

Coordination Act. General comments concerning the project and its resources are requested; however, specific terms and conditions to be included as a condition of exemption must be clearly identified in the agency letter. If an agency does not file terms and conditions within this time period, that agency will be presumed to have none. Other Federal, State, and local agencies are requested to provide comments they may have in accordance with their duties and responsibilities. No other formal requests for comments will be made. Comments should be confined to substantive issues relevant to the granting of an exemption. If an agency does not file comments within 45 days from the date of issuance of this notice, it will be presumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.

Dated: November 13, 1985.

Kenneth F. Plumb,

Secretary.

[FR Doc. 85-27456 Filed 11-18-85; 8:45 am]

BILLING CODE 6717-01-M

ENVIRONMENTAL PROTECTION AGENCY

[OPTS-41020 FRL-2924-6]

Seventeenth 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 Seventeenth Report to the Administrator of EPA on November 1, 1985. This report, which revises and updates the Committee's priority list of chemicals, adds three chemicals to the list for priority consideration by EPA in the promulgation of test rules under section 4(a) of the Act. The new chemicals are cyclohexane, 2,6-di-*tert*-butylphenol, and diisodecyl phenyl phosphite. None of these chemicals is designated for response within 12 months. The Seventeenth 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. ITC also notes the removal of 7 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 December 19, 1985. Focus Meetings will be held on December 16, 1985.

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-41020).

The public record supporting this action, including comments, is available for public inspection in Rm. E-107 at the address noted above from 8 a.m. to 4 p.m. Monday through Friday, except legal holidays. Focus Meetings will be held at EPA Headquarters, Rm. 2 South Conference Area, 401 M St., 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 one week 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 USA: (Operator-202-554-1404).

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

I. Background

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 under section 4(a) 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 Seventeenth Report was received by the Administrator on November 1, 1985, and follows this Notice. The Report adds three substances to the TSCA section 4(e) priority list.

II. New Section of 4(e) Priority List

The Seventeenth Report establishes a third section of the priority list. This new section is Part B of the list and contains those chemicals and categories of chemicals "recommended with intent-to-designate." Part A continues to list those chemicals, mixtures, and categories designated for priority consideration and response by EPA within 12 months, and Part C contains those chemicals, mixtures, and categories that have been recommended for priority consideration without being designated for response within 12 months.

The information received following recommendation with intent-to-designate of a chemical, mixture, or category of chemicals may influence the committee either to designate or not designate that chemical mixture, or category for EPA response within 12 months. That decision would be announced in a subsequent report to the Administrator.

III. 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 three substances recommended in the ITC's Seventeenth 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 three 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.

Focus Meetings will be held to discuss relevant issues pertaining to the 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 on December 16, 1985 at EPA Headquarters, Rm. 2 South Conference Area, 401 M St., 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: 9:30 a.m., cyclohexane; 1 p.m., 2,6-di-tert-butylphenol; 2 p.m., diisodecyl phenyl phosphite.

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

All written submissions should bear the identifying docket number (OPTS-41020).

IV. Status of List

In addition to adding the three recommendations to the priority list, the ITC's Seventeenth Report notes the removal of seven 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 Sixteenth Report, EPA responded to the ITC's recommendations for seven additional chemicals. The seven chemicals removed and the dates of publication in the Federal Register of EPA's responses to the ITC for these chemicals are: bisphenol A, May 17, 1985 (50 FR 20691); carbofuran intermediates, July 22, 1985 (50 FR 29761); 2-chloro-1,3-butadiene, August 6, 1985 (50 FR 34546); 1,2-dibromo-4-(1,2-dibromoethyl) cyclohexane, May 8, 1985 (50 FR 19460); diisopropyl biphenyl, May 3, 1985 (50 FR 18920); 2-ethylhexanoic acid, May 17, 1985 (50 FR 20678); isopropyl biphenyl, May 3, 1985 (50 FR 18920).

The current list contains eleven designated substances or groups of substances, two chemicals recommended with intent-to-designate and two recommended substances or groups of substances.

Authority: 15 U.S.C. 2603

Dated: November 8, 1985.

Joseph J. Merenda,
Director, Existing Chemical Assessment
Division.

Seventeenth 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 (ITC), 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 those 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. At least 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 three chemicals, and is noting the removal of seven as a result of responses by EPA.

The Priority List traditionally has been divided into two parts: Part A containing those recommended chemicals and groups designated for priority consideration and response by the EPA Administrator within 12 months, and Part B containing 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 non-designated chemicals and groups, the Committee anticipates that the EPA Administrator will respond in a timely manner. Beginning with this report, the part that

has been called Part B in previous reports will be called Part C.

With this report, the Committee is establishing a third part, to be called Part B, to contain those chemicals and groups "recommended with intent-to-designate." The "recommended with intent-to-designate" category is being established to take advantage of recent rules, published on August 28, 1985, promulgating automatic reporting requirements for non-designated ITC recommendations under the TSCA section 8(a) Preliminary Assessment rule (50 FR 34805) and the TSCA section 8(d) Health and Safety Data Reporting rule (50 FR 34809). The 8(a) and 8(d) rules require the submission to EPA of information on production, use, exposure and unpublished health and safety studies that may not be publicly available. The information received following "recommendation with intent-to-designate" of a chemical or group of chemicals may influence the Committee to either designate or not designate that chemical or group, for EPA response within 12 months, in a subsequent report to the Administrator.

