U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
National Policy

ORDER 1050.14B

Effective Date:
11/06/12

SUBJ: Polychlorinated Biphenyls (PCBs) in the National Airspace System

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 (PCBs) in the National Airspace System.

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Acting Administrator

Distribution: Electronically

Initiated By: AEE-1

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Chapter 1. General Information

1. Purpose of this Order. This order updates Agency policy, procedures, and responsibilities for implementation and compliance with the Environmental Protection Agency (EPA), 40 CFR Part 761 (40 CFR 761), Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

2. Audience. All Federal Aviation Administration (FAA) employees, managers, and contractors that deal, directly or indirectly, with the use, handling, storage, disposal, transportation, and/or sale of PCBs and PCB items.

3. Where Can I Find This Order? You can find this order on the MyFAA Employee Web site: https://employees.faa.gov/tools_resources/orders_notices/. This order is available to the public at http://www.faa.gov/regulations_policies/orders_notices/.

4. Authority to Change this Order.

a. **FAA Administrator.** The Administrator reserves the authority to establish or change policy, delegate authority, or assign responsibility as necessary.

b. **Director of the Office of Environment and Energy (AEE-1).**

(1) AEE-1 has the authority to add new chapters or appendices or change existing chapters or appendices that are proposed by organizational elements of FAA after appropriate coordination with internal stakeholder organizations.

(2) AEE-1 also has the authority to update and amend the *Tech. Support Document*.

c. **Organizational Elements.** Changes proposed by an organizational element within FAA must be submitted to AEE-1, who will evaluate, or assign a designee to evaluate, the changes for incorporation.

5. What this Order Cancels. Order 1050.14A, Polychlorinated Biphenyls in the National Airspace System, dated 6/20/91.

6. Explanation of Changes.

a. Removes and updates outdated EPA regulatory language.

b. Updates the format of this order by following the guidelines of FAA Order 1320.1E, FAA Directives Management.

7. Polychlorinated Biphenyls (PCB) General Information. PCBs belong to a broad family of organic chemicals known as chlorinated hydrocarbons. PCBs range in consistency from heavy oil liquids to waxy solids. Prior to 1979, PCBs were widely used in electrical equipment such as transformers, capacitors, switches and voltage regulators for their "cooling" properties because they do not readily burn or conduct

electricity, and only boil at high temperatures. PCBs are found in many pieces of equipment throughout FAA facilities. The following is a variety of equipment that FAA owns that may contain PCBs:

a. Transformers.

(1) Transformers are devices that increase or decrease voltage in an electrical system. Transformers in FAA facilities may be classified into one of three categories: PCB transformers (500 parts per million (ppm) or greater), PCB-Contaminated transformers (50-499 ppm PCBs), and non-PCB transformers (less than 50 ppm PCBs).

(2) The FAA has PCB transformers that are registered with EPA, and any newly found or assumed PCB transformer must also be registered with EPA. The FAA also has PCB-Contaminated transformers that are not required to be registered with EPA. To find additional information on registered PCB transformers, go to www.epa.gov and perform a search for PCB transformers.

b. Capacitors.

(1) Capacitors are electronic components that store an electric charge and release it when required. They come in a huge variety of sizes and types for use in regulating power as well as for conditioning, smoothing and isolating signals. Capacitors are made from many different materials, and virtually every electrical and electronic system uses them. For the purpose of PCBs, the EPA has set three categories for capacitors: (a) large high voltage capacitors; (b) large low voltage capacitors; and (c) small capacitors (i.e., that contain less than 1.36 kilograms/3 pounds of dielectric fluid). The EPA has different regulations for each type of capacitor.

