LIST OF CASES RECEIVED BY THE OFFICE OF HEARINGS AND APPEALS

[Week of May 4 through May 11, 1984]

Date	Name and location of applicant	Case No.	Type of submission
May 3, 1984	Economic Regulatory Administration, Dallas, Tex	HRD-0212	Motion for discovery. If granted: Discovery would be granted to the Economic Regulatory Administration in connection with the Statement of Objections submitted by Texaco Inc. in response to the August 6, 1981 Proposed Remedial Order issued to Texaco Inc. (Case No. BRO-1457).
May 4, 1984	Suffolk County, Washington, D.C.	HFA-0224	Appeal of an information request denial. If granted: Suffolk County would receive documents and records relating to the Long Island Lighting Company or the Shoreham Nuclear Power Station.
May 5, 1984	Office of Special Counsel, Washington, D.C.	HRD-0210	Motion for discovery. If granted: Discovery would be granted to the Office of Special Counsel in connection with the Statement of Objections submitted by Crown Central Petroleum Corporation in response to the December 29, 1983 Proposed Remedial Order (Case No. HRO-0139) issued to the firm.
May 9, 1984	Arkansas, California et al. Washington, D.C.	HRZ-0091	Interlocutory Order. If granted: The following states would be allowed to participate in the Texaco Petroleum Corporation Proposed Remedial Order Proceeding (Case No. HRO-0196): Arkansas, California, Delaware, Iowa, Louisiana, North Dakota, Rhode Island, Texas, and West Virginia.
May 10, 1984	Atlantic Richfield Co., Washington, D.C.	HRR-0031	Motion for modification/rescission. If granted: The March 22, 1984 Decision and Order (Case No. DRO-0163) issued to Atlantic Richfield Company would be modified regarding the overcharges for the period of September 1, 1976 through December 31, 1976.
Do	Gulf Oil Corp., Houston, Tex	HRD-0211	Motion for discovery. If granted: Discovery would be granted to Gulf Oil Corporation in connection with its Statement of Objections submitted in response to the Proposed Remedial Order issued to the firm (Case No. HRO-0153).

REFUND APPLICATION RECEIVED

[Week of May 4 to May 11, 1984]

Date	Name of refund proceeding/name of refund applicant	Case No.
Feb. 17, 1984	Pan American/Farmland Industries, Inc	RF38-1.
May 3, 1984	Manon Corp./Calloway Seafood	RF37-1.
May 7, 1984	Manon Corp./Campbell Piping Contractors, Inc	RF37-2.
Do	Belridge/Pennsylvania	RQ3-87.

[FR Doc. 84-14168 Filed 5-25-84; 8:45 am]

BILLING CODE 6450-01-M

ENVIRONMENTAL PROTECTION AGENCY

[TSH-FRL 2594-4; OPTS-41014]

Fourteenth Report of the Interagency Testing Committee to the Administrator; Receipt of Report and Request for Comments Regarding Priority List of Chemicals

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Interagency Testing Committee (ITC) established under section 4(e) of the Toxic Substances Control Act (TSCA), transmitted its Fourteenth Report to the Administrator of EPA on May 8, 1984. This report, which revises and updates the Committee's priority list of chemicals, adds five designated chemicals to the list for priority consideration by EPA in the promulgation of test rules under section 4(a) of the Act. One additional chemical is recommended but not designated for response within 12 months. The new designated chemicals are bisphenol A, 1,2-dibromo-4-(1,2-dibromoethyl) cyclohexane, 2-ethylhexanoic acid, isopropyl biphenyl, and diisopropyl biphenyl. 3,4-Dichlorobenzotrifluoride is recommended for testing consideration but not designated for response within 12 months. The Fourteenth Report is included in this notice. The Agency invites interested persons to submit written comments on the Report, and to attend Focus Meetings to help narrow and focus the issues raised by the ITC's recommendations. Members of the public are also invited to inform EPA if they wish to be notified of subsequent public meetings on these chemicals. EPA also notes the removal of 22 chemicals from the priority list because EPA has responded to the ITC's previous recommendations for testing of the chemicals.

DATES: Written comments should be submitted by June 28, 1984. Focus Meetings will be held on June 27 and 28, 1984.

ADDRESSES: Send written submissions to: TSCA Public Information Office (TS-793, Office of Pesticides and Toxic Substances, Environmental Protection Agency, Rm. E-108, 401 M St., SW., Washington, D.C. 20460. Submissions should bear the document control number (OPTS-41014).

The public record supporting this action, including comments, is available for public inspection in Rm. E-107 at the address noted above from 8:00 a.m. to 4:00 p.m. Monday through Friday, except legal holidays. Focus Meetings will be held at the Disabled American Veterans (DAV) Headquarters, 807 Maine Ave., SW., Washington, D.C. Persons planning to attend any one of the Focus Meetings and/or seeking to be informed of subsequent public meetings on these chemicals, should notify the TSCA Assistance Office at the address listed below. To insure seating accommodations at the Focus Meeting, persons interested in attending are asked to notify EPA at least 2 weeks ahead of the scheduled dates.

FOR FURTHER INFORMATION CONTACT: Edward A. Klein, Director, TSCA Assistance Office (TS-799), Office of Toxic Substances, Environmental Protection Agency, 401 M St., SW., Washington, D.C. 20460, Toll Free: (800-424-9065), In Washington, D.C.(554-1404), Outside the U&A: (Operator—202-554-1404).

SUPPLEMENTARY INFORMATION: EPA has received the Fourteenth Report of the TSCA Interagency Testing Committee to the Administrator.

I. Background

Section 4(a) of TSCA (Pub. L. 94-469, 90 Stat. 2003 *et seq*; 15 U.S.C. 2601 *et*

seq.) authorizes the Administrator of EPA to promulgate regulations requiring testing of chemical substances and mixtures in order to develop data relevant to determining the risks that such chemical substances and mixtures may present to health and the environment.

Section 4(e) of TSCA established an Interagency Testing Committee to make recommendations to the Administrator of EPA of chemical substances and mixtures to be given priority consideration in proposing test rules under section 4(a). Section 4(e) directs the Committee to revise its list of recommendations at least every 6 months as necessary. The ITC may "designate" up to 50 substances and mixtures at any one time for priority consideration by the Agency. For such designations, the Agency must within 12 months either initiate rulemaking or issue in the Federal Register its reasons for not doing so. The ITC's Fourteenth Report was received by the Administrator on May 8, 1984, and follows this Notice. The Report designates five substances for priority consideration and response by EPA within 12 months; one additional substance is recommended for testing consideration such that an Agency response within 12 months is not required.

II. Written and Oral Comments and Public Meetings

EPA invites interested persons to submit detailed comments on the ITC's new recommendations. The Agency is interested in receiving information concerning additional or ongoing health and safety studies on the subject chemicals as well as information relating to the human and environmental exposure to these chemicals. A notice is published elsewhere in today's Federal Register adding the five substances designated in the ITC's Fourteenth Report to the TSCA section 8(d) Health and Safety Data Reporting Rule (40 CFR Part 716). The section 8(d) rule requires the reporting of unpublished health and safety studies on the listed chemicals. These five chemicals will also be added to the TSCA section 8(a) Preliminary Assessment Information Rule (40 CFR Part 712) published elsewhere in this issue. The section 8(a) rule requires the reporting of production volume, use, exposure, and release information on the listed chemicals. The nondesignated substance, 3,4-dichlorobenzotrifluoride, will be separately proposed for addition to the section 8(a) and 8(d) rules.

Focus Meetings will be held to discuss relevant issues pertaining to chemicals and to narrow the range of issues/effects which will be the focus of the Agency's subsequent activities in responding to the ITC recommendations. The Focus Meetings will be held June 27 and 28, 1984, at the Disabled American Veterans (DAV) Headquarters, 807 Maine Ave., SW., Washington, D.C. These meetings are intended to supplement and expand upon written comments submitted in response to this notice. The schedule for the Focus Meetings is as follows: June 27 9:30 a.m.—isopropyl biphenyl and diisopropyl biphenyl, 1:00 p.m.—3,4-dichlorobenzotrifluoride; June 28, 9:00 a.m.—2-ethylhexanoic acid, 11:00 a.m.—bisphenol A, 2:00 p.m.—1,2-dibromo-4-(1 2-dibromoethyl) cyclohexane.

Persons wishing to attend one or more of these meetings should call the TSCA Assistance Office at the toll free number listed above at least 2 weeks in advance.

After consideration of the data pertaining to each chemical and any additional information provided in the written comments and the Focus Meetings, EPA will hold public meetings on each chemical after preliminary staff decisions have been made on the types of testing that are needed. These meetings will be in the month of September, but separate notice of these meetings will not be published at that time. Therefore, anyone wishing to attend these later meetings should contact EPA after July 30 at the address given for the TSCA Assistance Office in order to be notified in advance of the public meetings.

All written submissions should bear the identifying docket number (OPTS-41014).

III. Status of List

In addition to adding the 5 designations and one chemical recommended to the priority list, the ITC's Fourteenth Report notes the removal of 22 chemicals from the list since the last ITC report because EPA has responded to the Committee's prior recommendations for testing of the chemicals. Subsequent to the ITC's preparation of its Thirteenth Report, EPA responded to the ITC's recommendations for 22 additional chemicals. The 22 chemicals removed and the dates of publication in the Federal Register of EPA's responses to the ITC for these chemicals are: alkyl epoxides, January 4, 1984 (49 FR 449-456); aniline and bromo- chloro- and/or nitroanilines, January 3, 1984 (49 FR 108-126); aryl phosphates, December 29, 1983 (48 FR 57452-57460); bis(2-ethylhexyl) terephthalate, November 14, 1983 (48 FR 51845-51848); chlorinated benzenes, mono- and di- January 13, 1984 (49 FR 1760-1770); chlorinated benzenes, tri-, tetra-, and penta-, January 13, 1984 (49 FR 1760-1770); cyclohexanone, January 3, 1984 (49 FR 136-142); dibutyltin bis (isooctyl maleate), November 8, 1983 (48 FR 51361-51366); dibutyltin bis(isooctyl mercaptoacetate), November 8, 1983 (48 FR 51361-51366); dibutyltin bis(lauryl mercaptide), November 8, 1983 (48 FR 51361-51366); dibutyltin dilaurate, November 8, 1983 (48 FR 51361-51366); 1,2-dichloropropane, January 6, 1984 (49 FR 899-908); dimethyltin bis(isooctyl mercaptoacetate) November 8, 1983 (48 FR 51361-51366); 1,3-dioxolane, November 14, 1983 (48 FR 51839-51842); glycidol and its derivatives, December 30, 1983 (48 FR 57562-57571); halogenated alkyl epoxides, December 30, 1983 (48 FR 57686-57700); hydroquinone, January 4, 1984 (49 FR 438-449); monobutyltin tris(isooctyl mercaptoacetate), November 8, 1983 (48 FR 51361-51366); monomethyltin tris(isooctyl mercaptoacetate), November 8, 1983 (48 FR 51361-51366); quinone, January 4, 1984 (49 FR 456-465); 4-(1,1,3,3-tetramethylbutyl) phenol, November 15, 1983 (48 FR 51971-51976); and tris(2-ethylhexyl) trimellitate, November 14, 1983 (48 FR 51842-51845). The current list contains 14 designated substances or groups of substances and two recommended substances or groups of substances.

