

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 2

U.S. ENVIRONMENTAL  
PROTECTION AGENCY-REGION 2  
2010 AUG 27 PM 3:03  
REGIONAL HEARING  
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In the Matter of :  
The Okonite Company, Inc., : Docket No. TSCA-02-2010-9104  
Respondent. : Hon. Barbara A. Gunning  
 : Presiding Officer  
 :  
Proceeding under Section 16(a) of :  
the Toxic Substances Control Act. :  
-----X

**COMPLAINANT'S REBUTTAL PREHEARING EXCHANGE**

**I. PRELIMINARY STATEMENT**

Complainant, the Director of the Division of Enforcement and Compliance Assistance (DECA) of the United States Environmental Protection Agency (EPA or Agency), Region 2, by and through Region 2's Office of Regional Counsel, herewith provides this rebuttal prehearing exchange, in accordance with the Court's Prehearing Order, dated May 4, 2010.

**II. COMPLAINANT'S WITNESS**

Complainant submits the following names of witnesses whom EPA may call:

**Dr. John H Smith**, Chemist, EPA's Fibers and Organics Branch (FOB), National Program Chemicals Division (NPCD). Dr. Smith works out of the Agency's headquarters location (Ariel Rios Building, 1200 Pennsylvania Avenue, N. W., Washington, DC 20460). Dr. Smith will be presented as an expert witness for the Agency. Dr. Smith is expected to testify as to the potential environmental harm from use violations and the lack of correlation between lightly loaded transformers and the regulation at issue in this matter.

Complainant reserves the right, and nothing herein is intended or is to be construed to prejudice or waive any such right, to call or not to call the aforementioned potential witness, and to expand or otherwise modify the scope, extent and/or areas of the testimony of the above-named potential witnesses, where appropriate. In addition, Complainant reserves the right, upon adequate notice to the Court and Respondent, to list and to call additional potential hearing witnesses to answer and/or rebut evidence (testimonial or documentary) submitted by Respondent or on matters arising as a consequence of such evidence.

### **III. COMPLAINANT'S EXHIBITS**

Complainant expects to offer into evidence the following documents and records, copies of which are annexed hereto as Complainant's exhibits:

#### **Complainant's Exhibit 11**

Curriculum Vitae for Dr. John H. Smith.

#### **Complainant's Exhibit 12**

PCB Q & A Manual, 1994 Edition – Forward, Common Trade Names, and Chapter I, Transformers Q1 & A1.

#### **Complainant's Exhibit 13**

PCB Transformers and the Risk of Fire, dated April 1986.

#### **Complainant's Exhibit 14**

Guidance For Inspection of PCB Transformers Needing Enhanced Electrical Protection, dated September 1989, Figure III-3.

Complainant reserves the right, and nothing herein is intended or should be construed to prejudice such right, to supplement or add, subject to notice to the Court and Respondent,

documentary evidence to Complainant's prehearing exchange submission in order to respond to and/or rebut, or otherwise to address an issue arising as a consequence of, evidence Respondent submits or otherwise to update this prehearing exchange.

#### **IV. COMPLAINANT'S VIEW ON HEARING LOCATION**

Complainant adjusts its estimate to approximately three (3) days to put on its direct case to accommodate the additional witness.

#### **V. DISCUSSION OF *IN RE LAZARUS***

The Complaint and Notice of Opportunity for Hearing (Complaint), served on December 2, 2009, alleges Respondent's unauthorized use of two (2) polychlorinated biphenyl (PCB) transformers, or "PCB Transformers," as that term is defined in Section 761.3 of Title 40 of the Code of Federal Regulations (C.F.R.).

While *In re Lazarus*, 7 E.A.D. 318 (1997), discusses the continuing nature of use authorizations, the regulation at issue in *Lazarus* differed from the regulation in this Okonite matter. At that time, the regulation read as follows:

"As of December 1, 1985, all PCB Transformers \* \* \* must be registered with fire response personnel with primary jurisdiction (that is the fire department or fire brigade which would normally be called upon for the initial response to a fire involving the equipment). 40 C.F.R. § 761.30(a)(1)(vi)."

*Id.*; 50 Fed. Reg. 29170, 29200 (July 17, 1985). While the current regulation reads as follows:

No later than December 28, 1998 all owners of PCB Transformers, including those in storage for reuse, must register their transformers with the Environmental Protection Agency, National Program Chemicals Division, Office of Pollution Prevention and Toxics (7404), 401 M St., SW., Washington, DC 20460. This registration requirement is subject to the limitations in paragraph (a)(1) of this section.

40 C.F.R. § 761.30(a)(1)(vi)(A); 63 Fed. Reg. 35384, 35440 (June 29, 1998). The current registration requirement is a condition of continued authorized use:

A transformer owner must comply with all requirements of paragraph (a)(1)(vi)(A) of this section to continue the PCB-Transformer's authorization for use, or storage for reuse, pursuant to this section and TSCA section 6(e)(2)(B).

40 C.F.R. § 761.30(a)(1)(vi)(D); 63 Fed. Reg. 35384, 35440 (June 29, 1998).

The 1985 requirement called for the registration of PCB Transformers "As of December 1, 1985," while the current regulations require registration "No later than December 28, 1998." The 1998 registration requirement imposed a deadline for PCB Transformer registration. Any PCB Transformer not registered by December 28, 1998 is no longer authorized for use, pursuant to 40 C.F.R. § 761.30(a)(1)(vi)(D).