(2) Nearly all capacitors manufactured prior to July 2, 1979 were filled with PCB fluid concentration near 100 percent and capacitors manufactured after July 2, 1979 can be assumed to be non-PCB. Capacitors were required to be marked by the manufacturer, beginning July 1, 1978, with the statement "No PCBs". Therefore, it is easy to categorize which capacitors contain PCBs and to estimate the PCB concentration without testing. If the manufacturing date is not known and the capacitor is unmarked, one must assume that a capacitor contains PCBs.

c. Electromagnets, Switches and Voltage Regulators. Electromagnets are not commonly used in FAA facilities, but voltage regulators and switches are frequently used by the FAA to control, transmit, and distribute electric power efficiently. Though most oil-filled electromagnets, switches, and voltage regulators were not designed to contain PCBs, and most contain less than 50 ppm PCBs, these components must be considered to be PCB-Contaminated electrical equipment unless the actual PCB concentration of the oil is known.

d. Light Ballasts.

(1) Light Ballasts are the primary electric components of fluorescent light fixtures and are generally located within the fixture under a metal cover plate. The ballast units are generally composed of a transformer to reduce the incoming voltage, a small capacitor (which may contain PCBs) and possibly a thermal cut-off switch and/or safety fuse.

(2) PCBs were used in the manufacturing of fluorescent light ballasts before July 1, 1978. Ballasts manufactured since July 1, 1978 that do not contain PCBs should be marked by the manufacturer with the statement "No PCBs." For ballasts manufactured prior to July 1, 1978, or for ballasts without a "No PCBs" mark, one must assume that they contain PCBs greater than or equal to 500 ppm.

Chapter 2. Policy

1. Policy Statement. The FAA must comply with all EPA procedures and policies of 40 CFR Part 761 – Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. The FAA must also comply with any other PCB-related orders, statutes, and regulations as well as state regulations. 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 and PCB-Contaminated components wherever possible in order to avoid potential hazards and liabilities. State standards, which are often more stringent than Federal standards, must be complied with. Regulatory tracking methods should be used to identify and fulfill more stringent PCB management requirements that are established under state programs.

2. Highlights of Environmental Protection Agency (EPA) Requirements. There are many requirements in 40 CFR 761 that directly affect one's handling of PCBs. This section provides a brief overview of some of the major EPA requirements that the FAA should be aware of for PCBs.

a. EPA's PCB Concentration Assumption Policy. EPA assumption policies require a person to assume that different kinds of equipment (e.g., capacitors, transformers, electrical equipment) have PCBs in them if they have not been tested for PCB concentration. As stated above, capacitors and fluorescent light ballasts manufactured before July 2, 1979 are assumed to contain PCBs $\geq$ 500 ppm, and any fluid-filled capacitor manufactured after July 2, 1979 must be marked by the manufacturer with the statement "No PCBs". If the date of manufacture is unknown, it must be assumed to contain PCBs $\geq$ 500 ppm. For all other fluid-filled electrical equipment, there are several major assumption policies:

(1) A person may assume that transformers with < 3 pounds (1.36 kilograms) of fluid, circuit breakers, reclosers, oil-filled cable, and rectifiers whose PCB concentration is not established contain PCBs at < 50 ppm.

(2) A person must assume that mineral oil-filled electrical equipment that was manufactured before July 2, 1979 and whose PCB concentration is not established is PCB-Contaminated (50 to 499 ppm) electrical equipment.

(3) A person must assume that all other fluid-filled electrical equipment, containing 3 pounds or more of fluid other than mineral oil, manufactured before July 2, 1979 and whose PCB concentration is not established, contains PCBs at concentrations greater than or equal to 500 ppm.

(4) A person may assume that equipment manufactured after July 2, 1979, is non-PCB.

(5) A person must assume that equipment has PCBs in it if the date of the manufacture is unknown.

(6) All pole-mounted and pad-mounted distribution transformers manufactured before July 2, 1979 are assumed to contain mineral oil dielectric fluid.

