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Part VII

Environmental Protection Agency

**Forty-Sixth Report of the TSCA
Interagency Testing Committee to the
Administrator, Receipt of Report and
Request for Comments; Notice**

ENVIRONMENTAL PROTECTION AGENCY

[OPPTS-41054; FRL-6594-7]

Forty-Sixth Report of the TSCA Interagency Testing Committee to the Administrator; Receipt of Report and Request for Comments**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice.

SUMMARY: The Toxic Substances Control Act (TSCA) Interagency Testing Committee (ITC) transmitted its Forty-Sixth Report to the Administrator of the EPA on May 25, 2000. In the 46th Report, which is included with this notice, the ITC: Solicits information on uses, exposures, ecological effects, environmental fate, and health effects on 3 classes of structurally related chemicals (4 polychlorophenols and polychlorobenzenethiols, 8 chlorotrifluoromethylphenoxy benzenes, and 50 perfluorinated chemicals) that have potential to persist and bioconcentrate; requests more detailed exposure and use information be included in the TSCA Electronic Hazard and Safety Data Reporting Form; adds 8 nonylphenol polyethoxylate degradation products to the *Priority Testing List*; and removes 4 alkylphenols and 15 alkylphenol ethoxylates from the *Priority Testing List*.

EPA invites interested persons to submit written comments on the Report.

DATES: Comments, identified by docket control number OPPTS-41054, must be received on or before January 2, 2001.

ADDRESSES: Comments may be submitted by mail, electronically, or in person. Please follow the detailed instructions for each method as provided in Unit I. of the

SUPPLEMENTARY INFORMATION. To ensure proper receipt by EPA, it is imperative that you identify docket control number OPPTS-41054 in the subject line on the first page of your response.

FOR FURTHER INFORMATION CONTACT: *For general information contact:* Barbara Cunningham, Acting Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (202) 554-1404; e-mail address: TSCA-Hotline@epa.gov.

For technical information contact: John D. Walker, ITC Executive Director (7401), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone

number:(202) 260-1825; fax: (202) 260-7895; e-mail address: walker.johnd@epa.gov.

SUPPLEMENTARY INFORMATION:**I. General Information***A. Does this Action Apply to Me?*

This notice is directed to the public in general. It may, however, be of particular interest to you if you manufacture (defined by statute to include import) and/or process TSCA-covered chemicals and you may be identified by the North American Industrial Classification System (NAICS) codes 325 and 32411. Because this notice is directed to the general public and other entities may also be interested, the Agency has not attempted to describe all the specific entities that may be interested in this action. If you have any questions regarding the applicability of this action to a particular entity, consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Get Additional Information, Including Copies of this Document or Other Related Documents?

1. *Electronically.* You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at <http://www.epa.gov/>. To access this document, on the Home Page select "Laws and Regulations," "Regulations and Proposed Rules," and then look up the entry for this document under the "**Federal Register**—Environmental Documents." You can also go directly to the **Federal Register** listings at <http://www.epa.gov/fedrgstr/>.

You may also access additional information about the ITC and the TSCA testing program through the web site for the Office of Pollution Prevention and Toxics (OPPT) at <http://www.epa.gov/opptintr/>, or go directly to the ITC Home Page at <http://www.epa.gov/opptintr/itc/>.

2. *In person.* The Agency has established an official record for this action under docket control number OPPTS-41054. The official record consists of the documents specifically referenced in this action, any public comments received during an applicable comment period, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any

information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period, is available for inspection in the TSCA Nonconfidential Information Center, North East Mall Rm. B-607, Waterside Mall, 401 M St., SW., Washington, DC. The Center is open from noon to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Center is (202) 260-7099.

C. How and to Whom Do I Submit Comments?

You may submit comments through the mail, in person, or electronically. To ensure proper receipt by EPA, it is imperative that you identify docket control number OPPTS-41054 in the subject line on the first page of your response.

1. *By mail.* Submit your comments to: Document Control Office (7407), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

2. *In person or by courier.* Deliver your comments to: OPPT Document Control Office (DCO) in East Tower Rm. G-099, Waterside Mall, 401 M St., SW., Washington, DC. The DCO is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the DCO is (202) 260-7093.

3. *Electronically.* You may submit your comments electronically by e-mail to: oppt.ncic@epa.gov, or mail your computer disk to the address identified above. Do not submit any information electronically that you consider to be CBI. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on standard disks in WordPerfect 6.1/8.0 or ASCII file format. All comments in electronic form must be identified by docket control number OPPTS-41054. Electronic comments may also be filed online at many Federal Depository Libraries.

D. How Should I Handle CBI Information That I Want to Submit to the Agency?

Do not submit any information electronically that you consider to be CBI. You may claim information that you submit to EPA in response to this document as CBI by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. In addition to one complete version of

the comment that includes any information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public version of the official record. Information not marked confidential will be included in the public version of the official record without prior notice. If you have any questions about CBI or the procedures for claiming CBI, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

E. What Should I Consider as I Prepare My Comments for EPA?

We invite you to provide your views and comments on the ITC 46th Report. You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible.
2. Describe any assumptions that you used.
3. Provide copies of any technical information and/or data you used that support your views.
4. Provide specific examples to illustrate your concerns.
5. Make sure to submit your comments by the deadline in this notice.
6. To ensure proper receipt by EPA, be sure to identify the docket control number assigned to this action in the subject line on the first page of your response. You may also provide the name, date, and **Federal Register** citation.

II. Background

The Toxic Substances Control Act (TSCA) (15 U.S.C. 2601 *et seq.*) authorizes the Administrator of the EPA to promulgate regulations under TSCA section 4(a) requiring testing of chemicals and chemical groups in order to develop data relevant to determining the risks that such chemicals and chemical groups may present to health or the environment. Section 4(e) of TSCA established the ITC to recommend chemicals and chemical groups to the Administrator of the EPA for priority testing consideration.

Section 4(e) of TSCA directs the ITC to revise the TSCA section 4(e) *Priority Testing List* at least every 6 months.

1. *The ITC's 46th Report*. The 46th Report was received by the EPA Administrator on May 25, 2000, and is included in this notice. In the 46th Report, the ITC:

i. Solicits information on uses, exposures, ecological effects, environmental fate, and health effects on 3 classes of structurally related chemicals (4 polychlorophenols and polychlorobenzenethiols, 8 chlorotrifluoromethylphenoxy benzenes, and 50 perfluorinated chemicals) that have potential to persist and bioconcentrate.

ii. Requests more detailed exposure and use information be included in the TSCA Electronic Hazard and Safety Data Reporting Form.