The chemicals 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, NOVEMBER 1985

Chemical/Group	Recommended studies
A. Designated for response within 12 months.	None.
B. Recommended with intent-to-designate: Cyclohexane ¹ (CAS No. 110-82-7).	Health Effects: Chronic toxicity including oncogenicity and neurotoxicity; teratogenicity; reproductive toxicity.
2,6-Di-tert-butylphenol ² (CAS No. 128-39-2).	Health Effects: Toxicokinetics; chronic toxicity. Chemical Fate: Persistence in aerobic and anaerobic sediments. Ecological Effects: Acute toxicity to benthic organisms; bioconcentration in benthic organisms.
C. Recommended without being designated for response within 12 months: Diisodecyl phenyl phosphite ³ (CAS No. 25550-98-5).	Health Effects: Toxicokinetics; subchronic toxicity including neurotoxicity.

CA Index Names (9 CI)

¹ Cyclohexane.

² Phenol, 2,6-bis(1,1-dimethyl ethyl)-

³ Phosphorous acid, diisodecyl phenyl ester.

TSCA Interagency Testing Committee Statutory Member Agencies and Their Representative

Council on Environmental Quality
Harvey Doerksen, Member
Department of Commerce
Bernard Greifer, Member and

Chairperson
 Environmental Protection Agency
 John D. Walker, Member¹
 Laurence Rosenstein, Alternate¹
 National Cancer Institute
 Elizabeth K. Weisburger, Member
 Richard Adamson, Alternate
 National Institute of Environmental
 Health Sciences
 Douglas Bristol, Member²
 National Institute for Occupational
 Safety and Health
 Rodger L. Tatken, Member
 National Science Foundation
 Rodger W. Baier, Member³
 Jarvis L. Moyers, Alternate⁴
 Occupational Safety and Health
 Administration
 Stephen Mallinger, Alternate

*Liaison Agencies and Their
 Representatives*

Consumer Product Safety Commission
 Marilyn Wind⁵
 Lakshmi Mishra
 Department of Agriculture
 Homer E. Fairchild
 Richard M. Parry, Jr.
 Department of Defense
 Edmund Cummings
 Patrick A. Truman
 Food and Drug Administration
 Arnold Borsetti, Vice Chairperson
 National Toxicology Program
 Dorothy Canter

Committee Staff

Robert H. Brink, Executive Secretary
 Norma Williams, ITC Coordinator

Support Staff

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

Notes

- (1) Appointed on May 30, 1985.
- (2) Appointed on July 24, 1985.
- (3) Appointed on August 28, 1985.
- (4) Appointed on September 16, 1985.
- (5) Appointed on June 27, 1985.

The Committee acknowledges and is grateful for the assistance and support given the ITC 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 that ITC has recommended but not designated for response within 12 months.

At least 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, four 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 priority recommendations are described in previous reports (Ref. 1).

1.2 *Committee's previous reports.* Sixteen previous reports to the EPA Administrator have been issued by the Committee and published in the **Federal Register** (Ref. 1). Ninety-one entries (chemicals and groups of chemicals) were recommended for priority consideration by the EPA Administrator and designated for response within 12 months. In addition, one chemical and one group of chemicals were recommended without being so designated.

1.3 *Committee's activities during this reporting period.* Between April 1, 1985, and September 30, 1985, the Committee continued to review chemicals from its fourth and fifth scoring exercises, and from nominations by Member Agencies, Liaison Agencies and State Agencies.

The Committee contacted chemical manufacturers and trade associations to request information that would be of value in its deliberations. Most 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 reviewed available information on 85 chemicals. Three chemicals were selected for addition to the section 4(e) Priority List, and 18 were deferred indefinitely. The remaining chemicals are still under study.

On April 4, 1985, the ITC published an Intent-to-Designate notice (50 FR 13419) that listed three chemical substances and described additional information needed by the ITC to reach a more informed decision on whether or not to designate the chemical substances in a subsequent report to the EPA Administrator. The three chemical substances were 1H-benzotriazole (CAS No. 95-14-7), C.I. Pigment Green (CAS No. 1328-53-6) and N-ethyl-N-benzylaniline (CAS No. 92-59-1). A deadline of September 1, 1985 was provided for receipt of relevant information.

Information was received on aquatic toxicity, persistence and measured amounts in various environmental water samples for 1H-benzotriazole. The information shows that 1H-benzotriazole is unlikely to be present in the environment at concentrations that will cause significant environmental effects. The ITC has decided to defer indefinitely further consideration of 1H-benzotriazole.

Information received on Pigment Green 7 shows that the water solubility of this pigment is in the range 2×10^{-16} to 7×10^{-19} mg/L at 20 °C. The major purpose in obtaining information on water solubility was to evaluate data from aquatic toxicity tests using the pigment entirely in solution. The extremely low water solubility of Pigment Green 7 obviates aquatic toxicity testing of that sort. The ITC has decided to defer indefinitely further consideration of Pigment Green 7.

None of the requested information was received on N-ethyl-N-benzylaniline. However, other information received by the Committee shows that N-ethyl-N-benzylaniline is: (1) Produced at only one location in the U.S., (2) used as an intermediate in the production of dyes and (3) released to wastewater treatment facilities in low to moderate amounts where it is expected to sorb to sludge solids. Given the potential for low releases to surface waters at just one geographical location, the Committee has decided to defer indefinitely further consideration of N-ethyl-N-benzylaniline.

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 three chemicals: cyclohexane; 2,6-di-*tert*-butylphenol; and diisodecyl phenyl phosphite. None of these chemicals is 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.

Seven 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 listed in the following Table 2 with citations to EPA responses:

TABLE 2.—REMOVALS FROM THE TSCA SECTION 4(e) PRIORITY LIST, APRIL 1, 1985 THROUGH SEPTEMBER 30, 1985

Chemical/Group	EPA responses	
	Federal Register citation	Publication date
Bisphenol A.....	50 FR 20691.....	May 17, 1985.
Carboluran intermediates.....	50 FR 29761.....	July 22, 1985.
2-Chloro-1, 3-butadiene.....	50 FR 34546.....	Aug. 26, 1985.
1,2-Dibromo-4-(1,2-dibromoethyl) cyclohexane.....	50 FR 19460.....	May 8, 1985.
Diisopropyl biphenyl.....	50 FR 18920.....	May 3, 1985.
2-Ethylhexanoic acid.....	50 FR 20678.....	May 17, 1985.
Isopropyl biphenyl.....	50 FR 18920.....	May 3, 1985.

