9.1 What is the purpose of this chapter? This chapter provides guidance for storing, handling, and disposing of Polychlorinated Biphenyls (PCBs) at all Fish and Wildlife Service (Service) facilities.

9.2 Does this chapter apply to all PCB spills? This policy applies to spills of 50 ppm PCB or greater. The concentration of PCBs spilled is determined by the PCB concentration in the material spilled as opposed to the concentration of the PCBs in the material onto which the PCBs were spilled. If 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.

9.3 Who is responsible for administering the program?

A. The **Chief, Division of Engineering** is responsible for providing guidance and technical assistance to the Regional Engineers, and assisting the Division of Safety, Security and Aviation in developing and monitoring Regional programs for management of PCBs.

B. The **Chief, Office of Safety, Security and Aviation**, is responsible for providing assistance to the Regional safety managers in developing and monitoring Regional Programs for management of PCBs.

C. Regional Directors have overall responsibility for ensuring that facilities within their Region fully implement the requirements of this chapter and local, State, and Federal regulations governing the storage, handling, and disposition of PCBs and PCB Items.

D. Regional Engineers and Safety Managers will:

(1) Recommend and monitor actions intended to effectively minimize health risks and environmental damage from PCBs and PCB Items.

(2) Keep current on Federal, State, and local regulations regarding storing, handling, and disposing of PCBs and PCB Items.

(3) Coordinate with the General Services Administration for PCB management in those facilities owned or leased by GSA.

(4) Assist facility managers in meeting their responsibilities.

E. Facility Managers will:

(1) Arrange for qualified personnel to inspect facilities to determine the condition of equipment and items containing PCBs.

(2) Ensure proper handling, storing, labeling, recordkeeping, and disposal of items containing PCBs.

(3) Identify employees exposed to PCBs or with PCB exposure potential.

(4) initiate notification and obtain guidance to manage PCB discharges or spills.

9.4 What authorities govern this program?

A. Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 et seq.

B. Resource Conservation and Recovery Act (RCRA) (Solid Waste Disposal Act), 42 U.S.C. 6901 et seq. as amended.

C. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601 et seq.

D. 40 CFR 761, Subparts A through K, Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

E. Executive Order 12088, Federal Compliance with Pollution Control Standards.

9.5 What are the definitions for some terms used in this chapter?

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

B. PCB Article. Any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB articles or PCB equipment, and whose surface(s) has(have) not been in direct contact with PCBs.

C. PCB-Contaminated Electrical Equipment. Any electrical equipment, including but not limited to transformers capacitors, circuit breakers, reclosers, voltage regulators, switches, electromagnets, and cable, that contains 50 parts per million (ppm) or greater 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 Equipment.

D. PCB Item. Any PCB article, PCB article container, PCB container, or PCB equipment that deliberately or unintentionally contains or has as a part of it any PCB or PCBs.

E. PCB Transformer. Any transformer that contains 500 ppm PCB or greater.

F. Spill. 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.

9.6 What is a PCB Management Program? Each Region will develop and maintain a PCB management program, the purpose of which is to eliminate the risk of PCB exposure to personnel in Service facilities. Incorporate the program into existing facility management programs and include:

A. Inspection.

(1) Identify all locations containing Service-owned PCB Article, PCB Container, PCB Equipment, PCB transformers, PCB Items and PCB Contaminated Electrical Equipment, including their condition and age. If the facility uses or stores at least 45 kilograms (99.4 pounds) of PCBs, it must keep an inventory in accordance with 40 CFR 761.180(a)(2)(iii) through (vi).

(2) No recorded maintenance inspections are required for large PCB capacitors. However, ruptures, leaks and other uncontrolled discharges from PCB Capacitors are considered improper disposal of PCBs, and should be cleaned up in accordance with the PCB Spill Cleanup Policy as outlined in paragraph 9.7.

