



Polychlorinated Biphenyls

500 PPM CUTOFF LOWERED TO 50 PPM IN PCB MANUFACTURING BAN DRAFT RULE

Lowering the polychlorinated biphenyl (PCB) concentration to be regulated by the new PCB manufacturing ban to 50 parts per million (ppm) would bring up to a million additional pounds of PCB under control, according to an Environmental Protection Agency January 9 draft of the final rule.

The final manufacturing, processing, distribution in commerce, and use prohibitions will be an addition to the existing rule on PCB disposal and marking (Chemical Regulation Reporter Reference File: 35:0101). The manufacturing ban rule also will amend sections of the existing regulation on disposal and marking. The manufacturing ban originally was proposed in the Federal Register June 7, 1978 (Current Report, June 9, 1978, p. 385).

Changing the cutoff from 500 ppm in the disposal and marking regulations to 50 ppm in the upcoming manufacturing ban would increase substantially the health and environmental protection provided by the regulations, according to EPA sources.

The draft preamble to the final rule banning manufacturing of PCBs says EPA must choose a cutoff level which can be administered reasonably. The draft explains that even lower levels of PCB could be controlled under other EPA authorizations, such as the Clean Water Act and the Marine Protection, Research, and Sanctuaries Act.

The EPA draft says that the agency has no evidence that industry is either technologically or economically unable to comply with the 50 ppm standard.

One of the major problems with lowering the cutoff level further is PCB contamination in the production of chlorinated organic chemicals, according to the draft. Preliminary EPA studies show contamination levels as high as 10 ppm to 30 ppm, and these may be difficult to lower or eliminate (Current Report, January 5, p. 1779).

If the agency were to lower the cutoff level to 10 ppm, a much more significant burden would be placed on already strained PCB disposal and storage facilities. EPA is concerned that additional strain on disposal facilities might lead to improper disposal of more highly contaminated PCB wastes while the agency was concentrating on containing the lower-level contaminated wastes.

The draft preamble concludes that reducing the cutoff level to 10 ppm would increase the economic impact of the regulation unduly, would create serious technological problems for the organic chemical industry, and would place an excessive burden on the already strained PCB disposal system.

More stringent requirements would be set for such activities as oiling roads for dust control with waste oil containing low concentrations of PCBs, according to the draft preamble.

Oil used for dust control must not have any detectable level of PCBs, it says, because of eventual environmental dispersion.

Although the draft is preliminary, agency sources indicate that the 50 ppm cutoff level is a firm agency position.

Classification of Transformers

The draft preamble says transformers would be regulated according to the following four categories:

- PCB transformers, defined as those that contain PCBs at a concentration at or above 500 ppm, or any transformer that is not clearly marked as not containing PCB dielectric fluid or that is not definitely known to be free of PCBs at concentrations of 500 ppm or less;

- PCB-contaminated transformers, defined as those that contain between 50 ppm and 500 ppm PCB;

- Non-PCB transformers, defined as those that have been tested or can be verified to contain less than 50 ppm PCB; and

- Railroad transformers, to be handled separately under specific authorizations of the PCB rule. Railroad transformers would be designated by use rather than by PCB level.

Transformer categories would be used to designate specific disposal servicing, rebuilding, and storage requirements in the regulations, with the most stringent reserved for the highest levels of contamination.

PCB Definitions

Although the proposed rule includes definitions for PCB chemical substances, PCB mixtures, PCB articles, PCB equipment, and PCB containers, the draft final rule would define only PCB and PCBs.

The definition would apply to any chemical substance that "is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances containing such substance."

TOXIC SUBSTANCES SEMINAR

An introductory seminar on the Toxic Substances Control Act will be held by The Bureau of National Affairs, Inc., on March 15.

The seminar covers the provisions of the Toxic Substances Control Act, including premanufacture notification, testing, regulatory authority, reporting and recordkeeping requirements, relationship to other federal laws, effect on state laws and programs, judicial review and enforcement, and citizens' suits and petitions. Administrative actions by the Environmental Protection Agency under the Act will be discussed.

The seminar meets from 9 a.m. to 3 p.m. at BNA headquarters in Washington, D.C., and is conducted by the staff of the environment and safety division. The registration fee of \$125, which covers lunch and reference materials, should be sent in advance to confirm attendance. Registration is limited to 30 people. Checks should be made payable to The Bureau of National Affairs, Inc.

Checks or inquiries should be addressed to Frederick Tagg, Director of Education Programs, Room S-150, BNA, 1231-25th St., N.W., Washington, D.C. 20037. Telephone: (202) 452-4412.

Incineration of Mineral Oil

The draft rule preamble also details the agency rationale for considering allowing power generating facilities to incinerate low-level (50 ppm to 500 ppm) PCB-contaminated mineral oil (Current Report, December 1, 1978, p. 1492).