Removal of 74 entries was noted in previous reports (Ref. 1). To date, 81 chemicals and groups of chemicals have been removed from the Priority List.

With the three recommendations and seven removals noted in this report, 15 entries now appear on the section 4(e) Priority List. The Priority List is divided in the following Table 3 into three parts; namely, Table A, Chemicals and Groups of Chemicals Designated for Response Within 12 Months, Table B, Chemicals and Groups of Chemicals Recommended with Intent-to-Designate, and Table C, Chemicals and Groups of Chemicals Recommended Without Being Designated for Response Within 12 Months. Table 3 follows:

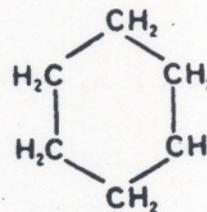
TABLE 3.—THE TSCA SECTION 4(e) PRIORITY LIST, NOVEMBER 1985

Entry	Date of designation
A. Chemicals and Groups of Chemicals Recommended and Designated for Response Within 12 Months	
1 Anthraquinone.....	Nov. 1984.
2. Cumene.....	Nov. 1984.
3. Mercaptobenzothiazole.....	Nov. 1984.
4. Methylcyclopentane.....	May 1985.
5. Octamethylcyclotetrasiloxane.....	Nov. 1984.
6. Pentabromoethylbenzene.....	Nov. 1984.
7. Sodium <i>N</i> -methyl- <i>N</i> -oleoylaurine.....	Nov. 1984.
8. Tetrabromobisphenol A.....	May 1985.
9. Triethylene glycol monomethyl ether.....	May 1985.
10. Triethylene glycol monoethyl ether.....	May 1985.
11. Triethylene glycol monobutyl ether.....	May 1985.
B. Chemicals and Groups of Chemicals Recommended With Intent-To-Designate	
1. Cyclohexane.....	Nov. 1985.
2. 2,6-Di- <i>tert</i> -butylphenol.....	Nov. 1985.
C. Chemicals and Groups of Chemicals Recommended Without Being Designated for Response Within 12 Months	
1. 3,4-Dichlorobenzotrifluoride.....	May 1984.
2. Diisodecyl phenyl phosphite.....	Nov. 1985.

Chronic effects including oncogenicity and neurotoxicity (with special emphasis on neuropathology)
Teratogenicity and reproductive toxicity

Physical and Chemical Information

CAS Number: 110-82-7
Synonyms: Hexamethylene;
Hexahydrobenzene
Structural Formula:



Empirical Formula: C₆H₁₂
Molecular Weight: 84
Melting Point: 6.5°C
Boiling Point: 80.7°C
Vapor Pressure: 100 mmHg at 25.5°C
Specific Gravity: 0.7781 (20/4°C)
Solubility in Water: 55 mg/L at 25°C (Ref. 18, Kirk-Othmer, 1983)
Solubility in Organic Solvents: Soluble in ethanol, ether, acetone, benzene, petroleum ether, and carbon tetrachloride
Log Octanol/Water Partition Coefficient: 3.18 (estimated; Ref. 20, Konemann, 1981)
Description of Chemical: Colorless, flammable, mobile liquid with bland to slightly pungent odor depending on presence of impurities

Rationale for Recommendations

I. *Exposure information*—A. *Production/use.* Cyclohexane is currently produced by nine domestic manufacturers (Ref. 5, CEH, 1983; Ref. 10, Exxon, 1984; Ref. 43, USITC, 1984). In 1983, the U.S. production volume was reported to be 1.66 billion pounds (Ref. 43, USITC, 1984). Annual domestic production capacity is approximately 2.8 billion pounds (Ref. 5, CEH, 1983).

In 1982, approximately 96 percent of the cyclohexane produced was used in the manufacture of adipic acid and caprolactam via cyclohexanol and cyclohexanone, respectively. The rest was principally consumed in solvent uses. In 1981, about 5 percent of the cyclohexane produced was used as a solvent for cellulose ethers, essential oils, rubber, and paint strippers (Ref. 5, CEH, 1983; Ref. 6, CPS, 1982).

Adipic acid and caprolactam are raw materials used in the production of nylon-6,6 and nylon-6, respectively. Adipic acid, cyclohexanol, and cyclohexanone are also used as solvents and as intermediates in the manufacture

Reference

(1) Sixteenth Report of the TSCA Interagency Testing Committee to the Administrator, Environmental Protection Agency. TSCA Interagency Testing Committee, May 21, 1985, 50 FR 20930-20939. Includes references to Reports 1 through 15 and annotative list of removals.

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 three chemical substances to the section 4(e) Priority List: cyclohexane; 2,6-di-*tert*-butylphenol; and diisodecyl phenyl phosphite. 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.

Sections 2.3 and 2.4 of this report present the recommendations and supporting rationales. Section 2.3 presents two recommendations with intent-to-designate. Section 2.4 presents one recommendation without designation for response within 12 months.

2.2 *Chemicals designated for response within 12 months. None.*

2.3 *Chemicals recommended with intent-to-designate but not designated for response within 12 months.*

2.3.a Cyclohexane (9 CI)
Summary of recommended studies. It is recommended that cyclohexane be tested for the following:

Health Effects:

of plasticizers and polyurethane resins (Ref. 5, CEH, 1983).