(7) It should be noted that the assumption policies in 40 CFR 761.2 do not apply when electrical equipment is being disposed of. Assumed PCB equipment must be tested to confirm the PCB content for disposal. Assumptions allowed under 40 CFR 761.2 apply only to transformers and other equipment in use or in storage for reuse. You must know the true concentration at time of disposal to assure compliance with the disposal regulations.

b. Recordkeeping. Each Line of Business/Staff Office (LOB/SO) that deal, directly or indirectly, with the use, handling, storage, disposal, transportation, and/or sale of PCBs and PCB items must maintain a running inventory of all PCB articles. Records shall be kept at each facility for the inspection, storage, disposal, and sale of PCB items. Inspections and recordkeeping shall be performed by the field organization which performs regular maintenance on this equipment.

c. FAA PCB Inventory Record. Within six months of the effective date of this order, each LOB that deals, directly or indirectly, with the use, handling, storage, disposal, transportation, and/or sale of PCBs and PCB items must complete a PCB Inventory Record. Appendix A (PCB Inventory Record) contains an example of the type of PCB inventory record that would satisfy the inventory requirement. Reports shall contain the reports identification symbol (RIS) number reflected in the subject line of this order. The PCB inventory needs to be maintained to ensure currency with equipment or operational changes. The PCB inventory record shall contain the following information:

(1) Listing of all PCB transformers registered with EPA (including the number of PCB transformers at each individual location, city, state, and address), and the updated information of the status of each piece of equipment each year.

(2) Total number, per individual location, of PCB large high and large low voltage capacitors in service at the end of the calendar year.

(3) Listing of all PCB-Contaminated equipment (i.e., PCB-Contaminated transformers, PCB-Contaminated capacitors, etc.), including # of PCB-Contaminated equipment at each individual location, city, state, and address, and the updated information of the status of each piece of equipment in service at the end of the calendar year.

(4) Total weight in kilograms of PCBs and of PCB items, including the identification of the contents, such as liquids and capacitors. Note that any requirements for weights in kilograms of PCBs 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. If the internal volume of PCBs is not known, a best estimate may be used.

(5) The dates when the PCB items are removed from service, placed in storage for disposal, or placed into transport for disposal.

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

(7) Annual Report. By July 1 of each year, an annual report shall be completed that shall contain information on the disposition of PCB items maintained by each facility during the previous calendar year that has, at any one time, on hand PCB containers containing at least 45 kilograms (99.4 pounds) of PCB, 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. Please refer to 40 CFR 761.180(a)(1) for the complete information that must be included in the Annual Report.

(8) Records and documents shall be maintained in the facility if the facility is normally occupied at least 8 hours a day, and at the facility responsible for those locations if not occupied at least 8 hours a day. Copies of this inventory shall be forwarded to the appropriate office that has that assigned responsibility for the administration of this program.

(9) Records shall be maintained for at least 3 years after the facility ceases to use or to store PCBs or PCB items in the prescribed quantities.

(10) 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 PCBs or PCB items are used or stored, the facility shall know the identity of the office that is maintaining the records.

(11) In addition to the following information required in this section, all documents, correspondence, and data concerning PCBs 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.

d. Transformers. Transformers are pieces of equipment that have many different Federal PCB regulations and requirements. There are two main requirements regarding PCB transformers that one should be aware of: (1) all owners of PCB transformers, including those in storage for reuse, were required to register their PCB transformers with the EPA in 1998, and any newly found or assumed PCB transformers are also to be registered immediately; and (2) any PCB transformers in use in or near commercial buildings must be registered with building owners. A visual inspection of each PCB transformer in use or stored for reuse shall be performed at least once every 3 months (with a minimum of 30 days between inspections). Depending on the PCB concentration and the type of storage facility, inspections can be done annually as long as there is a minimum of 180 days between inspections. See 40 CFR 761.30 for Federal regulations on transformers.