By reducing the regulatory cutoff for PCBs to 50 ppm, the amount of PCB liquid to be incinerated would increase from 300 million pounds to at least 3 billion pounds, according to the draft preamble.

The increase would raise compliance costs proportionately and would strain available incineration facilities if no new means of disposal were allowed, the agency preamble says.

In response to numerous industry comments on increased disposal problems from a lower cutoff level, the agency has made a tentative decision to allow power facilities to incinerate the bulk of the increased volume of mineral oil needing disposal.

The agency has determined that power generation and other industrial boilers can achieve 99.9 percent PCB destruction efficiency.

The draft preamble says this rule change would result in savings of more than \$19 million per year.

Manufacturing vs. Processing

The agency is still determining the distinction between PCB manufacturing and processing. EPA is reconsidering the designation of manufacturing vs. processing in response to industry comments on the production of PCB articles and equipment, according to the EPA draft.

Companies have told EPA that if the production of PCB articles and equipment were considered manufacturing, the term processing would have no meaning.

Although the draft rule is subject to change before promulgation, the January 9 draft says manufacturing would be defined as the actual creation of the substance. Other activities involving the use of an already existing substance would not be considered manufacturing.

The change in definition would have two major effects, according to the draft preamble. The first would be to postpone the date prohibiting the manufacture of PCB articles and PCB equipment produced in a totally enclosed manner until July 1, 1979.

The second effect would be on the importation of PCB articles and PCB equipment. The draft preamble examines the complexities of the issue, including the agency's tentative decision banning the importation of PCB articles upon the effective date of the rule but allowing continued importation of PCB equipment, such as television sets and microwave ovens.

Although PCB equipment could be built or imported until July 1, 1979, the draft says EPA will enforce strictly the prohibition of processing and distribution in commerce of PCBs, including PCB equipment after July 1, 1979. The preamble emphasizes this point, suggesting that stockpiling PCB items would be useless.

Exceptions to the manufacturing and processing ban may be allowed if EPA grants a specific exemption.

Other Changes Since Proposal

Although the draft is subject to change, the current version of the preamble and rules would allow the import and export of PCB wastes for disposal.

The preamble specifies that the PCB ban also would apply to the production of any substance that contains more than 50 ppm as an "impurity" or "by-product."

Most small PCB capacitors would be excluded from disposal requirements, according to the draft. Material such as small appliances or fluorescent light ballasts may be dis-

posed of as municipal solid waste, as allowed under the disposal and marking rule.

However, manufacturers of small capacitors or articles containing such capacitors remain subject to special disposal requirements found in the PCB disposal and marking regulations.

The agency has said it has found no feasible regulatory alternative to municipal disposal and has no further plans to regulate the disposal of these capacitors.

Projected Costs of PCB Rule

Compliance costs of the regulations are expected to approximate \$52 million in the first year, according to the draft preamble. Regulatory costs are expected to diminish in successive years as the use of PCBs is discontinued.

Curtailling the use of waste oil containing PCB for dust control on roads is expected to have the largest annual economic impact.

The agency calculates that approximately 300 million gallons of waste oil would be diverted from this use. Substitutes would cost highway departments and road owners an additional \$16 million a year.

However, the agency says the uncertainty of estimating such impacts means the actual costs could be much less or as high as \$32 million.

The ban on rebuilding PCB transformers in the draft regulation would cost the owners of transformers approximately \$10 million annually, according to EPA estimates. Costs would decrease gradually over a 30-year period as transformers are replaced.

Only electrically powered railroad units would be affected by the PCB ban. Consequently, the costs of the PCB ban on railroad units would be incurred by railroads and public transit authorities only in the Northeast. EPA estimates that costs to the seven Northeast railroads and transit authorities would be approximately \$9 million.

The total cost to users of PCB mining equipment would be about \$3 million, according to the draft preamble. The ban on PCB mining equipment is not expected to cause any interruption in coal production or significant problems for equipment owners, the draft preamble says.

Costs to owners of PCB-containing hydraulic systems are expected to be \$3 million annually for the first five years, according to the draft.

Preliminary agency cost estimates for reducing PCB contamination greater than 50 ppm are approximately \$5 million for the pigment industry.

However, the cost of regulating PCB impurities, as well as other aspects of regulating PCBs, would depend significantly on which exemptions EPA decides to grant, the draft says.

It says sellers of electrical equipment containing PCB capacitors also may be affected adversely. EPA estimates that costs could exceed \$1 billion. The draft preamble explains, however, that the issue is being considered in a separate rulemaking.

The draft also discusses the economic impact of testing and labeling requirements, removal of PCB fluid from natural gas pipeline pump compressors, and the ban on rebuilding PCB-containing electromagnets.

Testing

EPA CONSIDERS COMBINED STANDARDS FOR TESTING CHRONIC TOXIC EFFECTS

New standards for combined chronic effects testing of chemicals probably will be included in the Toxic Substances Control Act Section 4 standard proposals headed for Environmental Protection Agency top-level review this month.