B. Evidence for exposure. The National Occupational Hazard Survey, conducted by the National Institute of Occupational Safety and Health (Ref. 25, NIOSH, 1976) from 1972 to 1974, estimated that 68,863 workers in 4,653 plants were potentially exposed to cyclohexane in the workplace in 1970. Preliminary data from the more recent National Occupational Exposure Survey, conducted by NIOSH from 1980 to 1983, indicated that 42,560 workers, including 12,020 women, were potentially exposed to the compound in the workplace in 1980 (Ref. 26, NIOSH, 1984).

The 8-hour time-weighted average (TWA) permissible exposure limit (PEL) for cyclohexane is 300 ppm (1050 mg/m³) based on its potential to cause eye and mucous membrane irritation (Ref. 29, OSHA, 1983); the 8-hour TWA threshold limit value is the same (Ref. 1, ACGIH, 1985). In plant inspections conducted by the Occupational Safety and Health Administration (Ref. 30, OSHA, 1985) from 1981 through 1985, cyclohexane levels in 114 workplace atmosphere samples ranged from not detected to 227 ppm. Available industry monitoring data indicate that cyclohexane concentrations are below the PEL. For example, the arithmetic mean of 56 personal 8-hour TWA samples with potential cyclohexane exposure was determined to be 1.77 ppm (Ref. 40, Texaco, 1984); and, based on 3,586 air samples (personal and area) taken at four facilities with potential cyclohexane exposure (Ref. 35, Phillips, 1984), the average concentrations of cyclohexane ranged from 0.20 to 0.54 ppm and the maximum concentrations ranged from 0.44 to 113 ppm.

Workers may also be exposed to cyclohexane via inhalation or through skin absorption in a wide variety of industries that use the compound. For example, cyclohexane was identified as one of the solvents found in breathing zone samples taken from a number of shoe factors (Ref. 32, Perbellini et al., 1981) in which a commercial hexane mixture was used as a solvent. The percentage concentrations of cyclohexane and n-hexane ranged from 5 to 42 percent and 20 to 60 percent, respectively. These were the highest percentage concentrations noted in the workplace air. The percentage concentrations for other solvents (2-methylpentane, 3-methylpentane, and methylcyclopentane) ranged from 1 to 18 percent. In addition, cyclohexane is present in regular, premium, and unleaded gasoline to the extent of 1.58 volume percent (Ref. 3 API, 1985; Ref. 36,

Sanders and Maynard, 1968); therefore, workers may also be exposed through contact with these refined petroleum products.

General population exposure to cyclohexane may occur, since it has been found in ambient air samples (urban and rural) (Ref. 4, Arnts and Meeks, 1981; Ref. 15, Holzer et al., 1977; Ref. 17, Ioffe et al., 1977), surface water samples (Ref. 9, Ewing et al., 1977), and marine waters (Ref. 22, McAuliffe et al., 1980), suggesting the possibility of widespread dispersal. Additional evidence for population exposure may be inferred from the fact that cyclohexane was qualitatively identified in five of six breast-milk samples taken from women in two states, Pennsylvania, and New Jersey. Cyclohexane was not found in either of two samples from Louisiana (Ref. 42, USEPA, 1985).

Consumer exposure to cyclohexane may occur through dermal contact with, and/or inhalation of, the compound present in paints, paint strippers, and gasoline, and from spills of other refined petroleum products and crude oil.

II. Chemical fate information. Cyclohexane is expected to partition largely to the atmosphere with a portion going into water. Existing data indicate that cyclohexane will not persist in air or in surface waters and will degrade rapidly in both media. Therefore, chemical fate testing is not being recommended at this time.

III. Biological effects of concern to human health—A. Short-term (acute) effects. In an inhalation toxicity test, mice, rabbits, and cats exposed to cyclohexane at 18,000 ppm became recumbent within 30 minutes (Ref. 11, Flury and Zernik, 1931). The oral LD₅₀ for the rat was between 8.0 and 39.0 mL/kg (6.22 and 30.3 g/kg) (Ref. 19, Kimura et al., 1971).

B. Metabolism. Cyclohexane has been shown to be absorbed by several routes including inhalation in humans (Ref. 24, Mutti et al., 1981) and by oral and dermal routes in laboratory animals (Ref. 8, Elliot et al., 1959; Ref. 37, Sandmeyer, 1984). Cyclohexane administered orally to rabbits was found in expired air and urine. It was oxidized predominantly to cyclohexanol and cyclohexanediol, and to a lesser extent to CO₂ (Ref. 8, Elliot et al., 1959). Cyclohexanol appears to be a metabolite of inhaled cyclohexane in humans (Ref. 31, Perbellini and Brugnone, 1980). Cyclohexane inhibits *in vitro* noradrenaline-induced respiration of hamster brown fat cells (Ref. 34, Pettersson, et al., 1980).

In another metabolism and disposition study (Ref. 27, NTP, 1984), following intravenous administration of 0.76 mg/kg [¹⁴C]-cyclohexane to adult male Fischer 344 rats, it was demonstrated that 54 percent of the dose was excreted in the breath in the first hour, 80 percent in 24 hours, and 83 percent in 72 hours. After oral administration at doses of 2,000, 1,000, 200, and 100 mg/kg, 78, 76, 62, and 63 percent, respectively, of the dose was excreted in the breath over 72 hours, with the maximum rate of excretion generally occurring within 2 to 8 hours. In the same experiments, 12, 15, 29, and 29 percent, respectively, of the dose was excreted in urine, compared to 14 percent excreted in urine following the intravenous dose. Greater excretion of polar metabolites in urine following the smaller oral doses is attributed to relatively greater metabolism in liver following absorption from the gastrointestinal tract. No significant excretion of ¹⁴C in feces was observed. Unchanged cyclohexane accounted for 93 to 99 percent of the radiolabel excreted in breath, but less than 0.1 percent of the radiolabel in the urine. A maximum of 0.04–0.4 percent of the dose was excreted in breath as the more toxic cyclohexanone or 0.09 to 0.6 percent as cyclohexanal. Less than 0.1 percent of the dose was excreted in the urine as either of these compounds. Cyclohexane was concentrated primarily in adipose tissues, but these concentrations were very transient and total excretion was quite rapid.

