PCB levels persist despite limited use

More than 600 scientists, industrialists, conservationists, and politicians gathered in Chicago last week to discuss polychlorinated biphenyls and what to do about them. Sentiment was strong —but certainly not unanimous—to ban them altogether. Although uses of PCB's have been limited since 1972, levels in the environment apparently haven't declined, and there has been growing concern about the *long-term effects* of PCB contamination.

Several speakers described the widespread distribution of PCB's in the environment, and others noted the high incidence of PCB's in animals, in humans, and even in human milk. Still others cited studies showing that very low concentrations of PCB's can interfere with reproduction in fish, birds, and mammals.

Assistant secretary of the Interior Nathaniel P. Reed reminded listeners that an alarming number of Great Lakes fish contain more than the maximum 5 ppm of PCB's allowed by Food & Drug Administration guidelines. Multimillion-dollar programs to rebuild Great Lakes fisheries are "for naught," he warns, if the fish can't be harvested. Reed calls for the elimination of all sources of PCB's in the environment within three years.

Other participants took pot shots at the Environmental Protection Agency, which sponsored the conference. For example, Dr. A. Karim Ahmed of the Natural Resources Defense Council complains that although the Water Pollution Control Act directed EPA three years ago to take swift action, "Today there is no meaningful national program to regulate PCB discharges."

On the contrary, says EPA administrator Russell E. Train, "We find ourselves without the authority we need to really cope with the problem." What EPA needs, says Train, is an effective toxic substances control act. □

Administration backs toxic substances bill

The Ford Administration finally has made known its views on toxic substances control legislation. In response to a July 24 inquiry from Rep. John Y. McCollister (R.-Neb.), Office of Management & Budget director James T. Lynn says in his reply late last month that the Administration "supports the enactment" of McCollister's bill. The bill, H.R. 7664, is the mildest of all bills introduced in the House and Senate and has been to industry's liking. (McCollister is a member of the House Subcommittee on Consumer Protection & Finance, which is marking up the legislation.)

Various Administration officials —Environmental Protection Agency administrator Russell E. Train, EPA deputy administrator John R. Quarles Jr., and Council on Environmental Quality chairman Russell W. Peterson—have appeared before the Senate or the House subcommittees to endorse some form of toxic substances control legislation during the past year. But none of them has served as an official Administration spokesman. And there has been no Administration bill. A bill was drafted by EPA last January but was killed while making the rounds at OMB.

The closest the Administration came to explaining what it seeks in toxic substances control legislation was in testimony by Quarles before the House Subcommittee on Consumer Protection & Finance last July. At that time, Quarles in effect backed broad scale legislation, commenting that there is no adequate provision for controlling toxic substances under existing laws. And he recommended that premarket notification be required of every new chemical and significant new use of an existing chemical.

Lynn's letter contradicts Quarles' testimony on those points. Lynn says that the Administration believes in limiting premarket notification to only those chemicals that pose unreasonable risks. Further, control of toxic substances should be handled—to the greatest extent possible—through existing regulatory authorities, and this control should in no way impede technological innovation.



Lynn: limit premarket notification

The inconsistency in these points made by Quarles and Lynn was noted in the reply to Lynn from Rep. Lionel Van Deerlin (D.-Calif.), chairman of the House Subcommittee on Consumer Protection & Finance, Rep. Bob Eckhardt (D.-Tex.), and Rep. William M. Brodhead (D.-Mich.). The three Congressmen are cosponsors of a stringent House bill on toxic substances control. In the letter, they ask that the Administration again "reassess its position regarding the legislation." □

Laser cuts cost of isotope separations

Chemists at Columbia University have developed a new laser isotope separation procedure that they believe may substantially reduce the cost of commercial isotope separations. The procedure, developed by Dr. Richard N. Zare, Dr. Roger W. Anderson, and graduate student Saswati Datta, is based on an intracavity absorption technique recently developed by Dr. Richard Keller of the National Bureau of Standards.

In the first application of the technique to bulk processing, the Columbia group has made a tunable dye laser that specifically excites molecules containing one of chlorine's two isotopes, chlorine-37, while leaving unaffected molecules of the same compound containing the other isotope, chlorine-35. They have produced milligram quantities of chlorine-containing compounds in which 85% of the chlorine is ^{37}Cl. Naturally occurring chlorine compounds contain 24% of this isotope, the researchers say.

The chemists use iodine monochloride as their source of chlorine. Laser light, tuned by a dye laser to correspond to a band in chlorine's vibrational spectrum, is passed through a chamber containing iodine monochloride-35. This material acts much like another tuning dye; the light passing through it no longer lases in the region where iodine monochloride-35 absorbs, but it is more intense in the remaining regions. This light passes into the reaction chamber, which contains iodine monochloride and a scavenging molecule such as dibromoethylene. The laser light excites iodine monochloride molecules containing the ^{37}Cl isotope, and they react with the scavenger. Ground-

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