container stored for disposal after January 1, 1983, shall be removed from storage and disposed of as required by Subpart D of this part within one year from the date when it was first placed into storage.

(b) Except as provided in paragraph (c) of this section, after July 1, 1978, owners or operators of any facilities used for the storage of PCBs and PCB Items designated for disposal shall comply with the following requirements:

(1) The facilities shall meet the following criteria:

(i) Adequate roof and walls to prevent rain water from reaching the stored PCBs and PCB Items;

(ii) An adequate floor which has continuous curbing with a minimum six inch high curb. The floor and curbing must provide a containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container stored therein or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored therein, whichever is greater;

(iii) No drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area;

(iv) Floors and curbing constructed of continuous smooth and impervious materials, such as Portland cement concrete or steel, to prevent or minimize penetration of PCBs; and

(v) Not located at a site that is below the 100-year flood water elevation.

(c)(1) The following PCB Items may be stored temporarily in an area that does not comply with the requirements of paragraph (b) of this section for up to thirty days from the date of their removal from service, provided that a notation is attached to the PCB Item or a PCB Container (containing the item) indicating the date the item was removed from service:

(i) Non-leaking PCB Articles and PCB Equipment;

(ii) Leaking PCB Articles and PCB Equipment if the PCB Items are placed in a non-leaking PCB Container that contains sufficient sorbent materials to absorb any liquid PCBs remaining in the PCB Items;

(iii) PCB Containers containing non-liquid PCBs such as contaminated soil, rags, and debris; and

(iv) PCB Containers containing liquid PCBs at a concentration between 50 and 500 ppm, provided a Spill Prevention, Control and Countermeasure Plan has been prepared for the temporary storage area in accordance with 40 CFR Part 112. In addition, each container must bear a notation that indicates that the liquids in the drum do not exceed 500 ppm PCB.

(2) Non-leaking and structurally undamaged PCB Large High Voltage Capacitors and PCB-Contaminated Electrical Equipment that have not been drained of free flowing dielectric fluid may be stored on pallets next to a storage facility that meets the requirements of paragraph (b) of this section. PCB-Contaminated Electrical Equipment that has been drained of free flowing dielectric fluid is not subject to the storage provisions of § 761.65. Storage under this subparagraph will be permitted only when the storage facility

has immediately available unfilled storage space equal to 10 percent of the volume of capacitors and equipment stored outside the facility. The capacitors and equipment temporarily stored outside the facility shall be checked for leaks weekly.
[47 FR 37342, Aug. 25, 1982]

(3) Any storage area subject to the requirements of paragraph (b) or paragraph (c)(1) of this section shall be marked as required in Subpart C—§ 761.40(a)(10).

(4) No item of movable equipment that is used for handling PCBs and PCB Items in the storage facilities and that comes in direct contact with PCBs shall be removed from the storage facility area unless it has been decontaminated as specified in § 761.79.

(5) All PCB Articles and PCB Containers in storage shall be checked for leaks at least once every 30 days. Any leaking PCB Articles and PCB Containers and their contents shall be transferred immediately to properly marked non-leaking containers. Any spilled or leaked materials shall be immediately cleaned up, using sorbents or other adequate means, and the PCB-contaminated materials and residues shall be disposed of in accordance with § 761.60(a)(4).

(6) Except as provided in paragraph (c)(7) of this section, any container used for the storage of liquid PCBs shall comply with the Shipping Container Specification of the Department of Transportation (DOT), 49 CFR 178.80 (Specification 5 container without removable head), 178.82 (Specification 5B container without removable head), 178.102 (Specification 6D overpack with Specification 2S (§178.35) or 2SL (§178.35a) polyethylene containers) or 178.116 (Specification 17E container). Any container used for the storage of non-liquid PCBs shall comply with the specifications of 49 CFR 178.80 (Specification 5 container), 178.82 (Specification 5B container) or §178.115 (Specification 17C container). As an alternate, containers larger than those specified in DOT Specifications 5, 5B, or 17C may be used for non-liquid PCBs if the containers are designed and constructed in a manner that will provide as much protection against leaking and exposure to the environment as the DOT Specification containers, and are of the same relative strength and durability as the DOT Specification containers.

(7) Storage containers for liquid PCBs can be larger than the containers specified in paragraph (c)(6) of this section provided that:

(i) The containers are designed, constructed, and operated in compliance with Occupational Safety and Health Standards, 29 CFR 1910.106, *Flammable and combustible liquids*. Before using these containers for storing PCBs, the design of the containers must be reviewed to determine the effect on the structural safety of the containers that will result from placing liquids with the specific gravity of PCBs into the containers (see 29 CFR 1910.106(b)(1)(i)(f)).

(ii) The owners or operators of any facility using containers described in paragraph (c)(7)(i) of this section shall prepare and implement a Spill Prevention Control and Countermeasure (SPCC) Plan as described in Part 112 of this title. In complying with 40 CFR Part 112, the owner or operator shall read "oil(s)" as "PCB(s)" whenever it appears. The exemptions for storage capacity, 40 CFR 112.1(d)(2), and the amendment of SPCC plans by the Regional Administrator, 40 CFR 112.4, shall not apply unless some fraction of the liquids stored in the container are oils as defined by section 311 of the Clean Water Act.

(8) PCB Articles and PCB Containers shall be dated on the article or container when they are placed in storage. The storage shall be managed so that the PCB Articles and PCB Containers can be located by the date they entered storage. Storage containers provided in paragraph (c)(7) of this section shall have a record that includes for each batch of PCBs the quantity of the batch and date the batch was added to the container. The record shall also include the date, quantity, and disposition of any batch of PCBs removed from the container.

(9) Owners or operators of storage facilities shall establish and maintain records as provided in § 761.80.
[53 FR 12524, April 15, 1988]

(d) *Approval of commercial storers of PCB waste.*
[54 FR 52746, Dec. 21, 1989, effective Feb. 5, 1990]

(1) All commercial storers of PCB waste shall have interim approval to operate commercial facilities for the storage of PCB waste until [insert date 224 days after date of publication in the Federal Register]. Commercial storers of PCB waste are prohibited from storing any PCB waste at their facilities after [insert date 224 days after date of publication in the **Federal Register**] unless they have submitted by [insert date 224 days after date of publication in the **Federal Register**] a complete application for a final storage approval under paragraph (d)(2) of this section. The period of interim approval shall continue until the Regional Administrator (or the Director of the Exposure Evaluation Division (Director, EED) in cases involving commercial storage ancillary to a facility approved for disposal by the Director, EED) makes a final decision on the storage application at which time such interim approval shall terminate.

(2) The Regional Administrator for the region in which the storage facility is located (or the Director, EED, if the commercial storage area is ancillary to a facility approved for disposal by the Director, EED) shall grant written, final approval to engage in the commercial storage of PCB waste upon a determination by the Regional Administrator or the Director, EED, that the criteria in paragraph (d)(2)(i) through (d)(2)(vii) of this section have been met by the applicant.

(i) The applicant, its principals, and its key employees responsible for the establishment or operation of the commercial storage facility are qualified to engage in the business of commercial storage of PCB waste.

(ii) The facility possesses the capacity to handle the quantity of PCB waste which the owner or operator of the facility has estimated will be the maximum quantity of PCB waste that will be handled at any one time at the facility.

(iii) The owner or operator of the facility has certified compliance with the storage facility standards in paragraphs (b) and (c)(7) of this section.

(iv) The owner or operator has developed a written closure plan for the facility that is deemed acceptable by the Regional Administrator (or the Director, EED, if the commercial storage is ancillary to a disposal facility permitted by the Director, EED) under the closure plan standards of paragraph (e) of this section.

(v) The owner or operator has included in the application for final approval a demonstration of financial responsibility for closure that meets the financial responsibility standards of paragraph (g) of this section.

(vi) The operation of the storage facility will not pose an unreasonable risk of injury to health or the environment.

(vii) The environmental compliance history of the applicant, its principals, and its key employees shall be deemed to constitute a sufficient basis for denial of approval whenever in the judgment of the Regional Administrator (or Director, EED) two or more related civil violations or a single environmental criminal conviction evidence a pattern or practice of non compliance that demonstrate the applicant's unwillingness or inability to achieve and maintain its operations in a compliance status.

(3) Applicants for storage approvals shall submit a written application that includes any relevant information bearing upon the qualifications of the facility's principals and key employees to engage in the business of commercial storage of PCB wastes. This information

shall include, but is not limited to:

(i) The identification of the owner and the operator of the facility, including all general partners of a partnership, any limited partner of a partnership, any stockholder of a corporation or any participant in any other type of business organization or entity who owns or controls, directly or indirectly, more than 5 percent of each partnership, corporation, or other business organization and all officials of the facility who have direct management responsibility for the facility.

(ii) The identification of the person responsible for the overall operations of the facility (i.e., a plant manager, superintendent, or a person of similar responsibility) and the supervisory employees who are or will be responsible for the operation of the facility.

(iii) Information concerning the technical qualifications and experience of the persons responsible for the overall operation of the facility and the employees responsible for handling PCB waste or other wastes.

(iv) Information concerning any past State or Federal environmental violations involving the same business or another business with which the principals or supervisory employees were affiliated directly that occurred within 5 years preceding the date of submission and which relate directly to violations that resulted in either a civil penalty (irrespective of whether the matter was disposed of by an adjudication or by a without prejudice settlement) or judgment of conviction whether entered after trial or a plea, either of guilt or nolo contendere or civil injunctive relief and involved storage, disposal, transport, or other waste handling activities.

(v) A list of all companies currently owned or operated in the past by the principals or key employees identified in paragraphs (d)(3)(i) and (d)(3)(ii) of this section that are or were directly or indirectly involved with waste handling activities.

(vi) The owner's or operator's estimate of maximum PCB waste quantity to be handled at the facility.

(vii) A written statement certifying compliance with paragraph (b) or (c) of this section and containing a certification as defined in § 761.3.

(viii) A written closure plan for the facility, as described in paragraph (e) of this section.

(ix) The current closure cost estimate for the facility, as described in paragraph (f) of this section.

(x) A demonstration of financial responsibility to close the facility, as described in paragraph (g) of this section.

(4) The written approval issued by the Regional Administrator (or the Director, EED, if the commercial storage area is ancillary to a disposal facility approved by the Director, EED) shall include, but not be limited to, the following:

(i) The determination that the applicant has satisfied the requirements set forth in paragraph (d)(2) of this section, and a brief statement setting forth the basis for the determination.

(ii) Incorporation of the closure plan submitted by the facility owner or operator and approved by the Regional Administrator (or the Director, EED, if the commercial storage area is ancillary to a disposal facility approved by the Director, EED).

(iii) A condition imposing a maximum PCB storage capacity which the facility shall not exceed during its PCB waste storage operations. The maximum storage capacity imposed under this condition shall not be greater than the estimated maximum inventory of PCB waste included in the owner's or operator's application for final approval.

(iv) Such other conditions as deemed necessary by the Regional Administrator (or the Director, EED, if the commercial storage area is ancillary to a disposal facility approved by the Director, EED) to ensure that the operations of the PCB storage facility will not pose an unreasonable risk of injury to health or the environment.

(5) Storage areas at transfer facilities are exempt from the requirement to obtain approval as a commercial storer of PCB waste under this paragraph, unless the same PCB waste is stored at these facilities for a period of time greater than 10 consecutive days between destinations.

(6) Storage areas at RCRA-permitted facilities may be exempt from the separate TSCA storage approval requirements in this paragraph (d) upon a showing to the Regional Administrator's satisfaction that the facility's existing RCRA closure plan is substantially equivalent to this rule's closure plan standards, and that such facility's closure cost estimate and financial assurance demonstration account for maximum PCB waste inventories, and the requirements of paragraph (d)(3)(i) through (d)(3)(v) and (d)(3)(vii) of this section are met. A pay-in period of longer than 3 years after approval of the storage facility pursuant to this rule, will be acceptable to EPA if that pay-in period has already been established for a valid RCRA facility or previously approved TSCA facility.

(7) Storage areas ancillary to TSCA-approved disposal facilities may be exempt from a separate facility approval provided all of the following conditions are met:

(i) The current disposal approval contains an expiration date.

(ii) The current disposal approval's closure and financial responsibility conditions specifically extend to storage areas ancillary to disposal.

(iii) The current disposal approval's closure and financial responsibility conditions provide for annual adjustments for inflation, and for modification when changes in operation would affect closure costs.

(iv) The current disposal approval contains conditions on closure and financial responsibility that are at least as stringent as those in paragraphs (e) and (g) of this section. However, the provision for a 3-year closure trust pay-in period, as specified in paragraph (g)(1)(i) of this section, would be waived in a case in which an approved TSCA facility or RCRA facility that covers PCB storage has a longer pay-in period for the trust.

(v) The current disposal approval satisfies the requirements of paragraph (d)(3)(i) through (d)(3)(v) of this section.

(8) The approval of any existing TSCA-approved disposal facility ancillary to a commercial storage facility that is deficient in any of the conditions of paragraph (d)(7)(i) through (d)(7)(v) of this section shall be called in by the Regional Administrator or the Director, EED, if it was the Director, EED who issued it. The approval shall be modified to meet the requirements of paragraph (d)(7) of this section within 180 days of the effective date of this final rule, or a separate application for approval of the storage facility may be submitted to the Regional Administrator or the Director, EED, in the cases where the Director, EED issued the approval.

(e) *Closure.*

[54 FR 52746, Dec. 21, 1989, effective Feb. 5, 1990]

(1) A commercial storer of PCB waste shall have a written closure plan that identifies the steps that the owner or operator of the facility shall take to close the PCB waste storage facility in a manner that eliminates the potential for post-closure releases of PCBs which may present an unreasonable risk to human health or the environment. An acceptable closure plan must include, at a minimum, all of the following:

(i) A description of how the PCB storage areas of the facility will be closed in a manner that eliminates the potential for post-closure releases of PCBs into the environment.

(ii) An identification of the maximum extent of storage operations that will be open during the active life of the facility, including an identification of the extent of PCB storage operations at the facility relative to other wastes that will be handled at the facility.

(iii) An estimate of the maximum inventory of PCB wastes that could be handled at one time at the facility over its active life, and a detailed description of the methods or arrangements to be used during closure for removing, transporting, storing, or disposing of the

facility's inventory of PCB waste, including an identification of any off-site facilities that will be used.

(iv) A detailed description of the steps needed to remove or decontaminate PCB waste residues and contaminated containment system components, equipment, structures, and soils during closure in accordance with the levels specified in the PCB Spills Cleanup Policy in subpart G of this part, including a description of the methods for sampling and testing of surrounding soils, and the criteria for determining the extent of removal or decontamination.

(v) A detailed description of other activities necessary during the closure period to ensure that any post-closure releases of PCBs will not present unreasonable risks to human health or the environment. This includes activities such as ground-water monitoring, run-on and run-off control, and facility security.

(vi) A schedule for closure of each area of the facility where PCB waste is stored or handled, including the total time required to close each area of PCB waste storage or handling, and the time required for any intervening closure activities.

(vii) An estimate of the expected year of closure of the PCB waste storage areas, if a trust fund is opted for as the financial mechanism.

(2) A written closure plan determined to be acceptable by the Regional Administrator (or the Director, EED, if the commercial storage area is ancillary to a disposal facility approved by the Director, EED) under this section shall become a condition of any approval granted under paragraph (d) of this section.

(3) A separate and new closure plan need not be submitted in cases where a facility is currently covered by a TSCA approval or a RCRA permit, upon a showing to the satisfaction of the Regional Administrator (or the Director, EED, if the commercial storage area is ancillary to a disposal facility approved by the Director, EED) that the existing closure plan is substantially equivalent to closure plans required under paragraphs (d) through (g) of this section, and that the plan adequately accounts for PCB waste inventories.

(4) The commercial storer of PCB waste shall submit a written request to the Regional Administrator (or the Director, EED, if he approved the closure plan) for a modification to its storage approval to amend its closure plan, whenever:

(i) Changes in ownership, operating plans, or facility design affect the existing closure plan.

(ii) There is a change in the expected date of closure, if applicable.

(iii) In conducting closure activities, unexpected events require a modification of the approved closure plan.

(5) The Regional Administrator or the Director, EED, if he approved the closure plan, may modify the existing closure plan under the conditions described in paragraph (e)(4) of this section.

(6) Commercial storers of PCB waste shall comply with the following closure schedule:

(i) The commercial storer shall notify in writing the Regional Administrator or the Director, EED if he approved the closure plan, at least 60 days prior to the date on which final closure of its PCB storage facility is expected to begin.

(ii) The date when a commercial storer of PCB waste "expects to begin closure" shall be no later than 30 days after the date on which the storage facility received its final quantities of PCB waste. For good cause shown, the Regional Administrator or the Director, EED if he approved the closure plan, may extend the date for commencement of closure for an additional 30- day period.

(iii) Within 90 days after receiving the final quantity of PCB waste for storage, a commercial storer of PCB waste shall remove all PCB waste in storage at the facility from the facility in accordance with the approved closure plan. For good cause shown, the Regional Administrator or the Director, EED if he approved the closure plan, may approve a reasonable extension to the period for removal of the PCB waste.

(iv) A commercial storer of PCB waste shall complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final quantity of PCB waste for storage at the facility. For good cause shown, the Regional Administrator or Director, EED if he approved the closure plan, may approve a reasonable extension to the closure period.

(7) During the closure period, all contaminated system component equipment, structures, and soils shall be disposed of in accordance with the disposal requirements of subpart D of this part, or, if applicable, decontaminated in accordance with the levels specified in the PCB Spills Cleanup Policy at subpart G of this part. When PCB waste is removed from the storage facility during closure, the owner or operator becomes a generator of PCB waste subject to the generator requirements of subpart J of this part.

(8) Within 60 days of completion of closure of each facility for the storage of PCB waste, the commercial storer of PCB waste shall submit to the Regional Administrator (or Director, EED if he approved the closure plan), by registered mail, a certification that the PCB storage facility has been closed in accordance with the approved closure plan. The certification shall be signed by the owner or operator and by an independent registered professional engineer.

(f) *Closure cost estimate.*

[54 FR 52748, Dec. 21, 1989, effective Feb. 5, 1990]

(1) A commercial storer of PCB wastes shall have a detailed estimate, in current dollars, of the cost of closing the facility in accordance with its approved closure plan. The closure cost estimate shall be in writing, be certified by the person preparing it (using the certification defined in § 761.3) and comply with all of the following criteria:

(i) The closure cost estimate shall equal the cost of final closure at the point in the PCB storage facility's active life when the extent and manner of PCB storage operations would make closure the most expensive, as indicated by the facility's closure plan.