C. Carcinogenicity. There have been no carcinogenicity studies conducted using currently accepted standard testing protocols. It should be noted, however, that cyclohexane was used as a vehicle control in two studies identified in the published literature. One study was designed to evaluate the carcinogenic potential of middle distillates of shale oil and petroleum (Ref. 7, Easley, et al., 1982). The other study compared the tumor-promoting activity of pristane and a series of n-alkanes (Ref. 16, Horton, et al., 1981). Both studies were not of sufficient duration and were conducted in only one rodent species using a limited number of animals. More importantly, neither investigation was designed to directly address the carcinogenicity of cyclohexane. Hence, because of the intended purpose of each study, these investigations must be considered inadequate for evaluating cyclohexane's carcinogenic potential.

D. Genotoxicity. Cyclohexane did not exhibit genotoxic effects in various genotoxicity test systems. It was negative in the Ames test with

Salmonella typhimurium strains TA98, TA100, TA1535, and TA1537 with and without metabolic activation (Ref. 23, McCann et al., 1975; Ref. 28, NTP, 1985); in an unscheduled DNA synthesis test with a human lymphocyte cell culture (Ref. 33, Perocco et al., 1983); in a DNA cell-binding assay with *Escherichia coli* (Ref. 21, Kubinski et al., 1981); and in a mouse lymphoma forward mutation assay and a rat bone marrow cytogenic assay (Ref. 2, API, 1981). In an *in vitro* study (Ref. 39, Seemayer and Manojlovic, 1982), cell cultures of kidneys from Syrian golden hamsters were incubated for 18 hours with cyclohexane at various concentrations (not stated) and subsequently infected with SV40-virus. Inoculation of *in vitro* transformed cells into Syrian golden hamsters induced malignant tumors at high frequency; no other information was given. It was also positive in the SV40 virus-induced cell transformation system (Ref. 39, Seemayer and Manojlovic, 1982).

E. Reproductive effects, teratogenicity and embryotoxicity. No published information was found.

F. Chronic effects. No published information was found.

G. Subchronic effects.—Rats exposed to cyclohexane in an inhalation chamber at concentrations of 300, 1,000 or 2,000 ppm, 6 hours/day, 5 days/week for 2 weeks, showed reduced enzyme activity, especially brain azoreductase (Ref. 38, Savolainen and Pfaffli, 1980). Rabbits exposed to cyclohexane at 434 or 786 ppm for 6 hours/day for 50 days showed no toxic changes in the tissues at the low-dose level and minor microscopic changes in liver and kidneys at the high-dose level (Ref. 41, Treon et al., 1943); however, some of the rabbits died after exposure to cyclohexane at concentrations ranging from 7,400 to 18,500 ppm, 6 hours/day for 10 days.

H. Neurotoxicity. Cyclohexane has been shown to be a central nervous system (CNS) depressant. Observed effects have included dizziness, nausea, and unconsciousness (Ref. 37, Sandmeyer, 1984). At high vapor concentrations, convulsions in rabbits have also been reported (Ref. 14, Gosselin et al., 1984). In addition, cyclohexane has been reported to be suspect in producing classical solvent-induced polyneuropathies (Ref. 10, Exxon, 1984). In a description of a clinical case (Ref. 12, Franco et al., 1979), peripheral neuropathy was identified in an automobile painter exposed to paint solvents. Analysis of environmental air samples indicated the presence of cyclohexane, acetone, toluene, xylene, and isobutyl alcohol in concentrations

below the TLV. No tricresyl phosphate or lead was observed. The authors attributed the presence of neurologic symptoms to cyclohexane exposure, basing their conclusion on the symptoms and the apparent absence of substances with known neurotoxic properties.

In one animal study (Ref. 13, Frontali et al., 1981) six to nine rats were intermittently exposed to cyclohexane (9 to 10 hours/day, 5 to 6 days/week) via inhalation for up to 30 weeks at concentrations of 1,500 and 2,500 ppm. Post-exposure histologic examination of both tissue and sectional preparations from the peripheral nervous system did not reveal any pathologic alteration; the CNS was not examined. In the same study, rats treated with *n*-hexane at 2,500 ppm for 30 weeks and 5,000 ppm for 14 weeks developed solvent-induced giant axonal neuropathies.

The experimental evidence accumulated to date, relative to cyclohexane's neurotoxic potential, is very limited. The human experience and the conclusion drawn may be questionable (Ref. 12, Franco et al., 1979), and the animal study (Ref. 13, Frontali et al., 1981) reflects data obtained from histologic observations of only the peripheral nervous system (and not the CNS) following 30 weeks of exposure. No definitive experimental data appear to exist in the published literature on the potential of cyclohexane to induce pathologic changes, not necessarily in the peripheral nervous system but more importantly in the CNS, following long-term chronic exposure.

I. Rationale for health effects recommendations. The large production volume and many of the uses of cyclohexane indicate the potential for widespread human exposure. The number of workers occupationally exposed is high, and there is the possibility for general population exposure from cyclohexane's use as a solvent. Cyclohexane has also been detected in body fluids and in ambient air and water. Data are lacking on chronic effects, including oncogenicity. In particular, there is an absence of information on the neurotoxicity (with special emphasis on extensive pathologic examination of the CNS) of cyclohexane following long-term chronic exposure. In addition, no data are available on potential teratogenic and reproductive effects resulting from exposure to this chemical. Based on the potential for human exposure and the lack of adequate information on the health effects of cyclohexane, a chronic toxicity study, including both oncogenicity and neurotoxicity is

needed, as well as testing for teratogenic and reproductive effects.