2. *Status of the Priority Testing List*. The current TSCA section 4(e) *Priority Testing List* as of May 2000 can be found in Table 1 of the 46th ITC Report which is included in this notice. In the 46th ITC Report, the ITC added 8 nonylphenol polyethoxylate degradation products and removed 4 alkylphenols and 15 alkylphenol ethoxylates from the *Priority Testing List*.

List of Subjects

Environmental protection, Chemicals, Hazardous substances.

Dated: November 20, 2000.

Charles M. Auer,

Director, Chemical Control Division, Office of Pollution Prevention and Toxics.

Forty-Sixth Report of the TSCA Interagency Testing Committee to the Administrator, U.S. Environmental Protection Agency

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Summary

This is the 46th Report of the TSCA Interagency Testing Committee (ITC) to the Administrator of the U.S. Environmental Protection Agency (USEPA). The ITC described Degradation Effects Bioconcentration Information Testing Strategies (DEBITS) in its 45th Report as strategies to test for the availability of degradation, ecological or human health effects, and bioconcentration information for chemicals with potential to persist, bioconcentrate, and cause ecological or health effects. The ITC implemented DEBITS to identify three classes of structurally related chemicals that have potential to persist and bioconcentrate. These three classes (and number of chemicals associated with each class in parentheses) include polychlorophenols and polychlorobenzenethiols (4), chlorotrifluoromethylphenoxy benzenes (8), and perfluorinated chemicals (50). In this Report the ITC is:

1. Soliciting uses, exposures, ecological effects, environmental fate, and health effects information on these three classes.
 2. Requesting more detailed exposure and use information be included in the TSCA Electronic Hazard and Safety Data Reporting Form.
 3. Adding 8 nonylphenol polyethoxylate degradation products to the *Priority Testing List*.
 4. Removing 4 alkylphenols and 15 alkylphenol ethoxylates from the *Priority Testing List*.
- The revised TSCA section 4(e) *Priority Testing List* follows as Table 1.

TABLE 1.—THE TSCA SECTION 4(E) PRIORITY TESTING LIST (MAY 2000)

Report	Date	Chemical/group	Action
28	May 1991	Chemicals with low confidence reference dose (RfD) Acetone Thiophenol	Designated
30	May 1992	5 Siloxanes	Recommended
31	January 1993	13 Chemicals with insufficient dermal absorption rate data	Designated
32	May 1993	16 Chemicals with insufficient dermal absorption rate data	Designated
35	November 1994	4 Chemicals with insufficient dermal absorption rate data	Designated
37	November 1995	10 Alkylphenols and 2 alkylphenol polyethoxylates	Recommended
39	November 1996	8 Nonylphenol ethoxylates	Recommended

TABLE 1.—THE TSCA SECTION 4(E) PRIORITY TESTING LIST (MAY 2000)—Continued

Report	Date	Chemical/group	Action
41	November 1997	18 Alkylphenols, 5 polyalkylphenols and 6 alkylphenol polyethoxylates*	Recommended
42	May 1998	3-Amino-5-mercapto-1,2,4- triazole*	Recommended
42	May 1998	Glycoluril*	Recommended
42	May 1998	Methylal*	Recommended
42	May 1998	Ethyl silicate*	Recommended
46	May 2000	8 Nonylphenol polyethoxylate degradation products*	Recommended

* Data requested through the ITC's Voluntary Information Submissions Innovative Online Network (VISION—see <http://www.epa.gov/opptintr/itc/vision.htm>).

I. Background

The ITC was established by section 4(e) of the Toxic Substances Control Act (TSCA) “to make recommendations to the Administrator respecting the chemical substances and mixtures to which the Administrator should give priority consideration for the promulgation of a rule for testing under section 4(a)....At least every six months...., the Committee shall make such revisions to the *Priority Testing List* as it determines to be necessary and transmit them to the Administrator together with the Committee's reasons for the revisions” (Public Law 94–469, 90 Stat. 2003 *et seq.*, 15 U.S.C. 2601 *et seq.*). Since its creation in 1976, the ITC has submitted 45 semi-annual (May and November) Reports to the EPA Administrator transmitting the *Priority Testing List* and its revisions. ITC Reports are available from the ITC's web site (<http://www.epa.gov/opptintr/itc>) within a few days of submission to the Administrator and from <http://www.epa.gov/fedrgstr> after publication in the **Federal Register**. The ITC meets monthly and produces its revisions to the *Priority Testing List* with administrative and technical support from the ITC staff, ITC members, and their U.S. Government organizations and contract support provided by EPA. ITC members and staff are listed at the end of this Report.

II. TSCA Section 8 Reporting

A. TSCA Section 8 Rules

Following receipt of the ITC's Report by the EPA Administrator and addition of chemicals to the *Priority Testing List*, the EPA's Office of Pollution Prevention and Toxics (OPPT) promulgates TSCA section 8(a) Preliminary Assessment Information Reporting (PAIR) and TSCA section 8(d) Health and Safety Data (HaSD) rules for chemicals added to the *Priority Testing List*. These rules require producers and importers of chemicals recommended by the ITC to submit production and exposure reports under TSCA section 8(a) and producers, importers, and processors of chemicals recommended by the ITC to submit unpublished health and safety studies under TSCA section 8(d). These rules are automatically promulgated by OPPT unless requested not to do so by the ITC.

B. ITC's Use of TSCA Section 8 and “Other Information”

The ITC reviews the TSCA section 8(a) PAIR reports, TSCA section 8(d) HaSD studies and “other information” that becomes available after the ITC adds

chemicals to the *Priority Testing List*. “Other information” includes TSCA section 4(a) and 4(d) studies, TSCA section 8(c) submissions, TSCA section 8(e) “substantial risk” notices, “For Your Information” (FYI) submissions, ITC voluntary submissions, unpublished data submitted to and from U.S. Government organizations represented on the ITC, published papers, as well as use, exposure, effects, and persistence data that are voluntarily submitted to the ITC by manufacturers, importers, processors, and users of chemicals recommended by the ITC. The ITC reviews this information and determines if data needs should be revised, if chemicals should be removed from the *Priority Testing List* or if recommendations should be changed to designations.