(ii) The closure cost estimate shall be based on the costs to the owner or operator of hiring a third party to close the facility, and the third party shall not be either a corporate parent or subsidiary of the owner or operator, or member in joint ownership of the facility.

(iii) The owner or operator shall include in the estimate the current market costs for off-site commercial disposal of the facility's maximum estimated inventory of PCB wastes, except that on-site disposal costs may be used if on-site disposal capacity will exist at the facility at all times over the life of the PCB storage facility.

(iv) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of wastes, facility structures or equipment, land, or other assets associated with the facility at the time of closure.

(2) During the active life of the PCB storage facility, the commercial storer of PCB waste shall adjust annually for inflation the closure cost estimate within 60 days prior to the anniversary date of the establishment of the financial instruments used to demonstrate financial responsibility for closure, except that owners or operators who use the financial test or corporate guarantee shall adjust their closure cost estimates for inflation within 30 days after the close of the storer's fiscal year. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business*. The Implicit Price Deflator for Gross National Product is included in a monthly publication titled *Economic Indicators*, which is available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402. The inflation factor used in the latter method is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The adjustment to the closure cost estimate is then made by multiplying the most recent closure cost estimate by the latest inflation factor.

(3) Where the Regional Administrator

(or the Director, EED, if he approved the closure plan) approves a modification to the facility's closure plan, and that modification increases the cost of closure, the owner or operator shall revise the closure cost estimate no later than 30 days after the modification is approved. Any such revision shall also be adjusted for inflation in accordance with paragraph (f)(2) of this section.

(4) The owner or operator of the facility shall keep at the facility during its operating life the most recent closure cost estimate, including any adjustments resulting from inflation or from modifications to the closure plan.

(g) *Financial assurance for closure.* [54 FR 52748, Dec. 21, 1989, effective Feb. 5, 1990]

A commercial storer of PCB waste shall establish financial assurance for closure of each PCB storage facility that he owns or operates. In establishing financial assurance for closure, the commercial storer of PCB waste may choose from the following financial assurance mechanisms or any combination of mechanisms:

(1) The "closure trust fund," as specified in § 264.143(a) of this chapter, except for paragraph (a)(3) of § 264.143. For purposes of this paragraph, the following provisions also apply:

(i) Payments into the trust fund shall be made annually by the owner or operator over the remaining operating life of the facility as estimated in the closure plan, or over 3 years, whichever period is shorter. This period of time is hereafter referred to as the "pay-in period." For an existing facility, the first payment must be made within 30 calendar days after EPA has notified the facility of its conditional approval. Interim approval to operate is canceled and the application is denied if EPA does not receive verification that the payment was made in that 30-day period.

(ii) For a new facility, the first payment into the closure trust fund shall be made before EPA grants final approval of the application and before the facility may accept the initial shipment of PCB waste for commercial storage. A receipt from the trustee shall be submitted by the owner or operator to the Regional Administrator (or the Director, EED, if the commercial storage area is ancillary to a disposal facility approved by the Director EED) before this initial delivery of PCB waste. The first payment shall be at least equal to the current closure cost estimate, divided by the number of years in the pay-in period, except as provided in paragraph (g)(7) of this section for multiple mechanisms. Subsequent payments shall be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be determined by subtracting the current value of the trust fund from the current closure cost estimate, and dividing this difference by the number of years remaining in the pay-in period.

(iii) If an owner or operator of a facility existing on the effective date of this paragraph establishes a trust fund to meet the financial assurance requirements of this paragraph, and the value of the trust fund is less than the current closure cost estimate when a final approval is granted for the facility, the amount of the current closure cost estimate still to be paid into the trust fund shall be paid in over the pay-in period as defined in paragraph (g)(1)(i) of this section. Payments shall continue to be made no later than 30 days after each anniversary date of the first payment made into the trust fund. The amount of each payment shall be determined by subtracting the current value of the trust fund from the current closure cost estimate, and dividing this difference by the number of years remaining in the pay-in period.

(iv) The submission of a trust agreement with the wording specified in Sec. 264.151(a)(1) of this chapter, including any reference to hazardous waste management facilities, shall be deemed to be in compliance with the requirement to submit a trust agreement under this subpart.

(2) The "surety bond guaranteeing payment into a closure trust fund," as specified in § 264.143(b) of this chapter, including the use of the surety bond instrument specified at § 264.151(b) of this chapter and the standby trust specified at § 264.143(b)(3) of this chapter. The use of the surety bonds, surety bond instruments, and standby trust agreements specified in §§ 264.143(b) and 264.151(b) of this chapter shall be deemed to be in compliance with this subpart.

(3)(i) The "surety bond guaranteeing performance of closure," as specified at § 264.143(c) of this chapter, except for paragraph (c)(5) of Sec. 264.143 of this chapter. The submission and use of the surety bond instrument specified at § 264.151(c) of this chapter and the standby trust specified at § 264.143(c)(3) of this chapter shall be deemed to be in compliance with the requirements under this subpart relating to the use of surety bonds and standby trust funds.

(ii) For the purposes of this paragraph, and under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Liability is established by a final administrative determination pursuant to section 16 of TSCA that the owner or operator has failed to perform final closure in accordance with the closure plan and other approval or regulatory requirements when required to do so.

(4)(i) The "closure letter of credit" specified in § 264.143(d) of this chapter, except for paragraph (d)(8). The submission and use of the irrevocable letter of credit instrument specified in § 264.151(d) of this chapter and the standby trust specified in § 264.143(d)(3) of this chapter shall be deemed to be in compliance with the requirements of this subpart relating to the use of letters of credit and standby trust funds.

(ii) For the purposes of this paragraph, the Regional Administrator (or the Director, EED, if the commercial storage area is ancillary to a disposal facility approved by the Director, EED) may draw on the letter of credit following a final administrative determination pursuant to section 16 of TSCA that the owner or operator has failed to perform final closure in accordance with the closure plan and other approval or regulatory requirements when required to do so.

(5) "Closure insurance," as specified in § 264.143(e) of this chapter, utilizing the certificate of insurance for closure specified at Sec. 264.151(e) of this chapter. The use of closure insurance as specified in Sec. 264.143(e) of this chapter and the submission and use of the certificate of insurance specified in § 264.151(e) of this chapter shall be deemed to be in compliance with the requirements of this subpart relating to the use of closure insurance.

(6) The "financial test and corporate guarantee for closure," as described in § 264.143(f) of this chapter, including a letter signed by the owner's or operator's chief financial officer as specified at § 264.151(f) of this chapter and, if applicable, the written corporate guarantee specified at Sec. 264.151(h) of this chapter. The use of the financial test and corporate guarantee specified in § 264.143(f) of this chapter, the submission and use of the letter specified in § 264.151(f) of this chapter, and the submission and use of the written corporate guarantee specified at Sec. 264.151(h) of this chapter shall be deemed to be in compliance with the requirements of this subpart relating to the use of financial tests and corporate guarantees.

(7) The use of multiple financial mechanisms, as specified in Sec. 264.143(g) of this chapter is permitted.

(h) *Release of owner or operator.* [54 FR 52749, Dec. 21, 1989, effective Feb. 5, 1990]

Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator or the Director, EED, if he approved the closure plan, will notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain financial assurance for final closure of the facility.

[Sec. 761.65(h)]

unless the Regional Administrator or the Director, EED, if he approved the closure plan, has reason to believe that final closure has not been completed in accordance with the approved closure plan. The Regional Administrator or the Director, EED, if he approved the closure plan, shall provide the owner or operator with a detailed written statement stating the reasons why he believed closure was not conducted in accordance with the approved closure plan.

(i) *Laboratories and samples.*

[54 FR 52749, Dec. 21, 1989, effective Feb. 5, 1990]

(1) A laboratory is conditionally exempt from the notification and approval requirements for a commercial storer under Sec. 761.65 (d) through (h) when it stores samples held for disposal in a facility that complies with the standards in § 761.65(b)(1)(i) through (b)(1)(iv).

(2) A laboratory sample is exempt from the manifesting requirements in Sec. 761.208 when:

(i) The sample is being transported to a laboratory for the purpose of testing.

(ii) The sample is being transported back to the sample collector after testing.

(iii) The sample is being stored by the sample collector before transport to a laboratory for testing.

(iv) The sample is being stored in a laboratory before testing.

(v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector.

(vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(3) In order to qualify for the exemption in paragraph (d)(2)(i) and (d)(2)(ii) of this section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

(i) Comply with applicable U.S. Department of Transportation (DOT) or U.S. Postal Service (USPS) shipping requirements, found respectively in 49 CFR 173.345 and U.S. Postal Regulations 652.2 and 652.3.

(ii) Assure that the following information accompanies the sample:

(A) The sample collector's name, mailing address, and telephone number.

(B) The laboratory's name, mailing address, and telephone number.

(C) The quantity of the sample.

(D) The date of shipment.

(E) A description of the sample.

(iii) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(4) When the concentration of the PCB sample has been determined, and its use is terminated, the sample must be properly disposed. A laboratory must either manifest the PCB waste to a disposer or commercial storer, as required under § 761.208, retain a copy of each manifest, as required under Sec. 761.209, and follow up on exception reporting, as required under § 761.215 (a) and (b), or return the sample to the sample collector who must then properly dispose of the sample. If the laboratory returns the sample to the sample collector, the laboratory must comply with the shipping requirements set forth in paragraph (i)(3)(i) through (i)(3)(iii) of this section.

(j) *States and the Federal Government.* States and the Federal Government are exempt from the requirements of paragraphs (f) and (g) of this section.

[54 FR 52750, Dec. 21, 1989, effective Feb. 5, 1990]

(Approved by the Office of Management and Budget under control number 2070-0112)

§ 761.70 Incineration.

This section applies to facilities used to incinerate PCBs required to be incinerated by this part.

[48 FR 28172, July 10, 1984]

(a) *Liquid PCBs.* An incinerator used for incinerating PCBs shall be approved by an EPA Regional Administrator or the Assistant Administrator for Pesticides and Toxic Substances pursuant to paragraph (d) of this section. Requests for approval of incinerators to be used in more than one region must be submitted to the Assistant Administrator for Pesticides and Toxic Substances, except for research and development involving less than 500 pounds of PCB material (see § 761.60(i)(2)). Requests for approval of incinerators to be used in only one region must be submitted to the appropriate Regional Administrator. The incinerator shall meet all of the requirements specified in paragraph (a)(1) through (9) of this section, unless a waiver from these requirements is obtained pursuant to paragraph (d)(5) of this section. In addition, the incinerator shall meet any other requirements which may be prescribed pursuant to paragraph (d)(4) of this section.

[48 FR 13181, March 30, 1983]

(1) Combustion criteria shall be either of the following:

(i) Maintenance of the introduced liquids for a 2-second dwell time at 1200° (± 100°C) and 3 percent excess oxygen in the stack gas; or

(ii) Maintenance of the introduced liquids for a 1° second dwell time at 1600°C (± 100°C) and 2 percent excess oxygen in the stack gas.

(2) Combustion efficiency shall be at least 99.9 percent computed as follows:

Combustion efficiency= $[Cco_2/(Cco_2+Cco)]100$

where

Cco_2 = Concentration of carbon dioxide.

Cco = Concentration of carbon monoxide.

(3) The rate and quantity of PCBs which are fed to the combustion system shall be measured and recorded at regular intervals of no longer than 15 minutes.

(4) The temperatures of the incineration process shall be continuously measured and recorded. The combustion temperature of the incineration process shall be based on either direct (pyrometer) or indirect (wall thermocouple-pyrometer correlation) temperature readings.

(5) The flow of PCBs to the incinerator shall stop automatically whenever the combustion temperature drops below the temperatures specified in paragraph (a)(1) of this section.

(6) Monitoring of stack emission products shall be conducted:

(i) When an incinerator is first used for the disposal of PCBs under the provisions of this regulation;

(ii) When an incinerator is first used for the disposal of PCBs after the incinerator has been modified in a manner which may affect the characteristics of the stack emission products; and

(iii) At a minimum such monitoring shall be conducted for the following parameters: (a) O_2; (b) CO; (c) CO_2; (d) Oxides of Nitrogen (NO_x); (e) Hydrochloric Acid (HCl); (f) Total Chlorinated Organic Content (RCl); (g) PCBs; and (h) Total Particulate Matter.

(7) At a minimum monitoring and recording of combustion products and incineration operations shall be conducted for the following parameters whenever the incinerator is incinerating PCBs: (i) O_2; (ii) CO; and (iii) CO_2. The monitoring for O_2 and CO shall be continuous. The monitoring for CO_2 shall be periodic, at a frequency specified by

the Regional Administrator or Director, Exposure Evaluation Division.
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(8) The flow of PCBs to the incinerator shall stop automatically when any one or more of the following conditions occur, unless a contingency plan is submitted by the incinerator owner or operator and approved by the Regional Administrator or Director, Exposure Evaluation Division. The contingency plan indicates what alternative measures the incinerator owner or operator would take if any of the following conditions occur:
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(i) Failure of monitoring operations specified in paragraph (a)(7) of this section;

(ii) Failure of the PCB rate and quantity measuring and recording equipment specified in paragraph (a)(3) of this section; or

(iii) Excess oxygen falls below the percentage specified in paragraph (a)(1) of this section.

(9) Water scrubbers shall be used for HCl control during PCB incineration and shall meet any performance requirements specified by the appropriate EPA Regional Administrator or the Director, Exposure Evaluation Division. Scrubber effluent shall be monitored and shall comply with applicable effluent or pretreatment standards, and any other State and Federal laws and regulations. An alternate method of HCl control may be used if the alternate method has been approved by the Regional Administrator or the Assistant Administrator for Pesticides and Toxic Substances. (The HCl neutralizing capability of cement kilns is considered to be an alternate method.)
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(b) *Nonliquid PCBs.* An incinerator used for incinerating nonliquid PCBs, PCB Articles, PCB Equipment, or PCB Containers shall be approved by the appropriate EPA Regional Administrator or the Director, Exposure Evaluation Division pursuant to paragraph (d) of this section. Requests for approval of incinerators to be used in more than one region must be submitted to the Assistant Administrator for Pesticides and Toxic Substances, except for research and development involving less than 500 pounds of PCB material (see § 761.60(i)(2)). Requests for approval of incinerators to be used in only one region must be submitted to the appropriate Regional Administrator. The incinerator shall meet all of the requirements specified in paragraphs (b)(1) and (2) of this section unless a waiver from these requirements is obtained pursuant to paragraph (d)(5) of this section. In addition, the incinerator shall meet any other requirements that may be prescribed pursuant to paragraph (d)(4) of this section.
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(1) The mass air emissions from the incinerator shall be no greater than 0.001g PCB/kg of the PCB introduced into the incinerator.

(2) The incinerator shall comply with the provisions of paragraphs (a)(2), (3), (4), (6), (7), (8)(i) and (ii), and (9) of this section.

(c) *Maintenance of data and records.* All data and records required by this section shall be maintained in accordance with § 761.80, Records and Monitoring.
[53 FR 12524, April 15, 1988]

(d) *Approval of incinerators.* Prior to the incineration of PCBs and PCB Items the owner or operator of an incinerator shall receive the written approval of the Agency Regional Administrator for the region in which the incinerator is located, or the Director, Exposure Evaluation Division. Approval from the Assistant Administrator for Pesticides and Toxic Substances may be effective in all ten EPA regions. Such approval shall be obtained in the following manner:
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(1) *Application.* The owner or operator shall submit to the Regional Administrator or the Director, Exposure Evaluation Division an application which contains:
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(i) The location of the incinerator;

(ii) A detailed description of the incinerator including general site plans and design drawings of the incinerator;

(iii) Engineering reports or other information on the anticipated performance of the incinerator;

(iv) Sampling and monitoring equipment and facilities available;

(v) Waste volumes expected to be incinerated;

(vi) Any local, State, or Federal permits or approvals; and

(vii) Schedules and plans for complying with the approval requirements of this regulation.

(2) *Trial burn.* (i) Following receipt of the application described in paragraph (d)(1) of this section, the Regional Administrator or the Director, Exposure Evaluation Division shall determine if a trial burn is required and notify the person who submitted the report whether a trial burn of PCBs and PCB Items must be conducted. The Regional Administrator or the Assistant Administrator for Pesticides and Toxic Substances may require the submission of any other information that the Regional Administrator or the Assistant Administrator for Pesticides and Toxic Substances finds to be reasonably necessary to determine the need for a trial burn. Such other information shall be restricted to the types of information required in paragraphs (d)(1)(i) through (vii) of this section.
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(ii) If the Regional Administrator or the Director, Exposure Evaluation Division determines that a trial burn must be held, the person who submitted the report described in paragraph (d)(1) of this section shall submit to the Regional Administrator or the Director, Exposure Evaluation Division a detailed plan for conducting and monitoring the trial burn. At a minimum, the plan must include:
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(A) Date trial burn is to be conducted;

(B) Quantity and type of PCBs and PCB Items to be incinerated;

(C) Parameters to be monitored and location of sampling points;

(D) Sampling frequency and methods and schedules for sample analyses; and

(E) Name, address, and qualifications of persons who will review analytical results and other pertinent data, and who will perform a technical evaluation of the effectiveness of the trial burn.

(iii) Following receipt of the plan described in paragraph (d)(2)(ii) of this section, the Regional Administrator or the Director, Exposure Evaluation Division will approve the plan, require additions or modifications to the plan, or disapprove the plan. If the plan is disapproved, the Regional Administrator or the Director, Exposure Evaluation Division will notify the person who submitted the plan of such disapproval, together with the reasons why it is disapproved. That person may thereafter submit a new plan in accordance with paragraph (d)(2)(ii) of this section. If the plan is approved (with any additions or modifications which the Regional Administrator or the Director, Exposure Evaluation Division may prescribe), the Regional Administrator or the Director, Exposure Evaluation Division will notify the person who submitted the plan of the approval. Thereafter, the trial burn shall take place at a date and time to be agreed upon between the Regional Administrator or the Director, Exposure Evaluation Division and the person who submitted the plan.
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(3) *Other information.* In addition to the information contained in the report and plan described in paragraphs (d)(1) and (2) of this section, the Regional Administrator or the Director, Exposure Evaluation Division may require the

owner or operator to submit any other information that the Regional Administrator or the Director, Exposure Evaluation Division finds to be reasonably necessary to determine whether an incinerator shall be approved.

Note: The Regional Administrator will have available for review and inspection an Agency manual containing information on sampling methods and analytical procedures for the parameters required in § 761.70(a) (3), (4), (6), and (7) plus any other parameters he/she may determine to be appropriate. Owners or operators are encouraged to review this manual prior to submitting any report required in § 761.70.
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(4) *Contents of approval.* (i) Except as provided in paragraph (d)(5) of this section, the Regional Administrator or the Director, Exposure Evaluation Division may not approve an incinerator for the disposal of PCBs and PCB Items unless he finds that the incinerator meets all of the requirements of paragraphs (a) and/or (b) of this section.