IV. Ecological effects. Several static acute toxicity tests with aquatic organisms have indicated moderate toxicity (LC₅₀ values greater than 10 and less than 100 mg/L), but measured environmental concentrations (low µg/L or less) and expected rapid degradation in air and water suggest that cyclohexane will not cause adverse ecological effects at concentrations likely to be found in the environment. Therefore, ecological effects testing is not being recommended at this time.

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2.3.b 2,6-Di-*tert*-butylphenol

Summary of recommended studies. It is recommended that 2,6-di-*tert*-butylphenol (DTBP) be tested for the following:

A. Chemical Fate:

Persistence in aerobic and anaerobic sediments

B. Health Effects:

Toxicokinetics
Chronic toxicity

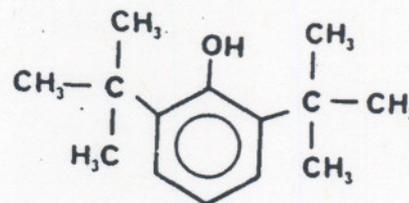
C. Ecological Effects:

Acute toxicity to benthic organisms
Bioconcentration in benthic organisms

Physical and Chemical Information

CAS Number: 128-39-2

Synonyms: Phenol, 2,6-bis(1,1-dimethylethyl)-(9 CI); DTBP
Structural Formula:



Empirical Formula: C₁₄H₂₂O

Molecular Weight: 206

Melting Point: 39°C (Ref. 2, Ethyl, 1984)

Boiling Point: 253

Vapour Pressure: <0.01 mmHg at 20°C

Specific Gravity: 0.914

Solubility in Water: 2.5 mg/L (Ref. 4,

Geyer et al., 1981) 0.4 mg/L

(estimated; Ref. 9, Lyman et al., 1982)

solubility Organic Solvents: Soluble in isopentane, methyl ethyl ketone, benzene, ethyl alcohol

Log Octanol/Water Partition

Coefficient: 5.43 (estimated; Ref. 9,

Lyman et al., 1982)

Description of Chemical: Light straw-colored crystalline solid

Rationale for Recommendations

I. Exposure information—A.

Production/use. DTBP is produced by at least two domestic manufacturers. The quantity of DTBP produced domestically is multimillion pounds per year, but the exact production figures are confidential (Ref. 2, Ethyl, 1984).

DTBP is used primarily (about 95 percent of production) as an intermediate in the production of high-molecular-weight hindered phenolic antioxidants (Ref. 2, Ethyl, 1984). These compounds are used to prevent oxidative degradation of synthetic polymers and plastics (e.g., polypropylene) during processing and service. DTBP is also used directly as an oxidation inhibitor and stabilizer for fuel oils, gasoline, plastics, rubber, and other products, and as an intermediate for synthetic resins, pesticides, and other products.

B. Occupational exposure. The National Occupational Hazard Survey conducted by the National Institute for Occupational Safety and Health during 1972-1974 estimated that 2,192 people in six industries were exposed to DTBP in the workplace in 1970 (Ref. 10, NIOSH, 1976). It was reported that occupational exposure to DTBP is confined to reactor operators, maintenance people, and workers involved in bulk shipment, loading and off-loading operations. DTBP is manufactured and used as an intermediate primarily in closed

systems, resulting in minimal workplace exposure. Protective clothing (e.g., gloves, goggles, respirators) and local and mechanical exhaust are recommended to control exposure to dust during handling (Ref. 2, Ethyl, 1984).

C. *Environmental release.* Release to wastewater treatment plants from production of DTBP may occur during washup or cleaning with solvents, and it is anticipated that this would result in the release of 0.002 to 0.004 pounds of

DTBP per day. If entrainment occurs during separation of the aqueous and organic phases, releases to wastewater treatment plants could be greater than 6 pounds per day (Ref. 8, Lopez-Avila and Hites, 1981). Disposal of containers or solvents with a residue of 0.1 to 1 percent DTBP may result in environmental releases of 550 to 5,500 pounds per year from processing. DTBP was tentatively identified in three industrial and one domestic wastewater

treatment facilities. These are unpublished data but a description of the analytical procedures was published by Shackelford et al. (Ref. 12, 1983). Releases of DTBP from use may occur during accidental spills of fuels containing DTBP. Available monitoring data for DTBP are summarized in Table 4. The measured concentrations probably result from processing or use-related releases and not from production. Table 4 follows:

TABLE 4.—MEASURED CONCENTRATIONS OF DTBP IN WASTEWATER, RIVER WATER, AND SEDIMENT

Source of DTBP	Sampling date	Concentration	Reference
Specialities Chemical Plant Wastewater.....	1976-77	0.6 to 0.8 mg/L.....	Ref. 6, Jungclaus et al. (1978).
Downstream river water.....	1976-77	1.6 ug/L.....	Ref. 6, Jungclaus et al. (1978).
Downstream sediment.....	1976-77	0.1 to 150 mg/kg.....	Ref. 6, Jungclaus et al. (1978).
Sediment near plant (0 to 27 cm depth).....	1976-77	0.5 to 180 mg/kg.....	Ref. 8, Lopez-Avila and Hites (1981).
Sediment 1 km downstream.....	1976-77	22 to 760 mg/kg.....	Ref. 8, Lopez-Avila and Hites (1981).

II. *Chemical fate information—A. Transport and persistence.* Based on the estimated low water solubility and high soil sorption coefficient ($K_{oc} > 1,000$) of DTBP, the chemical, if released to landfills, is expected to remain within the landfills. Limited data on activated sludge biodegradation suggest that less than 10 percent of DTBP would volatilize or mineralize, but more than 45 percent would be transformed to metabolites or remain as unextractable residues in sludge after 5 days at 25 C (Ref. 3, Freitag et al., 1982). Extrapolation from these data to sediments suggests that DTBP, or its oxidation products (quinones), might not be readily biodegradable in sediments.