(3) Service-owned transformers do not have to be tested to determine their PCB concentration. However if the nameplate indicates that the equipment contains PCB, or if there is any reason to believe that the equipment at one time contained PCB, or if there is no nameplate or other information to indicate the type of dielectric fluid, then the equipment must be assumed to be a PCB transformer (500 ppm or greater). Transformers known to contain mineral oil and whose PCB concentration is unknown, must be assumed to be PCB-Contaminated Electrical Equipment (50-499 ppm). These assumption rules effectively apply to all regulatory requirements relating to the equipment.

(4) Conduct inspections of Service-owned PCB transformers once every 3 months. The record of inspection for each PCB transformer must contain its location, the date of each visual inspection, the name of person performing inspection, the location of any leak(s), an estimate of the amount of dielectric fluid released from any leak, the date and description of any cleanup, containment, repair, or replacement, and the results of any containment and daily inspection required for uncorrected active leaks.

B. Use and Storage.

(1) PCB storage requirements apply to those PCBs and PCB Items with PCB concentrations of 50 ppm or greater including those that are assumed to be 50 ppm or greater. Storage rooms and equipment containing PCBs must be marked with an M_L marking (M_S marking for articles too small to accommodate the larger size marking) that can be easily read in accordance with 40 CFR 761.40 and complying with the format specified by 40 CFR 761.45. Marking of PCB Contaminated Electrical Equipment (50 to 500 ppm) is not required.

(2) Transformers or large capacitors containing PCBs at any concentration may be stored for reuse. However, transformers or large capacitors containing 50 ppm or greater of PCBs, which are stored for reuse, should be in a condition suitable for reuse. Equipment that is not suitable for reuse will be considered improperly disposed of. Units that are in storage for reuse are considered by EPA to be "in-service" for purposes of the regulations. Large PCB capacitors stored for reuse must be stored in a restricted access electrical substation or other restricted access indoor installation. Storage for reuse of PCB transformers (500 ppm or greater) or large capacitors containing PCBs that pose an exposure risk to food or feed is prohibited.

(3) The facility or area used to store PCB and PCB-Contaminated Transformers intended for disposal must comply with 40 CFR 761.65(b)(1). The facility or area must:

(a) Have adequate roof and walls to prevent rainwater from reaching the stored PCBs and PCB Items.

(b) Have an adequate floor that has continuous curbing with a minimum 6-inch high curb. The floor and curbing must provide a containment volume equal to 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.

(c) Have no drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area.

(d) Have floors and curbing constructed of continuous smooth and impervious materials to prevent or minimize penetration of PCBs.

(e) Not be located at a site that is below the 100-year flood water elevation.

(4) In those instances where only a portion of a building is being used as a PCB storage area, that area should be clearly marked and segregated from other activities within the structure.

(5) PCBs and PCB Items removed from service may be stored in other areas that do not comply with the storage area requirements when such storage is for a period of less than 30 days in accordance with 40 CFR 761.65(c)(1).

(6) Nonleaking PCB Large Capacitors and PCB Contaminated Electrical Equipment removed from service that have not been drained of free flowing dielectric fluid may be stored on pallets next to a storage area that is in compliance with the storage requirements.

(7) Containers used for the storage of PCBs must comply with the shipping container specification in accordance with 40 CFR 761.65 (c) (6)-(7).

(8) Combustible materials must not be stored by or within a PCB Transformer enclosure or the area within 5 meters (approximately 16 feet) of a PCB Transformer or PCB Transformer enclosure.

(9) All PCBs, PCB and PCB-Contaminated Transformers must be dated when placed into storage for disposal and must be removed from storage and disposed of within 1 year. The disposal time limitation of one year applies, whether the facility attempts to dispose the PCB waste by itself or through a contractor.

(10) There are no storage requirements or time restrictions on the storage for disposal of non-leaking small PCB capacitors such as ballasts.