[53 FR 12524, April 15, 1988]

(ii) In addition to the requirements of paragraphs (a) and/or (b) of this section, the Regional Administrator or the Director, Exposure Evaluation Division may include in an approval any other requirements that the Regional Administrator or the Director, Exposure Evaluation Division finds are necessary to ensure that operation of the incinerator does not present an unreasonable risk of injury to health or the environment from PCBs. Such requirements may include a fixed period of time for which the approval is valid.
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(5) *Waivers.* An owner or operator of the incinerator may submit evidence to the Regional Administrator or the Director, Exposure Evaluation Division that operation of the incinerator will not present an unreasonable risk of injury to health or the enviroment from PCBs, when one or more of the requirements of paragraphs (a) and/or (b) of this section are not met. On the basis of such evidence and any other available information, the Regional Administrator or the Assistant Administrator for Pesticides and Toxic Substances may in his/her discretion find that any requirement of paragraphs (a) and (b) of this section is not necessary to protect against such a risk, and may waive the requirements in any approval for that incinerator. Any finding and waiver under this paragraph must be stated in writing and included as part of the approval.

[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(6) *Persons approved.* An approval will designate the persons who own and who are authorized to operate the incinerator, and will apply only to such persons, except as provided in paragraph (d)(8) of this section.

(7) *Final approval.* Approval of an incinerator will be in writing and signed by the Regional Administrator or the Director, Exposure Evaluation Division. The approval will state all requirements applicable to the approved incinerator.
[48 FR 13181, March 30, 1983; 53 FR 12524, April 15, 1988]

(8) *Transfer of property.* Any person who owns or operates an approved incinerator must notify EPA at least 30 days before transferring ownership in the incinerator or the property it stands upon, or transferring the right to operate the incinerator. The transferor must also submit to EPA, at least 30 days before such transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's EPA incinerator approval. Within 30 days of receiving such notification and affidavit, EPA will issue an amended approval substituting the transferee's name for the transferor's name, or EPA may require the transferee to apply for a new incinerator approval. In the latter case, the transferee must abide by the transferor's EPA approval until EPA issues the new approval to the transferee.

§ 761.75 Chemical waste landfills.

This section applies to facilities used to dispose of PCBs in accordance with the part.
[49 FR 28172, July 10, 1984]

(a) *General.* A chemical waste landfill used for the disposal of PCBs and PCB Items shall be approved by the Agency Regional Administrator pursuant to paragraph (c) of this section. The landfill shall meet all of the requirements specified in paragraph (b) of this section, unless a waiver from these requirements is obtained pursuant to paragraph (c)(4) of this section. In addition, the landfill shall meet any other requirements that may be prescribed pursuant to paragraph (c)(3) of this section.

(b) *Technical requirements.* Requirements for chemical waste landfills used for the disposal of PCBs and PCB Items are as follows:

(1) *Soils.* The landfill site shall be located in thick, relatively impermeable formations such as large-area clay pans. Where this is not possible, the soil shall have a high clay and silt content with the following parameters:

(i) In-place soil thickness, 4 feet or compacted soil liner thickness, 3 feet;

(ii) Permeability (cm/sec), equal to or less than 1×10^{-7};

(iii) Percent soil passing No. 200 Sieve, >30;

(iv) Liquid Limit, >30; and

(v) Plasticity Index >15.

(2) *Synthetic membrane liners.* Synthetic membrane liners shall be used when, in the judgment of the Regional Administrator, the hydrologic or geologic conditions at the landfill require such a liner in order to provide at least a permeability equivalent to the soils in paragraph (b)(1) of this section. Whenever a synthetic liner is used at a landfill site, special precautions shall be taken to insure that its integrity is maintained and that it is chemically compatible with PCBs. Adequate soil underlining and soil cover shall be provided to prevent excessive stress on the liner and to prevent rupture of the liner. The liner must have a minimum thickness of 30 mils.

(3) *Hydrologic conditions.* The bottom of the landfill shall be above the historical high groundwater table as provided below. Floodplains, shorelands, and groundwater recharge areas shall be avoided. There shall be no hydraulic connection between the site and standing or flowing surface water. The site shall have monitoring wells and leachate collection. The bottom of the landfill liner system or natural in-place soil barrier shall be at least fifty feet from the historical high water table.

(4) *Flood protection.* (i) If the landfill site is below the 100-year floodwater elevation, the operator shall provide surface water diversion dikes around the perimeter of the landfill site with a minimum height equal to two feet above the 100-year floodwater elevation.

(ii) If the landfill site is above the 100-year floodwater elevation, the operators shall provide diversion structures capable of diverting all of the surface water runoff from a 24-hour, 25-year storm.

(5) *Topography.* The landfill site shall be located in an area of low to moderate relief to minimize erosion and to help prevent landslides or slumping.

(6) *Monitoring systems*—(i) *Water sampling.* (A) For all sites receiving PCBs, the ground and surface water from the disposal site area shall be sampled prior to commencing operations under an approval provided in paragraph (c) of this section for use as baseline data.

(B) Any surface watercourse designated by the Regional Administrator using the authority provided in paragraph (c)(3)(ii) of this section shall be sampled at least monthly when the landfill is being used for disposal operations.

(C) Any surface watercourse designated by the Regional Administrator using the authority provided in paragraph (c)(3)(ii) of this section shall be sampled for a time period specified by the

Regional Administrator on a frequency of no less than once every six months after final closure of the disposal area.

(ii) *Groundwater monitor wells.* (A) If underlying earth materials are homogenous, impermeable, and uniformly sloping in one direction, only three sampling points shall be necessary. These three points shall be equally spaced on a line through the center of the disposal area and extending from the area of highest water table elevation to the area of the lowest water table elevation on the property.

(B) All monitor wells shall be cased and the annular space between the monitor zone (zone of saturation) and the surface shall be completely backfilled with Portland cement or an equivalent material and plugged with Portland cement to effectively prevent percolation of surface water into the well bore. The well opening at the surface shall have a removable cap to provide access and to prevent entrance of rainfall or stormwater runoff. The well shall be pumped to remove the volume of liquid initially contained in the well before obtaining a sample for analysis. The discharge shall be treated to meet applicable State or Federal discharge standards or recycled to the chemical waste landfill.

(iii) *Water analysis.* As a minimum, all samples shall be analyzed for the following parameters, and all data and records of the sampling and analysis shall be maintained as required in § 761.80(d)(1). Sampling methods and analytical procedures for these parameters shall comply with those specified in 40 CFR Part 136 as amended in 41 FR 52779 on December 1, 1976.
[53 FR 12524, April 15, 1988]

(A) PCBs.

(B) pH.

(C) Specific conductance.

(D) Chlorinated organics.

(7) *Leachate collection.* A leachate collection monitoring system shall be installed above the chemical waste landfill. Leachate collection systems shall be monitored monthly for quantity and physicochemical characteristics of leachate produced. The leachate should be either treated to acceptable limits for discharge in accordance with a State or Federal permit or disposed of by another State or Federally approved method. Water analysis shall be conducted as provided in paragraph (b)(6)(iii) of this section. Acceptable leachate monitoring/collection systems shall be any of the following designs, unless a waiver is obtained pursuant to paragraph (c)(4) of this section.

(i) *Simple leachate collection.* This system consists of a gravity flow drainfield installed above the waste disposal facility liner. This design is recommended for use when semi-solid or leachable solid wastes are placed in a lined pit excavated into a relatively thick, unsaturated, homogenous layer of low permeability soil.

(ii) *Compound leachate collection.* This system consists of a gravity flow drainfield installed above the waste disposal facility liner and above a secondary installed liner. This design is recommended for use when semi-liquid or leachable solid wastes are placed in a lined pit excavated into relatively permeable soil.

(iii) *Suction lysimeters.* This system consists of a network of porous ceramic cups connected by hoses/tubing to a vacuum pump. The porous ceramic cups or suction lysimeters are installed along the sides and under the bottom of the waste disposal facility liner. This type of system works best when installed in a relatively permeable unsaturated soil immediately adjacent to the bottom and/or sides of the disposal facility.

(8) *Chemical waste landfill operations.* (i) PCBs and PCB Items shall be placed in a landfill in a manner that will prevent damage to containers or articles. Other wastes placed in the landfill that are not chemically compatible with PCBs and PCB Items including organic solvents shall be segregated from the PCBs throughout the waste handling and disposal process.

(ii) An operation plan shall be developed and submitted to the Regional Administrator for approval as required in paragraph (c) of this section. This plan shall include detailed explanations of the procedures to be used for recordkeeping, surface water handling procedures, excavation and backfilling, waste segregation burial coordinates, vehicle and equipment movement, use of roadways, leachate collection systems, sampling and monitoring procedures, monitoring wells, environmental emergency contingency plans, and security measures to protect against vandalism and unauthorized waste placements. EPA guidelines entitled "Thermal Processing and Land Disposal of Solid Waste" (39 FR 29337, Aug. 14, 1974) are a useful reference in preparation of this plan. If the facility is to be used to dispose of liquid wastes containing between 50 ppm and 500 ppm PCB, the operations plan must include procedures to determine that liquid PCBs to be disposed of at the landfill do not exceed 500 ppm PCB and measures to prevent the migration of PCBs from the landfill. Bulk liquids not exceeding 500 ppm PCBs may be disposed of provided such waste is pretreated and/or stabilized (e.g., chemically fixed, evaporated, mixed with dry inert absorbant) to reduce its liquid content or increase its solid content so that a non-flowing consistency is achieved to eliminate the presence of free liquids prior to final disposal in a landfill. PCB Container of liquid PCBs with a concentration between 50 and 500 ppm PCB may be disposed of if each container is surrounded by an amount of inert sorbent material capable of absorbing all of the liquid contents of the container.

(iii) Ignitable wastes shall not be disposed of in chemical waste landfills. Liquid ignitable wastes are wastes that have a flash point less than 60 degrees C (140 degrees F) as determined by the following method or an equivalent method: Flash point of liquids shall be determined by a Pensky Martens Closed Cup Tester, using the protocol specified in ASTM Standard D 93-85, or the Setaflash Closed Tester using the protocol specified in ASTM Standard D 3278-78.
[48 FR 5729, Feb. 8, 1983; 53 FR 21641, June 9, 1988]

(iv) Records shall be maintained for all PCB disposal operations and shall include information on the PCB concentration in liquid wastes and the three dimensional burial coordinates for PCBs and PCB Items. Additional records shall be developed and maintained as required in § 761.80.
[53 FR 12524, April 15, 1988]

(9) *Supporting Facilities.* (i) A six foot woven mesh fence, wall, or similar device shall be placed around the site to prevent unauthorized persons and animals from entering.

(ii) Roads shall be maintained to and within the site which are adequate to support the operation and maintenance of the site without causing safety or nuisance problems or hazardous conditions.

(iii) The site shall be operated and maintained in a manner to prevent safety problems or hazardous conditions resulting from spilled liquids and windblown materials.

(c) *Approval of Chemical Waste Landfills.* Prior to the disposal of any PCBs and PCB Items in a chemical waste landfill, the owner or operator of the landfill shall receive written approval of the Agency Regional Administrator for the Region in which the landfill is located. The approval shall be obtained in the following manner:

(1) *Initial Report.* The owner or operator shall submit to the Regional Administrator an initial report which contains:

(i) The location of the landfill;

(ii) A detailed description of the landfill including general site plans and design drawings;

(iii) An engineering report describing the manner is which the landfill complies with the requirements for

chemical waste landfills specified in paragraph (b) of this section;

(iv) Sampling and monitoring equipment and facilities available;

(v) Expected waste volumes of PCBs;

(vi) General description of waste materials other than PCBs that are expected to be disposed of in the landfill;

(vii) Landfill operations plan as required in paragraph (b) of this section;

(viii) Any local, State, or Federal permits or approvals; and

(ix) Any schedules or plans for complying with the approval requirements of these regulations.

(2) *Other Information.* In addition to the information contained in the report described in paragraph (c)(1) of this section, the Regional Administrator may require the owner or operator to submit any other information that the Regional Administrator finds to be reasonably necessary to determine whether a chemical waste landfill should be approved. Such other information shall be restricted to the types of information required in paragraphs (c)(1) (i) through (ix) of this section.

(3) *Contents of Approval.* (i) Except as provided in paragraph (c)(4) of this section the Regional Administrator may not approve a chemical waste landfill for the disposal of PCBs and PCB Items, unless he finds that the landfill meets all of the requirements of paragraph (b) of this section.

(ii) In addition to the requirements of paragraph (b) of this section, the Regional Administrator may include in an approval any other requirements or provisions that the Regional Administrator finds are necessary to ensure that operation of the chemical waste landfill does not present an unreasonable risk of injury to health or the environment from PCBs. Such provisions may include a fixed period of time for which the approval is valid.

The approval may also include a stipulation that the operator of the chemical waste landfill report to the Regional Administrator any instance when PCBs are detectable during monitoring activities conducted pursuant to paragraph (b)(6) of this section.

(4) *Waivers.* An owner or operator of a chemical waste landfill may submit evidence to the Regional Administrator that operation of the landfill will not present an unreasonable risk of injury to health or the environment from PCBs when one or more of the requirements of paragraph (b) of this section are not met. On the basis of such evidence and any other available information, the Regional Administrator may in his discretion find that one or more of the requirements of paragraph (b) of this section is not necessary to protect against such a risk and may waive the requirements in any approval for that landfill. Any finding and waiver under this paragraph will be stated in writing and included as part of the approval.

(5) *Persons Approved.* Any approval will designate the persons who own and who are authorized to operate the chemical waste landfill, and will apply only to such persons, except as provided by paragraph (c)(7) of this section.

(6) *Final Approval.* Approval of a chemical waste landfill will be in writing and will be signed by the Regional Administrator. The approval will state all requirements applicable to the approved landfill.

(7) *Transfer of Property.* Any person who owns or operates an approved chemical waste landfill must notify EPA at least 30 days before transferring ownership in the property or transferring the right to conduct the chemical waste landfill operation. The transferor must also submit to EPA, at least 30 days before such transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's EPA chemical waste landfill approval. Within 30 days of receiving such notification and affidavit, EPA will issue an amended approval substituting the transferee's name for the transferor's name, or EPA may require the transferee to apply for a new chemical waste landfill approval. In the latter case, the transferee must abide by the transferor's EPA approval until EPA issues the new approval to the transferee.

§ 761.79 Decontamination.

(a) Any PCB Container to be decontaminated shall be decontaminated by flushing the internal surfaces of the container three times with a solvent containing less than 50 ppm PCB. The solubility of PCBs in the solvent must be five percent or more by weight. Each rinse shall use a volume of the normal diluent equal to approximately ten (10) percent of the PCB Container capacity. The solvent may be reused for decontamination until it contains 50 ppm PCB. The solvent shall then be disposed of as a PCB in accordance with § 761.60(a). Non-liquid PCBs resulting from the decontamination procedures shall be disposed of in accordance with the provisions of § 761.60(a)(4).

(b) Movable equipment used in storage areas shall be decontaminated by swabbing surfaces that have contacted PCBs with a solvent meeting the criteria of paragraph (a) of this section.

Note: Precautionary measures should be taken to ensure that the solvent meets safety and health standards as required by applicable Federal regulations.

Subpart E—Exemptions

§ 761.80 Manufacturing, processing, and distribution in commerce exemptions.

(a)-(e) [Reserved]

[53 FR 12524, April 15, 1988]

(f) The Administrator grants the following petitioners an exemption for one year to manufacture small quantities of PCBs for research and development:

(1) California Bionuclear Corp., Sun Valley, CA 91352 (ME-13).

(2) Foxboro Co., North Haven, CT 06473 (ME-6).

(3) ULTRA Scientific, Inc., Hope, RI 02831 (ME-99.1).

(4) Midwest Research Institute, Kansas City, MO 64110 (ME-70.1).

(5) Pathfinder Laboratories, St. Louis, MO 63146 (A division of Sigma Aldridge Corporation, St. Louis, MO, 63178) (ME-76).

(6) Radian Corp., Austin, TX 78766 (ME-81.2).

(7) Wellington Sciences USA, College Station, TX 77840 (ME-104.1).

[51 FR 28556, Aug. 8, 1986]

(g) The Administrator grants a class exemption to all processors and distributors of PCBs in small quantities for research and development provided that the following conditions are met:

(1) All processors and distributors must maintain records of their PCB activities for a period of 5 years.

(2) Any person or company which expects to process or distribute in commerce 100 grams (.22 lb) or more PCBs in 1 year must report to EPA identifying the sites of PCB activities and the quantity of PCBs to be processed or distributed in commerce.

[51 FR 28556, Aug. 8, 1986]

(h)-(l) [Reserved]

[53 FR 12524, April 15, 1988]

(m) The Administrator grants the following petitioners an exemption for one year to process and export small quantities of PCBs for research and development:

(1) Chem Service, Inc., West Chester, PA 19380 (PDE-41).

(2) Foxboro Co., North Haven, CT 06473 (PDE-21.1).

(3) PolyScience Corp., Niles, IL 60648 (PDE-178).

(4) ULTRA Scientific, Inc., Hope, RI 02831 (PDE-282.1).

(5) Supelco, Inc., Bellefonte, PA 16823 0048 (PDE-41.2).

(6) Radian Corp., Austin, TX 78766 (PDE-182.1).

(n) The 1-year exemption granted to petitioners in paragraphs (f), (g), and (m) of this section shall be renewed automatically unless a petitioner notifies EPA of any increase in the amount of PCBs to be manufactured, imported, or exported or any change in the manner of

manufacture, import, or export of PCBs. EPA will consider the submission of such information to be a renewed petition for exemption. EPA will evaluate the information in the renewed exemption petition, issue a proposed rule for public comment, and issue either a final rule granting the exemption or a notice denying the exemption. Until EPA acts on the petition, the petitioner will be allowed to continue the activities for which it requests exemption.

(o) The 1-year class exemption granted to all processors and distributors of PCBs in small quantities for research and development in paragraph (g) of this section shall be renewed automatically unless information is submitted affecting EPA's conclusion that the class exemption, or the activities of any individual or company included in the exemption, will not pose an unreasonable risk of injury to health or the environment. EPA will evaluate the information, issue a proposed rule for public comment, and issue a final rule affecting the class exemption or individuals or companies included in the class exemption. Until EPA issues a final rule, individuals and companies included in the class exemption will be allowed to continue processing and distributing PCBs in small quantities for research and development.