(Sec. 4, Pub. L. 94-469, 90 Stat. 2003 (15 U.S.C. 2601))

Dated: May 18, 1984.

John A. Moore,

Assistant Administrator for Pesticides and Toxic Substances.

FOURTEENTH REPORT OF THE TSCA INTERAGENCY TESTING COMMITTEE TO THE ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

Summary

Section 4 of the Toxic Substances Control Act of 1976 (TSCA, Pub. L. 94-469) provides for the testing of chemicals in commerce that may present an unreasonable risk of injury to health or the environment. It also provides for the establishment of a Committee, composed of representatives from eight designated Federal agencies, to recommend chemical substances and mixtures (chemicals) to which the Administrator of the U.S. Environmental Protection Agency (EPA) should give priority consideration for the promulgation of testing rules.

Section 4(e)(1)(A) of TSCA directs the Committee to recommend to the EPA Administrator chemicals to which the

Administrator should give priority consideration for the promulgation of testing rules pursuant to section 4(a). The Committee is required to designate these chemicals, from among its recommendations, to which the Administrator should respond within 12 months by either initiating a rulemaking proceeding under section 4(a) or publishing the Administrator's reason for not initiating such a proceeding. Every 6 months, the Committee makes those revisions in the TSCA section 4(e) Priority List that it determines to be necessary and transmits them to the EPA Administrator.

As a result of its deliberations, the Committee is revising the TSCA section 4(e) Priority List by the addition of six chemicals and is noting the removal of 22, as a result of responses by EPA.

The Priority List is divided into two parts: Part A contains those recommended chemicals and groups designated for priority consideration and response by the EPA Administrator within 12 months, and part B contains chemicals and groups that have been recommended for priority consideration by EPA without being designated for response within 12 months. Although TSCA does not establish a deadline for EPA response to nondesignated chemicals and groups (part B of the Priority List), the Committee anticipates that the EPA Administrator will respond in a timely manner.

The entries being added to the Priority List are presented, together with the types of testing recommended, in the following Table 1.

TABLE 1.—ADDITIONS TO THE SECTION 4(e) PRIORITY LIST

Chemical/group	Recommended studies
A. Designated for response within 12 months:	
Bisphenol A (CAS No. 80-05-7).	Chemical Fate: Octanol/water partition coefficient; persistence. Health Effects: Chronic effects including oncogenicity; reproductive effects. Ecological Effects: Acute and chronic toxicity to fish, aquatic invertebrates, and algae; bioconcentration.
1,2-Dibromo-4-(1,2-dibromoethyl) cyclohexane (CAS No. 3322-93-8).	Chemical Fate: Water solubility; octanol/water partition coefficient; soil mobility; persistence. Health Effects: Toxicokinetic studies; subchronic studies including sperm morphology and vaginal cytology evaluation; chronic toxicity studies including oncogenicity. Ecological Effects: Acute and chronic toxicity to fish, aquatic invertebrates, and algae; bioconcentration.
Isopropyl biphenyl (CAS No. 25640-78-2). Diisopropyl biphenyl (CAS No. 69009-90-1).	Chemical Fate: Water solubility; octanol/water partition coefficient; persistence; soil mobility. Health Effects: Chronic toxicity, with emphasis on neurotoxic and kidney effects. Ecological Effects: Acute and chronic toxicity to fish, aquatic invertebrates, and algae; bioconcentration.
B. Recommended but not designated for response within 12 months:	
3,4-Dichlorobenzotrifluoride (CAS No. 328-84-7).	Chemical Fate: Water solubility; octanol/water partition coefficient; soil mobility; persistence. Health Effects: Toxicokinetics; genotoxicity; subchronic effects; chronic effects including oncogenicity. Ecological Effects: Acute and chronic toxicity to fish, aquatic invertebrates, and algae; bioconcentration.

TABLE 1.—ADDITIONS TO THE SECTION 4(e) PRIORITY LIST—Continued

Chemical/group	Recommended studies
2-Ethylhexanoic acid (CAS No. 149-57-5).	Health Effects: Chronic effects including oncogenicity.

TSCA Interagency Testing Committee

Statutory Member Agencies and Their Representatives

Council on Environmental Quality
Thomas H. Magness, III, Member
George W. Schlossnagle, Alternate (1)
Department of Commerce
Bernard Greifer, Member and Vice Chairperson
Environmental Protection Agency
Carl R. Morris, Member
Arthur M. Stern, Alternate
National Cancer Institute
Elizabeth K. Weisburger, Member and Chairperson
Richard Adamson, Alternate
National Institute of Environmental Health Sciences
Dorothy Canter, Member
National Institute for Occupational Safety and Health
Rodger L. Tatken, Member
Sanford S. Leffingwell, Alternate (2)
National Science Foundation
Winston C. Nottingham, Member
Occupational Safety and Health Administration
Ralph Yodaiken, Member
Martin Brown, Alternate (3)

Liaison Agencies and Their Representatives

Consumer Product Safety Commission
Arthur Gregory
Lakshmi Mishra
Department of Agriculture
Homer E. Fairchild
Richard M. Parry, Jr.
Department of Defense
Arthur H. McCreesh (4)
Patrick A. Truman (5)
Department of the Interior
Vyto A. Adomaitis
David R. Rosenberger
Food and Drug Administration
Arnold Borsetti
Allen H. Heim
National Toxicology Program
Dorothy Canter

Committee Staff Martin Greif, Executive Secretary

Norma Williams, ITC Coordinator

Support Staff

Alan Carpien—Office of the General Counsel, EPA
Stephen Ells—Office of Toxic Substances, EPA
Vera W. Hudson—National Library of Medicine

Notes

(1) Dr. Schlossnagle was appointed on November 17, 1983.
(2) Dr. Leffingwell was appointed on October 27, 1983.
(3) Dr. Brown was appointed on February 10, 1984.
(4) Dr. McCreesh died suddenly on March 22, 1984.
(5) Commander Truman was appointed on January 10, 1984.

The Committee acknowledges and is grateful for the assistance and support given to it by the staffs of CRCS, Inc., and Dynamac Corporation (technical support prime and subcontractors) and personnel of the EPA Office of Toxic Substances.

Chapter 1—Introduction

1.1 *Background.* The TSCA Interagency Testing Committee (Committee) was established under section 4(e) of the Toxic Substances Control Act of 1976 (TSCA, Public Law 94-469). The specific mandate of the Committee is to recommend to the Administrator of the U.S. Environmental Protection Agency (EPA) chemical substances and mixtures in commerce that should be given priority consideration for the promulgation of testing rules to determine their potential hazard to human health and/or the environment. TSCA specifies that the Committee's recommendations shall be in the form of a Priority List, which is to be published in the Federal Register. The Committee is directed by section 4(e)(1)(A) of TSCA to designate those chemicals on the Priority List to which the EPA Administrator should respond within 12 months by either initiating a rulemaking proceeding under section 4(a) or publishing the Administrator's reason for not initiating such a

proceeding. There is no statutory time limit for EPA response regarding chemicals which ITC has recommended, but not designated for response within 12 months.

Every 6 months, the Committee makes those revisions in the section 4(e) Priority List that it determines to be necessary and transmits them to the EPA Administrator.

The Committee is comprised of representatives from eight statutory member agencies, five liaison agencies, and one national program. The specific representatives and their affiliations are named in the front of this report. The Committee's chemical review procedures and prior recommendations are described in previous reports (Refs. 1 through 13).

1.2 *Committee's previous reports.* Thirteen previous reports to the EPA Administrator have been issued by the Committee and published in the Federal Register (Refs. 1 through 13). Seventy-three entries (chemicals and groups of chemicals) were recommended for priority consideration by the EPA Administrator and designated for response within 12 months. In addition, two groups were recommended without being so designated. Removal of forty-three entries was noted in the previous reports.

1.3 *Committee's activities during this reporting period.* Between October 1, 1983 and March 31, 1984 the Committee continued to review chemicals from its fourth scoring exercise and began to review chemicals from its fifth scoring exercise.

The Committee contacted more than 100 chemical manufacturers and trade associations to request information that would be of value in its deliberations. Fifty-four of those contacted provided unpublished information on current production, exposure, uses, and effects of chemicals under study by the Committee.

During this reporting period, the Committee evaluated 73 chemicals for priority consideration. Six chemicals were added to the section 4(e) Priority List, and 25 were deferred indefinitely. The remaining chemicals are still under study.

1.4 *The TSCA section 4(e) Priority List.* Section 4(e)(1) (B) of TSCA directs the Committee to: "* * * make such revisions in the [priority] list as it determines to be necessary and * * * transmit them to the Administrator together with the Committee's reasons for the revisions." Under this authority, the Committee is revising the Priority List by adding six chemicals: bisphenol A; 1,2-dibromo-4-(1,2-dibromoethyl) cyclohexane; 3,4-dichlorobenzotrifluoride; diisopropyl biphenyl; 2-ethylhexanoic acid; and isopropyl biphenyl. Five of these chemicals are designated for response within 12 months. The sixth, 3,4-dichlorobenzotrifluoride, is recommended, but not designated for response within 12 months. The testing recommended for these chemicals and the rationales for the recommendations are presented in Chapter 2 of this report.

