

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SUBJECT: Notes on U.S.--Japan Meeting of February 27

DATE: 3/2/76

FROM: I. E. Wallen

TO: Glenn E. Schweitzer

Minister Kido opened the PCB's discussion at the U.S.--Japan Cooperative Committee on February 27 by reviewing the development of their Toxic Substances legislation. Although a copy of his talk will be translated, the gist of his statement was as follows:

The real beginning of their legislation rests on a Soy Sauce incident in October 1968 when PCBs contaminated sauce resulted in 1000 plus hospital patients. In April 1970 they published a report on the need for measures to deal with such incidents. In February, 1971, the decision was made to accept the need for restrictions on PCBs use. Administrative action was recommended to discontinue the use of PCBs in carbonless copy paper.

In October 1971 it was decided that PCBs would be banned in paints and for other related uses. It was not clear what impact these actions would have on environmental improvement since (1) no analytic method was clearly established and (2) the chronic effects of PCBs were unknown. However, in June 1971 a task force at the national level established the administrative guidelines to ratify the bans. In early 1972 action was taken to ban the use of PCBs as heat exchange fluids and the import of PCBs containing transformers and capacitors was banned. Production by the two Japanese firms was discontinued between March and June 1972 and the U.S. supplier was cut off.

Countermeasures to reduce the impact of PCBs in the environment were initiated. A conference of nine Japanese Government Agencies was held in April 1972 to summarize the situation and agreement was reached on (1) measures to recover existing PCBs in the environment, (2) regulation of future discharges, (3) needed health effects studies, (4) analytic methods needs, and (5) use of substitutes. Implementation of the responsibility for continued concern with PCBs was delegated within the government.

In August 1972 safety standards were promulgated for handling PCBs containing products. A survey was initiated of (1) levels in fishes, (2) levels in food and other packaging, (3) inspection requirements, (4) known health effects, (5) need for dredging of sediments, and (6) information needs. A report of these surveys was received in December, 1972.

Some of the dates for setting standards for PCBs levels were:

July 1970 -- Effluent Guidelines
August 1972 -- Acceptable levels in fish, meat, animal feeds
December 1972 -- Plant emission limits
February 1972 -- Ambient Water Quality Standards
February 1975 -- Minimum level for dredging
December 1975 -- Solid Wastes Standards

In further background on a more general basis Minister Kido pointed out that key issues surfaced during the PCBs' actions included a new concern with the impact of a chemical on human health, the need to restrict imports, and the need to stop emissions during production, importation and uses. New regulatory authority was needed. In December 1972 the task force asked for a new type of pollution evaluation based on human health. Incidental to this need is concern for surveillance and protocols for testing health effects.

Their toxic substances law became effective in April 1974 and a Cabinet order implemented the law in June 1974. The law incorporated certain regulations including (1) a requirement that a list of harmful substances be promulgated, (2) new substances must be reviewed in advance of production; and (3) a special permit is required before a listed substance may be produced or imported.

The first substance on the list is PCBs and PCBs uses have been restricted to rolling stock, transformers, rectifiers and (apparently) certain aircraft uses. A set of standards for PCBs use was issued with the Cabinet order to restrict maintenance and repair of rolling stock and housekeeping procedures.

Problems foreseen by Minister Kido include (1) reprocessing and storage, (2) monitoring (surveillance), (3) operation of the screening part of the law, and (4) promotion of research and development on PCBs and PCB containing material.

Dr. Igarishi was introduced as the Chairman of toxic substances considerations within the U.S./Japan panel. He said that 250 new chemicals had been submitted for pre-market screening under the Japanese Law and 40 of them had been declared to be "safe." The Japanese list of existing chemical substances includes about 20,000 substances. They are examining the properties of these substances for similarities to PCBs. If they have similar properties, testing will be required. The Japanese government ... three agencies .. will perform the testing.

Mr. Sumikama answered the questions asked in the telegram, as follows:

1. (PCBs in Japan by uses to date).

--59,000 metric tons have been produced

5,000 metric tons exported

54,000 metric tons consumed

--condensers 36,000 tons

heat catalysts 9,000 tons

carbonless paper 5,000 tons

paints, etc. 4,000 tons

--recovery --

from heat catalysts - 6,577 tons

from carbonless paper - 100 tons

--recovered PCBs are stored in metal containers

--scrap recovery facilities are provided by the government

--an inventory of existing uses (transformers and large capacitors) has contacted 232,100 establishments since April 1975 and 130,675 responses were received:

9,500 tons of PCBs identified in transformers

8,000 tons of PCBs identified in capacitors

--the Japanese Government uses 3,220 tons in transport and 360 tons are held in the electrical manufacturers inventory

--36,000 tons are accounted for in shipments (including exports)

--10,000 tons remain unaccounted for. Some may still come during the inventory survey.

2. (PCBs regulations).

Copies of the regulations were offered to the U.S. delegation. I am trying to locate them. There were reported to be (1) environmental, (2) labor and health, (3) water quality, (4) treatment and disposal, and marine pollution prevention standards.

3. (Product regulations).

Failed, or no longer used, transformers and capacitors are to be stored and delivered to the government for recovery. Storage and use in transit/railroad uses are controlled. Local and the central governments control and recover PCBs in electrical equipment. An organization has been set up to locate and receive capacitors from appliances. The recovery of PCBs from carbonless copy paper is under study.

4. (Enforcement, monitoring and costs).

There is a definite improvement in environmental levels of PCBs since 1974. Local governments and the central government oversee and monitor these reductions. Records are kept

of costs and local governments may be reimbursed for costs including for such dredging as may be necessary.

5. (Substitutes).

Mineral oil and silicone oil are suggested for transformers
Alkyl naphthalene substitutes in carbonless paper
Various approaches to small capacitors
Transformers and capacitors with PCBs now in use may serve out useful life.

6. (Data on substitutes).

Substitutes are screened through the system provided by the new law. Tests are performed for degradation, persistence and toxicity. If old chemical uses exist, investigations are conducted in sediments and fishes. Silicone oil is equivalent to PCBs except for cost.

7. (Environmental tests).

biodegradation, bioaccumulation, chronic toxicity, and uses survey data are gathered.

8. The only designated hazardous substances under the law is PCBs. Monitoring of PCBs is carried in pinfishes and shellfishes.

A copy of the questionnaire is attached.

cc: L. Miller
F. Green
PCBs List
C. Willmore
T. Nourse
W. Basley
R. Thorsell