[Paragraphs (p)-(r) removed at 53 FR 12524, April 15, 1988]

Subpart F—[Reserved]

Subpart G—PCB Spill Cleanup Policy

[Sec. 761.120 through 761.135 added at 52 FR 10706, April 12, 1987]

§ 761.120 Scope.

(a) *General.* This policy establishes criteria EPA will use to determine the adequacy of the cleanup of spills resulting from the release of materials containing PCBs at concentrations of 50 ppm or greater. The policy applies to spills which occur after May 4, 1987.

(1) Existing spills (spills which occurred prior to May 4, 1987, are excluded from the scope of this policy for two reasons:

(i) For old spills which have already been discovered, this policy is not intended to require additional cleanup where a party has already cleaned a spill in accordance with requirements imposed by EPA through its regional offices, nor is this policy intended to interfere with ongoing litigation of enforcement actions which bring into issue PCB spills cleanup.

(ii) EPA recognizes that old spills which are discovered after the effective date of this policy will require site-by-site evaluation because of the likelihood that the site involves more pervasive PCB contamination than fresh spills and because old spills are generally more difficult to clean up than fresh spills (particularly on porous surfaces such as concrete). Therefore, spills which occurred before the effective date of this policy are to be decontaminated to requirements established at the discretion of EPA, usually through its regional offices.

(2) EPA expects most PCB spills subject to the TSCA PCB regulations to conform to the typical spill situations considered in developing this policy. This policy does, however, exclude from application of the final numerical cleanup standards certain spill situations from its scope: Spills directly into surface waters, drinking water, sewers, grazing lands, and vegetable gardens. These types of spills are subject to final cleanup standards to be established at the discretion of the regional office. These spills are, however, subject to the immediate notification requirements and measures to minimize further environmental contamination.

(3) For all other spills, EPA generally expects the decontamination standards of this policy to apply. Occasionally, some small percentage of spills covered by this policy may warrant more stringent cleanup requirements because of additional routes of exposure or significantly greater exposures than those assumed in developing the final cleanup standards of this policy. While the EPA regional offices have the authority to require additional cleanup in these circumstances, the Regional Administrator must first make a finding based on the specific facts of a spill that additional cleanup must occur to prevent unreasonable risk. In addition, before a final decision is made to require additional cleanup, the Regional Administrator must notify the Director, Office of Toxic Substances at Headquarters of his/her finding and the basis for the finding.

(4) There may also be exceptional spill situations that requires less stringent cleanup or a different approach to cleanup because of factors associated with the particular spill. These factors may mitigate expected exposures and risks or make cleanup to these requirements impracticable.

(b) *Spills that may require more stringent cleanup levels.* For spills within the scope of this policy, EPA generally retains, under § 761.135, the authority to require additional cleanup upon finding that, despite good faith efforts by the responsible party, the numerical decontamination levels in the policy have not been met. In addition, EPA foresees the possibility of exceptional spill situations in which site-specific risk factors may warrant additional cleanup to more stringent numerical decontamination levels than are required by the policy. In these situations, the Regional Administrator has the authority to require cleanup to levels lower than those included in this policy upon finding that further cleanup must occur to prevent unreasonable risk. The Regional Administrator will consult with the Director, Office of Toxic Substances, prior to making such a finding.

(1) For example, site-specific characteristics, such as short depth to ground water, type of soil, or the presence of a shallow well, may pose exceptionally high potential for ground water contamination by PCBs remaining after cleanup to the standards specified in this policy. Spills that pose such a high degree of potential for ground water contamination have not been excluded from the policy under paragraph (d) of this section because the presence of such potential may not be readily apparent. EPA feels that automatically excluding such spills from the scope of the policy could result in the delay of cleanup—a particularly undesirable outcome if potential ground water contamination is, in fact, a significant concern.

(2) In those situations, the Regional Administrator may require cleanup in addition to that required under § 761.125 (b) and (c). However, the Regional Administrator must first make a finding, based on the specific facts of a spill, that additional cleanup is necessary to prevent unreasonable risk. In addition, before making a final decision on additional cleanup, the Regional Administrator must notify the Director of the Office of Toxic Substances of his finding and the basis for the finding.

(c) *Flexibility to allow less stringent or alternative requirements.* EPA retains the flexibility to allow less stringent or alternative decontamination measures based upon site-specific considerations. EPA will exercise this flexibility if the responsible party demonstrates that cleanup to the numerical decontamination levels is clearly unwarranted because of risk-mitigating factors, that compliance with the procedural requirements or numerical standards in the policy is impracticable at a particular site, or that site-specific characteristics make the costs of cleanup prohibitive. The Regional Administrator will notify the Director of OTS of any decision and the basis for the decision to allow less stringent cleanup. The purpose of this notification is to enable the Director of OTS to ensure consistency of spill cleanup standards under special circumstances across the regions.

(d) *Excluded spills.* (1) Although the spill situations in paragraphs (d)(2)(i) through (vi) of this section are excluded from the automatic application of final decontamination standards under §761.125 (b) and (c), the general requirements under §761.125(a) do apply to these spills. In addition, all of these excluded situations require practicable, immediate actions to contain the area of contamination. While these situations may not always require more stringent cleanup measures, the Agency is excluding these scenarios because they will always involve significant factors that may not be adequately addressed by cleanup standards based upon typical spill characteristics.

(2) For the spill situations in paragraphs (d)(2)(i) through (vi) of this section, the responsible party shall decontaminate the spill in accordance with site-specific requirements established by the EPA regional offices.

(i) Spills that result in the direct contamination of surface waters (surface waters include, but are not limited to, "waters of the United States" as defined in Part 122 of this chapter, ponds, lagoons, wetlands, and storage reservoirs).

(ii) Spills that result in the direct contamination of sewers or sewage treatment systems.

(iii) Spills that result in the direct contamination of any private or public drinking water sources or distribution systems.

(iv) Spills which migrate to and contaminate surface waters, sewers, or drinking water supplies before cleanup has been completed in accordance with this policy.

(v) Spills that contaminate animal grazing lands.

(vi) Spills that contaminate vegetable gradens.

(e) *Relationship of policy to other statutes.* (1) This policy does not affect cleanup standards or requirements for the reporting of spills imposed, or to be imposed, under other Federal statutory authorities, including but not limited to, the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). Where more than one requirement applies, the stricter standard must be met.

(2) The Agency recognizes that the existence of this policy will inevitably result in attempts to apply the standards to situations within the scope of other statutory authorities. However, other statutes require the Agency to consider different or alternative factors in determining appropriate corrective actions. In addition, the types and magnitudes of exposures associated with sites requiring corrective action under other statutes often involve important differences from those expected of the typical, electrical equipment-type spills considered in developing this policy. Thus, cleanups under other statutes, such as RCRA corrective actions or remedial and response actions under SARA may result in different outcomes.

§ 761.123 Definitions.

For purposes of this policy, certain words and phrases are used to denote specific materials, procedures, or circumstances. The following definitions are provided for purposes of clarity and are not to be taken as exhaustive lists of situations and materials covered by the policy.

"Double wash/rinse" means a minimum requirement to cleanse solid surfaces (both impervious and nonimpervious) two times with an appropriate solvent or other material in which PCBs are at least 5 percent soluble (by weight). A volume of PCB-free fluid sufficient to cover the contaminated surface completely must be used in each wash/rinse. The wash/rinse requirement does not mean the mere spreading of solvent or other fluid over the surface, nor does the requirement mean a once-over wipe with a soaked cloth. Precautions must be taken to contain any runoff resulting from the cleansing and to dispose properly of wastes generated during the cleansing.

"High-concentration PCBs" means PCBs that contain 500 ppm or greater PCBs, or those materials which EPA requires to be assumed to contain 500 ppm or greater PCBs in the absence of testing.

"High-contact industrial surface" means a surface in an industrial setting which is repeatedly touched, often for relatively long periods of time. Manned machinery and control panels are examples of high-contact industrial surfaces. High-contact industrial surfaces are generally of impervious solid material. Examples of low-contact industrial surfaces include ceilings, walls, floors, roofs, roadways and sidewalks in the industrial area, utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components, indoor vaults, and pipes.

"High-contact residential/commercial surface" means a surface in a residential/commercial area which is repeatedly touched, often for relatively long periods of time. Doors, wall areas below 6 feet in height, uncovered flooring, windowsills, fencing, bannisters, stairs, automobiles, and children's play areas such as outdoor patios and sidewalks are examples of high-contact residential/commercial surfaces. Examples of low-contact residential/commercial surfaces include interior ceilings, interior wall areas above 6 feet in height, roofs, asphalt roadways, concrete roadways, wooden utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components (e.g., aluminum/vinyl siding, cinder block, asphalt tiles), and pipes.

"Impervious solid surfaces" means solid surfaces which are nonporous and thus unlikely to absorb spilled PCBs within the short period of time required for cleanup of spills under this policy. Impervious solid surfaces include, but are not limited to, metals, glass, aluminum siding, and enameled or laminated surfaces.

"Low-concentration PCBs" means PCBs that are tested and found to contain less than 500 ppm PCBs, or those PCB-containing materials which EPA requires to be assumed to be at concentrations below 500 ppm (i.e., untested mineral oil dielectric fluid).

"Nonimpervious solid surfaces" means solid surfaces which are porous and are more likely to absorb spilled PCBs prior to completion of the cleanup requirements prescribed in this policy. Nonimpervious solid surfaces include, but are not limited to, wood, concrete, asphalt, and plasterboard.

"Nonrestricted access areas" means any area other than restricted access, outdoor electrical substations, and other restricted access locations, as defined in this section. In addition to residential/commercial areas, these areas include unrestricted access rural areas (areas of low density development and population where access is uncontrolled by either man-made barriers or naturally occurring barriers, such as rough terrain,

mountains, or cliffs).

"Other restricted access (nonsubstation) locations" means areas other than electrical substations that are at least 0.1 kilometer (km) from a residential/commercial area and limited by man-made barriers (e.g., fences and walls) to substantially limited by naturally occurring barriers such as mountains, cliffs, or rough terrain. These areas generally include industrial facilities and extremely remote rural locations. (Areas where access is restricted but are less than 0.1 km from a residential/commercial area are considered to be residential/commercial areas.)

"Outdoor electrical substations" means outdoor, fenced-off, and restricted access areas used in the transmission and/or distribution of electrical power Outdoor electrical substations restrict public access by being fenced or walled off as defined under §761.30(l)(1)(ii). For purposes of this TSCA policy, outdoor electrical substations are defined as being located at least 0.1 km from a residential/commercial area. Outdoor fenced-off and restricted access areas used in the transmission and/or distribution of electrical power which are located less than 0.1. km from a residential/commercial area are considered to be residential/commercial areas.
[52 FR 23397, June 19, 1987]

"PCBs" means polychlorinated biphenyls as defined under §761.3. As specified under §761.1(b), no requirements may be avoided through dilution of the PCB concentration.

"Requirements and standards" means:

(1) "Requirements" as used in this policy refers to both the procedural responses and numerical decontamination levels set forth in this policy as constituting adequate cleanup of PCBs.

(2) "Standards" refers to the numerical decontamination levels set forth in this policy.

"Residential/commercial areas" means those areas where people live or reside, or where people work in other than manufacturing or farming industries. Residential areas include housing and the property on which housing is located, as well as playgrounds, roadways, sidewalks, parks, and other similar areas within a residential community. Commercial areas are typically accessible to both members of the general public and employees and include public assembly properties, institutional properties, stores, office buildings, and transportation centers.

"Responsible party" means the owner of the PCB equipment, facility, or other source of PCBs or his/her designated agent (e.g., a facility manager or foreman).

"Soil" means all vegetation, soils and other ground media, including but not limited to, sand, grass , gravel, and oyster shells. It does not include concrete and asphalt.

"Spill" means both intentional and unintentional spills, leaks, and other uncontrolled discharges where 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. This policy applies to spills of 50 ppm or greater PCBs. The concentration of PCBs spilled is determined by the PCB concentration in the material spilled as opposed to the concentration of PCBs in the material onto which the PCBs were spilled. Where a spill of untested mineral oil occurs, the oil is presumed to contain greater than 50 ppm, but less than 500 ppm PCBs and is subject to the relevant requirements of this policy.

"Spill area" means the area of soil on which visible traces of the spill can be observed plus a buffer zone of 1 foot beyond the visible traces. Any surface or object (e.g., concrete sidewalk or automobile) within the visible traces area or on which visible traces of the spilled material are observed is included in the spill area. This area represents the minimum area assumed to be contaminated by PCBs in the absence of precleanup sampling data and is thus the minimum area which must be cleaned.

"Spill boundaries" means the actual area of contamination as determined by postcleanup verification sampling or by precleanup sampling to determine actual spill boundaries. EPA can require additional cleanup when necessary to decontaminate all areas within the spill boundaries to the levels required in this policy (e.g., additional cleanup will be required if postcleanup sampling indicates that the area decontaminated by the responsible party, such as the spill area as defined in this section, did not encompass the actual boundaries of PCB contamination).
[52 FR 23397, June 19, 1987]

"Standard wipe test" means, for spills of high-concentration PCBs on solid surfaces, a cleanup to numerical surface standards and sampling by a standard wipe test to verify that the numerical standards have been met. This definition constitutes the minimum requirements for an appropriate wipe testing protocol. A standard-size template (10 centimeters (cm) x 10 cm) will be used to delineate the area of cleanup; the wiping medium will be a gauze pad or glass wool of known size which has been saturated with hexane. It is important that the wipe be performed very quickly after the hexane is exposed to air. EPA strongly recommends that the gauze (or glass wool) be prepared with hexane in the laboratory and that the wiping medium be stored in sealed glass vials until it is used for the wipe test. Further, EPA requires the collection and testing of field blanks and replicates.

§ 761.125 Requirements for PCB spill cleanup.

(a) *General.* Unless expressly limited, the reporting, disposal, and precleanup sampling requirements in paragraphs (a)(1) through (3) of this section apply to all spills of PCBs at concentrations of 50 ppm or greater which are subject to decontamination requirements under TSCA, including those spills listed under §761.120(b) which are excluded from the cleanup standards at paragraphs (b) and (c) of this section.

(1) *Reporting requirements.* The reporting in paragraphs (a)(1) (i) through (iv) of this section is required in addition to applicable reporting requirements under the Clean Water Act (CWA) or the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA). For example, under the National Contingency Plan all spills involving 10 pounds or more by weight of PCBs must currently be reported to the National Response Center (1-800-424-8802). The requirements in paragraphs (a)(1) (i) through (iv) of this section are designed to be consistent with existing reporting requirements to the extent possible so as to minimize reporting burdens on governments as well as the regulated community.
[53 FR 40884, Oct. 19, 1988]

(i) Where a spill directly contaminates surface water, sewers, or drinking water supplies, as discussed under §761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of 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.

(ii) Where a spill directly contaminates grazing lands or vegetable gardens, as discussed under §761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of Pesticides and Toxic Substances Branch) and proceed with the immediate requirements specified under paragraph (b) or (c) of this section, depending on the source of the spill, in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

(iii) Where a spill exceeds 10 pounds of PCBs by weight and is not addressed in paragraph (a)(1) (i) or (ii) of this section, the responsible party will notify the appropriate EPA regional office (Pesticides and Toxic Substances Branch) and proceed to decontaminate the spill

area in accordance with this TSCA policy in the shortest possible time after discovery, but in no case later than 24 hours after discovery.
[53 FR 40884, Oct. 19, 1988]

(iv) Spills of 10 pounds or less, which are not addressed in paragraph (a)(1) (i) or (ii) of this section, must be cleaned up in accordance with this policy (in order to avoid EPA enforcement liability), but notification of EPA is not required.

(2) *Disposal of cleanup debris and materials.* All concentrated soils, solvents, rags, and other materials resulting from the cleanup of PCBs under this policy shall be properly stored, labeled, and disposed of in accordance with the provisions of §761.60.

(3) *Determination of spill boundaries in the absence of visible traces.* For spills where there are insufficient visible traces yet there is evidence of a leak or spill, the boundaries of the spill are to be determined by using a statistically based sampling scheme.

(b) *Requirements for cleanup of low-concentration spills which involve less than 1 pound of PCBs by weight (less than 270 gallons of untested mineral oil).*—(1) *Decontamination requirements.* Spills of less than 270 gallons of untested mineral oil, low-concentration PCBs, as defined under §761.123, which involve less than 1 pound of PCBs by weight (e.g., less than 270 gallons of untested mineral oil containing less than 500 ppm PCBs) shall be cleaned in the following manner:

(i) Solid surfaces must be double washed/rinsed (as defined under §761.123); except that all indoor, residential surfaces other than vault areas must be cleaned to 10 micrograms per 100 square centimeters (10 $\mu g/100\ cm^2$) by standard commercial wipe tests.

(ii) All soil within the spill area (i.e., visible traces of soil and a buffer of 1 lateral foot around the visible traces) must be excavated, and the ground be restored to its original configuration by back-filling with clean soil (i.e., containing less than 1 ppm PCBs).

(iii) Requirements of paragraph (b)(1) (i) and (ii) of this section must be completed within 48 hours after the responsible party was notified or became aware of the spill.

(2) *Effect of emergency or adverse weather.* Completion of cleanup may be delayed beyond 48 hours in case of circumstances including but not limited to, civil emergency, adverse weather conditions, lack of access to the site, and emergency operating conditions. The occurrence of a spill on a weekend or overtime costs are not acceptable reasons to delay response. Completion of cleanup may be delayed only for the duration of the adverse conditions. If the adverse weather conditions, or time lapse due to other emergency, has left insufficient visible traces, the responsible party must use a statistically based sampling scheme to determine the spill boundaries as required under paragraph (a)(3) of this section.

(3) *Records and certification.* At the completion of cleanup, the responsible party shall document the cleanup with records and certification of decontamination. The records and certification must be maintained for a period of 5 years. The records and certification shall consist of the following:

(i) Identification of the source of the spill (e.g., type of equipment).

(ii) Estimated or actual date and time of the spill occurrence.

(iii) 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).

(iv) A brief description of the spill location.

(v) Precleanup sampling data used to establish the spill boundaries if required because of insufficient visible traces, and a brief description of the sampling methodology used to establish the spill boundaries.

(vi) A brief description of the solid surfaces cleaned and of the double wash/rinse method used.

(vii) Approximate depth of soil excavation and the amount of soil removed.

(viii) 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.

(ix) While not required for compliance with this policy, the following information would be useful if maintained in the records:

(A) Additional pre- or post-cleanup sampling.

(B) The estimated cost of the cleanup by man-hours, dollars, or both.