Twenty-two chemicals and groups of chemicals are being removed from the Priority List because the EPA Administrator has responded to the Committee's prior recommendations for testing them. They are:

Alkyl epoxides
Aniline and bromo- chloro- and/or nitroanilines
Aryl phosphates
Bis(2-ethylhexyl) terephthalate
Chlorinated benzenes, mono- and di-
Chlorinated benzenes, tri- tetra- and penta-
Cyclohexanone
Dibutyltin bis(isooctyl maleate)
Dibutyltin bis(isooctyl mercaptoacetate)
Dibutyltin bis(lauryl mercaptide)
Dibutyltin dilaurate
1,2-Dichloropropane
Dimethyltin bis(isooctyl mercaptoacetate)
1,3-Dioxolane
Glycidol and its derivatives
Halogenated alkyl epoxides
Hydroquinone
Monobutyltin tris (isooctyl mercaptoacetate)
Monomethyltin tris (isooctyl mercaptoacetate)
Quinone
4-(1,1,3,3-Tetramethylbutyl)phenol
Tris(2-ethylhexyl) trimellitate

With the six recommendations and 22 removals noted in this report, 16 entries now appear on the section 4(e) Priority List. The Priority List is divided in the following Table 2 into two parts; namely, Table 2A, Chemicals and Groups of Chemicals Designated for Response Within 12 Months, and Table 2B, Other Recommended Chemicals and Groups.

TABLE 2.—THE TSCA SECTION 4(e) Priority List—May 1984

Entry	Date of designation
2A. Chemical and Groups of Chemicals Designated for Response Within 12 Months	
1. Bisphenol A	May 1984.
2. 2-(2-Butoxyethoxy)ethyl acetate	Nov. 1983.
3. Calcium naphthenate	May 1983.
4. Cobalt naphthenate	Do.
5. 1,2-Dibromo-4-(1,2-dibromoethyl) cyclohexane.	May 1984.
6. Diisopropyl biphenyl	Do.
7. Ethylene bis(oxyethylene) diacetate.	Nov. 1983.
8. 2-Ethylhexanoic acid	May 1984.
9. 1,2,3,4,7,7-Hexachloronorbornadiene.	Nov. 1983.
10. Isopropyl biphenyl	May 1984.
11. Lead naphthenate	May 1983.
12. Methylolurea	Do.
13. Oleylamine	Nov. 1983.
14. 2-Phenoxyethanol	May 1983.

Entry	Date of recommendation
2B. Other Recommended Chemicals and Groups of Chemicals	
1. Carbofuran intermediates	Nov. 1982.
2. 3,4-Dichlorobenzotrifluoride	May 1984.

To date, 65 chemicals and groups of chemicals have been removed from the Priority List. The cumulative list is presented in the following Table 3.

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Table 3--Cumulative Removals from the TSCA Section 4(e) Priority List
May 1984

Chemical/Group	EPA Responses to Committee Recommendations	
	FEDERAL REGISTER	
	Citation	Publication Date
1 Acetonitrile	47 FR 58020-58023	Dec 29, 1982
2 Acrylamide	48 FR 725-727	Jan 6, 1983
3 Alkyl epoxides	49 FR 449-456	Jan 4 1984
4 Alkyl phthalates	46 FR 53775-53777	Oct 30, 1981
5 Alkyltin compounds	46 FR 5456-5463	Feb 5, 1982 1/
6 Aniline and bromo-, chloro-, and/or nitroanilines	49 FR 108-126	Jan 3, 1984
7 Antimony metal	48 FR 717-725	Jan 6, 1983
8 Antimony sulfide	48 FR 717-725	Jan 6, 1983
9 Antimony trioxide	48 FR 717-725	Jan 6, 1983
10 Aryl phosphates	48 FR 57452-57460	Dec 29, 1983
11. Benzidine-based dyes	46 FR 55004-55006	Nov 5, 1981
12 Benzyl butyl phthalate	46 FR 53775-53777	Oct 30, 1981
13. Biphenyl	48 FR 23080-23086	May 23, 1983
14 Bis(2-ethylhexyl) terephthalate	48 FR 51845-51848	Nov 14, 1983
15 Butyl glycolyl butyl phthalate	46 FR 54487	Nov 2, 1981
16 Chlorendic acid	47 FR 44878-44879	Oct 12, 1982
17 Chlorinated benzenes, mono- and di-	49 FR 1760-1770	Jan 13, 1984
18 Chlorinated benzenes, tri-, tetra-, and penta-	49 FR 1760-1770	Jan 13, 1984
19. Chlorinated naphthalenes	46 FR 54491	Nov 2, 1981
20 Chlorinated paraffins	47 FR 1017-1019	Jan 8, 1982
21 4-Chlorobenzotrifluoride	47 FR 50555-50558	Nov 8, 1982

1/ Removed by the Committee for reconsideration Seven individual group members were subsequently designated in the 11th ITC Report (Ref. 11) for priority consideration

Table 3--Cumulative Removals from the TSCA Section 4(e) Priority List (cont'd)
May 1984

	Chemical/Group	EPA Responses to Committee Recommendations	
		FEDERAL REGISTER	
		Citation	Publication Date
22	Chloromethane	45 FR 48524-48564	July 18, 1980
23	2-Chlorotoluene	47 FR 18172-18175	April 28, 1982
24	Cresols	48 FR 31812-31819	July 11, 1983
25	Cyclohexanone	49 FR 136-142	Jan 3, 1984
26	o-Dianisidine-based dyes	46 FR 55004-55006	Nov 5, 1981
27	Dibutyltin bis(isooctyl maleate)	48 FR 51361-51366	Nov 8, 1983
28	Dibutyltin bis(isooctyl mercaptoacetate)	48 FR 51361-51366	Nov 8, 1983
29	Dibutyltin bis(lauryl mercaptide)	48 FR 51361-51366	Nov 8, 1983
30	Dibutyltin dilaurate	48 FR 51361-51366	Nov 8, 1983
31.	Dichloromethane	46 FR 30300-30320	June 5, 1981
32	1,2-Dichloropropane	49 FR 899-908	Jan 6, 1984
33	Diethylenetriamine	47 FR 18386-18391	April 29, 1982
34	Dimethyltin bis(isooctyl mercaptoacetate)	48 FR 51361-51366	Nov 8, 1983
35	1,3-Dioxolane	48 FR 51839-51842	Nov 14, 1983
36	Ethyltoluene	48 FR 23088-23095	May 23, 1983
37	Fluoroalkenes	46 FR 53704-53708	Oct 30, 1981
38	Formamide	48 FR 23098-23102	May 23, 1983
39	Glycidol and its derivatives	48 FR 57562-57571	Dec 30, 1983
40	Halogenated alkyl epoxides	48 FR 57686-57700	Dec 30, 1983
41	Hexachloro-1,3-butadiene	47 FR 58029-58031	Dec 29, 1982
42	Hexachlorocyclopentadiene	47 FR 58023-58025	Dec 29, 1982
43	Hexachloroethane	47 FR 18175-18176	April 28, 1982

Table 3--Cumulative Removals from the TSCA Section 4(e) Priority List (cont'd)
May 1984

	Chemical/Group	EPA Responses to Committee Recommendations	
		FEDERAL REGISTER	
		Citation	Publication Date
44	Hydroquinone	49 FR 438-449	Jan 4 1984
45	Isophorone	48 FR 727-730	Jan 6, 1983
46	Mesityl oxide	48 FR 30699-30706	July 5, 1983
47	4,4'-Methylenedianiline	48 FR 31806-31810	July 11, 1983
48	Methyl ethyl ketone	47 FR 58025-58029	Dec 29, 1982
49	Methyl isobutyl ketone	47 FR 58025-58029	Dec 29, 1982
50	Monobutyltin tris(isooctyl mercaptoacetate)	48 FR 51361-51366	Nov 8, 1983
51	Monomethyltin tris(isooctyl mercaptoacetate)	48 FR 51361-51366	Nov 8, 1983
52	Nitrobenzene	46 FR 30300-30320	June 5, 1981
53	Phenylenediamines	47 FR 973-983	Jan 8, 1982
54	Polychlorinated terphenyls	46 FR 54482-54483	Nov 2, 1981
55	Pyridine	47 FR 58031-58035	Dec 29, 1982
56	Quinone	49 FR 456-465	Jan 4, 1984
57	4-(1,1,3,3-Tetramethylbutyl) phenol	48 FR 51971-51976	Nov 15, 1983
58	o-Tolidine-based dyes	46 FR 55004-55006	Nov 5, 1981
59	Toluene	47 FR 56391-56392	Dec 16, 1982
60	1,2,4-Trimethylbenzene	48 FR 23088-23095	May 23, 1983
61	Trimethylbenzenes	48 FR 23088-23095	May 23, 1983
62	1,1,1-Trichloroethane	46 FR 30300-30320	June 5, 1981
63	Tris(2-chloroethyl) phosphite	47 FR 49466-49467	Nov 1, 1982
64	Tris(2-ethylhexyl) trimellitate	48 FR 51842-51845	Nov 14, 1983
65.	Xylenes	47 FR 56392-56394	Dec 16, 1982

BILLING CODE 6560-50-C

References

(1) Initial Report to the Administrator, Environmental Protection Agency, TSCA Interagency Testing Committee, October 1, 1977. Published in the Federal Register of Wednesday, October 12, 1977, 42 FR 55026–55080. Corrections published in the Federal Register of November 11, 1977, 42 FR 58777–58778. The report and supporting dossiers were also published by the Environmental Protection Agency, EPA 560–10–78/001, January 1978.

(2) Second Report of the TSCA Interagency Testing Committee to the Administrator, Environmental Protection Agency. TSCA Interagency Testing Committee, April 1978. Published in the Federal Register of Wednesday, April 19, 1978, 43 FR 16684–16688. The report and supporting dossiers were also published by the Environmental Protection Agency, EPA 560–10–78/002, July 1978.

(3) Third Report of the TSCA Interagency Testing Committee to the Administrator, Environmental Protection Agency. TSCA Interagency Testing Committee, October 1978. Published in the Federal Register of Monday, October 10, 1978, 43 FR 50830–50835. The report and supporting dossiers were also published by the Environmental Protection Agency, EPA 560–10–79/001, January 1979.