e. Storage. Storage policies establish certain requirements for storage of PCB articles depending on whether PCB articles are stored for reuse or disposal. In regards to storage for disposal, a person can store PCB waste for up to one year, with possible extensions for different circumstances. PCB articles may only be stored for disposal at a facility with certain criteria (e.g., adequate roofing and walls, adequate flooring, no drain valves, etc.). If PCB articles are stored in containers, a person must comply with specific PCB container regulations. In regards to storage for reuse, a person can store PCB articles only if certain criteria are met (e.g., use and marking requirements are met, proper records maintained, the date of removal, projected location and future use of the article, and the date of the PCB is scheduled for repair), and may only be stored for reuse for no more than 5 years from the date it was removed from service. Reference 40 CFR 761.35 for storage for reuse regulations and 40 CFR 761 Subpart D for storage and disposal requirements.

f. Labeling and Marking. In 40 CFR 761.35**,** EPA requires that each different type of PCB item containing greater than 499 ppm PCBs must be clearly marked and labeled in plain view with the letters and striping on a white or yellow background. There are two main marking formats that a facility can use that are required by EPA: a Large PCB Mark and Small PCB Mark. The PCB mark must meet EPA format requirements in color, size, and durability. All means of access to PCB disposal storage areas and PCB transformer locations must also be labeled with the Large PCB Mark. FAA also requires that PCB items: (1) containing 50 – 499 ppm; and (2) containing less than 50 ppm of PCBs be also clearly marked. See Figures 1-1, 1-2, 1-3 and 1-4 for FAA required labeling requirements.

g. Disposal. Disposal of PCB articles depend on the type of PCB article that is being disposed of. Specific regulations apply to each type of PCB article (e.g., PCB transformers, PCB capacitors, PCB containers, PCB light ballasts, PCB liquids, PCB-Contaminated electrical equipment, PCB bulk product waste, etc). The two most common methods of disposal are: (1) incineration; and (2) disposal at a chemical waste landfill. Any type of disposal not specified in EPA regulations is prohibited. Taking a PCB article out of service for disposal shall only be performed by a qualified FAA contractor in accordance with all applicable regulations.

h. Spill Notification, Cleanup and Sampling. Certain spills of PCBs are required to be reported. Spills in excess of 1 lb of PCBs must be reported to the National Response Center in accordance with the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the Clean Water Act. For spills of liquids in excess of 50 ppm PCB, a person must notify an EPA Regional Office and the National Response Center in the shortest possible time after discovery, but in no case later than 24 hours after discovery if a spill: (1) directly contaminates drinking water, surface water, or sewers; (2) contaminates grazing lands or vegetable gardens; and (3) is > 10 lbs of PCBs by weight. For any spill, contact your Safety and Environmental Compliance Manager (SECM). In addition, there are different cleanup requirements for different types of spills (e.g., low concentration spills of < 1 lb of PCBs, high and low concentration spills involving 1 lb or more of PCBs). Furthermore, if spills occur, sampling is required in specific circumstances. The collection and analysis of samples to verify the cleanup and on-site disposal must be done according to specific EPA parameters. PCB cleanups must be planned, designed, and implemented to fulfill the provisions of the PCB Spill Cleanup Policy codified in 40 CFR 761.120 through 761.135.

i. Decontamination. PCB-containing equipment and containers shall be decontaminated according to regulatory procedures prior to reuse or disposal as non-PCB contaminated waste. There are different types of decontamination standards and procedures for removing PCBs, which are regulated for disposal, from water, organic liquids, non-porous surfaces, concrete (considered a porous surface under the decontamination standard), and non-porous surfaces covered with a porous surface, such as paint or coating on metal (see 40 CFR 761.79).

j. Non-liquid PCBs (NLPCBs). NLPCBs are a wide variety of manufactured products that have been found to contain some level of PCBs. They can include but are not limited to: plastics (such as plastic insulation from wire or cable; radio, television and computer casings; vehicle parts; or furniture laminates); preformed or molded rubber parts and components; applied dried paints, varnishes, waxes or other similar coatings or sealants; caulking; Galbestos roofing; and various gasket materials. Caution

should be taken when handling caulk from buildings dated prior to 1978 and EPA guidelines for safe removal should be followed.