(c) *Requirements for cleanup of high-concentration spills and low-concentration spills involving 1 pound or more PCBs by weight (270 gallons or more of untested mineral oil).* Cleanup of low-concentration spills involving 1 pound or more PCBs by weight and of all spills of materials other than low-concentration materials shall be considered complete if all of the immediate requirements, cleanup standards, sampling, and recordkeeping requirements of paragraphs (c) (1) through (5) of this section are met.

(1) *Immediate requirements.* The four actions in paragraphs (c)(1) (i) through (iv) of this section must be taken as quickly as possible and within no more than 24 hours (or within 48 hours for PCB Transformers) after the responsible party was notified or became aware of the spill, except that actions described in paragraphs (c)(1) (ii) through (iv) of this section can be delayed beyond 24 hours if circumstances (e.g., civil emergency, hurricane, tornado, or other similar adverse weather conditions, lack of access due to physical impossibility, or emergency operating conditions) so require for the duration of the adverse conditions. The occurrence of a spill on a weekend or overtime costs are not acceptable reasons to delay response. Owners of spilled PCBs who have delayed cleanup because of these types of circumstances must keep records documenting the fact that circumstances precluded rapid response.

(i) The responsible party shall notify the EPA regional office and the NRC as required by §761.125(a)(1) or by other applicable statutes.

(ii) The responsible party shall effectively cordon off or otherwise delineate and restrict an area encompassing any visible traces plus a 3-foot buffer and place clearly visible signs advising persons to avoid the area to minimize the spread of contamination as well as the potential for human exposure.

(iii) The responsible party shall record and document the area of visible contamination, noting the extent of the visible trace areas and the center of the visible trace area. If there are no visible traces, the responsible party shall record this fact and contact the regional office of the EPA for guidance in completing statistical sampling of the spill area to establish spill boundaries.

(iv) The responsible party shall initiate cleanup of all visible traces of the fluid on hard surfaces and initiate removal of all visible traces of the spill on soil and other media, such as gravel, sand, oyster shells, etc.

(v) If there has been a delay in reaching the site and there are insufficient visible traces of PCBs remaining at the spill site, the responsible party must estimate (based on the amount of material missing from the equipment or container) the area of the spill and immediately cordon off the area of suspect contamination. The responsible party must then utilize a statistically based sampling scheme to identify the boundaries of the spill area as soon as practicable.

(vi) Although this policy requires certain immediate actions, as described in paragraphs (c)(1)(i) through (iv) of this section, EPA is not placing a time limit on completion of the cleanup effort since the time required for completion will vary from case to case. However, EPA expects that decontamination will be

[Sec. 761.125(c)(1)(vi)]

achieved promptly in all cases and will consider promptness of completion in determining whether the responsible party made good faith efforts to clean up in accordance with this policy.

(2) *Requirements for decontaminating spills in outdoor electrical substations.* Spills which occur in outdoor electrical substations, as defined under 761.123, shall be decontaminated in accordance with paragraphs (c)(2)(i) and (ii) of this section. Conformance to the cleanup standards under paragraphs (c)(2)(i) and (ii) of this section shall be verified by post-cleanup sampling as specified under §761.130. At such times as outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the nonrestricted access requirements under paragraph (c)(4) of this section.

(i) Contaminated solid surfaces (both impervious and non-impervious) shall be cleaned to a PCB concentration of 100 micrograms (μg)/100 square centimeters (cm^2) (as measured by standard wipe tests).

(ii) At the option of the responsible party, soil contaminated by the spill will be cleaned either to 25 ppm PCBs by weight, or to 50 ppm PCBs by weight provided that a label or notice is visibly placed in the area. Upon demonstration by the responsible party that cleanup to 25 ppm or 50 ppm will jeopardize the integrity of the electrical equipment at the substation, the EPA regional office may establish an alternative cleanup method or level and place the responsible party on a reasonably timely schedule for completion of cleanup.

(3) *Requirements for decontaminating spills in other restricted access areas.* Spills which occur in restricted access locations other than outdoor electrical substations, as defined under §761.123, shall be decontaminated in accordance with paragraph (c)(3)(i) through (v) of this section. Conformance to the cleanup standards in paragraph (c)(3)(i) through (v) of this section shall be verified by postcleanup sampling as specified under §761.130. At such times as restricted access areas other than outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the nonrestricted access area requirements of paragraph (c)(4) of this section.

(i) High-contact solid surfaces, as defined under §761.163 shall be cleaned to 10 $\mu g/100\ cm^2$ (as measured by standard wipe tests).

(ii) Low-contact, indoor, impervious solid surfaces will be decontaminated to 10 $\mu g/100\ cm^2$.

(iii) At the option of the responsible party, low-contact, indoor, nonimpervious surfaces will be cleaned either to 10 $\mu g/100\ cm^2$ or to 100 $\mu g/100\ cm^2$ and encapsulated. The Regional Administrator, however, retains the authority to disallow the encapsulation option for a particular spill situation upon finding that the uncertainties associated with that option pose special concerns at that site. That is, the Regional Administrator would not permit encapsulation if he/she determined that if the encapsulation failed the failure would create an imminent hazard at the site.

(iv) Low-contact, outdoor surfaces (both impervious and nonimpervious) shall be cleaned to 100 $\mu g/100\ cm^2$.

(v) Soil contaminated by the spill will be cleaned to 25 ppm PCBs by weight.

(4) *Requirements for decontaminating spills in nonrestricted access areas.* Spills which occur in nonrestricted access locations, as defined under §761.123, shall be decontaminated in accordance with paragraphs (c)(4)(i) through (v) of this section. Conformance to the cleanup standards at paragraphs (c)(4)(i) through (v) of this section shall be verified by postcleanup sampling as specified under §761.130.

(i) Furnishings, toys, and other easily replaceable household items shall be disposed of in accordance with the provisions of §761.60 and replaced by the responsible party.

(ii) Indoor solid surfaces and high-contact outdoor solid surfaces, defined as high contact residential/commercial surfaces under §761.123, shall be cleaned to 10 $\mu g/100\ cm^2$ (as measured by standard wipe tests).

(iii) Indoor vault areas and low-contact, outdoor, impervious solid surfaces shall be decontaminated to 10 $\mu g/100\ cm^2$.

(iv) At the option of the responsible party, low-contact, outdoor, nonimpervious solid surfaces shall be either cleaned to 10 $\mu g/100\ cm^2$ or cleaned to 100 $\mu g/100\ cm^2$ and encapsulated. The Regional Administrator, however, retains the authority to disallow the encapsulation option for a particular spill situation upon finding that the uncertainties associated with that option pose special concerns at that site. That is, the Regional Administrator would not permit encapsulation if he/she determined that if the encapsulation failed the failure would create an imminent hazard at the site.

(v) Soil contaminated by the spill will be decontaminated to 10 ppm PCBs by weight provided that soil is excavated to a minimum depth of 10 inches. The excavated soil will be replaced with clean soil, i.e., containing less than 1 ppm PCBs, and the spill site will be restored (e.g., replacement of turf).

(5) *Records.* The responsible party shall document the cleanup with records of decontamination. The records must be maintained for a period of 5 years. The records and certification shall consist of the following:

(i) Identification of the source of the spill, e.g., type of equipment.

(ii) Estimated or actual date and time of the spill occurrence.

(iii) 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).

(iv) A brief description of the spill location and the nature of the materials contaminated. This information should include whether the spill occurred in an outdoor electrical substation, other restricted access location, or in a nonrestricted access area.

(v) Precleanup sampling data used to establish the spill boundaries if required

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because of insufficient visible traces and a brief description of the sampling methodology used to establish the spill boundaries.

(vi) A brief description of the solid surfaces cleaned.

(vii) Approximate depth of soil excavation and the amount of soil excavation and the amoun of soil removed.

(vii) Postcleanup verification sampling data and, if not otherwise apparent from the documentation, a brief description of the sampling methodology and analytical technique used.

(ix) While not required for compliance with this policy, information on the estimated cost of cleanup (by man-hour, dollars, or both) would be useful; if maintained in the records.

§ 761.130 Sampling requirements.

Postcleanup sampling is required to verify the level of cleanup under § 761.125(c) (2) through (4). The responsible party may use any statistically valid, reproducible, sampling scheme (either random samples or grid samples) provided that the requirements of paragraphs (a) and (b) of this section are satisfied.

(a) The sampling area is the greater of (1) an area equal to the area cleaned plus an additional 1-foot boundary, or (2) an area 20 percent larger than the original area of contamination.

(b) The sampling scheme must ensure 95 percent confidence against false positives.

(c) The number of samples must be sufficient to ensure that areas of contamination of a radius of 2 feet or more within the sampling area will be detected, except that the minimum number of samples is 3 and the maximum number of samples is 40.

(d) The sampling scheme must include calculation for expected variability due to analytical error.

(e) EPA recommends the use of a sampling scheme developed by the Midwest Research Institute (MRI) for use in EPA enforcement inspections: "Verification of PCB Spill Cleanup by Sampling and Analysis." Guidance for the use of this sampling scheme is available in the MRI report "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup." Both the MRI sampling scheme and the guidance document are available from the TSCA Assistance Office, Environmental Protection Agency, Rm. E 543, 401 M St. SW., Washington, DC 20460 (202-554-1404). The major advantage of this sampling scheme is that it is designed to characterize the degree of contamination within the entire sampling area with a high degree of confidence while using fewer samples than any other grid or random sampling scheme. This sampling scheme also allows some sites to be characterized on the basis of composite samples.

(f) EPA may, at its discretion, take samples from any spill site. If EPA's sampling indicates that the remaining concentration level exceeds the required level, EPA will require further cleanup. For this purpose, the numerical level of cleanup required for spills cleaned in accordance with § 761.125(b) is deemed to be the equivalent of numerical cleanup requirements required for cleanups under § 761.125(c)(2) through (4). Using its best engineering judgment, EPA may sample a statistically valid random or grid sampling technique, or both. When using engineering judgment or random "grab" samples, EPA will take into account that there are limits on the power of a grab sample to dispute statistically based sampling of the type required of the responsible party. EPA headquarters will provide guidance to the EPA regions on the degree of certainty associated with various grab sample results.

§ 761.135 Effect of compliance with this policy and enforcement.

(a) Although a spill of material containing 50 ppm or greater PCBs is considered improper PCB disposal, this policy establishes requirements that EPA considers to be adequate cleanup of the spilled PCBs. Cleanup in accordance with this policy means compliance with the procedural as well as the numerical requirements of this policy. Compliance with this policy creates a presumption against both enforcement action for penalties and the need for further cleanup under TSCA. The Agency reserves the right, however, to initiate appropriate action to compel cleanup where, upon review of the records of cleanup or EPA sampling following cleanup, EPA finds that the decontamination levels in the policy have not been achieved. The Agency also reserves the right to seek penalties where the Agency believes that the responsible party has not made a good faith effort to comply with all provisions of this policy, such as prompt notification of EPA of a spill, recordkeeping, etc.

(b) EPA's exercise of enforcement discretion does not preclude enforcement action under other provisions of TSCA or any other Federal statute. This includes, even in cases where the numerical decontamination leveis set forth in this policy have been met, civil or criminal action for penalties where EPA believes the spill to have been the result of gross negligence or knowing violation.

Subpart J—General Records and Reports

[54 FR 52750, Dec. 21, 1989, effective Feb. 5, 1990]

§ 761.180 Records and monitoring.

[49 FR 28172, July 10, 1984]

This section contains recordkeeping and reporting requirements that apply to PCBs, PCB Items, and PCB storage and disposal facilities that are subject to the requirements of the part.

(a) *PCBs and PCB Items in service or projected for disposal.*

[54 FR 52750, Dec. 21, 1989, effective Feb. 5, 1990]

Beginning February 5, 1990, each owner or operator of a facility, other than a commercial storer or a disposer of PCB waste, using or storing at any one time at least 45 kilograms (99.4 pounds) of PCBs contained in PCB Container(s), or one or more PCB Transformers, or 50 or more PCB Large High or Low Voltage Capacitors shall develop and maintain at the facility, or a central facility provided they are maintained at that facility, all annual records and the written annual document log of the disposition of PCBs and PCB Items. The written annual document log must be prepared for each facility by July 1 covering the previous calendar year (January through December). The annual document log shall be maintained for at least 3 years after the facility ceases using or storing PCBs and PCB Items in the quantities prescribed in this paragraph. Annual records (manifests and certificates of disposal) shall be maintained for the same period. The annual records and the annual document log shall be available for inspection at the facility where they are maintained by authorized representatives of EPA during normal business hours, and each owner or operator of a facility subject to these requirements shall know the location of these records. All records and annual documents required to be prepared and maintained by this section prior to February 5, 1990 shall continue to be maintained at the facility for the same time as the annual records and the annual document log. The annual document required for 1989 shall cover the period from January 1, 1989 to February 5, 1990.

(1) The annual records shall include the following:

(i) All signed manifests generated by the facility during the calendar year.

(ii) All Certificates of Disposal that have been received by the facility during the calendar year.

(2) The written annual document log shall include the following:

(i) The name, address, and EPA identification number of the facility covered by the annual document log and

the calendar year covered by the annual document log.

(ii) The unique manifest number of every manifest generated by the facility during the calendar year, and from each manifest and for unmanifested waste that may be stored at the facility, the following information:

(A) For bulk PCB waste (e.g., in a tanker or truck), its weight in kilograms, the first date it was removed from service for disposal, the date it was placed into transport for off-site storage or disposal, and the date of disposal, if known.

(B) The serial number (if available) or other means of identifying each PCB Article (e.g., transformer or capacitor), the weight in kilograms of the PCB waste in each transformer or capacitor, the date it was removed from service for disposal, the date it was placed in transport for off-site storage or disposal, and the date of disposal, if known.

(C) A unique number identifying each PCB Container, a description of the contents of each PCB Container, such as liquid, soil, cleanup debris, etc., including the total weight of the material in kilograms in each PCB Container, the first date material was placed in each PCB Container for disposal, and the date each PCB Container was placed in transport for off- site storage or disposal, and the date of disposal if known.

(D) A unique number identifying each PCB Article Container, a description of the contents of each PCB Article Container, such as pipes, capacitors, electric motors, pumps, etc., including the total weight in kilograms of the contents of each PCB Article Container, the first date a PCB Article was placed into each PCB Article Container for disposal, the total weight of the PCB Articles in kilograms in each PCB Article Container, and the date the PCB Article Container was placed in transport for off-site storage or disposal, and the date of disposal if known.

(iii) The total number by specific type of PCB Articles and the total weight in kilograms of PCBs in PCB Articles, the total number of PCB Article Containers and total weight in kilograms of the contents of PCB Article Containers, the total number of PCB Containers and the total weight in kilograms of the contents of PCB Containers, and the total weight in kilograms of bulk PCB waste that was placed into storage for disposal or disposed during the calendar year.

(iv) The total number of PCB Transformers and total weight in kilograms of PCBs contained in the transformers remaining in service at the end of the calendar year.

(v) The total number of Large High or Low Voltage PCB Capacitors remaining in service at the end of the calendar year.

(vi) The total weight in kilograms of any PCBs and PCB Items in PCB Containers, including the identification of container contents, remaining in service at the facility at the end of the calendar year.

(vii) For any PCBs or PCB item received from or shipped to another facility owned or operated by the same generator, the information required under paragraph (a)(2)(ii)(A) through (a)(2)(ii)(D) of this section.

(viii) A record of each telephone call, or other means of verification agreed upon by both parties, made to each designated commercial storer or designated disposer to confirm receipt of PCB waste transported by an independent transporter, as required by § 761.208.

(b) *Disposers and commercial storers of PCB waste.*

[54 FR 52750, Dec. 21, 1989, effective Feb. 5, 1990]

Beginning February 5, 1990, each owner or operator of a facility (including high efficiency boiler operations) used for the commercial storage or disposal of PCBs and PCB Items shall maintain annual records on the disposition of all PCBs and PCB items at the facility and prepare and maintain a written annual document log that includes the information required by paragraphs (b)(2) of this section for PCBs and PCB Items that were handled as PCB waste at the facility. The written annual document log shall be prepared by July 1 for the previous calendar year (January through December). The written annual document log shall be maintained at each facility for at least 3 years after the facility is no longer used for the storage or disposal of PCBs and PCB Items except that, in the case of chemical waste landfills, the annual document log shall be maintained at least 20 years after the chemical waste landfill is no longer used for the disposal of PCBs and PCB Items. The annual records shall be maintained for the same period. The annual records and written annual document log shall be available at the facility for inspection by authorized representatives of the EPA. All records and annual documents required to be prepared and maintained by this section prior to February 5, 1990 shall continue to be maintained at the facility for the same time as the annual records and the annual document log. The annual document for 1989 shall cover the period from January 1, 1989 to February 5, 1990. From the written annual document log the owner or operator of a facility must prepare the annual report containing the information required by paragraphs (b)(3)(i) through (b)(3)(vi) of this section for PCBs and PCB Items that were handled as PCB waste at the facility during the previous calendar year (January through December). The annual report must be submitted by July 15 of each year for the preceding calendar year. If the facility ceases commercial PCB storage or disposal operations, the owner or operator of the facility shall provide at least 60 days advance written notice to the Regional Administrator for the region in which the facility is located of the date the facility intends to begin closure.

(1) The annual records shall include the following:

(i) All signed manifests generated or received at the facility during the calendar year.

(ii) All Certificates of Disposal that have been generated or received by the facility during the calendar year.

(2) The written annual document log shall include the following:

(i) The name, address, and EPA identification number of the storage or disposal facility covered by the annual document log and the calendar year covered by the annual document log.

(ii) For each manifest generated or received by the facility during the calendar year, the unique manifest number and the name and address of the facility that generated the manifest the following information:

(A) For bulk PCB waste (e.g., in a tanker or truck), its weight in kilograms, the first date PCB waste was placed in the tanker or truck for disposal, the date it was received at the facility, the date it was placed in transport for off-site disposal (if applicable), and the date of disposal, if known.

(B) The serial number or other means of identifying each PCB Article, not in a PCB Container or PCB Article Container, the weight in kilograms of the PCB waste in the PCB Article, the date it was removed from service for disposal, the date it was received at the facility, the date it was placed in transport for off-site disposal (if applicable), and the date of disposal (if known).

(C) The unique number assigned by the generator identifying each PCB Container, a description of the contents of each PCB Container, such as liquid, soil, cleanup debris, etc., including the total weight of the PCB waste in kilograms in each PCB Container, the first date PCB waste was placed in each PCB Container or PCB Article Container, the date each PCB Container was placed in transport for off-site storage or disposal (as applicable), and the date the PCB Container was disposed (if known).