(4) Fourth Report of the TSCA Interagency Testing Committee to the Administrator, Environmental Protection Agency. TSCA Interagency Testing Committee, April 1979. Published in the Federal Register of Friday, June 1, 1979, 44 FR 31866–31889.

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(11) Eleventh Report of the TSCA Interagency Testing Committee to the Administrator, Environmental Protection Agency. TSCA Interagency Testing Committee, October 1982. Published in the Federal Register of Friday, December 3, 1982, 47 FR 54625–54644.

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Chapter 2—Recommendations of the Committee

2.1 *Chemicals recommended for priority consideration by the EPA Administrator.* As provided by section 4(e)(1)(B) of TSCA, the Committee is adding the following chemical substances to the section 4(e) Priority List: bisphenol A; 1,2-dibromo-4-(1, 2-dibromoethyl) cyclohexane; 3,4-dichlorobenzotrifluoride; diisopropyl biphenyl; 2-ethylhexanoic acid; and isopropyl biphenyl. The recommendation of these chemicals is being made after considering the factors identified in section 4(e)(1)(A) and other available relevant information, as well as the professional judgment of Committee members.

The five recommendations designated for response by the EPA Administrator within 12 months and supporting rationales are presented in section 2.2 of this report. Section 2.3 contains one recommendation with no designated time limit for response by the EPA Administrator.

2.2 *Chemicals designated for response within 12 months with supporting rationales.*

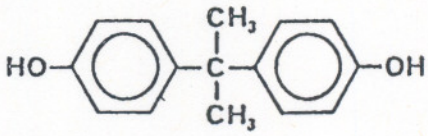
2.2a *Bisphenol A.*

Summary of recommended studies. It is recommended that bisphenol A be tested for the following:

A. Chemical Fate:
Octanol/water partition coefficient
Persistence
B. Health Effects:
Chronic effects including oncogenicity
Reproductive effects
C. Ecological Effects:
Acute and chronic toxicity of fish, aquatic invertebrates, and algae
Bioconcentration

Physical and Chemical Information

CAS Number: 80–05–7
Synonyms:
4,4'-Isopropylidenediphenol 2,2-Bis (p-hydroxyphenyl) propane
Phenol,4,4'-(1-methylethylidene)bis-
(9 CI)
Structural Formula:



Empirical Formula: $C_{15}H_{16}O_2$.
Molecular Weight: 228.
Melting Point: 153° C (crude); 155–157° C (purified).
Boiling Point: 220° C at 4 mmHg.
Vapor Pressure: 0.2 mmHg at 170° C
Specific Gravity: 1.195 (25/25° C).
Solubility in Water: Less than 0.1% at 25°C; 0.34% at 83° C; soluble in dilute base.
Solubility in Organic Solvents: Soluble in polar organic solvents such as acetone and methanol.
Log Octanol/Water Partition Coefficient: 3.84 (estimated; Ref. 14, Lyman et al., 1982).
Description of Chemical: White flakes.

Rational for Recommendations

I. *Exposure information*—A. *Production/use/disposal.* The 1982 production volume of bisphenol A was 479 million pounds (Ref. 4, C&EN, 1983). The annual domestic production capacity as of January 1, 1983, was estimated to be 930 million pounds (Ref. 26, SRI, 1983).

Bisphenol A is used primarily as an intermediate in the production of epoxy and polycarbonate resins. It is also used in the manufacture of phenoxy resins, corrosion-resistant unsaturated polyester-styrene resins, and polysulfone resins, and as a stabilizer for polyvinyl chloride resins, as an antioxidant in rubber and plastics, and as a raw material in the production of tetrabromobisphenol A and other compounds used in the manufacture of flame retardants (Refs. 5, 6, 11, 12 and 8, CEH, 1978, 1979; Kirk-Othmer, 1978, 1980; EPA, 1981).

Since bisphenol A is produced in a closed system, the chances of exposure during manufacture are expected to be minimal. It is shipped as prills in 50-pound bags, hopper cars or one ton super sacks. Therefore, the greatest potential for worker exposure is to the dust during packaging, handling and shipping (Ref. 20, NIOSH, 1983). The National Occupational Exposure Survey conducted during 1981–1983 estimated that 9446 workers were exposed to bisphenol A in the workplace. Estimates for exposure from downstream uses are not yet available (Ref. 21, NIOSH, 1984). Based upon its high production volume

and the fact that it is manufactured and used at many sites, bisphenol A is likely to enter the environment in substantial quantities. It can be released in industrial wastewaters during manufacturing, processing and through inadvertent spills.

B. *Evidence for exposure.* NIOSH has reported levels of exposure to bisphenol A in the workplace in three Health Hazarad Reports. Concentrations were measured at levels of 1.063 mg/m3 in spray operations (Ref. 17 NIOSH, 1979), of 0.0083 mg/m3 in sanding and grinding of cured epoxy resins (Ref. 18, NIOSH, 1980a), and less than 0.04 to 4.49 μg/m3 in epoxy coating operations (Ref. 19, NIOSH, 1980b).

Bisphenol A has been found in atmospheric fallout near Tokyo at concentrations ranging from 0.04 to 0.2 μg/m2 day (Ref. 15, Matsumoto and Hanya, 1980). In a study by Matsumoto et al. (Ref. 16, 1977), bisphenol A was found in water samples taken from two rivers receiving industrial discharges. One sample contained 10–90 ng/L, and the other contained 1–9 μg/L of bisphenol A. It has also been found at a concentration of 4.8 mg/L in an effluent prior to treatment at a Soviet plant manufacturing epoxy resins (Ref. 9, Friedman, 1980). Schackleford and Keith (Ref. 25, 1976) reported finding bisphenol A in an effluent from a chemical manufacturing plant in Indiana but did not quantify the amount.

II. *Chemical fate information.*—A. *Persistence.* Like other substituted phenols, bisphenol A is likely to undergo photolysis or oxidation, but at an undetermined rate. Some biodegradation during wastewater treatment and in receiving waters is also likely.

B. *Rational for chemical fate recommendations:* Although bisphenol A is not expected to be highly persistent, the fact that it has been found in river waters and in effluent discharges demonstrates that biodegradation is not rapid and complete. Testing is needed to estimate its removal during waste treatment and to determine its persistence in receiving waters.

III. *Biological effects of concern to human health*—A. *Toxicokinetics (absorption, distribution, and excretion).* A study of the metabolic fate of an orally administered dose of radio-labeled bisphenol A in the rat indicated that the major excretory route was through the feces, with 56 percent of the radiolabel excreted in this manner (Ref. 13, Knaak and Sullivan, 1966). Excretion through the urine accounted for 28 percent of the dose and was primarily as a glucuronide. No radiolabel could be detected in respiratory CO_2, and none remained in the body after 3 days.

B. *Mutagenicity.* Bisphenol A was not found to be mutagenic when tested in *Salmonella typhimurium* strains TA–1535, TA–1537 TA–98, and TA–100, with and without metabolic activation (Ong, 1979, cited in Ref. 8, EPA, 1981). these negative results were also obtained by the NTP (Ref. 24, 1984a). The chemical was also negative for inducing sister-chromatid exchanges and chromosamal aberrations in Chinese Hamster ovary cells in cluture. Zavadskii and Khovanova (1975 cited in Ref. 8, EPA, 1981) reported that bisphenol A produced no effects on somatic cells of *Drosophila melanogaster.*

C. *Short-term (acute) effects.* The oral LD_{50} in rats, mice, and rabbits was reported to be 3.25, 2.5 and 2.23 g/kg, respectively (Ref. 1, AIHA, 1967).

D. *Long-term (subchronic/chronic) effects. Carcinogenicity.* A carcinogenesis bioassay was conducted in which bisphenol A was fed at levels of 1,000 or 2,000 ppm to groups of 50 rats of either sex, at levels of 1,000 or 5,000 ppm to groups of 50 male mice, and at levels of 5,000 or 10,000 ppm to groups of 50 female mice for 103 weeks. It was concluded that, under the conditions of the bioassay, "there was no convincing evidence that bisphenol A was carcinogenic for rats or mice," (Ref. 22, NTP 1982)

E. *Teratogenicity and reproductive effects.* In a teratogenicity study by Hardin et al., (Ref. 10, 1981), offspring from rats receiving intraperitoneal doses of 85 and 125 mg/kg on days 1 through 15 of gestation showed significantly reduced mean fetal body weights and crown-to-rump lengths. The mean number of implants and number of live fetuses per litter were also reduced in the high-dose rats. In both groups, numerous instances of enlarged cerebral ventricles and retarded skeletal ossification were seen; one case of hydroxephalus occurred in the high-dose group. Because of the limited number of litters, further testing in rats and mice is being conducted (Ref. 24, NTP 1984b). In the NTP study, the animals are dosed during the post-implantation period while in Hardin's study they were dosed earlier in the cycle, i.e. during the pre- and post-implantation period.

Bisphenol A has been reported to produced estrogenic effects (Ref. 2, Bitman and Cecil, 1970). Bond et al. (Ref. 3, 1980) also tested ovariectomized rats for estrogenic effects and an increase in uterine water was observed at higher doses.

F. *Rational for health effects recommendations.* Concern exists regarding the potential carcinogenicity of bisphenol A by the inhalation route of administration, since that is the main route of human exposure. Consequently, it is recommended that bisphenol A be tested for chronic toxicity including oncogenicity by the inhalation route. Furthermore, because of the estrogenic activity, it should also be tested for reproductive effects.

IV. *Ecological effects of concern*—A. *Toxicity.* The 96-hour LC_{50} for sheepshead minnow, tested under flow-through conditions, was 7.5 mg/L (Ref. 7 Dow, 1982).

B. *Bioconcentration.* No test data were found. Based upon an estimated log P of 3.84, the expected bioconcentration factor (BCF), using the model of Veith et al. (Ref. 28, 1979), is 368.

C. *Rationale for ecological effects recommendations.* Based upon the large production volume, environmental releases from manufacturers and processors are likely to occur. The one acute toxicity test on the sheepshead minnow is inadequate to predict the acute and chronic effects on aquatic organisms. Because of the large exposure potential, tests with both freshwater and estuarine organisms are recommended. Acute and chronic toxicity tests with several species of fish, aquatic invertebrates, and algae should be performed. Based upon the estimated BCF of 368, a test with fish should be performed to quantify bioconcentration.