C. Promoting More Efficient Use of Information Submission Resources

The Voluntary Information Submissions Innovative Online Network (VISION) is accessible through the world wide web (<http://www.epa.gov/opptintr/itc/vision.htm>). VISION includes the Voluntary Information Submissions Policy (VISP) and links to the TSCA Electronic HaSD Reporting Form (<http://www.epa.gov/opptintr/er/hasd.htm>). The VISP provides examples of data needed by ITC member U.S. Government organizations, examples of studies that should not be submitted, the milestones for submitting information, guidelines for using the TSCA Electronic HaSD Reporting Form and instructions for electronically submitting full studies. The TSCA Electronic HaSD Reporting Form is used to provide electronic information on ITC voluntary submissions, TSCA section 8(d) studies (to meet data needs of the ITC member U.S. Government organizations), FYI submissions, and TSCA section 8(e) studies.

In its 45th Report, the ITC stated that use and exposure information should be submitted through VISION using section 3.2 of the TSCA Electronic HaSD Reporting Form (Confidential Business Information (CBI) should NOT be submitted on the TSCA Electronic HaSD Reporting Form). Since then the ITC Director has received numerous requests to provide more details on the type of use and exposure information needed by the ITC. In response to these requests, the ITC asked EPA to include the following use and exposure information in section 3.2 of the TSCA Electronic HaSD Reporting Form:

- Manufacturing or processing procedures (batch, continuous, closed, open, etc.).
- Product (raw-material, site-limited intermediate, end-use, etc.).

- Type of end use (consumer product, industrial product, consumer and industrial product).
- Percent of chemical in end-use product.
- Average concentrations in air, water and soil within the borders of manufacturing and processing facilities.
- Number of people likely to be exposed during chemical manufacturing and average exposure concentrations.
- Number of people likely to be exposed during chemical processing and average exposure concentrations.
- Number of people likely to be exposed during chemical use and average exposure concentrations.

D. Request to Promulgate a TSCA Section 8(d) Rule

The ITC encourages producers, importers, processors, and users of its recommended chemicals to use VISION to voluntarily provide electronic information and establish a dialogue with the ITC to discuss needed data. If the ITC does not receive voluntary electronic information submissions to meet its data needs, then it will ask the EPA to promulgate a TSCA section 8(d) HaSD rule to determine if there are unpublished data to meet those needs. The ITC strongly encourages those companies that must respond to a TSCA section 8(d) rule to provide data by using the TSCA Electronic HaSD Reporting Form.

III. ITC's Activities During This Reporting Period (November 1999 to April 2000): Information Solicitations

In its 45th Report, the ITC discussed its strategies to screen chemicals for persistence and bioconcentration potential (<http://www.epa.gov/opptintr/itc>). These strategies are referred to as Degradation Effects Bioconcentration Information Testing Strategies (DEBITS). DEBITS provides a means to prioritize chemicals based on degradation, ecological or human health effects, and bioconcentration information. Briefly the ITC screened 12,557 chemicals and used criteria to identify 435 chemicals with potential to persist and bioconcentrate (see Figure 1 in 45th Report).

Since the 45th Report was delivered to the EPA Administrator on November 30, 1999, the ITC used DEBITS to further prioritize these 435 chemicals. The ITC used DEBITS to identify a subset of 112 chemicals with bioconcentration factors (BCFs) >250. These and structurally related chemicals with BCF <250 were placed in chemical classes and screened for the existence of ecological effects, health effects, and environmental fate

data. A BCF of 250 has been used by the EPA as a lower "threshold" to identify substances with potential to bioconcentrate. From these 112 chemicals, the ITC reviewed 42 chemicals which had BCF >250 and production/importation volumes between 100,000 and 1,000,000 pounds reported in response to the 1986, 1990, 1994, or 1998 EPA Inventory Update Rules. The ITC is interested in identifying structurally related classes of chemicals for testing which have a suspicion of toxicity but lack adequate screening data. The ITC is also interested in utilizing Structure Activity Relationships (SARs) to predict the toxicity of untested chemicals in these structural classes. Although High Production Volume (HPV) chemicals with production/importation volumes >1,000,000 pounds are expected to have screening data developed as part of the EPA's HPV Chemical Challenge (<http://www.epa.gov/opptintr/chemrtk/volchall.htm>) and OECD SIDS (<http://www.oecd.org/>) programs, they were included in groups of structurally related chemicals in order to provide additional opportunities to develop SARs. In a few instances, structurally related chemicals not previously identified by DEBITS were also included in a chemical class, if there were data useful for establishing SARs.

In this reporting period, three classes of chemicals:

1. Polychlorophenols and polychlorobenzenethiols.
2. Chlorotrifluoromethylphenoxy benzenes.
3. Perfluorinated chemicals have emerged from DEBITS as classes of specific interest.

The ITC is seeking information on uses, exposures, health effects, and ecological effects from the manufacturers, importers, and processors of those chemicals in order to determine whether any of them should be added to the *Priority Testing List*. It is requested that solicited information be electronically submitted before August 29, 2000, consistent with the 90-day milestone of the VISP (<http://www.epa.gov/opptintr/itc/visp.htm>) for submitting data through the TSCA Electronic HaSD Reporting Form. DEBITS will continue to be implemented in the future to prioritize chemicals with potential to persist and bioconcentrate.

A. Polychlorophenols and Polychlorobenzenethiols

1. *Background.* Polychlorophenols and polychlorobenzenethiols includes pentachlorothiophenol (Chemical Abstract Service (CAS) number (No.) 133-49-3) and tetrachloropyrocatechol (CAS No. 1198-55-6). Pentachlorothiophenol is one of the 42 chemicals with BCF >250 and production/importation volume between 100,000 and 1,000,000 pounds. Tetrachloropyrocatechol is one of the 435 chemicals that satisfy the DEBITS production/importation, persistence, and bioconcentration potential criteria described by the ITC in its 45th Report. The ITC used available data for 2 structurally related chemicals, pentachlorophenol (CAS No. 87-86-5) and hexachlorobenzene (CAS No. 118-74-1), to evaluate suspicion of potential ecological and health effects of pentachlorothiophenol and tetrachloropyrocatechol.

Pentachlorothiophenol meets the DEBITS criteria; it has an ultimate predicted aerobic biodegradation rate of >2-3 months and an estimated log octanol-water partition coefficient of 5.91, and an estimated BCF of 7,066. There are limited health effects data on pentachlorothiophenol except mild eye irritation in the standard Draize test and an intraperitoneal LD₅₀ of 100 milligram/kilogram (mg/kg) in mice. The ITC has no ecological effects data on pentachlorothiophenol. However, pentachlorothiophenol is a metabolite of hexachlorobenzene and pentachlorophenol. It is formed as a result of glutathione conjugation (Hahn et al, 1988, 1989; Linko et al, 1986; Mehendale et al, 1975; Rozman et al, 1977). It has been detected in the urine of human populations exposed to hexachlorobenzene (To-Figueras et al., 1992, 1997). The carcinogenicity, reproductive effects, and development toxicities of pentachlorophenol and hexachlorobenzene are well known (ATSDR, 1996; Chhabra et al., 1999). The ITC believes pentachlorothiophenol may present a suspicion of toxicity given the metabolic relationship and structural similarity to hexachlorobenzene and pentachlorophenol.