C. Disposal.

(1) TSCA disposal regulations are modeled after the "cradle-to-grave" tracking system for hazardous wastes under the Resource Conservation and Recovery Act

(RCRA). The tracking system consists of obtaining an EPA identification number, using RCRA Uniform Manifests which physically track the PCB wastes from the point of generation to the site of storage and/or disposal, and recordkeeping and reporting requirements that complete the tracking system and facilitate enforcement of the PCB disposal regulations.

(2) PCB Small Capacitors.

(a) All Small Capacitor light ballasts manufactured through 1979 contains PCBs. Ballasts manufactured after 1979 that do not contain PCBs are labeled "No PCBs." However, the best way to identify post-1979 ballasts that contain PCBs is to call the manufacturer with the ballast make and model number.

(b) The two primary Federal laws governing disposal of PCB Small Capacitors contained in fluorescent light ballasts are the TSCA and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

(c) TSCA permits disposal of most non-leaking PCB ballasts in a sanitary landfill if the potting material in the ballast contains less than 50 ppm of PCBs. However, some States prohibit disposal of any PCB-containing ballasts in sanitary landfills. Also, because of CERCLA, the "release" or "threat of release" of more than one pound of PCBs (approximately 16 ballasts) into the environment (sanitary landfill) requires notification to the National Response Center (NRC). This notification would firmly establish the facility's liability and lead to possible future involvement in any remediation at municipal solid waste landfills receiving such waste. The combination of incineration and recycling removes and destroys PCB-containing material from lighting ballasts and preserves the remainder for recycling. More than 80 percent of each ballast , by weight, is composed of solid recyclable material such as copper wire and steel laminations. Service recommends disposal of non-leaking ballasts using EPA authorized recyclers who send only the PCB capacitor to high temperature incineration facility to destroy PCBs.

(d) The TSCA requires that leaking PCB-containing ballasts must be incinerated at an EPA-approved high temperature incinerator. All materials that contact the ballast or the leaking substance are also PCB waste. Trained personnel or contractors will be used to handle and dispose leaking PCB-containing ballasts. Leaking PCB ballasts and any associated PCB waste, can be collected into plastic bags and the bags placed along with other PCB ballasts for disposal to authorized recyclers.

(e) All PCB Small Capacitors such as light ballasts must be manifested for disposal using EPA's Uniform Hazard Waste Manifest except in States which require the State Hazardous Waste Manifest. Any transporter used to transport PCB waste from the generator to either a PCB storage or disposal facility must have formally notified EPA of its PCB transportation activity and received an EPA Identification number pursuant to TSCA. The facility manager must confirm that the firm transporting the material has properly notified EPA. In addition, when a leak has occurred, the PCB regulations require prompt and thorough cleanup of contaminated surfaces and materials, and proper disposal of the cleanup materials.

(f) Marking is required on all shipping containers containing PCB ballasts in those States which regulate PCB ballasts as a hazardous waste. The containers should bear the yellow "Caution Contains PCBs" label available from most label companies. In addition, the container should contain the name and address of the generator, the date the ballasts were first removed from service, a description of the material (e.g., Discarded Lighting Ballasts with Small PCB Capacitors), and the EPA regulatory status: disposal requirements pursuant to 40 CFR 761.60 (b)(2)(ii).

(g) Service policy is to dispose of all Small Capacitors containing PCB ballasts manufactured prior to 1979 using EPA authorized recyclers, in lieu of storage.

(3) PCB Large Capacitors/Transformers. It is the Service's policy that all PCB Large Capacitors and PCB Transformers (50 ppm and greater) must be disposed of in an EPA approved incinerator facility.

D. Employee Protection.

(1) Identify those employees exposed to PCBs on the job; provide protection and training for workers exposed to PCBs, including the provision of protective work clothing, shower facilities, and facilities for washing hands during shifts. Airborne contamination of PCBs should be assessed and precautionary practices followed to protect personnel, which in most cases, includes the wearing of respirators.

(2) Provide written notification, to those employees with risk of PCB exposure, of training programs related to PCB management.

(3) Medical histories and physical examinations emphasizing liver and skin conditions should be maintained for those employees exposed to PCBs.

