GENERAL STUDIES

Activities of Government Agencies Regarding Inventories, Substitutes, and Housekeeping - Meetings have been held with senior officials of several Government agencies which (a) own or operate electrical equipment containing PCB's, or (b) are responsible for Governmental procurement of PCB-containing products. These agencies have been urged to provide an inventory of the current Governmental usage of such products and an evaluation of the steps they are taking to (a) introduce substitutes, and (b) reduce PCB discharges into the environment. George Wirth, OTS, (202) 755-6179.

Technical Information Exchange with States - The Governors of the States have been asked to work with EPA in reducing environmental discharges of PCB's. To assist, EPA is developing a technical information exchange program. George Wirth, OTS, (202) 755-6179.

Consultations with OECD on Uses, Labeling, and Reporting - Discussions are continuing with the Organization for Economic Cooperation and Development concerning the efforts of member countries to reduce the need for PCB's. Also of concern is the consistency of labeling and reporting activities directed to PCB's and products containing PCB's. At the most recent meeting in June 1976, recommendations were forwarded to the OECD Environmental Council for consideration at its meeting in July. Jack Thompson, OIA, (202) 755-0430.

Industrial Task Forces on Substitutes and Housekeeping Procedures - Meetings have been held with senior representatives of firms which manufacture PCB's and transformers and capacitors containing PCB's, as well as with railway, transit, and electrical utility organizations. Discussions have considered replacements for PCB's, effluent controls, housekeeping, and other immediate steps to reduce environmental discharges of PCB's. Three industry task forces have completed their tasks and prepared their reports which will be published in August 1976. George Wirth, OTS, (202) 755-6179.

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HEALTH AND ECOLOGICAL EFFECTS AND ENVIRONMENTAL BEHAVIOR

Health Effects Summary - A summary of current health effects data, including populations exposed and levels of exposure, has just been released. Dr. Albert Kolby, EDA, (202) 245-1301.

Drinking Water Contamination - The National Academy of Sciences has been requested to review the health effects of PCB's in drinking water. The Academy will provide information on the dose-response characteristics of PCB's by December 1976, as a basis for determining whether a standard is appropriate. Edgar Jeffrey, OWS, (202) 426-8877.

Behavior in Soils - A review of existing literature to determine the interactions of PCB's in soils is underway. Also, as an adjunct to previously scheduled investigations of leachates from selected landfills, investigations of possible PCB leakage are being concluded. A preliminary report was published in May 1976. Alan Corson, OSWMP, (202) 755-9187.

CURRENT AND PROJECTED SOURCES, ENVIRONMENTAL LEVELS, AND EXPOSED POPULATIONS

Hydraulic and Heat Transfer Fluids - Preliminary assessments indicate that PCB's have been widely used as hydraulic fluids and heat transfer fluids and in other similar applications. An assessment of these uses, including current recycling and reclamation practices, will assist in determining actions needed to curtail significant environmental discharges. These studies are slated for completion in December 1976. Thomas Kopp, OTS, (202) 755-0300.

Investment Casting - An analysis of the use of PCB's in the investment casting industry will help clarify the extent of PCB usage, discharges from users, the industry's dependency on PCB's, and the feasibility of substitutes. Recommendations for follow-up actions will be made. These are expected to be completed in December 1976. Thomas Kopp, OTS, (202) 755-0300.

Pulp and Paper Industry - Based on a preliminary survey of the paper recycling industry, an attempt will be made to assess the scope of environmental problems associated with the occurrence of paper impregnated with PCB's. This task is to be completed in December 1976. Thomas Kopp, OTS, (202) 755-0300.

Inventory of PCB-Containing Carbonless Copy Paper - An inventory of GSA and DSA supply warehouses to determine the quantities of used and unused PCB-contaminated carbonless copy paper is being conducted. Thomas Kopp, OTS, (202) 755-0300.

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Contamination of Imported Products - Once an analytical procedure has been identified and standardized, selected imported products will be tested for contamination by PCB's and related materials. John Moran, ORD, (202) 426-2026.

Ambient Levels and Trends - Limited monitoring of air, water, and soil at selected sites is being carried out to document current and ambient levels of PCB's. Monitoring is also conducted near specialized users of PCB's. Preliminary results were correlated and published in May. Vincent DeCarlo, OTS, (202) 755-6956.

Drinking Water Surveys - Drinking water supplies in 122 cities are being surveyed for various organic constituents, including PCB's. The results will be available by February 1977. Edgar Jeffrey, OWS, (202) 426-8877.

Point-Source Information - Additional information concerning the uses and environmental discharges of PCB's from point-sources are being sought from industrial organizations pursuant to Secs. 308 of the Federal Water Pollution Control Act, and 114 of the Clean Air Act. Carl Schafer, OE, (202) 755-0750.

Human Adipose Tissues - PCB's are among the environmental contaminants being measured in the 1700 adipose tissue samples taken from selected cities each year. Annual reports are prepared in June. Dr. Frederick Kutz, EPA/OPP, (202) 755-8060.