Tetrachloropyrocatechol also meets the DEBITS criteria; it has an ultimate predicted aerobic biodegradation rate of >2-3 months and an estimated log octanol-water partition coefficient of 4.29, and a measured BCF of

316-5,011. There is very little known about the health effects of tetrachloropyrocatechol, except for severe eye irritation in the Draize tests and an oral LD₅₀ in mice of 318 mg/kg. However, tetrachloropyrocatechol is a metabolite of pentachlorophenol. A fathead minnow LC₅₀ value of 1 mg/Liter (L) (highly toxic) from 96-hour flow-through tests has been reported (Russom et al., 1997) and six TSCA section 8(d) studies were submitted where tetrachloropyrocatechol was a component of the test substance, biologically treated bleached kraft mill effluent. It is predicted to inhibit cellular respiration as an uncoupler of oxidative phosphorylation. The ITC believes tetrachloropyrocatechol may present a suspicion of toxicity given the metabolic relationship and structural similarity to pentachlorophenol.

Information Profiles for pentachlorothiophenol and tetrachloropyrocatechol are posted on the ITC's web site (<http://www.epa.gov/opptintr/itc>).

2. *Information needs.* The ITC needs more information on uses and data on exposures, environmental releases, pharmacokinetics, subchronic toxicity, reproductive and developmental effects, carcinogenicity, and ecological effects for pentachlorothiophenol and tetrachloropyrocatechol. The ITC also needs mutagenicity data for pentachlorothiophenol. If the information is not voluntarily obtained, the ITC will consider adding these chemicals to the *Priority Testing List* in its next Report to the EPA Administrator so that final TSCA section 8(a) and 8(d) rules are promulgated by EPA.

B. Chlorotrifluoromethylphenoxy Benzenes

1. *Background.* The chlorotrifluoromethylphenoxy benzenes is a structural class of eight chemicals that satisfy the DEBITS persistence and bioconcentration potential and production/importation criteria described by the ITC in its 45th Report (Table 2). Four of the chlorotrifluoromethylphenoxy benzenes are among the 42 chemicals with BCF >250 and production/importation volume between 100,000 and 1,000,000 pounds; *p*-toluidine, 5-chloro-.alpha.,.alpha.,.alpha.-trifluoro-2-nitro-*N*-phenyl (CAS No. 1806-24-2) has a production/importation volume <100,000 pounds.

TABLE 2.—CHLOROTRIFLUOROMETHYLPHENOXY BENZENES

CAS No.	Chemical name	HPV ²	Estimated BCF	Fish ³ LC ₅₀ mg/L	NO ₂ on benzene ring
1806-24-2	<i>p</i> -Toluidine, 5-chloro-.alpha.,.alpha.,.alpha.-trifluoro-2-nitro- <i>N</i> -phenyl	No	2380	2.22	Yes
42874-63-5	Phenol, 5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitro-	No	879		Yes
42874-96-4	Benzene, 2-chloro-1-(3-methylphenoxy)-4-(trifluoromethyl)-	No	2696	1.96	No
77501-63-4	5-(2-Chloro-4-(trifluoromethyl)phenoxy)-2-nitro-2-ethoxy-1-methyl-2-oxoethyl ester (lactofen) ¹	No	1009		Yes
88185-22-2	Benzoic acid, 3-[2-chloro-4-(trifluoromethyl)phenoxy]-, 2-ethoxy-1-methyl-2-oxo	No	1692	0.668	No
50594-44-0	Phenol, 5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitro-, acetate ¹	Yes	362	0.39	Yes
50594-77-9	Phenol, 3-(2-chloro-4-(trifluoromethyl)phenoxy)-, acetate ¹	Yes	500	0.17	No
63734-62-3	Benzoic acid,3-(2-chloro-4-(trifluoromethyl)phenoxy)- ¹	Yes	3	2.20	No

¹ The ITC is not soliciting information on lactofen (077501-63-4) or HPV chemicals; ITC is relying on information from EPA's HPV chemical challenge program to provide data on HPV category chemicals.

2 HPV = High Production Volume; chemicals with U.S. production/importation volumes >1 million pounds, e.g., those chemicals in EPA's HPV chemical challenge program (<http://www.epa.gov/opptintr/chemrtk/volchall.htm>).

3 Fish LC₅₀ data are all from 96-hour flow through tests with fathead minnows using measured chemical concentrations.

One member of the class, lactofen (CAS No. 77501-63-4) is a well-studied herbicide, considered to be a probable human carcinogen by the USEPA. Lactofen or 5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitro-2-ethoxy-1-methyl-2-oxo ethyl ester was found to increase the incidence of liver tumors in CD-1 mice and hepatic neoplastic nodules and preneoplastic foci in Sprague-Dawley rats (PPG Industries, 1985a,b). On the basis of these findings, the USEPA concluded that lactofen met the criteria of a category B2 probable human carcinogen (<http://ace.orst.edu/cgi-bin/mfs/01/pips/lactofen.htm>). A number of other hepatic, renal, and hematologic effects have been reported in CD-1 mice, Sprague-Dawley rats, and beagle dogs after repeated dosing. Lactofen caused developmental effects in a 2-generation reproductive study using CD rats (PPG Industries, 1983) and when fed to pregnant Sprague-Dawley rats (PPG Industries, 1982). Lactofen was administered in the diet for all these studies. Mixed results have been obtained in genotoxicity testing. As a result of the oncogenicity and other adverse health effects associated with lactofen, there is a heightened concern for potential toxicity of the other seven chlorotrifluoromethylphenoxy benzenes which have not been as extensively investigated.