(D) The unique number assigned by the generator identifying each PCB Article Container, a description of the contents of each PCB Article Container, such as pipes, capacitors, electric motors, pumps, etc., including the total weight in kilograms of the PCB waste in each PCB

Article Container, the first date a PCB Article was placed in each PCB Article Container for disposal, the date each PCB Article Container was placed in transport for off-site storage or disposal (as applicable), and the date the PCB Article Container was disposed (if known).

(E) Disposers of PCB waste shall include the confirmed date of disposal for items in paragraphs (b)(2)(ii)(A) through (b)(2)(ii)(D) of this section.

(iii) For any PCB waste disposed at a facility that generated the PCB waste or any PCB waste that was not manifested to the facility, the information required under paragraph (b)(2)(ii)(A) through (B)(2)(ii)(E) of this section.

(3) The owner or operator of a PCB disposal or commercial storage facility shall submit an annual report, which briefly summarizes the records and annual document log required to be maintained and prepared under paragraphs (b)(1) and (b)(2) of this section, to the Regional Administrator of the EPA region in which the facility is located by July 15 of each year, beginning with July 15, 1991. The first annual report submitted on July 15, 1991, shall be for the period starting February 5, 1990 and ending December 31, 1990. The annual report shall contain no confidential business information. The annual report shall consist of the information listed in paragraphs (b)(3)(i) through (b)(3)(vi) of this section.

(i) The name, address, and EPA identification number of the facility covered by the annual report for the calendar year.

(ii) A list of the numbers of all signed manifests of PCB waste initiated or received by the facility during that year.

(iii) The total weight in kilograms of bulk PCB waste, PCB waste in PCB Transformers, PCB waste in PCB Large High or Low Voltage Capacitors, PCB waste in PCB Article Containers, and PCB waste in PCB Containers in storage at the facility at the beginning of the calendar year, received or generated at the facility, transferred to another facility, or disposed of at the facility during the calendar year. The information must be provided for each of these categories, as appropriate.

(iv) The total number of PCB Transformers, the total number of PCB Large High or Low Voltage Capacitors, the total number of PCB Article Containers, and the total number of PCB Containers in storage at the facility at the beginning of the calendar year, received or generated at the facility, transferred to another facility, or disposed of at the facility during the calendar year. The information must be provided for each of these categories, as appropriate.

(v) The total weight in kilograms of each of the following PCB categories: bulk PCB waste, PCB waste in PCB Transformers, PCB waste in PCB Large High or Low Voltage Capacitors, PCB waste in PCB Article Containers, and PCB waste in PCB Containers remaining in storage for disposal at the facility at the end of the calendar year.

(vi) The total number of PCB Transformers, the total number of PCB Large High or Low Voltage Capacitors, the total number of PCB Article Containers, and the total number of PCB Containers remaining in storage for disposal at the facility at the end of the calendar year.

(vii) The requirement to submit annual reports to the Regional Administrator continues until the submission of the annual report for the calendar year during which the facility ceases PCB storage or disposal operations. Storage operations have not ceased until all PCB waste, including any PCB waste generated during closure, has been removed from the facility.

(4) Whenever a commercial storer of PCB waste accepts PCBs or PCB Items at his storage facility and transfers the PCB waste off-site to another facility for storage or disposal, the commercial storer of PCB waste shall initiate a manifest under subpart K of this part for the transfer of PCBs or PCB Items to the next storage or disposal facility.

Note: Any requirements for weights in kilograms of PCBs may be calculated values if the internal volume of PCBs in containers and transformers is known and included in the reports, together with any assumptions on the density of the PCBs contained in the containers or tranformers. If the internal volume of PCBs is not known, a best estimate may be used.

(c) *Incineration facilities.* Each owner or operator of a PCB incinerator facility shall collect and maintain for a period of 5 years from the date of collection the following information, in addition to the information required in paragraph (b) of this section:

(1) When PCBs are being incinerated, the following continuous and short-interval data:

(i) Rate and quantity of PCBs fed to the combustion system as required in § 761.70(a)(3);

(ii) Temperature of the combustion process as required in § 761.70(a)(4); and

(iii) Stack emission product to include O_2, CO, and CO_2 as required in § 761.70(a)(7).

(2) When PCBs are being incinerated, data and records on the monitoring of stack emissions as required in § 761.70(a)(6).

(3) Total weight in kilograms of any solid residues generated by the incineration of PCBs and PCB Items during the calendar year, the total weight in kilograms of any solid residues disposed of by the facility in chemical waste landfills, and the total weight in kilograms of any solid residues remaining on the facility site.

(4) When PCBs and PCB Items are being incinerated, additional periodic data shall be collected and maintained as specified by the Regional Administrator pursuant to § 761.70(d)(4).

(5) Upon any suspension of the operation of any incinerator pursuant to § 761.70(a)(8), the owner or operator of such an incinerator shall prepare a document. The document shall, at a minimum, include the date and time of the suspension and an explanation of the circumstances causing the suspension of operation. The document shall be sent to the appropriate Regional Administrator within 30 days of any such suspension.

(d) *Chemical waste landfill facilities.* Each owner or operator of a PCB chemical waste landfill facility shall collect and maintain until at least 20 years after the chemical waste landfill is no longer used for the disposal of PCBs the following information in addition to the information required in paragraph (b) of this section:

(1) Any water analysis obtained in compliance with § 761.75(b)(6)(iii); and

(2) Any operations records including burial coordinates of wastes obtained in compliance with § 761.75(b)(8)(ii).

(e) *High efficiency boiler facilities.* Each owner or operator of a high efficiency boiler used for the disposal of liquids between 50 and 500 ppm PCB shall collect and maintain for a period of 5 years the following information, in addition to the information required in paragraph (b) of this section:

(1) For each month PCBs are burned in the boiler the carbon monoxide and excess oxygen data required in § 761.60(a)(2)(iii)(A)(8) and § 761.60(a)(3)(iii)(A)(8);

(2) The quantity of PCBs burned each month as required in § 761.60(a)(2)(iii)(A)(7) and § 761.60(a)(3)(iii)(A)(7); and

(3) For each month PCBs (other than mineral oil dielectric fluid) are burned, chemical analysis data of the waste as required in § 761.60(a)(3)(iii)(B)(6).

(f) *Retention of special records by storage and disposal facilities.* In addition to the information required to be maintained under paragraphs (b), (c), (d) and (e) of this section, each owner or operator of a PCB storage or disposal facility (including high efficiency boiler operations) shall collect and maintain for the time period specified in paragraph (b) of this section the following data:

(1) All documents, correspondence, and

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data that have been provided to the owner or operator of the facility by any State or local government agency and that pertain to the storage or disposal of PCBs and PCB Items at the facility.

(2) All documents, correspondence, and data that have been provided by the owner or operator of the facility to any State or local government agency and that pertain to the storage or disposal of PCBs and PCB Items at the facility.

(3) Any applications and related correspondence sent by the owner or operator of the facility to any local, State, or Federal authorities in regard to waste water discharge permits, solid waste permits, building permits, or other permits or authorizations such as those required by § 761.70(d) and § 761.75(c).

[53 FR 12524, April 15, 1988]

[Approved by the Office of Management and Budget under control numbers 2070-0061 and 2070-0112]

[54 FR 52752, Dec. 21, 1989, effective Feb. 5, 1990]

§ 761.185 Certification program and retention of records by importers and persons generating PCBs in excluded manufacturing processes.

[49 FR 25239, June 20, 1984; 49 FR 28172, July 10, 1984]

(a) In addition to meeting the basic requirements of § 761.1(f) and the definition of excluded manufacturing processes at § 761.3, manufacturers with processes inadvertently generating PCBs and importers of products containing inadvertently generated PCBs must report to EPA any excluded manufacturing process or imports for which the concentration of PCBs in products leaving the manufacturing site or imported is greater than 2 micrograms per gram (2 μg/g, roughly 2 ppm) for any resolvable gas chromatographic peak. Such reports must be filed by October 1, 1984 or, if no processes or imports require reports at the time, within 90 days of having processes or imports for which such reports are required.

(b) Manufacturers required to report by paragraph (a) of this section must transmit a letter notifying EPA of the number, the type, and the location of excluded manufacturing processes in which PCBs are generated when the PCB level in products leaving any manufacturing site is greater than 2 μg/g for any resolvable gas chromatographic peak. Importers required to report by paragraph (a) of this section must transmit a letter notifying EPA of the concentration of PCBs in imported products when the PCB concentration of products being imported is greater than 2 μg/g for any resolvable gas chromatographic peak. Persons must also certify the following:

(1) Their compliance with all applicable requirements of § 761.1(f), including any applicable requirements for air and water releases and process waste disposal.

(2) Whether determinations of compliance are based on actual monitoring of PCB levels or on theoretical assessments.

(3) That such determinations of compliance are being maintained.

(4) If the determination of compliance is based on a theoretical assessment, the letter must also notify EPA of the estimated PCB concentration levels generated and released.

(c) Any person who reports pursuant to paragraph (a) of this section:

(1) Must have performed either a theoretical analysis or actual monitoring of PCB concentrations.

(2) Must maintain for a period of three years after ceasing process operations or importation, or for seven years, whichever is shorter, records containing the following information:

(i) *Theoretical analysis.* Manufacturers records must include: the reaction or reactions believed to be generating PCBs; the levels of PCBs generated; and the levels of PCBs released. Importers records must include: the reaction or reactions believed to be generating PCBs and the levels of PCBs generated; the basis for all estimations of PCB concentrations; and the name and qualifications of the person or persons performing the theoretical analysis; or

(ii) *Actual monitoring.* (A) The method of analysis.

(B) The results of the analysis, including data from the Quality Assurance Plan.

(C) Description of the sample matrix.

(D) The name of the analyst or analysts.

(E) The date and time of the analysis.

(F) Numbers for the lots from which the samples are taken.

(d) The certification required by paragraph (b) of this section must be signed by a responsible corporate officer. This certification must be maintained by each facility or importer for a period of three years after ceasing process operation or importation, or for seven years, whichever is shorter, and must be made available to EPA upon request. For the purpose of this section, a responsible corporate officer means:

(1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.

(2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(e) Any person signing a document under paragraph (d) of this section shall also make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information. Based on my inquiry of the person or persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for falsifying information, including the possibility of fines and imprisonment for knowing violations.
Dated:
Signature:

(f) This report must be submitted to the TSCA Document Processing Center (TS-790), Rm. L-100, Office of Toxic Substances, Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, Attention: PCB Notification. This report must be submitted by October 1, 1984 or within 90 days of starting up processes or commencing importation of PCBs.

[53 FR 12524, April 15, 1988]

(g) This certification process must be repeated whenever process conditions are significantly modified to make the previous certification no longer valid.

[Approved by the Office of Management and Budget under control number 2070-0008]

§ 761.187 Reporting importers and by persons generating PCBs in excluded manufacturing processes.

[49 FR 28172, July 10, 1984]

In addition to meeting the basic requirements of § 761.1(f) and the definition of excluded manufacturing process at § 761.3, PCB-generating manufacturing processes or importers of PCB-containing products shall be considered "excluded manufacturing processes" only when the following conditions are met:

(a) Data are reported to the EPA by the owner/operator or importer concerning the total quantity of PCBs in product

from excluded manufacturing processes leaving any manufacturing site in any calendar year when such quantity exceeds 0.0025 percent of that site's rated capacity for such manufacturing processes as of October 1, 1984; or the total quantity of PCBs imported in any calendar year when such quantity exceeds 0.0025 percent of the average total quantity of such product containing PCBs imported by such importer during the years 1978, 1979, 1980, 1981 and 1982.

(b) Data are reported to the EPA by the owner/operator concerning the total quantity of inadvertently generated PCBs released to the air from excluded manufacturing processes at any manufacturing site in any calendar year when such quantity exceeds 10 pounds.

(c) Data are reported to the EPA by the owner/operator concerning the total quantity of inadvertently generated PCBs released to water from excluded manufacturing processes from any manufacturing site in any calendar year when such quantity exceeds 10 pounds.

(d) These reports must be submitted to the TSCA Document Processing Center (TS-790), Rm. L-100, Office of Toxic Substances, Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, Attention: PCB Notification. [53 FR 12524, April 15, 1988]

[Approved by the Office of Management and Budget under control number 2070-0008]

§ 761.193 Maintenance of monitoring records by persons who import, manufacture, process, distribute in commerce, or use chemicals containing inadvertently generated PCBs.

[49 FR 28172, July 10, 1984]

(a) Persons who import, manufacture, process, distribute in commerce, or use chemicals containing PCBs present as a result of inadvertent generation or recycling who perform any actual monitoring of PCB concentrations must maintain records of any such monitoring for a period of three years after a process ceases operation or importing ceases, or for seven years, whichever is shorter.

(b) Monitoring records maintained pursuant to paragraph (a) of this section must contain:

(1) The method of analysis.
(2) The results of the analysis, including data from the Quality Assurance Plan.
(3) Description of the sample matrix.
(4) The name of the analyst or analysts.
(5) The date and time of the analysis.
(6) Numbers for the lots from which the samples are taken.

[Approved by the Office of Management and Budget under control number 2070-008]

Subpart K—PCB Waste Disposal Records and Reports

§ 761.202 EPA identification numbers.

[54 FR 52752, Dec. 21, 1989, effective Feb. 5, 1990]

(a) *General.* Any generator, commercial storer, transporter, or disposer of PCB waste who is required to have an EPA identification number under this subpart must notify EPA of his/her PCB waste handling activities, using the notification procedures and form described in § 761.205. EPA will confirm the EPA identification number of facilities already assigned one, and will assign an EPA identification number to facilities that do not have one.

(b) *Prohibitions.* After June 4, 1990:

(1) A generator of PCB waste shall not:

(i) Process, store, dispose of, transport, or offer for transportation PCB waste without having received an EPA identification number from the Agency. A generator of PCB waste who is exempted from notification under Sec. 761.205(c)(1) or who notifies EPA in a timely manner under Sec. 761.205(c)(2)(i), but has not yet received a unique identification number, shall be regarded as having received from EPA the identification number "40 CFR PART 761."

(ii) Offer the PCB waste to transporters, disposers, or commercial storers of PCB waste who have not received an EPA identification number.

(2) A transporter of PCB waste shall not:

(i) Transport PCB waste without having received an EPA identification number from EPA.

(ii) Deliver PCB waste to transporters, disposers, or commercial storers of PCB waste that have not received an EPA identification number.

(3) A commercial storer of PCB waste shall not accept any PCB waste for storage without having received an EPA identification number from EPA.

(4) A disposer of PCB waste shall not accept any PCB waste for disposal without having received an EPA identification number from EPA. A disposer of PCB waste who owns more than one disposal facility or mobile treatment unit shall not accept waste unless the disposer has received an EPA identification number for each facility or mobile unit.

(c) *PCB waste handled prior to effective date of this subpart.* Generators (other than generators exempt from notification under § 761.205(c)(1)), commercial storers, transporters, and disposers of PCB waste who are required to have EPA identification numbers under this subpart, and who were engaged in PCB waste handling activities on or prior to February 5, 1990, are not subject to the prohibitions of paragraph (b) of this section if they have applied for an EPA identification number in accordance with the applicable notification procedures of § 761.205. Such persons shall use the EPA identification number "40 CFR PART 761," or a number assigned to the persons by EPA or a State under RCRA, until EPA issues to such persons a specific identification number under § 761.205(a), (b), or (c).

(d) *PCB waste first handled after effective date of this subpart.* Generators (other than generators exempt from notification under Sec. 761.205(c)(1)), commercial storers, transporters, and disposers of PCB waste who are required to have EPA identification numbers under this subpart, and who first engage in PCB waste activities after February 5, 1990, are subject to the prohibitions in paragraph (b) of this section.

§ 761.205 Notification of PCB waste activity (EPA Form 7710-53).

[54 FR 52752, Dec. 21, 1989, effective Feb. 5, 1990]

(a)(1) All commercial storers, transporters, and disposers of PCB waste who were engaged in PCB waste handling activities on or prior to February 5, 1990 shall notify EPA of their PCB waste activities by filing EPA Form 7710-53 with EPA by no later than April 4, 1990. Upon receiving the notification form, EPA will assign an EPA identification number to each entity that notifies.

(2) All generators (other than generators exempt from notification under paragraph (c)(1) of this section), commercial storers, transporters, and disposers of PCB waste who first engage in PCB waste handling activities after February 5, 1990, shall notify EPA of their PCB waste activities by filing EPA Form 7710-53 with EPA prior to engaging in PCB waste handling activities.

(3) Any person required to notify EPA under this section shall file with EPA Form 7710-53. Copies of EPA Form 7710-53 are available from the Chemical Regulation Branch (TS-798), Office of Toxic Substances, Environmental Protection Agency, 401 M St. SW, Washington, DC 20460. Descriptive

[Sec. 761.205(a)(3)]

information and instructions for filling in the form are included in paragraphs (a)(4)(i) through (viii) of this section.

(4) All of the following information shall be provided to EPA on Form 7710-53:

(i) The name of the facility, and the name of the owner or operator of the facility.

(ii) EPA identification number, if any, previously issued to the facility.

(iii) The facility's mailing address.

(iv) The location of the facility.

(v) The facility's installation contact and telephone number.

(vi) The type of PCB waste activity engaged in at the facility.

(vii) Signature of the signer of the certification statement, typed or printed name and official title of signer, and date signed.

(viii) EPA has determined that the information in paragraphs (a)(4)(i) through (a)(4)(vii) of this section shall not be treated as confidential business information. This information will be disclosed to the public without further notice to the submitter unless the submitter provides a written justification (submitted with the notification form) which demonstrates extraordinary reasons why the information should be entitled to confidential treatment.

(b) Generators (other than those generators exempt from notification under paragraph (c)(1) of this section), commercial storers, transporters, and disposers of PCB waste who have previously notified EPA or a State of hazardous waste activities under RCRA shall notify EPA of their PCB waste activities under this part by filing EPA Form 7710-53 with EPA by no later than April 4, 1990. The notification shall include the EPA identification number previously issued by EPA or the State and upon receipt of the notification, EPA shall verify and authorize the use of the previously issued identification number for PCB waste activities.

(c)(1) Generators of PCB waste need not notify EPA and receive unique EPA identification numbers under this section, unless their PCB waste activities are described in paragraph (c)(2) of this section. Generators exempted from notifying EPA under this paragraph shall use the generic identification number "40 CFR PART 761" on the manifests, records, and reports which they shall prepare under this subpart, unless such generators elect to use a unique EPA identification number previously assigned to them under RCRA by EPA or a State.

(2) Generators of PCB waste who use, own, service, or process PCBs or PCB Items shall notify EPA of their PCB waste activities only if they own or operate PCB storage facilities subject to the storage requirements of Sec. 761.65 (b) or (c)(7). Such generators shall notify EPA in the following manner:

(i) Generators storing PCB waste subject to the storage requirements of § 761.65 (b) or (c)(7) shall notify EPA by filing EPA Form 7710-53 with EPA by no later than April 4, 1990.