Measurements of DTBP and oxidation products in sediments at concentrations of 70 to 760 ppm and 7 to 38 ppm, respectively, seem to confirm this suggestion (Ref. 8, Lopez-Avila and Hites, 1981).

B. *Rationale for chemical fate recommendations.* Based on the reported multimillion pound production of DTBP, its occurrence in wastewaters, surface waters, and sediments, and its potential to partition to and persist in sediments, data are needed on the persistence of DTBP in aerobic and anaerobic sediments.

III. *Biological effects of concern to human health—A. Carcinogenicity.* No information was found.

B. *Mutagenicity.* No information was found.

C. *Reproductive effects, teratogenicity, embryotoxicity, and fetotoxicity.* DTBP was nontoxic to mothers in fetal resorption studies with rats at a total dose of 0.25 g for 21 days. The DTBP treatment caused large decreases in the number of litters, implantations, and normal fetuses (Ref. 14, Telford et al., 1962).

D. *Special studies.* Animal tests indicate that DTBP is both a mild eye and skin irritant (Ref. 2, Ethyl, 1984). Doses applied were 1.0 to 8.0 g/kg.

E. *Toxicity—1. Short-term (acute) effects.* The acute toxicity of DTBP is summarized in Table 5:

TABLE 5.—ACUTE TOXICITY OF DTBP IN LABORATORY ANIMALS¹

Species	Route	LD ₅₀ (mg/Kg)	References
Mouse.....	Oral.....	2,995	Ref. 1, Cao et al. (1982).
Mouse.....	Intravenous.....	120	Ref. 5, James and Glen (1980).
Rat.....	Oral.....	9,200	Ref. 2, Ethyl (1984).
Rabbit.....	Skin.....	10,000	Ref. 2, Ethyl (1984).

¹ Sex and number of animals not specified.

2. *Subacute/subchronic.* In subacute feeding studies of DTBP in rats, 10 male Sprague-Dawley rats were fed DTBP at a dose level of 4.55 mmol/kg/day for 3 weeks. Six control rats received a laboratory ration. Two of ten rats fed DTBP died of hemorrhaging during the 3 weeks. In the two dead animals, hemorrhages in the epididymis, muscle,

thymus, pleural cavity, cranial cavity, submaxillary lymph node, and intragastric blood pooling were observed. The prothrombin index was significantly decreased in animals given DTBP (Ref. 13, Takahashi and Hiraga, 1978).

F. *Chronic.* No information was found.

G. *Rationale for health effects recommendations.* DTBP is used in applications where there is the potential for human exposure. The short-term toxicity of DTBP does not appear to be high; however, on continued feeding, pronounced effects on the prothrombin index were observed. In addition, DTBP has an irritant action. Therefore, studies

on the toxicokinetics of DTBP are needed, as well as studies to delineate the extent of its chronic toxicity.

IV. Ecological effects of concern—A. Acute effects. No empirical data were found. However, using the data published by Saarikoski and Viluksela (Ref. 11, 1982) and Lipnick et al. (Ref. 7, 1985), and using an estimated log P of 5.43, the LC_{50} to fish is estimated to be about 0.28 mg/L. With respect to this estimate, the effect of steric hindrance on the degree of toxicity is unknown.

B. Chronic effects. No information was found.

C. Bioconcentration. A bioconcentration factor (BCF) of 800 after 1 day was measured in an alga (*Chlorella*) (Ref. 4, Geyer et al., 1981). The measured BCF in a fish (golden orfe), was 660 after 3 days (Ref. 3, Freitag et al., 1982). The estimated BCF of DTBP, based on a log P of 5.43 and using the method of Veith et al., (Ref. 15, 1979) is 8,200; the actual BCF may be lower if DTBP is metabolized.

D. Rationale for ecological effects recommendations. The available test data suggest relatively rapid partitioning of DTBP to biological tissues. Based on this information, the lack of empirical data on toxicity, and the measured concentrations of DTBP in sediments, data are needed on the acute toxicity of DTBP to benthic organisms and on the bioconcentration of DTBP in benthic organisms.

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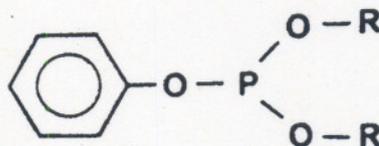
2.4 Chemicals recommended without designation for response within 12 months

2.4.a Diisodecyl phenyl phosphite
Summary of recommended studies. It is recommended that diisodecyl phenyl phosphite (PDDP) be tested for the following:

Health Effects:
Toxicokinetics
Subchronic toxicity including neurotoxicity

Physical and Chemical Information

CAS Number: 25550-98-5
Synonyms: Phenyl diisodecyl phosphite; Phosphorous acid, diisodecyl phenyl ester (9 CI)
Structural Formula:



R = isodecyl

R = isodecyl

Empirical Formula: $C_{26}H_{47}O_3P$

Molecular Weight: 438

Melting Point: No information was found.