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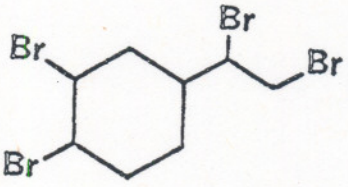
2.2.b *1,2-Dibromo-4-(1,2-Dibromoethyl)Cyclohexane.*

Summary of recommended studies. It is recommended that 1,2-dibromo-4-(1,2-dibromoethyl)cyclohexane (DBDBECH) be tested for the following:

A. Chemical Fate:
Water solubility
Octanol/water partition coefficient
Soil mobility
Persistence
B. Health Effects:
Toxicokinetic studies
Subchronic studies including sperm morphology and vaginal cytology evaluation
Chronic toxicity studies including oncogenicity
C. Ecological Effects:
Acute and chronic toxicity to fish, aquatic invertebrates, and algae
Bioconcentration

Physical and Chemical Information

CAS Number: 3322–93–8.
Synonym:
Vinylcyclohexene tetrabromide
Cyclohexane, 1,2-dibromo-4-(1,2-dibromoethyl) (9 CI)
Structural Formula:



Empirical Formula: $C_8H_{12}Br_4$.
Molecular Weight: 428.
Melting Point: 72–73° C.
Log Octanol/Water Partition Coefficient: 4.7 (estimated; Ref. 8, Lyman et al., 1982).
Description of Chemical: Solid.

Rationale for Recommendations

I. *Exposure information*—A. *Production/use/disposal.* Production of DBDBECH was reported to be 600,000 pounds in 1982 and less than 1 million pounds in 1983 (Refs. 12 and 13, 1983, 1984). The TSCA Inventory (public portion) reported the 1977 production to be between and 10 million pounds (Ref. 5, EPA, 1983).The compound is used as a flame retardant in construction materials, in high-impact plastic parts of appliances, and in electric cable coatings (Refs. 3 and 12, Chemtronics, 1982; Saytech, 1983). Because it is an effective flame retardant with high thermal stability (Ref. 6, Green and Versnel, 1974), the demand for the compound is expected to increase with the current improvement in the housing and construction industry (Ref. 12, Saytech, 1983).

B. *Evidence for exposure.* There is no information documenting the presence of DBDBECH in the aquatic environment. Releases from production and use are expected to result in both human and environmental exposure.

II. *Chemical fate information*—A. *Transport.* Based on an estimated water solubility of 13 mg/L, transport of DBDBECH by water is likely. Based on an estimated log P of 4.7 some absorption to soil and suspended solids in water will also occur.

B. *Persistence.* No information was found.

C. *Rationale for chemical fate recommendations.* Chemical fate tests are needed to determine the mobility and persistence of DBDBECH under environmental conditions.

III. *Biological effects of concern to human health*—A. *Summary.* DBDBECH was shown to be negative in the *Salmonella* assay in strains TA98, TA100, TA1535, and TA1537 with and without metabolic activation (Ref. 10, NTP 1984). In vitro cytogenetc and mouse lymphoma tests are planned by NTP (Ref. 10, NTP 1984). No other information on the biological effects of DBDBECH was found.

B. *Rationale for health effects recommendations.* DBDBECH is structurally related to ethylene dibromide, which is a known carcinogen that has also been shown to produce reproductive abnormalities in several species (Refs. 1, 4, and 11, Amir et al., 1983; Courtens et al., 1980; Sastry and Mukherjee, 1980). Since no data on the health effects of DBDBECH were found, toxicokinetic and subchronic studies, including sperm morphology and vaginal cytology evaluation are recommended. If it is determined that there is substantial exposure to this compound, then chronic toxicity studies, including oncogenicity, are recommended.

IV. *Ecological effects of concern*—A. *Toxicity.* No data were found on the aquatic toxicity of DBDBECH. A similar compound, 1,2-dichloro-4-(1,2,dichloroethyl)cyclohexane, adversely affected rainbow trout and bluegills after one hour of exposure at 5 mg/L (Ref. 2, Applegate et al., 1957).

B. *Bioconcentration.* Based on an estimated log P of 4.7, aquatic organisms are likely to bioconcentrate DBDBECH. Using the equation of Veith et al. (Ref. 14, 1979), the bioconcentration factor is estimated to be 2000.

C. *Rationale for ecological effects recommendations.* Based on the production and uses of DBDBECH, releases to the aquatic environment are likely. Although no data were found, DBDBECH may be highly toxic to aquatic organisms and may bioconcentrate substantially. Testing is needed to determine the acute and chronic toxicity to aquatic organisms and to quantify the bioconcentration potential.

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2.2.c *2-Ethylhexanoic Acid (9 CI).*

Summary of recommended studies. It is recommended that 2-ethylhexanoic acid be tested for the following:

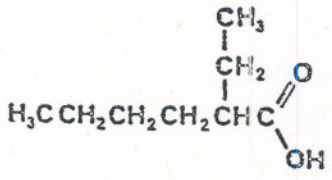
Health Effects: Chronic effects including oncogenicity.

Physical and Chemical Information

CAS Number: 149–57–5.

SYNONYMS:
Butylethylacetic acid
alpha-Ethylcaproic acid

Structural Formula:



Empirical Formula: $C_8H_{16}O_2$.
Molecular Weight: 144.

Melting Point: −83° C.
Boiling Point: 226.9° C at 760 mmHg.
Vapor Pressure: 0.03 mmHg at 20° C.
Specific Gravity: 0.9077 (20/20° C).
Solubility in Water: 0.1% at 20° C (Ref. 24, Union Carbide, 1983a).

Log Octanol/Water Partition Coefficient: 3 (estimated; Ref. 11, Lyman et al., 1982).

Description of Chemical: 2-Ethylhexanoic acid is a mild-odored liquid. It is a weak acid that, in the presence of a strong acid, will react with an alcohol to produce an ester (Ref. 15, Morrison and Boyd, 1973).

Rationale for Recommendations

I. *Exposure information*—A. *Production/use/disposal.* The 1977 U.S. manufacture/importation of 2-ethylhexanoic acid, as listed in the public portion of the TSCA Inventory, was 11.1–61 million pounds (Ref. 7, EPA, 1982). The largest producer listed in the Inventory has stated that its current annual production range is 10–30 million pounds and that production is expected to remain at this level in the future (Ref. 6, Eastman Kodak, 1983). Other manufacturers have confirmed additional current production and importation of greater than one million pounds (Ref. 8, 3, and 2, Filo Chemical, 1983a; BASF 1983, American Hoechst, 1983).

2-Ethylhexanoic acid is a chemical intermediate used primarily in the manufacture of 2-ethylhexanoic metal soaps (Ref. 9, Filo Chemical, 1983b). The soaps are utilized primarily as promoters for curing thermoset polyester resins, as driers for certain oil-based paints, inks, varnishes, and enamels, and as catalysts for polyurethane foams. Typically, the various soaps are added to the unsaturated polyester resin, paint, or foam polyol at levels of less than one percent (Ref. 6, Eastman Kodak, 1983).

Esters and salts of 2-ethylhexanoic acid have been used in the preparation of synthetic greases and lubricants. Diesters of 2-ethylhexanoic acid with triethylene glycol or tetraethylene glycol are used as thickeners in lubricants for both low- and high-temperature applications (Ref. 6, Eastman Kodak, 1983).

The National Occupational Hazard Survey lists 16,613 persons as being potentially exposed to 2-ethylhexanoic acid during 1970 (Ref. 10, NIOSH, 1983). Because vapors of the compound may irritate the eyes, nose, and throat, and the liquid material causes significant skin and eye irritation, workers are urged to use protective clothing, eyewear and respirators during handling (Ref. 24 and 6, Union Carbide, 1983a; Eastman Kodak, 1983).

One manufacturer reported that trace amounts of the compound are released to the atmosphere during manufacture. Recommended disposal methods for the compound during manufacture and in-house use include incineration and treatment at an onsite wastewater treatment facility (Ref. 6, Eastman Kodak, 1983). Another manufacturer stated that its recommended method of waste disposal is incineration (Ref. 24, Union Carbide, 1983a).

B. *Evidence for exposure.* Although 2-ethylhexanoic acid is not used in consumer products, the 2-ethylhexanoate metal soaps are utilized in such products. Thus, general population exposure to the anion may occur. The compound also has been detected in leachate from a landfill in Oklahoma at 4.2 mg/L (Ref. 5, Dunlop et al., 1978).

II. *Chemical fate information.* No test data were found pertaining to the transport and persistence of 2-ethylhexanoic acid. Although rapid biodegradation of the chemical has been predicted, its presence in leachate from a landfill does not support this position.

III. *Biological effects of concern to human health*—A. *Acute toxicity.* The oral LD_{50} of 2-ethylhexanoic acid in rats was 3 g/kg and the dermal LD_{50} in rabbits was 6.3 ml/kg (Ref. 23, Smyth and Carpenter, 1944). The dermal LD_{50} in guinea pigs with a 4-day contact period was 6.3 g/kg (Ref. 25, Union Carbide, 1983b). The dermal LD_{50} in guinea pigs and rabbits was reported as 5,680 mg/kg and 1,260 mg/kg, respectively (Ref. 4, Clayton and Clayton, 1982). The inhalation LC_{50} in guinea pigs was determined to be greater than 420 ppm/6 hours (Ref. 6, Eastman Kodak, 1983). Undiluted 2-ethylhexanoic acid (0.001 ml) caused corneal necrosis of the rabbit eye. The undiluted compound and 10 percent solutions in acetone caused skin erythema in rabbits (Ref. 25, Union Carbide, 1983b).

B. *Teratogenicity/embryotoxicity.* No information was found regarding the teratogenicity or embryotoxicity of 2-ethylhexanoic acid.

C. *Metabolism and toxicokinetics studies.* No information was found on the metabolism or toxicokinetics of 2-ethylhexanoic acid. However, 2-ethylhexanoic acid was one of the initial metabolites identified when 2-ethylhexanol was administered orally to rats (Ref. 1, Albro, 1975).

D. *Genotoxicity.* 2-Ethylhexanoic acid has been selected for mutagenicity testing in the *Salmonella* microsomal assay and for in-vitro cytogenetics testing in Chinese hamster ovary cells (Ref. 22, NTP 1984). No other

information was found on genotoxicity testing of this compound. However, 13 compounds containing the 2-ethylhexyl moiety were negative in the *Salmonella* assay both with and without metabolic activation (Ref. 19, NTP 1983a).