Six chlorotrifluoromethylphenoxy benzenes had fish LC₅₀ values; all were less than or equivalent to about 1 mg/L; chemicals with LC₅₀ values <1 mg/L are considered "highly toxic" to aquatic organisms. Four chlorotrifluoromethylphenoxy benzenes had a nitro group on the benzene ring (Table 2). Estimates from the EPA's Cancer Expert System (Lai et al., 1996; Woo et al., 1995, 1998) suggested that chlorotrifluoromethylphenoxy benzenes with a nitro group on the benzene ring might have higher carcinogenicity potential than chlorotrifluoromethylphenoxy benzenes with no nitro group on the benzene ring. Data are needed to validate these suggestions. In addition, the ITC has determined that health effects data are indexed in TOXLINE or the Registry of Toxic Effects of Chemical Substances (RTECS) for three chlorotrifluoromethylphenoxy benzenes:

Phenol, 5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitro- (CAS No. 42874-63-5); phenol, 3-(2-chloro-4-(trifluoromethyl)phenoxy)-, acetate (CAS No. 50594-77-9); and benzoic acid, 3-(2-chloro-4-(trifluoromethyl)phenoxy)- (CAS No. 63734-62-3). For the latter 2 chlorotrifluoromethylphenoxy benzenes acute and genotoxicity studies were submitted to the EPA as a result of a TSCA section 8(d) rule that was promulgated for the chlorotrifluoromethylphenoxy benzenes (CAS No. 42874-96-4, 50594-77-9, and 63734-62-3) that were previously added to the *Priority Testing List* in the ITC's 29th Report published in the **Federal Register** of December 30, 1991 (56 FR 67424) (FRL-4007-6) as trifluoromethyl diaryl ethers and then removed from the *Priority Testing List* in the 41st Report published in the **Federal Register** of April 9, 1998 (63 FR 17658) (FRL-5773-5). TOXLINE, RTECS, and TSCA section 8(d) studies for phenol, 5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitro- (CAS No. 42874-63-5); phenol, 3-(2-chloro-4-(trifluoromethyl)phenoxy)-, acetate (CAS No. 50594-77-9); and benzoic acid, 3-(2-chloro-4-(trifluoromethyl)phenoxy)- (CAS No. 63734-62-3) have been considered by the ITC. An Information Profile for 5-(2-chloro-4-(trifluoromethyl)phenoxy)-2-nitro- is posted on the ITC's web site (<http://www.epa.gov/opptintr/itc>).

2. *Information needs.* The ITC needs information on uses, exposures, environmental releases, ecological effects, pharmacokinetics, subchronic toxicity, reproductive and developmental effects, mutagenicity, and carcinogenicity for four chlorotrifluoromethylphenoxy benzenes, except lactofen and the three HPV chemicals (Table 2). If the information is not voluntarily obtained, the ITC will consider adding these chemicals to the *Priority Testing List* in its next Report to the EPA Administrator, so that final TSCA section 8(a) and 8(d) rules are promulgated by EPA.

C. Perfluorinated Chemicals

1. *Background.* The ITC is interested in 50 perfluorinated chemicals, because:

- The carbon-fluorine bond is highly stable and likely to persist.

- There is potential for long-range atmospheric transport, persistence, bioconcentration, and bioaccumulation.

- There are few publicly available data on ecological effects, health effects, wildlife exposures, or human exposures.

Forty-eight perfluorinated chemicals were assigned to 10 structural classes while two did not fit any structural class. Thirty-eight perfluorinated chemicals satisfy the DEBITS persistence (ultimate biodegradation >2-3 months) and bioconcentration potential (log octanol-water partition coefficient 3-6) and production/importation criteria described by the ITC in its 45th Report. An additional 12 (identified by an asterisk in Tables 3, 4, 7, 10, and 11) were selected from TSCA section 8(e) submissions because they were structurally related to the 38 perfluorinated chemicals and may be useful in developing SARs. The 12 structurally related perfluorinated chemicals from TSCA section 8(e) submissions include chemicals that:

- Are present in human and animal blood.
- Are pesticide active ingredients.
- Cause tumors and developmental toxicity in animal studies.
- Are metabolites of the 38 perfluorinated chemicals that satisfy the DEBITS criteria.

Estimated BCFs and Henry's Law Constants (HLCs) for perfluorinated chemicals were based on associated or non-hydrolyzed chemical structures. Estimated BCFs for the 50 perfluorinated chemicals range from 3 to 26,000. HLCs ranged from 10³ to 10⁻¹⁰ atm m³/mole. Approximately half of the perfluorinated chemicals had estimated HLCs >10⁻² atm m³/mole, suggesting they could evaporate and be susceptible to long-range transport. The perfluoroalkyl iodides are likely to undergo rapid photolysis in the atmosphere, leading to possibly long-lived degradation products. Estimated BCFs and HLCs for perfluorinated chemicals are listed in Tables 3-13. Information Profiles for non-HPV perfluorinated chemicals for which there were publicly available toxicity data are posted on the ITC's web site (<http://www.epa.gov/opptintr/itc>). The ITC is continuing to evaluate information on uses, exposures, environmental fate, ecological effects, and health effects of perfluorinated chemicals.

TABLE 3.—PERFLUOROALKYL ACIDS AND SALTS¹

CAS No.	Chemical name	BCF	HLC
000335-77-3	1-Decanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heneicosafluoro-	10	3.03E-01
001763-23-1	1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-*	56	1.10E-02
002795-39-3	1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt*	56	1.10E-02
003825-26-1	Ammonium perfluorooctanoate*	56	9.10E-02
003871-99-6	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, potassium salt*	3	3.97E-04
021615-47-4	Hexanoic acid, undecafluoro-, ammonium salt*	3	3.29E-03
029457-72-5	1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, lithium salt	56	1.10E-02

* TSCA 8(e) submission

1 It should be noted that methods used to estimate BCF and HLC were based on associated chemical structures. The salts of carboxylic and sulfonic acids are expected to exist as dissociated structures in the environment; the dissociated structure will be more water-soluble and likely to have a lower BCF and HLC than the associated structure.