Unlike electrical equipment and other articles filled with liquid PCBs, these items are not authorized for continued use. These NLPCB materials are regulated at any detectable concentration of PCBs. However, there are no assumption rules for these materials, and they are often only discovered inadvertently during sampling events for other sources of PCB contamination, or waste characterization. Generally, these materials may be disposed of as bulk product waste (40 CFR 761.62) in a municipal waste landfill.

k. EPA-Required Records and Reports. For PCB waste disposal, Federal regulations require a tracking system which consists of four parts:

(1) Notification – (40 CFR 761.205) 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.

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

(3) EPA Identification Number – (40 CFR 761.202) Generators are to include their EPA Identification Number on the Uniform Manifest.

(4) Recordkeeping – (40 CFR 761.208-218) Manifest reports are to be retained for three years. Refer to EPA regulations concerning exception reporting, certificates of disposal, unmanifested waste reports, and annual documents and reports.

3. PCB Coordinators. Each Line of Business (LOB) and Staff Office (SO) that deals, directly or indirectly, with the use, handling, storage, disposal, transportation, and/or sale of PCBs and PCB items or own or lease facilities where PCB and/or PCB items are or may be present, shall designate an individual as a PCB Coordinator, and shall always make the designee known to the Office of Environment and Energy (AEE-200). It will be the responsibility of the PCB Coordinator to maintain required records for inspection, testing, accidental spills/cleanup, storage, disposal, transportation, and sale of PCB Items. The PCB Coordinator will act as a point of contact for budget projections for the funding of PCB compliance measures and for PCB-related questions/problems.

Figure 1-1. Large PCB Mark (not to scale)

CAUTION
CONTAINS
PCBs
(Polychlorinated Biphenyls)

A toxic environmental contaminant requiring special handling and disposal in accordance with U.S. Environmental Protection Agency Regulations 40 CFR 761 – For Disposal Information contact the nearest U.S. EPA Office.

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In case of accident or spill, call toll free the U.S. Coast Guard National Response Center, (800) 424-8802

Also Contact
Tel. No.

Figure 1-2. Small PCB Mark (not to scale)

CAUTION CONTAINS **PCBs**
(Polychlorinated Biphenyls)
FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

Figure 1-3. PCB Contaminated (50-499 ppm)

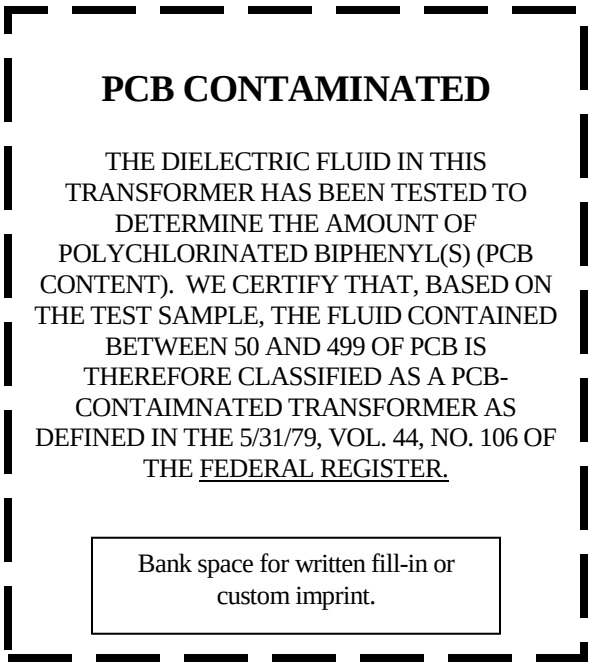
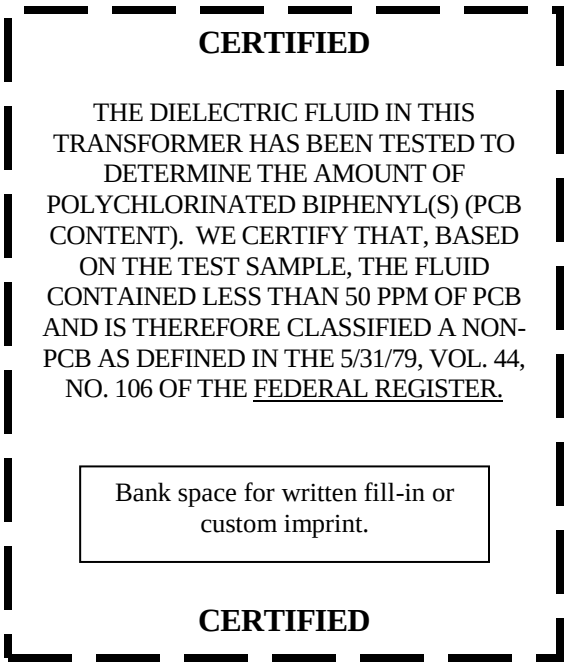