E. *Carcinogenicity.* No information was found on the carcinogenicity of 2-ethylhexanoic acid. To date, NTP has tested four compounds containing the 2-ethylhexyl moiety for carcinogenicity and other chronic toxic effects in rats and mice, namely, di(2-ethylhexyl) phthalate (DEHP), di(2-ethylhexyl) adipate (DEHA), tris(2-ethylhexyl)phosphate, and 2-ethylhexyl sulfate (Refs. 17 18, 20, and 21, NTP 1982a; NTP 1982b; NTP 1983b; NTP 1983c). The administration of all four compounds correlated with increased occurrences of hepatocellular tumors, principally carcinomas, in female mice. DEHA and DEHP also induced hepatocellular tumors in male mice, while DEHP caused hepatocellular tumors in female mice and rats. These results suggest that compounds containing the 2-ethylhexyl moiety may have some carcinogenic potential for the mouse liver (Ref. 10, Kluwe, 1984).

F. *Other effects.* In a chemical class study, DEHP DEHA, di(2-ethylhexyl)-sebacate, 2-ethylhexyl alcohol, 2-ethylhexanoic acid, and, to a lesser extent, 2-ethylhexyl aldehyde induced an increase in hepatic peroxisomes and peroxisome-associated enzymes, whereas adipic acid, diethyl phthalate, hexanol, hexyl aldehyde and hexanoic acid did not (Ref. 13, Moody and Reddy, 1978). Subsequent research on all of the above chemicals except di(2-ethylhexyl)sebacate demonstrated that those compounds that induced peroxisomal proliferation also produced a decrease in serum triglyceride and cholesterol concentrations in rats (Ref. 14, Moody and Reddy, 1982). These data indicate that the 2-ethylhexyl moiety may be important in inducing these effects.

G. *Rationale for health effects recommendations.* The potential exists for occupational exposure to 2-ethylhexanoic acid. General population exposure to the 2-ethylhexanoate anion may occur from the use of products containing 2-ethylhexanoate metal soaps. Suspicion exists as to the potential toxicity of the 2-ethylhexyl moiety on the basis of results from carcinogenicity studies of four 2-ethylhexyl compounds and of the ability of a group of 2-ethylhexyl compounds, including 2-ethylhexanoic acid, to induce peroxisomal proliferation and hypolipidemia in rats. Accordingly, chronic studies including oncogenicity studies in rats and mice are recommended for 2-ethylhexanoic acid.

IV *Ecological effects.* Compounds of similar structure have been found to have low to moderate toxicity. 2-Ethylhexanoic acid is not expected to be toxic to aquatic organisms at the levels at which it is likely to occur in the environment. Hence tests for ecological effects are not recommended.

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2.2.d *Isopropylbiphenyls.*

Summary of recommended studies. It is recommended that the mixed isomers of isopropylbiphenyl (IPBP) and the mixed isomers of diisopropylbiphenyl (DIPBP) be tested for the following:

A. Chemical Fate:
Water solubility
Octanol/water partition coefficient
Persistence
Soil mobility
B. Health Effects:
Chronic toxicity, with emphasis on neurotoxic and kidney effects
C. Ecological Effects:
Acute and chronic toxicity to fish, aquatic invertebrates, and algae
Bioconcentraton

If IPBP and DIPBP can not be isolated and tested separately, then tests with

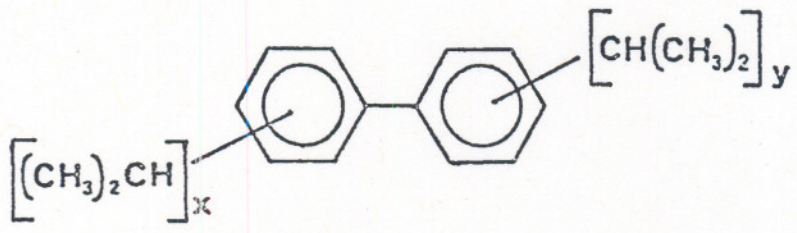
two commercial mixtures should be performed: one high in IPBP and one high in DIPBP

Physical and Chemical Information

CAS Number:
Isopropylbiphenyl: 25640-78-2
Diisopropylbiphenyl: 69009-90-1

Synonyms:
Isopropylbiphenyl: IPBP—1,1' Biphenyl, (1-methylethyl)-(3 CI)
Diisopropylbiphenyl: DIPBP—1,1' Biphenyl, ar, ar'-bis(1-methylethyl)-(9 CI)

Structural Formula:



For IPBP: x=1, y=0
For DIPBP: x=1, y=1 or x=2, y=0

Empirical Formula:
Isopropylbiphenyl: $C_{15}H_{16}$
Diisopropylbiphenyl: $C_{18}H_{22}$

Molecular Weight:
Isopropylbiphenyl: 196
Diisopropylbiphenyl: 238

Melting Point: No data were found on the pure compounds.

Boiling Point: No data were found on the pure compounds.

Vapor Pressure: No data were found on the pure compounds.

Specific Gravity: No data were found on the pure compounds.

Water Solubility: No data were found on the pure compounds.

Log/Octanol Water Partition Coefficient:
Isopropylbiphenyl: 5.34 (estimated; Ref. 14, Peterman, 1983)
Diisopropylbiphenyl: 6.64 (estimated; Ref. 14, Peterman, 1983)

Available data on the physcial and chemical properties of various commercial mixtures of IPBP and DIPBP are presented in the following Table 1.

Table 1--Physical and Chemical Properties of Commercial Mixtures Containing Isopropylbiphenyls and Diisopropylbiphenyls

Property	Compound		
	CG[a]	Wemcol®	SURE SOL®-250
% Isopropylbiphenyl	≥ 94	98 9[b]	≥ 94[c]
% Diisopropylbiphenyl	< 6	<1 1	< 6
Specific gravity	0 98-0 99	0 988[b]	0 990[c]
Log P	--	5 23[d], 7 0[e]	--
Water solubility	--	10 mg/L[b], 0 051 mg/L[e]	--
Vapor pressure	--	$5x10^{-4}$ mmHg[d]	0 01 mmHg[f]
Melting point	--	< -55°C[b]	--
Boiling point	>233° C	--	--

[a]Ref 19, Sybron, 1982
[b]Ref 23, Westinghouse, 1977
[c]Ref 8, Koch, 1982
[d]Estimated (Ref 1, Addison, 1983)
[e]Measured (Ref 13, Ozburn et al , 1980)
[f]Ref, 18, Sun, 1977

Rationale for Recommendations

I. *Exposure information*—A. *Production/use/disposal.* Isopropylbiphenyls (IPBPs) and diisopropylbiphenyls (DIPBPs) are produced simultaneously and are not separated for commercial purposes (Refs. 8, 9, Koch, 1982, 1983). Both compounds are sold as mixtures containing varying ratios of IPBP and DIPBP The commercial mixtures generally contain also small amounts (<1%) of triisopropylbiphenyls.

Information on the current uses and production of commercial mixtures containing IPBP and DIPBP is presented in the following Table 2.

Table 2--Data on Current Production and Uses of Commercial Mixtures Containing Isopropylbiphenyls and Diisopropylbiphenyls[a]

Product	Manufacturer	Production (million lb)	Percent IPBP	Use
SURE SOL®-250	Koch	3-4	≥94	Dielectric fluid
CG	Sybron	0 84-8 4	≥94	Dielectric fluid
PG	Sybron	0 36-3 6	≥75	Carbonless copy paper
MPG	Sybron		≥72 5	Carbonless copy paper

[a]Refs 8 and 19, Koch, 1982, Sybron, 1982

Mixtures of IPBP and DIPBP containing high percentages of IPBP (>94 percent) are used as dielectric fluids in capacitors (Refs. 8 and 19, Koch, 1982; Sybron, 1982), whereas mixtures containing less IPBP are normally used as dye solvents in the manufacture of carbonless copy paper (Ref. 19, Sybron, 1982). The dye solvent constitutes approximately 3 percent of the paper's weight. Tulp et al. (Ref. 21, 1978) analyzed a sample of the commercial product Wemcol® a capacitor fluid, and found that it contained 60.3 percent 3-isopropylbiphenyl and 38.6 percent 4-isopropylbiphenyl, with the remainder containing four isomers of diisopropylbiphenyl.

SURE SOL®-250 is produced in a closed system (Ref. 8, Koch, 1982). No information was available on the number of workers exposed to IPBP and DIPBP during the manufacturing process.

The potential for widespread human exposure to IPBP and DIPBP exists through their use in carbonless copy paper. IPBP and DIPBP are expected to enter the environment via wastewaters from plants manufacturing the mixtures, from plants making carbonless copy paper, from paper mills using recycled paper, from capacitor leakage, and from landfills where capacitors and carbonless copy paper have been discarded. Leaching from landfills is also a potential source of human exposure through groundwater contamination.

B. *Evidence for exposure.* There is no direct evidence of human exposure to the compounds. However, two teams of investigators have reported health complaints by office workers using carbonless copy paper containing the compounds (Refs. 10 and 7 Levy and Hanoa, 1982; Kleinman and Horstman, 1982). Peterman (Ref. 14, 1983) investigated the distribution of PCB substitutes in the Fox River system of Wisconsin. He found *m*-IPBP and *p*-IPBP in the wastewater discharge of a deinking-recycling paper mill that used mixed waste paper. He also detected the compounds in walleyed pike collected in the lower Fox River downstream from the discharge site.

A monitoring study performed by the State of Wisconsin (Ref. 15, St. Amant et al., 1983) during 1978–81 revealed the presence of IPBP in fish from several other locations in Green Bay and Sturgeon Bay.

II. *Chemical fate information*—A. *Transport.* The high log octanol/water partition coefficients (between 5 and 7) and the low water solubilities indicate that these compounds are likely to sorb strongly to sediment and suspended matter in receiving waters. Suspended matter can be transported over large distances. There is insufficient information to determine the extent that these compounds are transported. As stated above, IPBP was found in fish downstream from the point of discharge.

