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Recommendations on PCB Policy
(Prepared by The Office of Research)

Background

Polychlorinated Biphenyls (PCB's) are chemical compounds that have been widely used--as flame-proof dielectric fluids in transformers and capacitors; as plasticizers in plastics, sealants, caulking compounds, etc.; as pesticide extenders; as lubricants, heat transfer and hydraulic fluids; and even as ingredients in heat shields on air to air missiles. About 1,000,000,000 pounds have been produced in the United States since 1930 by Monsanto. There are no other producers of PCB's in the United States, but PCB's are produced in a number of foreign countries including Great Britain, France, Germany, and Japan.

Adequate replacements for PCB's exist for all uses except for use in fire-proof capacitors and transformer fluids. Monsanto has voluntarily withdrawn PCB's from the market except for the capacitors and transformer uses. These uses are in closed systems, and good industrial practice can prevent PCB's from these uses reaching the environment. Worn out capacitors are disposed of as solid waste, and presumably present only minimal threat to the environment because they are sealed and little if any is believe to leave land fills. There may be a possibility for using other disposal methods with large capacitors.

There is no existing legal authority for control of manufacture, import, or use of PCB's. Passage of the Toxic Substances Control Act would, of course, make such regulation possible. It is possible that Monsanto's voluntary restrictions will result in import of PCB's, or of other companies manufacturing PCB's in this country (patent protection has expired long since).

The intent of the proposed EPA policy is to use the authorities that we do have to regulate the controllable sources of PCB's to the water environment. It is important to note that we do not believe it is necessary to regulate PCB's in air--in fact, we don't have adequate methods for measuring them in air, even if we did want to regulate.

We have already taken some actions to control PCB's; i.e., required pesticide registrants to reformulate their products to eliminate PCB's, either as inert or active ingredients; and included PCB's in our list of hazardous materials in the proposed regulation under section 12a of PL 660 now awaiting OMB "coordination."

Other Federal Agencies are taking or have taken actions to control PCB's. FDA has established interim guidelines of 5 ppm in foods, and these guidelines are monitored by FDA and USDA in the case of poultry products and meats.

FDA has proposed regulations prohibiting PCB-containing recycled pulp in food packaging materials, and a temporary (one-year) tolerance of PCB's in all packaging materials. FDA has prohibited the use of PCB's in food processing plants.

Specific Questions

1. How will the proposed EPA policy be announced?

The Interagency Task Force report will be released with a news release that includes statements about Federal actions taken and proposed. At present, it includes statements consistent with the proposed EPA policy.

In addition, when the EPA order is issued, an EPA news release should be issued specifying in detail and explaining the EPA actions.

2. How will it be enforced?

Permits for the electrical industry (and PCB manufacturers) will specifically prohibit discharge of PCB's (technically possible to achieve this level of control). The electrical industry is now the sole legitimate user of PCB's.

Monitoring data from fish, shellfish, and water will be examined to reveal locations with high PCB content. These areas can then be subjected to follow-up studies to determine sources, and enforcement actions under the Refuse Act initiated where warranted. As noted in the background paper, PCB's will continue to reach the environment (in decreasing amounts) from secondary sources such as recycled pulp, and from undetected or unknown leaks from equipment in which PCB's are used as heat transfer and hydraulic fluids until the change over to replacements is completed. By the end of 1972, there should be drastic reductions in PCB's in use in systems where they would be expected to reach the environment (unless new supplies become available through import or new manufacturers).

Areas with known high levels of PCB discharge can be monitored closely to assure rapid decrease in PCB discharge levels--Dayton, Ohio and Los Angeles are examples of such areas.

3. What are the other options?

The options considered were:

--No action by EPA, assuming that the Monsanto restriction would be sufficient to achieve acceptable environmental levels of PCB.

--Including PCB's as a hazardous air pollutant and a hazardous material under PL 660.

--Enforcement actions under the Refuse Act on the basis

that no permits now mention PCB's and hence no knowing discharges of PCB's will be permitted.

--Requiring the States to include PCB in the water quality standards as they are revised, and using the usual conference procedures, etc. for enforcement. The revised "Green Book" is expected to include recommendations on allowable levels of PCB's consistent with the proposed policy.

--Using the construction grant program to require municipalities to enact regulations that prohibit discharge of PCB's (and other hazardous materials) to the sewer system of which the grant project is a part.

--Prohibition of discharge of PCB's by users of PCB's.

The policy proposed was based on the following facts:

1. PCB use has been severely restricted by Monsanto (the sole U.S. manufacturer), and PCB's reaching the environment will rapidly decrease.

2. The electrical industry will be the sole legitimate user of PCB's. It is technologically possible to use PCB's here without contaminating the environment.

3. PCB's are on the list of hazardous materials proposed under the water pollution law..

4. Occurrence of PCB's in air is at very low levels, and is not believed to pose environmental problems. Furthermore, PCB uses that contributed PCB's to the air have been largely eliminated (pesticide use, use in plastics, etc.). Some may reach the air from inadequate incineration of PCB-containing materials.

5. PCB's are present in some plastics, paints, sealers, carbon-less carbon paper and other manufactured products. As stocks of these materials are used up and disposed of or recycled, some PCB's will reach the environment. The amounts should decrease rapidly, since PCB's are no longer sold for such uses. PCB's have been used in heat transfer systems and as hydraulic fluids, lubricants, and cutting oils. Monsanto has not only withdrawn PCB's for these uses, but has actively worked with users to have the substances replaced immediately. Monsanto accepts the used materials for disposal by high temperature incineration.

The recommended policy was intended to provide immediate action that would "back up" Monsanto's voluntary restrictions, and at the same time would recognize the inevitable nature of some PCB residues. It would

distinguish between legitimate uses and secondary sources of contamination. It would indicate a goal for allowable levels in water. It would not preclude additional actions later if these appear necessary (for example, dealing with PCB discharges to muncipal systems if PCB levels do not decline as fast as we expect).