Figure 1-4. CERTIFIED (Less than 50 ppm)



4. Roles and Responsibilities. Compliance with the policies and procedures of this order is the responsibility of each LOBs/SOs that deals, directly or indirectly, with the use, handling, storage, disposal, transportation, and/or sale of PCBs and PCB items or which owns or leases facilities where PCBs and/or PCB items are known or assumed to be present.

a. LOBs/SOs are responsible for the development of implementation procedures to ensure the compliance with 40 CFR 761 and the requirements detailed in this order. This also includes the assignment of personnel and other resources necessary to carry out the provisions of this order within their respective areas of responsibility. Further, LOBs/SOs 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. LOBs/SOs must also include, within the scope of any routine modernization or relocation projects, the replacement of equipment containing PCBs and any environmental cleanup measures. It is the responsibility of each LOB/SO to submit a yearly budget to the PCB Coordinator concerning the costs associated with compliance with PCB regulations (40 CFR 761).

b. The Office of Environment and Energy (AEE) is responsible for reviewing FAA compliance with the provisions of 40 CFR 761; developing policies for implementing 40 CFR 761; providing assistance to LOBs/SOs in the development of guidelines and procedures for their program areas; interpreting policies established in this order in consultation with the responsible officials in the EPA; providing advice to officials in FAA concerning changes in EPA policies relative to PCBs 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.

c. The Logistics Service and its counterparts in the regions and centers and the FAA Depot are responsible for necessary logistic support to the LOBs/SOs for marking, storing, disposing, and transporting of PCBs and PCB items. They are also responsible for reviewing all procurement and disposal documents to ensure that no PCBs or PCB articles are imported or exported without a special EPA exemption.

d. Finance personnel should use this order as the basis for developing estimates related to costs associated with compliance with 40 CFR 761.

Chapter 3. Emergency Procedures

1. General. This chapter describes actions that can be taken to reduce the effects of leaks, spills, or the burning of materials containing PCBs. It also provides first aid procedures (see paragraph 2g below) in the event of accidental contact with PCBs. Cleanup requirements for PCB spills are found in 40 CFR 761 Subpart G.

2. Procedures. FAA personnel should not perform clean up of PCB spills but may take measures to contain spills as outlined in 2d below.

a. Personal contact with PCBs, regardless of its concentration, shall be reported immediately to the designated PCB Coordinator and the Safety/Health Official 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 coordinated with, the 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 PCBs 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 PCBs.

d. A slow drip or weeping from a PCB article should be corrected as follows:

(1) Upon discovery, exit the area and notify appropriate supervisor and LOB/SO PCB Coordinator.

(2) Only trained FAA personnel wearing appropriate protective equipment shall enter the area (see Section 3.2.(e)(3)).

(2) FAA personnel shall avoid any physical contact with PCB liquids. Take reasonable steps to 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.

(3) Notify your SECM.