B. *Persistence.* Westinghouse (Ref. 23, 1977) performed tests with a mixture containing 98.9 percent IPBP (Wemcol®). In a river die-away study using river water and sediment, greater than 80 percent of the mixture (concentration unspecified) was biodegraded in 48 hours. In a sewage sludge test, 60 percent biodegradation occurred in 24 hours and 100 percent in less than one week. These data suggest facile degradation. However, the presence of IPBP in the discharge of the paper mill after wastewater treatment and in fish several miles away indicates either that IPBP does not readily biodegrade or that at high concentrations (as are likely to be present in the recycling mill wastewater) bacteria cannot degrade

IPBP fast enough to remove it entirely from the effluent.

C. *Rationale for chemical fate recommendations.* Chemical fate tests to determine the potential for transport and persistence within the aquatic environment should be performed.

III. *Biological effects of concern to human health*—A. *Toxicokinetics and metabolism.* Sullivan et al. (Refs. 16 and 17 1977 1978) presented excretion studies indicating that 4–IPBP is nearly completely absorbed by the gastrointestinal tract of the rat and that 48 hours after administration of a single oral dose or intraperitoneal dose of ^{14}C–IPBP more than 80 percent of the radioactivity was eliminated. The authors noted that 4–IPBP and/or its metabolites were sequestered in fatty tissues and were then released at slower rates into the bloodstream for ultimate metabolism and elimination. The same authors reported on biotransformation of 4–IPBP indicating hydroxylation of the benzene ring and oxidative reactions of the isopropyl chain.

B. *Mutagencity.* Cline and McMahon (Ref. 5, 1977) and McMahon et al. (Ref. 12, 1979) studied the mutagenic activity of 4-IPBP in 10 microbial strains over a 10,000-fold concentration gradient with and without metabolic activation and it was found to be inactive. Other studies (Ref. 11, Litton Bionetics, 1976) demonstrated no mutagenic activity in assays conducted either in the presence or absence of a liver-activation system.

C. *Short-term (acute) effects.* Cannon (Ref. 3, 1975a) and Westinghouse (Ref. 23, 1977) reported acute oral LD_{50} values for IPBP in rats of 4.7 and 8.5 g/kg, respectively. During toxicity studies in rats and dogs, 4-IPBP produced erosions and ulcerations of the upper gastrointestinal mucosa, degenerative changes in kidney tubules, and papillary necrosis (Ref. 20, Todd et al., 1975).

Sullivan et al. (Ref. 17 1978) performed 90-day toxicity studies with IPBP and noted nephrotoxicity, renal lesions, and small calculi in the renal pelvis and bladder.

When IPBP was administered orally to rats at 800 mg/kg/day for 10–15 days, it caused neutropenia, lymphocytosis, hypoproteinemia, dystrophy of the liver and kidneys, hyperplasia in the spleen, and hypertrophy in myocardial fibers (Ref. 22, Volodchenko et al., 1973).

D. *Skin absorption and irritation studies.* Several studies showing IPBP to be a skin irritant have been reported (Refs. 6, 23, and 4, Haley et al., 1959; Westinghouse, 1977· Cannon 1975b).

E. *Carcinogenicity, teratogenicity, embryotoxicity, and fetotoxicity.* No information was found.

F *Observations in humans.* Levy and Hanoa (Ref. 10, 1982) reported that office workers complained of an unpleasant odor from a new set of self-copying paper forms. The workers complained also of headaches, irritation, fatigue, and redness of the eyes and face. The odor was attributed to the release of IPBP solvent from the sheets, which were impregnated with both color former and developer on the front and capsules with color former on the back. The complaints gradually disappeared after the suspect forms were replaced with forms from another manufacturer.

Kleinman and Horstman (Ref. 7 1982) presented a preliminary report of health complaints attributed to the use of carbonless copy paper containing IPBP Of the exposed office workers on the campus of the University of Washington who responded to a questionnaire, 26.8 percent reported health problems associated with the use of carbonless copy paper and 14.0 percent reported some health effects but were uncertain if these effects were related to the use of the paper. The authors reported a stastisically significant association between the number of complaints and the amount of paper used.

G. *Rationale for health effects recommendations.* There is a potential for dermal exposure to IPBP and DIPBP particularly as a result of their use in carbonless copy paper. Also there is a potential for human exposure through consumption of fish and drinking water contaminated with the compounds. In view of reports of adverse health effects following exposure of office workers to copy paper containing the compounds, adverse effects in laboratory animals, and lack of chronic toxicity data, it is recommended that 2-year chronic toxicity testing be undertaken, with emphasis on evaluating funther neurotoxic and kidney effects.

IV *Ecological effects of concern*—A. *Short-term (acute) effects.* According to Westinghouse (Ref. 23, 1977), the 96-hour LC_{50} values of Wemcol® (98.9% IPBP) for bluegills and rainbow trout are 4.0 and 2.5 mg/L, respectively. These tests were static tests, and the concentrations of IPBP were not measured in the test waters. These LC_{50} values substantially exceed the reported water solubility limit of 0.051 mg/L (Ref. 13, Ozburn et al., 1980).

Ozburn et al. (Ref. 13, 1980) performed 96-hour flow-through toxicity tests with Wemcol® and flagfish (*Jordanella floridae*). An acetone carrier was used to help solubilize the compound in the test water. The LC_{50} values for young and adult fish based on measured test concentrations of IPBP were 0.28 mg/L and greater than 0.75 mg/L, respectively. These values also exceed the reported solubility limit in water. Therefore, the aquatic toxicity data should be confirmed.

B. *Long-term (chronic) effects.* Ozburn et al. (Ref. 13, 1980) performed a 31-day test to investigate the potential effects of Wemcol® on reproduction of flagfish. After spawning had begun in all test aquaria, five concentrations of Wemcol® were introduced into the test aquaria. After exposure during a 21-day spawning period, fry survival was investigated over an additional 10-day exposure period. Exposure to Wemcol® had an effect on the adult fish; three of seven died at the 0.42 mg/L exposure level, and one each died at the 0.2 and 0.1 mg/L concentrations, respectively. Although there were apparently no adverse effects on reproduction, fry survival was reduced at a measured IPBP concentration of 0.43 mg/L.

C. *Bioconcentration and food-chain transport.* Ozburn et al. (Ref. 13, 1980) performed a 28-day uptake, 14-day depuration bioconcentration test with flagfish. Fish were exposed to mean IPBP concentrations of 3.5 and 24.1 µg/L. Using the BIOFAC computer program developed by Blau and Agin (Ref. 2, 1978), the bioconcentration factors for the low and high exposures were estimated to be 2,896 and 10,790, respectively. The times to 90 percent steady-state for the low and high exposures were 9.6 and 5.3 days, respectively. The time to 50 percent clearance at both exposure levels was less than 3 days.

D. *Rationale for ecological effects recommendations.* IPBP and DIPBP have been detected in the aquatic environment. Through their continued use in carbonless copy paper and as a dielectric fluid, there remains a potential for environmental release.

No data were found on the toxicity of DIPBP and the aquatic toxicity data for IPBP need confirmation. The inconsistency in the toxicity data with regard to reported solubility indicates that acute toxicity values may be lower than presently measured. The data indicate that IPBP is toxic to fish at concentrations of less than 1 mg/L. There are no data on the effects of the compound on aquatic invertebrates such as *Daphnia magna.* Because of the suspected toxicity at less than 1 mg/L and the high bioconcentration potential of these compounds, chronic toxicity tests should be performed below the limits of solubility. An early life-stage test with at least one fish (rainbow trout) and a life-cycle test with at least one invertebrate (*Daphnia magna*)

should be performed. Bioconcentration tests with fish should also be performed.

Because of the uncertainties concerning the fate and persistence of these compounds, laboratory microcosm studies are recommended. These studies would determine distribution of the compounds in test animals, sediment, and water column of the test system and would measure the effects on benthic and water-column species.

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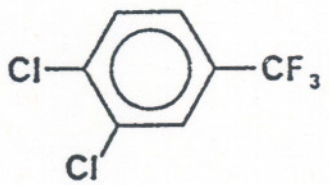
2.3.a *3,4-Dichlorobenzotrifluoride. Summary of recommended studies.* It is recommended that 3,4-dichlorobenzotrifluoride (DCBTF) be tested for the following:

A. Chemical Fate:
Water solubility
Octanol/water partition coefficient
Persistence
Soil mobility
B. Health Effects:
Toxicokinetics
Genotoxicity
Subchronic effects
Chronic effects including oncogenicity
C. Ecological Effects:
Acute and chronic toxicity to fish, aquatic invetebrates, and algae
Bioconcentration

Physical and Chemical Information

CAS Number: 328–84–7

Synonyms:
Benzene, 1,2-xdichloro-4-(trifluoromethyl)-(9 Cl).
3,4-Dichloro-α, α, α-trifluorotoluene.
Structural Formula:



Empirical Formula: $C_7H_3Cl_2F_3$.
Molecular Weight: 215.
Melting Point: −12° C.
Boiling Point: 170° C.
Vapor Pressure: 2 mmHg at 25° C.
Specific Gravity: 1.47
Solubility in water: 25 mg/L. (estimated; Ref. 6, Lyman et al., 1982).
Log Octanol/Water Partition ficient: 4.7 (estimated; Ref. 6, Lyman et al., 1982).
Description of Chemical: Clear liquid.

Rationale for Recommendations

I. *Exposure information*—A. *Production/use/disposal.* The only recent manufacturer of 3,4-dichlorobenzotrifluoride (DCBTF) in the United States has reported that the company no longer makes the compound (Ref. 7 Occidental, 1983). However, U.S. importation of the compound in recent years reached a peak of approximately 3.5 million pounds in 1981 as shown below (Refs. 13 and 14, USITC, 1980–83):

Year and volume imported

	Pounds
1979	500,507
1980	922,852
1981	3,432,106
1982	143,511

The compound is used as a raw material in the manufacture of other chemical intermediates. It is estimated that inhalation exposure occurs to workers at an average concentration of less than 10 ppm (Ref. 8, Rohm and Haas, 1982). Environmental releases to air and water from industrial processing have been reported (Ref. 8, Rohm and Haas, 1982). In addition, disposal of the compound in landfills is believed to be the source of DCBTF found in river water (Ref. 2, Elder et al., 1981).

B. *Evidence for exposure.* The compound has been found at concentrations of 0.02 to 0.28 mg/kg in the edible portion of fish sampled from the Niagara River (Ref. 16, Yurawecz, 1979). Elder et al. (Ref. 2, 1981) found DCBTF in water and/or sediment samples taken from Bloody Run Creek.