Levels in Air - Limited preliminary air monitoring data are being obtained near several facilities. These data will be considered in determining whether a more intensive monitoring effort is in order as a step to determining the desirability, feasibility, and impact of an air standard. Implementation of this effort awaits approval of an interim monitoring method. Mike Jones, OAQPS, (919) 688-8501.

Consultations with Canada on Levels in Great Lakes - Consultations with Canada on the contamination of the fishing resources of the Great Lakes are continuing. The most recent session was held in March. Conrad Kleveno, EPA/OIA, (202) 755-8712.

Analytical Method - Although monitoring has been undertaken, the analytical procedures used have not been standardized. Available methods are being screened for reliability and feasibility, and recommendations will be made for their use in various media. John Moran, ORD, (202) 426-2026.

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Predictive Models - Mathematical models to predict environmental distribution, levels, and transport based on release data are being developed. Thomas Kopp, OTS, (202) 755-0300.

SUBSTITUTES, CONTROL TECHNOLOGY, AND RELATED COSTS AND ECONOMIC FACTORS

Solid Waste Management - A continuing program of technical assistance provides guidance to public and private organizations faced with practical disposal problems involving hazardous substances, including PCB's. Advice is available on recycling, burial, incineration, and other possible disposal techniques. Recommended procedures concerning environmentally acceptable waste disposal practices for PCB's and PCB-containing materials were published in the Federal Register on April 1. William Wallace, OSWMP, (202) 755-9190.

Guidelines of the American National Standards Institute - The ANSI Standards on PCB's are designed to improve the handling, maintenance, disposal, and related environmental aspects of PCB's and equipment containing PCB's. EPA is actively participating in the current revision of this standard which should be widely accepted throughout the industrial sector. An initial draft of the revision is in review. Thomas Kopp, OTS, (202) 755-0300.

Incineration of Capacitors - Test burns of PCB-containing capacitors in a high-temperature incinerator were made this spring. By-product formation at various temperatures will be among the factors evaluated in the final report due in August. John Schaum, OSWMP, (202) 755-9200.

Destructive Dechlorination - Several control technologies for removal of PCB's from effluent streams were evaluated. Destructive dechlorination was determined to have the greatest potential utility. A demonstration grant is expected to be made within the next few months to provide working scale application. Paul DesRosiers, ORD, (202) 755-9014.

Replacement Fluids - A continuing assessment of substitutes for PCB's, including development of environmentally acceptable replacement fluids, is necessary as PCB uses are phased-out. A variety of substitutes currently under development are being considered as well as substitutes which might be suggested at a later date. Two requests for an evaluation of possible substitute fluids have resulted in responses published in the June 9 Federal Register. Thomas Kopp, OTS, (202) 755-0300.

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Harbor Studies - Studies under [illegible] Water Pollution Control Act concerning the removal of in-place pollutants in harbors will give special consideration to PCB's. Kenneth Mackenthun, OWPS, (202) 755-0100.

Lake Contamination - The Clean Lakes program provides a mechanism to encourage States to consider contamination from PCB's and their removal. A letter on this topic was sent to all States in February 1976. Kenneth Mackenthun, OWPS, (202) 755-0100.

Dredging of Sediments - The Corps of Engineers is consulting with EPA on controlling possible transference of PCB's from sediments to the water during dredging operations. Vance Hughes, OWPS, (202) 755-0100.

CONTROL OPTIONS, REGULATORY ACTIONS, AND ATTENDANT IMPACTS

Water Quality Criteria - A maximum level of 1 ppt in navigable waters has been proposed as a Water Quality Criterion under Sec. 304 of the Federal Water Pollution Control Act. Leonard Guarraia, OWPS, (202) 245-3042.

Toxic Effluent Standard - A national water effluent standard for PCB's under Section 307(a) of the Federal Water Pollution Control Act has been proposed. Pretreatment standards pursuant to Section 307(b) are under study. Kent Ballentine, OWPS, (202) 245-3030.

Effluent Guidelines - The need for and feasibility of PCB effluent guidelines based on Best Practical Technology for those industries involved in the manufacturing of machinery and mechanical products are being studied. If such guidelines are warranted, steps will be initiated in 1976 to develop and incorporate discharge limitations into regulations as appropriate. DeVereaux Barnes, OWPS, (202) 426-2727.

Spill Prevention - Regulations designed to prevent spills of PCB's into navigable waterways will be developed pursuant to Section 311 of the Federal Water Pollution Control Act. The proposed regulations should be ready for publication in late 1976. Henry VanCleave, OWPS, (202) 245-3045.

Drinking Water Standard - If determined appropriate, a drinking water standard will be proposed in early 1977. Charles Hendricks, OWS, (202) 426-8877.

Tolerances in Food - Recent health effects reports are being reviewed to determine if the temporary food tolerance for PCB's should be revised. Dr. Albert Kolby, FDA, (202) 245-1301.

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Workplace Criteria Document - A criteria document which will recommend to OSHA an appropriate workplace exposure standard is in preparation. Richard Rhoden, NIOSH, (301) 443-3680.

State Regulatory Actions - Five states have adopted PCB control acts. Others are examining the possibility of establishing pretreatment standards. Thomas Kopp, OTS, (202) 755-0300.

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