(4) Ensure proper cleanup and removal of the PCBs in accordance with 40 CFR 761 Subpart G by an approved commercial cleanup contractor.

(5) Repair or replace and dispose of the defective device/article.

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

(1) Upon discovery, all personnel not directly involved in the cleanup or site assessment should leave the spill area and contact their LOB/SO PCB Coordinator.

(2) To prevent the accumulation of vapors, the spill area must be adequately ventilated (i.e., open doors, windows, operate fans, etc.) directly to the outside of the building. Shut down building air handling equipment to/from the spill area.

(3) Only trained personnel wearing appropriate protective equipment shall enter the spill area. The Safety/Health Officer 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 PCBs. Clothing that becomes saturated with PCBs 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.

(4) The spill shall be contained as stated in Section 3.2.(d)(1) by an approved commercial cleanup firm. Additional measures such as blocking floor drains, containing water runoff, and controlling and treating water or other liquids used during cleanup shall be taken as soon as possible to prevent contamination of sewer systems or streams.

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

(6) Residues contaminated with PCBs (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.

(7) Report the spill in accordance with Section 2.2.h., above.

(8) Ensure proper cleanup and disposal of PCB- contaminated material in accordance with EPA or State requirements. 40 CFR 761 Subpart G contains EPA cleanup levels for PCB spills. State standards may be more stringent. FAA personnel are not to conduct cleanup actions; commercial firms are available on a contract basis to cleanup spills.

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

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

(2) Call the fire department and the designated Safety/Health Officer for the local facility.

(3) Shut down building air handling equipment to/from the affected area.

(4) Contact your LOB/SO PCB Coordinator.

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

(6) Contact state or regional EPA.

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

Chapter 4. Administrative Information

1. Distribution. This order is distributed to the division level of all FAA LOBs/SOs in Washington, Regions, Centers, and ATO Service Centers; to the branch levels in all regional divisions; and to all staffed field offices and facilities. This order is available on the FAA Employee Website.

2. Background.

a. The Toxic Substances Control Act (TSCA), P.L. 94-469, designated PCBs as hazardous chemical substances. PCBs are commonly found as fluids or mixtures in ballasts, electric motor coolants, hydraulic machinery, and heat transfer systems. PCBs are also found in voltage regulators, switches, circuit breakers, reclosers, and cables. 40 CFR 761, issued by the EPA, outlines procedures for use, storage, and disposal of PCBs 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. However, liability issues for the FAA are incentives to minimize PCBs at FAA facilities. 40 CFR 761 also establishes requirements for inspection, recordkeeping, marking, and transportation of PCBs.

b. It should be noted that Section 15 of 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 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 EPA regulations, and to compel the taking of actions required by these EPA regulations.

3. Authority to Change this Order.

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

b. The Director of the Office of Environment and Energy may issue changes to this order for compliance with the latest EPA policy related to PCBs. Changes in 40 CFR 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.

4. Definitions.

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

b. **Disposal** means to intentionally or accidentally discard, throw away, or otherwise complete or terminate the useful life of PCBs and PCB items. Disposal includes spills, leaks, and other uncontrolled releases of PCBs as well as actions related to containing, transporting, destroying, degrading, decontaminating, or confining PCBs and PCB Items.

c. Facility means all contiguous land, structures, other appurtenances, and improvements on the land, used for the treatment, storage, or disposal of PCB waste. A facility may consist of one or more treatment, storage, or disposal units.

d. 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) residential properties, (4) stores, (5) office buildings, and (6) transportation centers (e.g., airport terminal buildings, subway stations, bus stations, or train stations).

e. 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. States may require additional documentation, forms, or information.

f. Mineral Oil PCB Transformer means any transformer originally designed to contain mineral oil as the dielectric fluid, which has been tested and found to contain 500 ppm or greater PCBs.

g. Non-liquid PCBs means materials containing PCBs that by visual inspection do not flow at room temperature (25 °C or 77 °F) or from which no liquid passes when a 100 g or 100 ml representative sample is placed in a mesh number 60 ±5 percent paint filter and allowed to drain at room temperature for 5 minutes.

h. 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 40 CFR 761.30(a)(2)(v).

i. 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 a substance.