The creek drains the Hyde Park landfill and flows into the Niagara River. The concentrations were estimated to be on the order of 0.1 to 1 ppb in the water and 0.5 to 2 ppm in the sediment.

II. *Chemical fate information*—A. *Transport.* The fact that DCBTF has been found in the creek that drains the Hyde Park landfill demonstrates that DCBTF can be transported in water (Ref. 2, Elder et al., 1981).

B. *Persistence.* The compound is expected to persist in the aquatic environment as evidenced by the concentrations of DCBTF found in Niagara River fish (Ref. 16, Yurawecz, 1979). In an anaerobic biodegradation test with 4-chlorobenzotrifluoride (*p*-CBTF), a structural analog of DCBTF, only 64 percent of the compound was converted to gaseous products during a 59-day test (Ref. 3, EPA, 1984). Because of the volatility of *p*-CBTF an attempt to determine aerobic biodegradation was unsuccessful; and in a 28-day test to determine photolysis, there was no degradation of this analog.

C. *Rationale for chemical fate recommendations.* Although DCBTF is expected to persist in the aquatic environment, information is needed to quantify the removal during wastewater treatment and the rates of biodegradation in receiving waters.

III. *Biological effects of concern to human health*—A. *Toxicokinetics (absorption, distribution, and excretion).* No texicokinetic data have been found, but the estimated log P of 4.7 suggests that the chemical may accumulate in body lipids.

B. *Metabolism.* No information was found.

C. *Mutagenicity.* No data on DCBTF were found. The analog 4-chlorobenzotrifluoride was positive in an unscheduled DNA synthesis assay (EUE cells) and in a sister-chromatid exchange study (Ref. 4, Hooker, 1981).

D. *Short-term (acute) effects.* The acute LC_{50} (oral) and LD_{50} (inhalation) studies with DCBTF in the rat resulted in values of 1.15 g/kg and >2,000 pm (1-hour exposure), respectively (Ref. 8, Rohm and Hass, 1982); a 24-hour skin painting study in the rabbit indicated an LD_{50} value of >5.0 g/kg.

E. *Long-term (subchronic/chronic) effects.* No information was found on neurotoxicity, behavioral toxicity, oncogencity, or other chronic effects. However, 90-day subchronic study of the analog *p*-CBTF demonstrated "renal tubular degeneration" in all male rats at doses of 40, 150, and 500 mg/kg and "centrilobular hypertrophy" in the livers of male and female rats (Ref. 3, EPA 1984).

F *Reproduction.* No information was found.

G. *Teratogencity.* No information was found.

H. *Rationale for health effects recommendations.* There is concern for the cumulative toxicological effects of long-term worker exposure to the compound. This concern is enhanced by the observed chronic ecological effects at low doses (see section IV). Also, bioaccumulation potential of the compound is cause for concern for human exposure through food-chain transport. Based on these concerns and the absence of health-effects data, it is recommended that toxicokinetic, genotoxic, subchronic, and chronic studies, including oncogenicity studies, be conducted to evaluate the hazards of the compound.

IV *Ecological effects of concern*—A. *Short-term (acute) effects.* No studies have been found on the acute toxicity of DCBTF· however, studies are available on *p*-CBTF In static, acute toxicity tests with the bluegill, rainbow trout, and *Daphnia magna* the LC_{50} values ranged from 12 to 13.5 mg/L for *p*-CBTF (Refs. 9, 10, and 11, UCES, 1979a, 1979b, 1979c).

B. *Long-term (subchronic/chronic) effects.* No data were found on DCBTF In a daphnid life-cycle test with *p*-CBTF effects were observed at concentrations much lower than those that caused acute effects. The maximum acceptable toxicant concentration (MATC), based on measured concentrations, ranged between 0.030 and 0.050 mg/L while the 21-day LC_{50} was 0.071 mg/L (Ref. 12, UCES, 1979d). The MATC from a 30-day early life-stage test with the fathead minnow was >0.54 and <1.40 mg/L (Ref. 1, EG&G, Bionomics, 1981).

C. *Bioconcentration and food-chain transport.* No test data on DCBTF were found. Based upon an estimated log P of 4.7 the expected bioconcentration factor (BCF) using the equation of Veith et al. (Ref. 15, 1979) would be 2000. The BCF for *p*-CBTF in bluegills was determined to be in the range of 122 to 202 (Ref. 3, EPA, 1984). These values are in fairly good agreement with a BCF of 279, estimated using the Veith et al. equation and a log P of 3.7.

Based upon the expected persistence and bioconcentration potential of DCBTF food chain transport may occur.

D. *Rationale for ecological effects recommendations.* No data have been found on the aquatic toxicity of DCBTF However, because of its higher level of chlorination and higher estimated log P the compound is expected to be more toxic than p-CBTF DCBTF has an estimated log P of 4.7 as compared with an estimated log P of 3.7 for *p*-CBTF Based upon the model developed by Konneman (Ref. 5, 1981), the estimated LC_{50} in fish for DCBTF and *P*-CBTF would be 1.3 and 8.0 mg/L, respectively.

Since *p*-CBTF has been found to cause chronic effects on daphnids at 0.050 mg/L, a concentration 240 times lower than the concentration that caused acute toxic effects, the major concern for DCBTF is its potential for chronic effects on invertebrates at very low concentrations.

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[OPPE-FRL 2594-2]

Agency Information Collection Activities Under OMB Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Section 3507(a)(2)(B) of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires the Agency to publish in the Federal Register a notice of proposed information collection requests (ICRs) that have been forwarded to the Office of Management and Budget for review. The ICR describes the nature of the solicitation and the expected impact, and, where appropriate, includes the actual data collection instrument. The following ICRs are available to the public for review and comment.

FOR FURTHER INFORMATION CONTACT: David Bowers; Office of Standards and Regulations; Regulation and Information Management Division (PM-223); U.S. Environmental Protection Agency; 401 M Street, SW., Washington, D.C. 20460; telephone (202) 382-2742 or FTS 382-2742.

SUPPLEMENTARY INFORMATION:

Hazardous Waste Programs

- Title: Information Requirements for Hazardous Waste Storage and Treatment Facilities (EPA #0814).

Abstract: Tank and container facilities must obtain an operating permit from EPA under the Resource Conservation and Recovery Act (RCRA). Respondents submit the required information voluntarily or when EPA requests Part B of the RCRA permit. The Agency will use the information to determine eligibility for a RCRA permit.

Respondents: Owners/operators of hazardous waste storage tank and container facilities.

Comments on all parts of this notice should be sent to:

David Bowers (PM-225), U.S. Environmental Protection Agency, Office of Standards and Regulations, Regulation and Information Management Division, 401 M Street, SW., Washington, D.C. 20460, and

Carlos Tellez, Office of Management and Budget, Office of Information and Regulatory Affairs, New Executive Office Building (Room 3228), 726 Jackson Place, NW., Washington, D.C. 20503.

Daniel J. Fiorino,

Acting Director, Regulation and Information Management Division.

[FR Doc. 84-14057 Filed 5-25-84 8:45 am]
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[OPTS-211012B; TSH-FRL 2595-8]

Response to Citizen's Petition on Asbestos; Regional Public Meetings

AGENCY: Environmental Protection Agency (EPA).

ACTION: Response to Citizen's Petition; Notice of Regional Public Meetings.

SUMMARY: EPA will hold three regional public meetings as part of its effort to gather data and hear arguments on current options for asbestos abatement in schools and public buildings, pursuant to the EPA response to a citizen's petition. Those wishing to request time for statements at the meeting should contact the TSCA Assistance Office as indicated in "FOR FURTHER INFORMATION CONTACT" below.

DATES: Places and dates: The meetings will take place at the following locations and dates:.

June 14, 1984—Holiday Inn Civic Center, The Gold Room, 50 8th Street, San Francisco, California

June 20, 1984—Dirksen Building, 219 South Dearborn Street, Court Room 2525, Chicago, Illinois

June 28, 1984—Gardiner Auditorium, State House, State Capitol Building, Beacon Street, Boston, Massachusetts2

All meetings will begin at 9 a.m. and adjourn by 4:30 p.m.

FOR FURTHER INFORMATION CONTACT: Edward A. Klein, Director, TSCA Assistance Office (TS-799), Office of Toxic Substances, Environmental Protection Agency, Rm. E-543, 401 M St., SW., Washington, D.C. 20460, Toll Free: (800-424-9065), In Washington, D.C.. (554-1404), Outside the USA: (Operator-202-554-1404).

SUPPLEMENTARY INFORMATION: On November 16, 1983, the Service Employees International Union (SEIU) petitioned EPA, under section 21 of TSCA, to initiate rulemaking to require the abatement of friable asbestos-containing materials in public and private elementary and secondary schools. In addition, the petition requested rulemaking concerning the inspection and abatement of friable asbestos-containing materials in public and commercial buildings.

The specific points of the petition submitted by the SEIU are enumerated below:

1. Establish standards for determining when friable asbestos-containing materials in schools are hazardous.

2. Establish requirements for corrective action when friable asbestos-containing materials are determined to be hazardous.

3. Establish requirements for inspection and abatement of friable asbestos-containing materials in public and commercial buildings.

4. Establish standards for the performance of abatement activities, including standards for the protection of persons performing such activities.

The Agency granted the petitioner s requests as published in the Federal Register of April 17, 1984 (49 FR 15094). In granting the petition, the Agency agreed to hold a public meeting on May 7, 1984 to hear testimony from experts on how EPA should modify the Asbestos-in-Schools program. This meeting provided an opportunity for industry, unions, trade associations, public interest groups and other interested parties to furnish information and express their views orally on the details of what the Agency should include in its rulemaking proposals. In response to a subsequent petition, the Agency is conducting three regional meetings on this topic to be held in San Francisco, California, Chicago, Illinois and Boston, Massachusetts.

A copy of the petition and all related information and the administrative record in this proceeding are in Rm. E-107 Environmental Protection Agency, 401 M St., SW., Washington, D.C. 20460. Interested persons may view or copy these materials between 9 a.m. and 4 p.m., Monday through Friday, excluding legal holidays.

Dated: May 21, 1984.

Edwin F. Tinsworth,

Acting Director, Office of Toxic Substances.

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