9.7 What is EPA' s PCB Spill Spill Cleanup Policy?.

A. EPA's PCB Spill Cleanup Policy. EPA recognized that the risks posed by spills of PCBs vary, depending upon the spill location and the amount of PCBs spilled. Therefore, the spill policy requires cleanup of PCBs to different levels depending upon spill location, the potential for exposure to residual PCBs remaining after cleanup, the concentration of PCBs initially spilled, and the nature and size of the population potentially at risk of exposure. Detailed information about cleanup, recordkeeping, and testing requirements are found in 40 CFR 761.125 and 40 CFR 761.130. EPA's policy establishes four categories of PCB spills:

(1) Small, low-concentration spills are spills of materials containing 50-499 ppm PCBs and which involve less than 1 pound of PCBs by weight or less than 270 gallons of untested mineral oil.

(2) Large, low-concentration spills are spills of materials containing 50-499 ppm PCBs and which involve more than 1 pound of PCBs by weight or more than 270 gallons of untested mineral oil.

(3) High-concentration spills are spills of materials containing PCBs in concentrations of 500 ppm or greater in any quantity.

(4) Excluded spills are spills that result in the direct contamination of surface waters or sewers or sewage treatment plants or any private or public drinking water sources or distribution systems. Spills which migrate to and contaminate surface waters, sewers, or drinking water supplies before cleanup has been completed or spills that

contaminate animal grazing lands or vegetable gardens are also excluded. For each of the above excluded spill situations, the facility must contact the appropriate Regional EPA Office of Pesticides and Toxic Substances within 24 hours of discovery of the spill. The EPA will establish cleanup standards and requirements for the "excluded" spills on a case-by-case basis.

B. Notification. All notifications of PCB spills to the National Response Center (NRC) or EPA , whenever feasible, will be coordinated with the Regional Spill Coordinator and/or Environmental Coordinator, prior to any such notifications.

(1) PCB spills of more than 1 pound (measured as the constituent of pure PCB by weight, must be reported within 24 hours to the National Response Center (1-800-424-8802) in order to comply with CERCLA requirements. An example of this type of spill would be the PCB in lighting ballasts. It would take approximately 16 ballasts to leak completely its PCB contents to obtain 1 pound of PCB (1 ounce of PCB per ballast).

(2) All PCB spills, 50 ppm or greater, which contaminate surface waters, sewers and sewer treatment plants, private or public drinking water sources, animal grazing lands, and vegetable gardens, must be reported to the appropriate EPA Regional Office of Pesticides and Toxic Substances no later than 24 hours after the spill. This requirement applies to any amount of spill.

(3) All PCB spills, 50 ppm or greater, involving 10 pounds or more by weight of PCBs (approximately 1 gallon of pure PCB) must be reported to the appropriate EPA Regional Office of Toxic and Pesticides no later than 24 hours after the spill.

(4) When a transformer is involved in a fire, the facility is required to immediately report the incident to the National Response Center (1-800-424-8802).

9.8 Do I need to be aware of State and Local Requirements.? Knowledge of individual State and local requirements is important to administering the PCB program. In addition to adopting the Federal regulations as a minimum set of requirements, the States have the authority to regulate PCBs more stringently than the Federal program in order to address a specific concern or activity sensitive in that State. Having that authority, the States:

A. May require PCBs to be regulated as hazardous waste pursuant to RCRA (See 561 FW 6).

B. May require PCBs to be regulated to a lower concentration. For example, regulated PCBs in one State are defined to be materials and fluids that contain PCBs at a concentration greater than 7 ppm in lieu of the Federal requirements of 50 ppm.

C. May require shipments of PCBs to have manifest documents.

D. May require analysis to quantify the PCB concentration in all PCB items.

E. May require additional inspections of select PCB items and specific disposal requirements for PCBs and PCB Items.

F. May require waste generators of PCBs and PCB Items to obtain disposal permits.