TABLE 4.—PERFLUOROALKYL SULFONAMIDES

CAS No.	Chemical name	BCF	HLC
000754-91-6	1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	10000	1.84E-03
001691-99-2	1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro- <i>N</i> -(2-hydroxyethyl)- <i>N</i> -ethyl-	5543	5.72E-07
004151-50-2	1-Octanesulfonamide, ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-*	500	5.37E+00
024448-09-7	1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro- <i>N</i> -(2-hydroxyethyl)- <i>N</i> -methyl-*	26000	4.30E-04
034449-89-3	1-Butanesulfonamide, ethyl-1,1,2,2,3,3,4,4,4-nonafluoro- <i>N</i> -(2-hydroxyethyl)-	206	7.50E-07
034454-97-2	1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro- <i>N</i> -(2-hydroxyethyl)- <i>N</i> -methyl-	86	5.65E-07
034455-03-3	1-Hexanesulfonamide, ethyl-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro- <i>N</i> -(2-hydroxyethyl)-	6331	2.07E-05
067584-55-8	2-Propanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester	961	1.94E-05
067584-56-9	2-Propanoic acid, 2-methyl (undecafluoropentyl)sulfonyl amino ethyl ester	5330	1.02E-04
068555-72-6	1-Pentanesulfonamide, ethyl-1,1,2,2,3,3,4,4,5,5,5-undecafluoro- <i>N</i> -(2-hydroxyethyl)-	1142	3.94E-06
068555-74-8	1,1,2,2,3,3,4,4,5,5,5-Undecafluoro- <i>N</i> -(2-hydroxyethyl)- <i>N</i> -methylpentane-1-sulphonamide	478	2.97E-06
068555-75-9	1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro- <i>N</i> -(2-hydroxyethyl)- <i>N</i> -methyl-	2651	1.56E-05
068555-77-1	1-Butanesulfonamide, 3-(dimethylamino)propyl-1,1,2,2,3,3,4,4,4-nonafluoro-	465	4.63E-06

* TSCA 8(e) submission.

TABLE 5.—PERFLUORINATED QUATERNARY AMMONIUM CHEMICALS

CAS No.	Chemical name	BCF	HLC
001652-63-7	1-Propanaminium,3-(((heptadecafluorooctyl)sulfonyl)amino)- <i>N,N,N</i> -trimethyl-, iodide	6	4.04E-10
038006-74-5	1-Propanaminium,3-[[heptadecafluorooctyl)sulfonyl]amino]- <i>N,N,N</i> -trimethyl-, chloride	6	4.04E-10

TABLE 6.—PERFLUOROALKANES

CAS No.	Chemical name	BCF	HLC
000076-19-7	Octafluoropropane	50	3.30E+01
000678-26-2	Dodecafluoropentane	488	3.50E+03
002994-71-0	Hexafluoro-1,2-bis(trifluoromethyl)cyclobutane	145	2.05E+03

TABLE 7.—FLUOROALKYL ETHERS

CAS No.	Chemical name	BCF	HLC
000755-73-7	2,2,3,3-Tetrafluoro-3-methoxy-propionic acid methyl ester*	3	4.30E-05
001623-05-8	Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethylenyl)oxy]-	76	8.74E+00
003330-14-1	Propane, 1-(1-(difluoro(1,2,2-tetrafluoroethoxy)methyl)-1,2,2-tetrafluoroethoxy)-1,1,2,2,3,3,3-heptafluoro-	7355	4.99E+00
003330-15-2	Heptafluoropropyl 1,2,2,2-tetrafluoroethyl ether	151	3.90E+00
063863-43-4	Propanoic acid, 3-1-difluoro(trifluoroethylenyl)oxy methyl-1,2,2-tetrafluoroethoxy-2,2,3,3-tetrafluoro-, methyl ester	327	2.55E-03
104147-32-2	3,5-Dichloro-4-(1,1,2,2-tetrafluoroethoxy)aniline	160	1.29E-06

* TSCA 8(e) submission.

TABLE 8.—FLUOROALKYL IODIDES

CAS No.	Chemical name	BCF	HLC
000423-39-2	1-Iodoperfluorobutane	1193	4.99E+01
002043-55-2	1,1,1,2,2,3,3,4,4-Nonafluoro-6-iodohexane	6809	1.11E+01
068188-12-5	Perfluoroalkyl(C2-C18)ethyl iodide	1228	2.11E+00

TABLE 9.—GAMMA, OMEGA-PERFLUOROALKYL ALCOHOLS

CAS No.	Chemical name	BCF	HLC
000647-42-7	3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanol	4064	1.50E-01
002043-47-2	3,3,4,4,5,5,6,6,6-Nonafluoro-1-hexanol	132	5.42E-03
068391-08-2	2-Perfluoroalkyl (C6-C12) ethanol	3092	9.99E-02

TABLE 10.—PERFLUOROALKYL SULFONYL FLUORIDES

CAS No.	Chemical name	BCF	HLC
000375-72-4	Nonafluorobutanesulfonyl fluoride	5364	8.91E-02

TABLE 10.—PERFLUOROALKYL SULFONYL FLUORIDES—Continued

CAS No.	Chemical name	BCF	HLC
000421-20-5	Methyl fluorosulfonate*	2	5.00E-05
068156-06-9	Cyclohexanesulfonyl fluoride, decafluoro(pentafluoroethyl)-	7741	7.57E+00
068318-34-3	Cyclohexanesulfonyl fluoride, decafluoro(trifluoromethyl)-	1396	1.44E+00

* TSCA 8(e) submission.

TABLE 11.—PERFLUOROGLYCOL ACID FLUORIDES

CAS No.	Chemical name	BCF	HLC
004089-58-1	Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-(1,1,2,3,3,3-hexafluoro-2-(1,1,2,2-tetrafluoro-2-(fluorosulfonyl)ethoxy)propoxy)-	4709	7.55E-05
001422-71-5	3-Pentanone, 1,1,2,2,4,4,5,5-octafluoro-1,5-dimethoxy-*	3	4.27E-05
069116-71-8	Methyl 2,2-difluoromalonyl fluoride*	3	1.50E-05
069116-72-9	Propanoic acid, 2,2,3,3-tetrafluoro-3-1,2,2,2-tetrafluoro-1-(fluorocarbonyl)ethoxy-, methyl ester*	2	1.30E-04
069116-73-0	Propanoic acid, 3-(2-(1,2-difluoro-2-oxo-1-(trifluoromethyl)ethoxy)-1,2,2-trifluoro-1-(trifluoromethyl)ethoxy)-2,2,3,3-tetrafluoro-, methyl ester	121	1.70E-04

* TSCA 8(e) submission

1 It should be noted that methods used to estimate BCF and HLC were based on non-hydrolyzed chemical structures. Certain perfluoroglycol acid fluorides are expected to rapidly hydrolyze (within an hour, depending upon chemical concentration) in the environment; the hydrolysis products will be more water-soluble and likely to have a lower BCF and HLC than the non-hydrolyzed structure.