Boiling Point: 200°C at 5 mmHg (Ref. 16, Witco, 1982)

Vapor Pressure: <1 mmHg at 20°C (Ref. 16, Witco, 1982)

Specific Gravity: 0.940 25/15.5°C (Ref. 5, Borg-Warner, 1983)

Solubility in Water: Insoluble (Ref. 5, Borg-Warner, 1983); 0.01-20 ppb (estimated)

Solubility in Organic Solvents: Soluble in most common aprotic organic solvents (Ref. 5, Borg-Warner, 1983)

Log Octanol/Water Partition Coefficient: 7.4 (estimated)

Description of Chemical: Water-white liquid with a slight phenolic odor (Ref. 16, Witco, 1982)

Rationale for Recommendations

I. Exposure information—A. Production/use. One manufacturer reported production of 1 to 10 million pounds of the compound in 1983. Another manufacturer of PDDP is listed in the public portion of the TSCA Inventory, but volume is not reported. Domestic production and importation volumes of PDDP have not been reported by the U.S. International Trade Commission for the period 1977 through 1983. PDDP, an organophosphite, is used primarily as a heat/light stabilizer and secondary antioxidant for a variety of polymeric materials, including vinyl polymers and polyurethanes (Ref. 11, Minagawa et al., 1983; Ref. 3, Aza et al., 1982), poly(ether ester) rubbers (Ref. 2, Anon, 1982), and epoxy resins (Ref. 15, Uram, 1982; Ref. 13, Nippon Steel, 1980). The estimated domestic consumption of phosphite antioxidants in plastics applications in 1980 was 25.5 million pounds, with a projected growth to 34.5 million pounds by 1985 (Ref. 6, CEH, 1982).

B. Evidence for exposure. The National Occupational Hazard Survey estimated that 900 workers were potentially exposed to PDDP in the workplace in 1970 (Ref. 12, NIOSH, 1976). Manufacturers of PDDP recommend the use of personal protective equipment [e.g., neoprene gloves, aprons, goggles (Ref. 16, Witco, 1982), and organic vapor respirators (Ref. 5, Borg-Warner, 1983)] to limit worker exposure. The compound may cause skin irritation, and one commercial formulation contains 5 percent by weight triphenyl phosphite, a neurotoxicant (Ref. 5, Borg-Warner, 1983).

II. *Chemical fate information.* In the environment, PDDP is expected to sorb to soil and sediment due to its low water solubility and low vapor pressure. No information was found on its persistence, but this phosphite may hydrolyze or biodegrade in surface and ground waters. Environmental releases should be quite low, with most of the release to landfills via discarded bags and polymer trimmings. Therefore, chemical fate testing is not being recommended at this time.

III. *Biological effects of concern to human health—A. Toxicokinetics (absorption, distribution, and excretion).* No information was found.

B. *Genotoxicity.* No information was found.

C. *Short-term (acute) effects.* The acute oral LD₅₀ value for the rat is 9.40 g/kg (Ref. 5, Borg-Warner, 1983).

D. *Long-term (subchronic/chronic) effects.* No information was found.

E. *Reproductive and developmental effects.* No information was found.

F. *Rationale for health effects recommendations.* Current production data for PDDP are not precise and appear to represent lower limits; e.g., one manufacturer of PDDP is not listed in the public portion of the TSCA Inventory. Available information does indicate that recent annual production of PDDP is at least 1 to 10 million pounds and may be higher. In addition, the dispersive use pattern for the variety of products that may contain PDDP suggests potentially widespread exposures. In addition to such polymeric materials as vinyl polymers and polyurethanes, epoxy resins, and rubber, PDDP is also used in fluorinated refrigeration agents (Ref. 1, Ando et al., 1982), heat-pump working fluids (Ref. 4, Berenbaum et al., 1978), and epoxidized esters and oils (Ref. 9, Kauder, 1968). Other potential uses include an antioxidant for xylene (Ref. 10, Kotas et al., 1982), a catalyst component for the reaction of olefins with maleic anhydride (Ref. 8, Kao Soap Co., 1979), PVC cross-linking agents (Ref. 14, Sugahara, 1978), and as a solvent for an antimicrobial solution (Ref. 7, Hill, 1982).

No data on the health effects of PDDP were found that would permit an assessment of its potential hazard to humans. However, PDDP is structurally related to triphenyl phosphite, a neurotoxicant (Ref. 5, Borg-Warner, 1983). Because of the lack of health effects data and the exposure potential discussed above, toxicokinetic and subchronic toxicity testing, including neurotoxicity, are being recommended for PDDP.

IV. *Ecological effects of concern.* No information was found on the ecological

effects of PDDP. Releases of PDDP to surface waters are expected to be insignificant, and the PDDP disposed of in landfills should sorb strongly to particulates until hydrolyzed or biodegraded. Therefore, ecological effects testing is not being recommended at this time.

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BILLING CODE 6560-50-M

FEDERAL EMERGENCY MANAGEMENT AGENCY

Agency Information Collection Submitted to the Office of Management and Budget for Clearance

The Federal Emergency Management Agency (FEMA) has submitted to the Office of Management and Budget the following information collection package for clearance in accordance with the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Type: Extension of 3067-0166.

Title: Crisis Counseling Assistance and Training.

Abstract: In order to obtain a Crisis Counseling Grant, the State IFG Agency named by the Governor, usually the State Mental Health Agency, must send a letter of request and a plan of services to FEMA.

Type of Respondents: State or Local Governments.

Number of Respondents: 3.

Burden Hours: 1,720.

Copies of the above information collection request and supporting documentation can be obtained by calling or writing the FEMA Clearance Officer, Linda Shiley, (202) 646-2624, 500 C Street S.W., Washington, D.C. 20472.

Comments should be directed to Mike Weinstein, Desk Officer for FEMA, Office of Information and Regulatory Affairs, OMB, Rm. 3235, New Executive Office Building, Washington, D.C. 20503.

Dated: November 12, 1985.

Walter A. Girstantas,

Director, Administrative Support.

[FR Doc. 85-27513 Filed 11-18-85; 8:45 am]

BILLING CODE 6718-01-M

Agency Information Collection Submitted to the Office of Management and Budget for Clearance

The Federal Emergency Management Agency (FEMA) has submitted to the Office of Management and Budget the following information collection