(ii) Generators who desire to commence storage of PCB waste after February 5, 1990 shall notify EPA and receive an EPA identification number before they may commence storage of PCBs at their facilities established under Sec. 761.65 (b) or (c)(7).

(iii) A separate notification shall be submitted to EPA for each PCB storage facility owned or operated by generators of PCB waste. Upon receiving these notifications, EPA will assign generators unique EPA identification numbers for each storage facility notifying EPA under this section.

(d) Persons required to notify under this section shall file EPA Form 7710- 53 with EPA by mailing the form to the following address: Chief, Chemical Regulation Branch (TS-798), Office of Toxic Substances, Environmental Protection Agency, Rm. NE-117, 401 M St., SW, Washington, DC 20460.

(e) The requirements under this section to notify EPA and obtain EPA identification numbers shall in no case excuse compliance by any person subject to the 1-year limit on storage prior to disposal under Sec. 761.65(a).

(Approved by the Office of Management and Budget under control number 2070- 0112.)

§ 761.207 The manifest—general requirements.

(54 FR 52753, Dec. 21, 1989, effective Feb. 5, 1990)

(a) A generator who relinquishes control over PCB wastes by transporting, or offering for transport by his own vehicle or by a vehicle owned by another person, PCB waste for commercial off-site storage or off-site disposal shall prepare a manifest on EPA Form 8700-22, and if necessary, a continuation sheet. The generator shall specify:

(1) 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.

(2) For each PCB Article Container or PCB Container, the unique identifying number, type of PCB waste (e.g., soil, debris, small capacitors), earliest date of removal from service for disposal, and weight in kilograms of the PCB waste contained.

(3) 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.

(b) EPA does not maintain supplies of printed copies of Form 8700-22 for public use, although printed copies of the manifest may be available from State offices. Camera-ready copies of the form are available for printing purposes from State offices, EPA Regional Offices, and EPA Headquarters.

(c) If the State to which the shipment is manifested (i.e., consignment State) supplies the manifest and requires its use, then the generator must use that manifest.

(d) If the consignment State does not supply the manifest, but the State in which the generator is located (i.e., generator State) supplies the manifest and requires its use, then the generator must use that State's manifest.

(e) If both the consignment State and the generator State supply manifests and require their use, the generator must use the consignment State's manifest.

(f) If neither the generator State nor the consignment State supplies the manifest, the generator may obtain the manifest from any source.

(g) A generator shall designate on the manifest one off-site commercial storage or disposal facility approved under this part for the commercial storage or disposal of the PCBs and PCB Items described on the manifest.

(h) If the transporter is unable to deliver the PCB waste to the designated disposer or commercial storer, the transporter must contact the generator of the PCB waste for instructions. The generator shall either designate another approved disposer or commercial storer, or instruct the transporter to return the PCB waste back to the generator.

(i) The manifest which accompanies the PCB waste shall consist of at a minimum the number of copies required to provide the generator, the initial transporter, each subsequent transporter, and the owner or operator of the designated commercial storage or disposal facility with one legible copy each for their records, and one additional copy to be returned to the generator by the owner or operator of the first designated commercial storage or disposal facility.

(j) The requirements of this section

apply only to PCB wastes as defined in § 761.3. This includes PCB wastes with PCB concentrations below 50 ppm where the PCB concentration below 50 ppm was the result of dilution; these PCB wastes are required, under § 761.1(b), to be managed as if they contained PCB concentrations greater than 50 ppm. An example of such a PCB waste is spill cleanup material containing less than 50 ppm PCBs when the spill involved material containing greater than 50 ppm.

§ 761.208 Use of the manifest.

[54 FR 52753, Dec. 21, 1989, effective Feb. 5, 1990]

(a)(1) The generator of PCB waste shall:

(i) Sign the manifest certification by hand.

(ii) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest.

(iii) Retain one copy among its records in accordance with § 761.209(a).

(iv) Give to the transporter the remaining copies of the manifest that will accompany the shipment of PCB waste.

(2) For bulk shipments of PCB waste within the United States transported solely by water, the generator shall send three copies of the manifest dated and signed in accordance with this section directly to the owner or operator of the designated commercial storage or disposal facility. Copies of the manifest are not required for each transporter.

(3) For rail shipments of PCB waste within the United States which originate at the site of generation, the generator shall send at least three copies of the manifest dated and signed in accordance with this section to:

(i) The next non-rail transporter, if any.

(ii) The designated commercial storage or disposal facility if transported solely by rail.

(4) When a generator has employed an independent transporter to transport the PCB waste to a commercial storer or disposer, the generator shall confirm by telephone, or by other means of confirmation agreed to by both parties, that the commercial storer or disposer actually received the manifested waste. The generator shall confirm receipt of the waste by close of business the day after he receives the manifest hand-signed by the commercial storer or disposer, in accordance with paragraph (c)(1)(iv) of this section. If the generator has not received the hand-signed manifest within 35 days after the independent transporter accepted the PCB waste, the generator shall telephone, or communicate with by some other agreed-upon means, the disposer or commercial storer to determine whether the PCB waste has actually been received. If the PCB waste has not been received, the generator shall contact the independent transporter to determine the disposition of the PCB waste. If the generator has not received a hand-signed manifest from an EPA-approved facility within 10 days from the date of the telephone call or other agreed upon means of communication, to the independent transporter, the generator shall submit an exception report to the EPA Regional Administrator for the Region in which the generator is located, as specified in § 761.215. The generator shall retain a written record of all telephone or other confirmations to be included in the annual document log, in accordance with § 761.180.

(b)(1) A transporter shall not accept PCB waste from a generator unless it is accompanied by a manifest signed by the generator in accordance with paragraph (a)(1) of this section, except that a manifest is not required if any one of the following conditions exists:

(i) The shipment of PCB waste consists solely of PCB wastes with PCB concentrations below 50 ppm, unless the PCB concentration below 50 ppm was the result of dilution, in which case § 761.1(b) requires that the waste be managed as if it contained PCBs at the concentration prior to dilution.

(ii) The PCB waste is accepted by the transporter for transport only to a storage or disposal facility owned or operated by the generator of the PCB waste.

(2) Before transporting the PCB waste, the transporter shall sign and date the manifest acknowledging acceptance of the PCB waste from the generator. The transporter shall return a signed copy to the generator before leaving the generator's facility.

(3) The transporter shall ensure that the manifest accompanies the PCB waste.

(4) A transporter who delivers PCB waste to another transporter, or to the designated commercial storer or disposer of PCB waste, shall:

(i) Obtain the date of delivery and the handwritten signature of the subsequent transporter of PCB waste, or of the owner or operator of the designated commercial storage or disposal facility on the manifest.

(ii) Retain one copy of the manifest in accordance with § 761.209(b).

(iii) Give the remaining copies of the manifest to the accepting transporter of PCB waste, or to the designated commercial storage or disposal facility.

(5) The requirements of paragraphs (b)(3) and (4) of this section shall not apply to transporters of bulk shipments by water if all of the following conditions are met:

(i) The PCB waste is delivered by water (bulk shipment) to the designated commercial storage or disposal facility.

(ii) A shipping paper containing all the information required on the manifest (excluding EPA identification number, generator certification, and signatures) accompanies the PCB waste.

(iii) The transporter delivering the PCB waste obtains the date of delivery and handwritten signature of the owner or operator of the designated commercial storage or disposal facility on either the manifest or the shipping paper.

(iv) The person delivering the PCB waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility.

(v) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with § 761.209(b).

(6) For shipments involving rail transportation, the requirements of paragraphs (b)(3) and (b)(4) of this section shall not apply. Instead, the requirements described at § 263.20(f) of this chapter for the rail transportation of hazardous waste apply to such shipments. The rail transporter shall retain one copy of the manifest or rail shipping paper in accordance with § 761.209(b).

(7) The transporter shall deliver the entire quantity of PCB waste accepted from a generator or transporter to either of the following destinations:

(i) The designated commercial storage or disposal facility listed on the manifest.

(ii) The next designated transporter of PCB waste.

(8) If the PCB waste cannot be delivered in accordance with paragraph (b)(7) of this section, the transporter shall contact the generator for further directions and shall revise the manifest and/or return the PCB waste according to the generator's instructions.

(9) No provision of this section shall be construed to affect or limit the applicability of any requirement applicable to transporters of PCB waste under regulations issued by the Department of Transportation (DOT) and set forth at 49 CFR part 171.

(c)(1) If a commercial storage or disposal facility receives an off-site shipment of PCB waste accompanied by a manifest, the owner or operator, or his agent, shall:

(i) Sign and date each copy of the manifest to certify that the PCB waste

[Sec. 761.208(c)(1)(i)]

covered by the manifest was received.

(ii) Note any significant discrepancies in the manifest (as defined in Sec. 761.210(a)(1)) on each copy of the manifest.

(iii) Immediately give the transporter at least one copy of the signed manifest.

(iv) Within 30 days after the delivery, send a copy of the manifest to the generator.

(v) Retain a copy of each manifest among the facility's records in accordance with § 761.209(d).

(2) If a commercial storage or disposal facility receives PCB waste from a rail or water (bulk shipment) transporter accompanied by a shipping paper containing all the information required on the manifest except the EPA identification numbers, generator's certification, and signatures, the owner or operator, or his agent, shall:

(i) Sign and date each copy of the manifest or shipping paper to certify that the PCB waste covered by the manifest or shipping paper was received.

(ii) Note any significant discrepancies in the manifest or shipping paper on each copy of the manifest or shipping paper.

(iii) Immediately give the rail or water transporter at least one copy of the manifest or shipping paper, if applicable.

(iv) Within 30 days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within 30 days after delivery, the owner or operator shall send a copy of the shipping paper signed and dated to the generator.

(v) Retain at the commercial storage or disposal facility a copy of the manifest and shipping paper, if signed in lieu of the manifest, in accordance with § 761.209(d).

(3) Whenever an off-site shipment of PCB waste is initiated from a commercial storage or disposal facility, the owner or operator of the commercial storage or disposal facility shall comply with the manifest requirements that apply to generators of PCB waste.

§ 761.209 Retention of manifest records.

[54 FR 52755, Dec. 21, 1989, effective Feb. 5, 1990]

(a) A generator of PCB waste shall keep a copy of each manifest signed in accordance with § 761.208(a)(1) until the generator receives a signed copy from the designated commercial storage or disposal facility which received the PCB waste. The copy signed by the commercial storer or disposer shall be retained for at least 3 years from the date the PCB waste was accepted by the initial transporter. A generator subject to annual document requirements under § 761.180 shall retain copies of each manifest for the period required by § 761.180(a).

(b)(1) A transporter of PCB waste shall keep a copy of the manifest signed by the generator, transporter, and the next designated transporter, if applicable, or the owner or operator of the designated commercial storage or disposal facility. This copy shall be retained for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(2) For shipments of PCB waste delivered to the designated commercial storage or disposal facility by water (bulk shipment), each water (bulk shipment) transporter shall retain a copy of the shipping paper described in § 761.208(b)(5)(ii) for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(3) For shipments of PCB waste by rail within the United States:

(i) The initial rail transporter shall keep a copy of the manifest and the shipping paper required to accompany the PCB waste for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(ii) The final rail transporter shall keep a copy of the signed manifest, or the required shipping paper if signed by the designated facility in lieu of the manifest, for a period of at least 3 years from the date the PCB waste was accepted by the initial transporter.

(c) The owner or operator of a PCB commercial storage or disposal facility that receives off-site shipments of PCB waste shall retain at the facility for at least 3 years a copy of each manifest or shipping paper that the owner or operator signs in accordance with § 761.208(c)(1) or (c)(3).

(d) The periods of record retention required by this section shall be extended automatically during the course of any outstanding enforcement action regarding the regulated activity.

[Approved by the Office of Management and Budget under control number 2070- 0112]

§ 761.210 Manifest discrepancies.

[54 FR 52755, Dec. 21, 1989, effective Feb. 5, 1990]

(a) Manifest discrepancies are differences between the quantity or type of PCB waste designated on the manifest or shipping paper and the quantity or type of PCB waste actually delivered to and received by a designated facility.

(1) Significant discrepancies in quantity are:

(i) Variations greater than 10 percent in weight of PCB waste in containers.

(ii) Any variation in piece count, such as a discrepancy of one PCB Transformer or PCB Container or PCB Article Container in a truckload.

(2) Significant discrepancies in type of PCB waste are obvious differences which may be discovered by inspection or waste analysis, such as the substitution of solids for liquids or the substitution of high concentration PCBs (above 500 ppm) with lower concentration materials.

(b) Upon discovering a significant discrepancy, the owner or operator of the designated commercial storage or disposal facility shall attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the PCB waste, such owner or operator shall immediately submit to the Regional Administrator for the Region in which the designated facility is located a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

[Approved by the Office of Management and Budget under control number 2070- 0112]

§ 761.211 Unmanifested waste report.

[54 FR 52755, Dec. 21, 1989, effective Feb. 5, 1990]

(a) After April 4, 1990, if a PCB commercial storage or disposal facility receives any shipment of PCB waste from an off-site source without an accompanying manifest or shipping paper (where required in place of a manifest), and any part of the shipment consists of any PCB waste regulated for disposal, then the owner or operator of the commercial storage or disposal facility shall attempt to contact the generator, using information supplied by the transporter, to obtain a manifest or to return the PCB waste.

(b) If the owner or operator of the commercial storage or disposal facility cannot contact the generator of the PCB waste, he shall notify the Regional Administrator of the EPA region in which his facility is located of the unmanifested PCB waste so that the Regional Administrator can determine whether further actions are required before the owner or operator may store or dispose of the unmanifested PCB waste.

(c) Within 15 days after receiving the unmanifested PCB waste, the owner or operator shall prepare and submit a report to the Regional Administrator for the Region in which the commercial storage or disposal facility is located and

to the Regional Administrator for the Region in which the PCB waste originated, if known. The report may be submitted on EPA Form 8700-13B, or by a written letter designated "Unmanifested Waste Report." The report shall include the following information:

(1) The EPA identification number, name, and address of the PCB commercial storage or disposal facility.

(2) The date the commercial storage or disposal facility received the unmanifested PCB waste.

(3) The EPA identification number, name, and address of the generator and transporter, if available.

(4) A description of the type and quantity of the unmanifested PCB waste received at the facility.

(5) A brief explanation of why the waste was unmanifested, if known.

(6) The disposition made of the unmanifested waste by the commercial storage or disposal facility, including:

(i) If the waste was stored or disposed by that facility, was the generator identified and was a manifest subsequently supplied.

(ii) If the waste was sent back to the generator, why and when.

[Approved by the Office of Management and Budget under control number 2070- 0112]

§ 761.215 Exception reporting.

[54 FR 52755, Dec. 21, 1989, effective Feb. 5, 1990]

(a) A generator of PCB waste, who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated PCB commercial storage or disposal facility within 35 days of the date the waste was accepted by the initial transporter, shall immediately contact the transporter and/or the owner or operator of the designated facility to determine the status of the PCB waste.

(b) A generator of PCB waste shall submit an Exception Report to the Regional Administrator for the Region in which the generator is located if the generator has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter. The Exception Report shall include the following:

(1) A legible copy of the manifest for which the generator does not have confirmation of delivery.

(2) A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the PCB waste and the results of those efforts.

(c) A disposer of PCB waste shall submit a One-year Exception Report to the Regional Administrator for the Region in which the disposal facility is located whenever the following occurs:

(1) The disposal facility receives PCBs or PCB Items on a date more than 9 months from the date the PCBs or PCB Items were removed from service for disposal, as indicated on the manifest or continuation sheet; and

(2) Because of contractual commitments or other factors affecting the facility's disposal capacity, the disposer of PCB waste could not dispose of the affected PCBs or PCB Items within 1 year of the date of removal from service for disposal.

(d) A generator or commercial storer of PCB waste who manifests PCBs or PCB Items to a disposer of PCB waste shall submit a One-year Exception Report to the Regional Administrator for the Region in which the generator or commercial storer is located whenever the following occurs:

(1) The generator or commercial storer transferred the PCBs or PCB Items to the disposer of PCB waste on a date more than 9 months from the date of removal from service for disposal of the affected PCBs or PCB Items, as indicated on the manifest or continuation sheet; and

(2) The generator or commercial storer either has not received within 13 months from the date of removal from service for disposal a Certificate of Disposal confirming the disposal of the affected PCBs or PCB Items, or the generator or commercial storer receives a Certificate of Disposal confirming disposal of the affected PCBs or PCB Items on a date more than 1 year after the date of removal from service.

(e) The One-year Exception Report shall include:

(1) A legible copy of any manifest or other written communication relevant to the transfer and disposal of the affected PCBs or PCB Items.

(2) A cover letter signed by the submitter or an authorized representative explaining:

(i) The date(s) when the PCBs or PCB Items were removed from service for disposal.

(ii) The date(s) when the PCBs or PCB Items were received by the submitter of the report, if applicable.

(iii) The date(s) when the affected PCBs or PCB Items were transferred to a designated disposal facility.

(iv) The identity of the transporters, commercial storers, or disposers known to be involved with the transaction.

(v) The reason, if known, for the delay in bringing about the disposal of the affected PCBs or PCB Items within 1 year from the date of removal from service for disposal.

[Approved by the Office of Management and Budget under control number 2070- 0112]

§ 761.218 Certificate of disposal.

[54 FR 52756, Dec. 21, 1989, effective Feb. 5, 1990]

(a) For each shipment of manifested PCB waste that the owner or operator of a disposal facility accepts by signing the manifest, the owner or operator of the disposal facility shall prepare a Certificate of Disposal for the PCBs and PCB Items disposed of at the facility, which shall include:

(1) The identity of the disposal facility, by name, address, and EPA identification number.

(2) The identity of the PCB waste affected by the Certificate of Disposal including reference to the manifest number for the shipment.

(3) A statement certifying the fact of disposal of the identified PCB waste, including the date(s) of disposal, and identifying the disposal process used.

(4) A certification as defined in § 761.3.

(b) The Certificate of Disposal shall be sent to the generator identified on the manifest which accompanied the shipment of PCB waste within 30 days of the date that disposal of the PCB waste identified on the manifest was completed.

(c) The disposal facility shall keep a copy of each Certificate of Disposal among the records that it retains under § 761.180(b).

(d)(1) Generators of PCB waste shall keep a copy of each Certificate of Disposal that they receive from disposers of PCB waste among the records they retain under § 761.180(a).

(2) Commercial storers of PCB waste shall keep a copy of each Certificate of Disposal that they receive from disposers of PCB waste among the records the retain under § 761.180(b).