TABLE 12.—PERFLUOROALKYL CARBOXYLIC ACID FLUORIDES

CAS No.	Chemical name	BC F	HLC
000335-66-0	Pentadecylfluorooctanoyl fluoride	3011	2.58E+02
000375-84-8	Tridecafluoroheptanoyl fluoride	543	4.91E+01

TABLE 13.—PERFLUORINATED CHEMICALS NOT ASSIGNED TO A STRUCTURAL CLASS

CAS No.	Chemical name	BCF	HLC
019430-93-4	1-Hexene, 3,3,4,4,5,5,6,6,6-nonafluoro-	1393	1.11E+02
068140-20-5	Perfluoroalkyl (C4-C10) ethyl mercaptan	1606	5.26E+00

2. *Information needs.* The ITC needs measured BCFs, HLCs, and bioaccumulation data for most of the perfluorinated chemicals. Information on uses, exposures, health effects, and ecological effects is needed for perfluoroalkyl acids and salts, perfluoroalkyl sulfonamides, perfluorinated quaternary ammonium chemicals, perfluoroalkanes, fluoroalkyl ethers, fluoroalkyl iodides, gamma, omega-perfluoroalkyl alcohols, perfluoroalkyl sulfonyl fluorides, perfluoroglycol acid fluorides, perfluoroalkyl carboxylic acid fluorides, 1-hexene, 3,3,4,4,5,5,6,6,6-nonafluoro- (CAS No. 19430-93-4), and perfluoroalkyl (C4-C10) ethyl mercaptan (CAS No. 68140-20-5). For the perfluoroalkyl iodides, the ITC needs information on possible long-lived atmospheric degradation products. ITC is not soliciting information on two perfluoroalkyl sulfonamides that are in the EPA's HPV Challenge Program, 1-octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-N-(2-hydroxyethyl)-N-ethyl-

octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-N-(2-hydroxyethyl)-N-methyl- (CAS No. 24448-09-7) and the pesticides, lithium perfluorooctane sulfonate (LPOS) or 1-octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-, lithium salt (CAS No. 29457-72-5) (see <http://www.epa.gov/oppr001/factsheets/factsht2.htm>) and Sulfuramid or 1-octanesulfonamide, -ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro- (CAS No. 4151-50-2) (see <http://www.epa.gov/opp>).

IV. Revisions to the TSCA Section 4(e) Priority Testing List

A. Chemicals Added to the Priority Testing List: Nonylphenol Polyethoxylate Degradation Products

1. *Recommendation.* Add 8 nonylphenol polyethoxylate degradation products to the *Priority Testing List* to obtain information to meet U.S. Government data needs.

2. *Rationale for recommendation.*

Alkylphenols, polyalkylphenols, alkylphenol ethoxylates, and alkylphenol polyethoxylates were recommended in the ITC's 37th (61 FR 4188, February 2, 1996) (FRL-4991-6), 39th (62 FR 8578, February 25, 1997) (FRL-5580-9), and 41st Reports. Nonylphenol polyethoxylates were recommended in the ITC's 39th Report. Recent studies have measured nonylphenol polyethoxylate degradation products in wastewater effluents and surrounding aquatic systems (Bennett and Metcalfe, 2000; Hale et al., 2000). Some of these products can cause neuroendocrine-mediated effects in fish at low parts per billion (ppb) concentrations. One nonylphenol polyethoxylate degradation product, branched 4-nonylphenol (mixed isomers) (CAS No. 84852-15-3) was previously recommended in the ITC's 37th Report. As a result of these findings and to meet U.S. Government data needs for these chemicals, the ITC is adding 8 nonylphenol polyethoxylate degradation products to the *Priority Testing List* (Table 14).

TABLE 14.—NONYLPHENOL POLYETHOXYLATE DEGRADATION PRODUCTS BEING ADDED TO THE PRIORITY TESTING LIST

CAS No.	Nonylphenol polyethoxylate degradation product
104-35-8	4-nonylphenol ethoxylate (NP1EO)
20427-84-3	4-nonylphenol diethoxylate (NP2EO)

TABLE 14.—NONYLPHENOL POLYETHOXYLATE DEGRADATION PRODUCTS BEING ADDED TO THE PRIORITY TESTING LIST—Continued

CAS No.	Nonylphenol polyethoxylate degradation product
3115-49-9	4-nonylphenol triethoxylate (NP3EO)
106807-78-7	4-nonylphenol tetraethoxylate (NP4EO)
108241-00-5	4-nonylphenoxy acetic acid (NP1EC)
	4-nonylphenoxy ethoxy acetic acid (NP2EC)
	4-nonylphenoxy diethoxy acetic acid (NP3EC)
	4-nonylphenoxy triethoxy acetic acid (NP4EC)

3. *Supporting information.* Recent studies have documented that nonylphenol polyethoxylate degradation products can act as *in vitro* and *in vivo* estrogen agonists in fish and amphibians (Jobling and Sumpter, 1993; Jobling et al., 1996; Kloas et al., 1999). While most of these studies were conducted with nonylphenol and octylphenol, there is evidence to suggest that nonylphenol polyethoxylate degradation products (short-chain ethoxylates and carboxylates) can also act to disrupt neuroendocrine function.

i. *Effects.* Exposure of male fathead minnows to nonylphenol at 1.1 ppb caused an increase in the number and size of sertoli cells and germ cell syncytia (Miles-Richardson et al., 1999). In the same study, exposure of fathead minnows to 5.5 ppb nonylphenol polyethoxylate consisting of primarily 7–11 carbon ethoxylate chains, no changes in number and size of sertoli cells and germ cell syncytia were detected, but shorter carbon ethoxylate chains (1–4 carbons) were not tested. In the same laboratory, exposure of fathead minnows to 0.05 ppb nonylphenol caused significant increases in plasma vitellogenin and estradiol (Giesy et al., 2000).

Exposure of male rainbow trout to 30 ppb octylphenol, nonylphenol, 4-nonylphenoxy acetic acid (NP1EC), and 4-nonylphenol diethoxylate (NP2EO) caused increases in serum vitellogenin and inhibition in testicular growth (Jobling et al., 1996). Octylphenol was the most potent followed by nonylphenol, NP2EO, and NP1EC. A lowest-observed-effect-concentration (LOEC) was not determined for NP2EO or NP1EC, but the 30 ppb exposure concentrations for NP1EC and NP2EO are well below total concentrations of carboxylates and ethoxylates reported for many of the effluents in the midwestern United States that are discussed below. Exposure of female rainbow trout to 1 ppb nonylphenol and NP2EO and 10 ppb NP1EC reduced growth (Ashfield et al., 1998).