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

k. PCB Capacitor means any capacitor that contains greater than or equal to 500 ppm PCB.

l. 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.

m. PCB-Contaminated means a non-liquid material containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm; or a liquid material containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm.

n. 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 contains PCBs at concentrations of greater or equal to 50 ppm and less than 500 ppm in the contaminating fluid.

o. 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.

p. PCB Item means any PCB Article, PCB Article Container, PCB Container, PCB Equipment, or anything that deliberately or unintentionally contains or has a part of it any PCB or PCBs.

q. PCB Transformer means any transformer that contains greater than or equal to 500 ppm PCBs.

5. Forms and Reports. An annual report (PCB Record Inventory, RIS 1050-5) is required. See Chapter 2 Section 4(a) and (b).

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Appendix A. PCB Inventory Record

Date: As of _____

Type of PCB Item	Installed				Storage			Transferred			Disposal			
	PCB Item Nomenclature NSN. No.	Quan-tity Each	Total Liquid Weight PCBs	Facility Location Type, Number	Date Stored	Total Liquid Weight PCBs	Storage Location	Date Trans-ferred	Total Liquid Weight PCBs	Name, Address, Transfer Company, Driver Name	Date Re-ceived	Date Dis-posed	Total Liquid Weight PCBs	Name, Address Disposal Facility

Appendix B. Fluids Containing PCBs

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	j. Saniotherm	s. Pyranol
b. Diachlor	k. Dykanol	t. EEC-18
c. Elemex	l. Inerteen	u. Clophen (2)
d. Hyvol	m. Asbestol	v. Fenclor (3)
e. No – Flamol	n. Chlorextol	w. DK (3)
f. Saf-T-Kuhl	o. Aroclor B	x. Phenoclor (1)
g. Pyrolor	p. Clorinol	y. Kenneclor (1)
h. Therminol	q. Clorphen	z. Solvol (4)
i. Therminol	r. Eucaret	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. Pydraul A-2008, A-200-B	f. Pydraul 2308230-A
b. Pydraul AC, AC-A & B, AC-28	g. Pydraul 280
c. Pydraul F-9, & F-9-A	h. Pydraul 312 & 312-A
d. Pydraul 135 & 135-A	i. Pydraul 540, 540-A & 540-B
e. Pydraul 150 & 150-A	j. Pydraul 625 & 625-A

Note. Those liquids above which are underlined contained polychlorinated terphenyls that may be contaminated with PCBs

Appendix C. 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

(1) Univolt 33

(2) Univolt 35

(3) Univolt 60

(4) Univolt 61

c. GE Silicone Insulating Liquid

d. Gulf Transcress H5582

e. Shell Diala – AX

f. RTE Corporation R-Temp Fluid

g. Texaco

(1) Texaco Code 600 Transformer Oil 55

(2) Texaco Code 1515 Transformer Oil 55

2. Capacitor Oils. The following oil does not contain PCBs, has a low toxicity and biodegradable according to the manufacturer.

a. Dow X FS-41691

b. Non-PCB Power Capacitors

(1) General Electric's Econol Line

(2) Sprague's Econol Line.

Appendix D. FAA Form 1320-19, Directive Feedback Information

Directive Feedback Information

Please submit any written comments or recommendation for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: Order

To: Directive Management Officer, _____

(Please check all appropriate line items)

☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____ .

☐ Recommend paragraph _____ on page _____ be changed as follows: *(attached separate sheet if necessary)*

☐ In a future change to this order, please include coverage on the following subject *(briefly describe what you want added)*:

☐ Other comments:

☐ I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____

Telephone Number: _____ Routing Symbol: _____

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