ENVIRONMENTAL PROTECTION LIST OF COMPANIES APPROVED FOR DISPOSAL ON POLYCHLORINATED BIPHENYLS

(Released by the Office of Toxic Substances, Environmental Protection Agency, February 17, 1987; Revised July 22, 1988)

COMPANY	ADDRESS	PHONE
Incinerator		
ENSCO	P.O. Box 1957 El Dorado, AR 71730	(501) 223-4160
ENSCO	P.O. Box 8513 Little Rock, AR 72215-8513	(501) 223-4100*
General Electric	100 Woodlawn Ave. Pittsfield, MA 01201	(413) 494-3729
Pyrochem/Aptus	P.O. Box 907 Coffeyville, KS	(316) 251-4782
Pyrotech Systems	P.O. Box 1957 El Dorado, AR 71731	(501) 863-7173
Rollins	P.O. Box 609 Deer Park, TX 77536	(713) 479-6001
SCA Chemical Services	11700 South Stony Island Ave. Chicago, IL 60617	(312) 646-5700
U.S. EPA/ORD Mobile Incinerator	Woodbridge Ave. Rariton Depot, Bldg. 10 Edison, NJ 08837	(201) 321-6635
Alternate Thermal		
GA Technologies, Incorporated	P.O. Box 85608 San Diego, CA 92138	(619) 455-2517*
J.M. Huber Corporation	P.O. Box 2831 Borger, TX 79007	(806) 274-6331
Chemical		
American Mobile Oil Purification Co.	233 Broadway, 17th Floor New York, NY 10279	(212) 267-7073*
Chemical Waste Management	1550 Balmer Road Model City, NY 14107	(716) 754-8231
Exceltech, Inc.	41638 Christy Street Fremont, CA 94538	(415) 659-0404
General Electric	One River Road Schenectady, NY 12345	(518) 385-3134
National Oil Processing/Aptus	P.O. Box 1062 Coffeyville, KS 67337	(800) 345-6573
Niagara Mohawk Power Corporation	300 Erie Boulevard West Syracuse, NY 13202	(315) 474-1511
PPM, Inc.	1875 Forge Street Tucker, GA 30084	(404) 934-0902*
Sun Environmental, Inc.	1700 Gateway Blvd. S.E. Canton, OH 44707	(216) 452-0837
T & R Electric Supply Company, Inc.	Box 180 Colman, SD 57017	(800) 843-7994
Transformer Consultants	P.O. Box 4724 Akron, OH 44310	(800) 321-9580*
Trinity Chemical Co. Inc.	6405 Metcalf, Cloverleaf 3 Suite 313 Shawnee Mission, KS 66202	(913) 831-2290

COMPANY	ADDRESS	PHONE
Physical Separation		
ENSCO	1015 Louisiana Street Little Rock, AR 72202	(501) 223-4100*
National Electric/Aptus	P.O. Box 935 Coffeyville, KS 67337	(800) 345-6573
Quadrex HPS, Inc.	1940 N.W. 67th Place Gainesville, FL 32606	(904) 373-6066*
Unison Transformer Services, Inc.	P.O. Box 1076 Henderson, KY 42420	(800) 544-0030
Biological		
Detox Industries, Inc.	12919 Dairy Ashford Sugar Land, TX 77478	(713) 240-0892
Chemical Waste Landfills		
Casmalia Resources	559 San Ysidro Road P.O. Box 5275 Santa Barbara, CA 93150	(805) 937-8449
CECOS International	56th St. & Niagara Falls Boulevard Niagara Falls, NY 14302	(716) 282-2676
CECOS International	5092 Aber Road Williamsburg, OH 45176	(513) 720-6114
Chemical Waste Management	Alabama Inc. Box 55 Emelle, AL 35459	(205) 652-9721
Chemical Waste Management	Box 471 Kettleman City, CA 93239	(209) 386-9711
Chem-Security Systems Incorporated	Star Route Arlington, OR 98712	(503) 454-2777
Envirosafe Services Inc. of Idaho	P.O. Box 417 Boise, ID 83701	(208) 384-1500
SCA Chemical Services	Box 200 Model City, NY 14107	(716) 754-9231
U.S. Ecology, Inc.	Box 578 Beatty, NV 89003	(702) 553-2203
U.S. Pollution Control, Inc.	Grayback Mountain Knolls, UT 84074	(405) 528-8371

COMPANIES MAKING PCB DISPOSAL APPLICATIONS TO U.S. EPA HEADQUARTERS

O.H. Materials Corporation
16406 U.S. Route 224 East
P.O. Box 551
Findlay, OH 45839-0551
Greg McCartney (800) 537-9540
Alternate Thermal (Transportable)

General Electric Company
Apparatus & Engineering Services
One River Road
Schenectady, New York 12345
Craig Horneck (518) 385-2888
Chemical (Mobile)

U.S. Army
OPMCM-TE, Building 4585
Aberdeen Proving Ground, MD 21010
Leonard Rowe (301) 671-2583
Incinerator (Stationary)

IT Corporation
312 Directors Drive
Knoxville, TN 37923
John Woodyard (213) 378-9933
Chemical (Mobile)

Riedel Environmental Services, Inc.
4611 North Channel Avenue
P.O. Box 5007
Portland, Oregon 97208-5077
Jeff Duncan (800) 334-0004
Alternate Thermal (Transportable)

Arc Technologies Company
c/o Chemical Waste Management, Inc.
3003 Butterfield Road
Oak Brook, Illinois 60521
Ken Wittle (215) 687-9070
Alternate Thermal (Transportable)

Haztech, Inc.
5280 Panola Industrial Blvd.
Decatur, Georgia 30035
Saul Furstein (404) 981-9332
Alternate Thermal (Transportable)

Hazardous Electric Line Power
Equipment Removal, Inc. (HELPER)
R.R. 2 Box 155
P.O. Box 505
Madison, South Dakota 57042-9413
Daniel Pardy (605) 256-6254
Chemical (Mobile)

Ozonics Technology, Inc.
90 Herbert Avenue
P.O. Box 320
Closter, New Jersey 07624
Edward Pedzy (201) 767-1332
Chemical (Mobile)

PCB DISPOSERS CHM-125 31:0183

COMPANY	ADDRESS	PHONE
Roy F. Weston, Inc. Weston Way West Chester, PA 19380 John Noland (215) 692-3030 Incinerator (Transportable)	Ecova Corporation 1425 Whitlock Lane #100 Carrollton, Texas 75006 Scott Berdine (214) 446-0313 Alternate Thermal (Transportable)	Ogden Environmental Services, Inc. P.O. Box 85178 San Diego, California 92138-5178 Maya Rohr (619) 455-3045 Alternate Thermal (Transportable)
IT Corporation 312 Directors Drive Knoxville, TN 37923 Robert Stephens (615) 690-3211 Incinerator (Transportable)	SRH Associates, Inc. 123 NE Third Avenue Portland, Oregon 97232 John Spencer (503) 232-0834 Alternate Thermal (Transportable)	General Electric Company One River Road Schenectady, New York 12345 Bill Thornton (518) 385-3720 Solvent Extraction (Mobile)

U.S. EPA REGIONAL DISPOSAL CONTACTS

Region I
(Connecticut, Maine, Massachusetts, Rhode Island, Vermont)

Tony Palermo
Air Management Division
Environmental Protection Agency, Region I
John F. Kennedy Federal Building
Boston, Massachusetts 02203
(617) 565-3279, FTS 835-3279

Region II
(New Jersey, New York, Puerto Rico, Virgin Islands)

John Brogard Dan Kraft
Air and Waste Management Division FTS 340-6669
Environmental Protection Agency, Region II
26 Federal Plaza
New York, New York 10278
(212) 264-8682, FTS 264-8682

Region III
(Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)

Edward Cohen (3HW40)
Hazardous Waste Management Division
Environmental Protection Agency, Region III
841 Chestnut Street
Philadelphia, Pennsylvania 19107
(215) 597-7668, FTS 597-7668

Region IV
(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

Robert Stryker, PCB Coordinator
Connie Jones
Pesticides and Toxic Substances Branch
Environmental Protection Agency, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365
(404) 347-3864, FTS 257-3864

Region V
(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

Sheldon Simon
Pesticides and Toxic Substances Branch (5S-PTSB-7)
Environmental Protection Agency, Region V
230 South Dearborn Street
Chicago, Illinois 60604
(312) 353-1428, FTS 886-6087

Region VI
(Arkansas, Louisiana, New Mexico, Oklahoma, Texas)

Jim Sales Donna Mullin
Hazardous Waste Management Division FTS 255-724-
Environmental Protection Agency, Region VI
Allied Bank Tower
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 655-6719, FTS 255-6719

Region VII
(Iowa, Kansas, Missouri, Nebraska)

Leo Alderman, PCB Coordinator
Gary Bertram
Toxic and Pesticides Branch
Environmental Protection Agency, Region VII
726 Minnesota Avenue
Kansas City, Kansas 66101
(913) 236-2835, FTS 757-2835

Region VIII
(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)

Kay Modi
Toxic Substances Branch
Environmental Protection Agency, Region VIII
One Denver Place
999 18th Street, Suite 1300
Denver, Colorado 80202-2413
(303) 293-1738, FTS 564-1738

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Region IX
(Arizona, California, Hawaii, Nevada, American Samoa, Guam)

Greg Czajowski (T-5-2)
Pesticides and Toxics Branch
Environmental Protection Agency, Region IX
215 Fremont Street
San Francisco, California 94105
(415) 974-7295, FTS 454-7295

Region X
(Alaska, Idaho, Oregon, Washington)

Cathy Massimino (HW-114) Bill Hedgebeth
Hazardous Waste Management Branch FTS 399-7369
Environmental Protection Agency, Region X
1200 Sixth Avenue
Seattle, Washington 98101
(206) 442-4153, FTS 399-4153

APPENDIX 2. FLUIDS CONTAINING PCB's

1. Monsanto Corporation was the principal manufacturer of PCBs in the United States and used the trade name "ASKAREL".

2. Other Representatives PCB Trade Names.

Dielectric Fluids

a. Arcolors
b. Diachlor
c. Elemex
d. Hyvol
e. No - Flamol
f. Saf-T-Kuhl
g. Pyrolor
h. Therminol
i. Therminol
j. Saniotherm
k. Dykanol
l. Inerteen
m. Asbestol
n. Chlorextol
o. Aroclor B
p. Clorinol
q. Clorphen
r. Eucaret
s. Pyranol
t. EEC-18
u. Clophen (2)
v. Fenclor (3)
w. DK (3)
x. Phenoclor (1)
y. Kenneclor (1)
z. Solvol (4)
aa. Eucarel
bb. Diacolor

(1) - Imported from France
(2) - Imported from Germany
(3) - Imported from Italy
(4) - Imported from USSR

Heat Transfer Fluids

a. Therminol FR-0
b. Therminol FR-10
c. Therminol FR-1
d. Therminol FR-2
e. Therminol FR-3

Vacuum Fluids

a. Santo Vac 1
b. Santo Vac 2

Hydraulic Fluids

a. Phdraul A-2008, A-200-B
b. Pydraul AC, AC-A & B, AC-28
c. Pydraul F-9, & F-9-A
d. Pydraul 135 & 135-A
e. Pydraul 150 & 150-A
f. Phdraul 2308230-A*
g. Phdraul 280
h. Phdraul 312 & 312-A
i. Pydraul 540, 540-A & 540-B (5)
j. Pydraul 625 & 625-A

Note: Those liquids above which are underlined contain polychlorinated Terphenyls that may be contaminated with PCBs.

APPENDIX 3. DIELECTRIC FLUIDS THAT DO NOT CONTAIN PCBs

Oil/liquids which do not contain PCBs according to their manufacturer are listed below:

1. Transformer Oils. The following are a few transformer oils/liquids that do not contain PCBs according to their manufacturer.

   a. Dow corning 561 Silicone Insulating Liquid.

   b. Exxon Oils.

      (1) Uminolt 33

      (2) Uminolt 35

      (3) Uminolt 60

      (4) Uminolt 61

   c. GE Silicone Insulating Liquid.

   d. Gulf Transcress H5582.

   e. Shell Drala - AX.

   f. RTE Corporation.

      (1) Texaco Code 600 Transformer Oil 55.

      (2) Texaco Code 1515 Transformer.

1. Capacitor Oils. The following oil does not contain PCBs, has a low toxicity and biodegradable according to the manufacturer.

   a. DOW K FS-41691.

   b. NON-PCB Power Capacitors.

      (1) General Electric's Econol Line.

      (2) Sprague's Econol Line.

APPENDIX 4. PCB MANAGEMENT CHECKLIST

PCB MANAGEMENT CHECKLIST

Facility: _____ Auditor: _____ Date: _____

Regulatory Citation	Auditors' Checklist	Comments	Finding Number
	Use of PCBs and PCB Items:		
40 CFR 761.30	• The extent of PCB use (e.g., transformers, capacitors, heat transfer systems) at the facility has been identified.		
40 CFR 761.30	• PCB large high voltage capacitors and PCB large low voltage capacitors are not being used or stored after October 1, 1988 unless they are located in a restricted access area (defined in 761.30).		
	• PCB transformers:		
	- Are not used or stored near food, feed, or flammable items (i.e., paints, solvents, paper, etc.)		
	- Are registered with local fire departments		
	- Are visually inspected every 3 months, or every 12 months for a tested PCB transformer with under 60,000 ppm PCBs, or a transformer with 100% impervious, undrained containment (inspection and maintenance records retained for 3 years after the disposal of the transformer)		
	- Any fire-related incident involving PCB transformers has been reported to the National Response Center.		

Activity: PCB Management

Regulatory Citation	Auditors' Checklist	Comments	Finding Number
40 CFR 761.30	• PCB transformers located in or near commercial buildings: - Are registered with the building owner - Are removed by October 1, 1990 if network PCB transformer with higher secondary voltage - Are equipped with electrical protection if lower secondary voltage network, lower secondary voltage radial, or higher secondary voltage radial PCB transformer.		
40 CFR 761.40	• Marking and labelling requirements for PCBs and PCB items (applies only to 50 ppm or more PCBs) are met for the following: - PCB storage areas used to store PCB items for disposal (vault doors, machinery room doors, fences or other access areas) - PCB containers, whether in storage or while being used for waste collection - PCB equipment (all PCB transformers and PCB large high voltage capacitors; PCB large low voltage capacitors at time of removal) - Transport vehicles carrying PCB containers with more than 45 kg (99.4 lbs.) of liquid PCBs or at least one PCB Transformer.		

Activity: PCB Management

Regulatory Citation	Auditors' Checklist	Comments	Finding Number
40 CFR 761.65	**Storage of PCB Items for Disposal:** • PCB items are inspected every 30 days for leaks. • PCB items are stored in DOT-approved containers. • Moveable equipment used to handle PCB items is decontaminated prior to leaving storage area. • Stored PCBs and PCB items are disposed of within one year from date they were placed in storage. • Storage area is managed so that PCB containers can be located by the date they are initially entered into storage. • Long-term storage facilities (between 30 days and one year) meet the following requirements: - Roof and walls of the facility prevent rainwater from reaching PCBs and PCB items - The floor has continuous curbing (minimum 6 inches) - The floor and curbing are made of continuously smooth and impervious materials such as Portland cement or steel - Containment volume of the facility equals or exceeds twice the internal volume of the largest		

Activity: PCB Management

Regulatory Citation	Auditors' Checklist	Comments	Finding Number
	PCB article or container or 25 percent of the total internal volume of all PCB items, whichever is greater - The storage facility is located above the 100-year floodplain - The facility has no floor drains, cracks or openings. • PCB items at 50-500 ppm temporarily stored (less than 30 days) in areas not meeting the above requirements: - Have a notation indicating the date they were taken out of service and put into storage - Are not stored for more than 30 days - Have an SPCC plan for containers of liquid PCBs at 50-500 ppm - Have a notation on liquid storage containers indicating that the concentration of PCBs does not exceed 500 ppm PCB.		
40 CFR 761.79	• PCB containers are decontaminated in the following manner: - Containers are flushed three times with a solvent that contains less than 50 ppm PCBs		

Activity: PCB Management

Regulatory Citation	Auditors' Checklist	Comments	Finding Number
	• Records contributing to the document are maintained at the facility for at least 5 years after the facility ceases to use or store PCB items.		
No citation	**Records Referenced in Other Parts:**		
	• Records of quarterly visual inspection and maintenance history for PCB transformers are maintained by the facility, including transformer location, and dates of visual inspection, repair, cleanup, or discovery of a leak. (See Part 761.30)		
	• Records of PCB transformer registration with the local fire response personnel. (See Part 761.30)		
	• Records of monthly visual inspection of the PCB storage for disposal area. (See Part 761.65)		
	• Records of weekly visual inspection of temporary or interim PCB storage for disposal area. (See Part 761.65)		
	• Records are readily available for inspection.		
	PCB Spills/Cleanup:		
40 CFR 761.120,125	• PCB cleanup is conducted in accordance with regulations and EPA guidance.		
	• Record certifying that an area has been decontaminated, is maintained at the facility for 5 years following decontamination.		

Activity: PCB Management

Regulatory Citation	Auditors' Checklist	Comments	Finding Number
	- The solubility of PCBs in the solvent is 5 percent by weight - Each rinse is approximately 10 percent of the volume of the PCB container - The solvent rinse is disposed of in accordance with PCB disposal requirements (40 CFR 761.60)		
40 CFR 761.60	• PCB-contaminated waste (containing 50 ppm or more PCBs) is disposed of at an EPA-approved incinerator, high efficiency boiler or landfill.		
	Inspection, Storage and Disposal Records:		
40 CFR 761.180	• An annual document is prepared and maintained on file at the facility if the facility stores at least 45 kg (99.4 lbs.) of PCBs during the year, has one or more PCB transformers, or has 50 or more large PCB capacitors. The report contains the following information: - Dates when PCB item is removed from service, placed in storage, or placed into transport for disposal - Total number of PCB transformers and total weight of PCBs they contain - Total number of PCB large high voltage and large low voltage capacitors.		

Activity: PCB Management

Regulatory Citation	Auditors' Checklist	Comments	Finding Number
	• PCB spills or leaks which occurring after May 4, 1987 are reported to the EPA Regional Administrator within 24 hours and to the National Response Center if: - The spill contains 50 ppm or more PCBs and involves more than 10 lbs. of PCB-fluid (i.e., one gallon of PCB dielectric fluid), or - The spill directly contaminates surface waters, sewers, drinking water supplies, or grazing lands, or - The extent or volume of the spill is unknown (such as spills that enter the drainage system), or - People come into direct and uncontrolled contact with the spill.		