ii. *Environmental concentrations.* Despite data suggesting that

nonylphenol polyethoxylate metabolites may biodegrade (Staples et al., 1999), recent studies demonstrated that nonylphenol polyethoxylate effluent and effluent dominated stream concentrations may exceed LOEC concentrations reported in the literature. Barber et al. (1999) estimated nonylphenol polyethoxylate degradation products in seven midwest sewage treatment plant effluents and in one effluent-dominated stream (Des Plaines River, IL) approximately 100 kilometers (km) downstream of the major nonylphenol polyethoxylate sources. Generally effluents had nonylphenol polyethoxylate degradation product concentrations greater than 50 ppb with NPE2C the predominant form in most effluents and in the effluent dominated stream. Nonylphenol concentrations in the Des Plaines River slightly exceeded 1 ppb. Naylor et al. (1996) and Field and Reed (1996) estimated nonylphenol, total nonylphenol ethoxylate, and NP1EC-NP4EC (4-nonylphenoxy triethoxy acetic acid) concentrations in 15 pulp and paper mill and 6 sewage treatment plant effluents to the Fox River, WI. Total nonylphenol ethoxylate typically exceeded 50 ppb in all effluents, while nonylphenol concentrations were generally greater than 1 ppb. The nonylphenol carboxylates concentrations were always greater than 15 and 140 ppb in the pulp and paper mill and sewage treatment effluents, respectively. Nonylphenol and total nonylphenol ethoxylate Fox River concentrations near Green Bay were 0.582 and 2.78 ppb, respectively, while the total nonylphenol carboxylate concentration was 13.5 ppb. Nonylphenol carboxylates were shown to persist for considerable distances downstream. In addition to these existing data, EPA is sponsoring ongoing programs to sample sediment and fish in the midwestern United States.

4. *Information needs.* Data are needed to determine the LOECs (in comparison to estradiol) of branched 4-nonylphenol (mixed isomers), 4-nonylphenol ethoxylate (NP1EO),

4-nonylphenol diethoxylate (NP2EO), 4-nonylphenol triethoxylate (NP3EO), 4-nonylphenol tetraethoxylate (NP4EO), 4-nonylphenoxy acetic acid (NP1EC), 4-nonylphenoxy diethoxy acetic acid (NP2EC), 4-nonylphenoxy triethoxy acetic acid (NP3EC), and 4-nonylphenoxy tetraethoxy acetic acid (NP4EC) causing neuroendocrine effects in aquatic organisms. Data are also needed to determine whether nonylphenol polyethoxylate degradation products have the potential to interfere with growth and metamorphosis of amphibians (e.g., tadpoles).

B. Chemicals Removed From the Priority Testing List: Alkylphenols and Alkylphenol Ethoxylates

1. *Background.* In this Report, the ITC is removing 4 alkylphenols (APs) and 15 alkylphenol ethoxylates (APEs) from the *Priority Testing List*. The 4 APs were added to the *Priority Testing List* in the ITC's 37th Report; the 15 APEs were added to the *Priority Testing List* in the ITC's 39th Report. Submission of TSCA section 8(d) studies for APs added to the *Priority Testing List* in the ITC's 37th Report were required by a TSCA section 8(d) HaSD rule (61 FR 7421, February 28, 1996) (FRL-4991-6). TSCA section 8(d) and FYI studies for APEs added to the *Priority Testing List* in the ITC's 39th Report were voluntarily submitted in response to information solicitations discussed in the ITC's 39th Report.

2. *Removal rationale.* The APs and APEs being removed from the *Priority Testing List* are listed in Table 15. Three APs and 13 APEs are being removed because no domestic production or importation volumes were reported to the USEPA in response to any of the 1986, 1990, 1994, and 1998 Information Update Rules (IURs) or the 2000 PAIR rule. Production/importation volumes were reported for one AP and two APEs in the 1990 IUR but not in the subsequent 1994 and 1998 IURs or the 2000 PAIR rule. These three chemicals are also being removed because of insufficient production.

TABLE 15.—APs AND APEs BEING REMOVED FROM THE PRIORITY TESTING LIST

CAS No.	Chemical name	Category	Removal rationale
104-43-8	4-Dodecylphenol	AP	b
3884-95-5	2-(1,1,3,3-Tetramethylbutyl)phenol	AP	a, b
31195-95-6	Isobutylphenol (mixed isomers)	AP	a, b
54932-78-4	4-(2,2,3,3-Tetramethylbutyl)phenol	AP	a, b
7311-27-5	2-[2-[2-(4-Nonylphenoxy)ethoxy]ethoxy]ethoxy]ethanol	APE	a, b
20636-48-0	14-(4-Nonylphenoxy)-3,6,9,12-tetraoxatetradecan-1-ol	APE	a, b
26264-02-8	14-(Nonylphenoxy)-3,6,9,12-tetraoxatetradecan-1-ol	APE	a, b

TABLE 15.—APS AND APES BEING REMOVED FROM THE PRIORITY TESTING LIST—Continued

CAS No.	Chemical name	Category	Removal rationale
26571-11-9	26-(4-Nonylphenoxy)-3,6,9,12,15,18,21,24-octaoxaheacosan-1-ol	APE	b
27176-93-8	2-[2-(4-Nonylphenoxy)ethoxy]ethanol	APE	a, b
27177-01-1	17-(Nonylphenoxy)-3,6,9,12,15-pentaoxaheptadecan-1-ol	APE	a, b
27177-05-5	23-(Nonylphenoxy)-3,6,9,12,15,18,21-heptaoxatricosan-1-ol	APE	a, b
27177-08-8	29-(Nonylphenoxy)-3,6,9,12,15,18,21,24,27-nonaoxanonacosan-1-ol	APE	b
51938-25-1	Poly(oxy-1,2-ethanediyl), .alpha.-(2-nonylphenyl)-.omega.-hydroxy-	APE	a, b
65455-72-3	29-(Isononylphenoxy)-3,6,9,12,15,18,21,24,27-nonaoxanonacosan-1-ol	APE	a, b
152143-22-1	Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched, phosphates	APE	a, b
	Nonoxynol-2	APE	a, b
	Nonoxynol-3	APE	a, b
	Nonoxynol-7	APE	a, b
	.alpha.-(4-Nonylphenol)-.omega.-hydroxypoly(oxyethylene)	APE	a, b

a No domestic production or importation volumes were reported to the USEPA in response to 1986, 1990, 1994, and 1998 IURs (indicating that volumes were less than 10,000 pounds per site in 1985, 1989, 1993, and 1997).

b No domestic production or importation volumes were reported to the USEPA in response to the January 11, 2000, PAIR rule published in the FEDERAL REGISTER (65 FR 1548) (FRL-5777-2) (indicating that volumes were less than 1,000 pounds per site in 1999).

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VI. TSCA Interagency Testing Committee Statutory Organizations and Their Representatives

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