Allegations in the *Lazarus* case also differ from the present Okonite case. In *Lazarus*, the complaint alleged "failure to register PCB Transformers with the local fire department." *Lazarus* at 367. The present Okonite Complaint alleges "unauthorized use" of PCB Transformers, as opposed to "failure to register."

For purposes of a statute of limitation analysis, the timeframe is normally five (5) years prior to the filing of the Complaint. 28 U.S.C. § 2462. The proceeding for the enforcement of any civil fine, penalty, or forfeiture, pecuniary or otherwise, shall not be entertained unless commenced within five years from the date when the claim first accrued. *Id.* EPA filed the Complaint on December 2, 2009. Therefore, the timeframe for a statute of limitation analysis in this matter is from December 2, 2004 to December 2, 2009. In this case, however, EPA maintains that the unauthorized transformer use violations are continuing in nature, i.e., the

violations commenced when Respondent failed to comply with the authorization requirements and continue to the present date.

A more in depth discussion is warranted, but not in the prehearing exchange. Briefs on the legal issues are the appropriate forum for detailed arguments.

Dated: August 26, 2010  
New York, New York

Respectfully submitted,

  
\_\_\_\_\_  
Karen L. Taylor, Esq.  
Assistant Regional Counsel  
Office of Regional Counsel  
U.S. Environmental Protection Agency,  
Region 2  
290 Broadway, 16th floor  
New York, New York 10007-1866  
212-637-3637  
FAX: 212-637-3199

**In the Matter of The Okonite Company, Inc.**  
**Docket No. TSCA-02-2010-9104**

**CERTIFICATE OF SERVICE**

I certify that the foregoing Complainant's Rebuttal Prehearing Exchange was sent this day in the following manner to the addressees listed below:

Original and Copy by Hand:

Karen Maples  
Regional Hearing Clerk  
U.S. Environmental Protection  
Agency, Region 2  
290 Broadway, 16th floor  
New York, NY 10007-1866

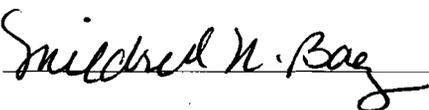
Copy by Pouch Mail:

Honorable Barbara A. Gunning  
Administrative Law Judge  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue NW  
Mail Code 1900L  
Washington, DC 20460

Copy by First Class Mail:  
Facsimile (w/o attachments)  
to (201) 236-0129

Francis T. Guiliano, Esq.  
Law Offices  
102 Hilltop Road  
Post Office Box 340  
Ramsey, NJ 07446

Dated:     AUG 26 2010      
    New York, New York    



**Complainant's Exhibit 11**

Curriculum Vitae for Dr. John H. Smith.

## 2010 Post-Secondary Academic and Employment History for John H. Smith

### Academic Degrees:

1968 - B.S. in Chemistry from Duke University  
1976 - Ph.D. in Chemistry from Georgia Institute of Technology

### Post-Graduate Employment History:

1968-1969 Teaching Assistant at Georgia Institute of Technology  
1969-1971 U.S. Army Intelligence (Interrogator with Vietnamese Language Training) - Vietnam Veteran  
1971-1976 Teaching Assistant and Research Assistant at Georgia Institute of Technology  
1976-1977 Assistant Professor of Chemistry at Gordon Junior College in Barnesville, GA  
1977-date Chemist, United States Environmental Protection Agency (EPA)

### Relevant EPA Experience:

Author of: PCB Federal regulations, technical support documents for Federal PCB regulations, PCB policy documents, PCB regulatory interpretation letters, and PCB regulatory implementation technical guidance. (19 years)

On-site reviewer of technologies, which demonstrate PCB destruction as part of an EPA disposal approval and permitting process. (12 years)

Technical consultant, advisor, and author of technical guidance and enforcement legal agreements on PCB sampling, analysis, disposal and use for EPA enforcement offices. (18 years)

Trained and assisted in the training of Federal Government staff and managers on the PCB regulations and their implications, including the EPA Office of Solid Waste, EPA Regional Staff, EPA Regional public training, Department of Energy headquarters and field office staff and managers, and Bureau of Indian Affairs electrical workers. (16 years)

Speaks and represents the United States Environmental Protection Agency (EPA) in briefings and national meetings on PCB regulations and regulatory policy. Acts as a trainer on the PCB regulations for other Federal Agency staff. (16 years)

Relevant Experience (continued):

Serves as a EPA international PCB expert and a United States of America delegate for the regional UNECE Long Range Transport of Air Pollutants – Persistent Organic Pollutants (LRTAP-POPs) negotiations and the global Stockholm Convention, both of which were signed by the United States Government.

Trains and gives presentations to officials in foreign governments (Japan, People's Republic of China, Philippines, Commonwealth of the Bahamas, Russia and the Commonwealth of Independent States) on PCB management and reviews foreign (Argentina and Philippines) draft PCB regulations. (9 years)

As a consultant to the United National Environment Program (UNEP), contributed to the Basel Convention Secretariat-sponsored Southern African Development Community (SADC) PCB Inventory Workshops, which were led by Mr. Nelson Manda in 2004. Attended and assisted with presentations workshops in Tanzania, Lesotho, Botswana, and Mozambique.

Represented the EPA at the Basel Convention Secretariat-sponsored Regional PCB Project Workshop "Inventarios y Planes de Manejo de PCBs in la Region CentroAmericana" in San Salvador, El Salvador in 2004.

Represented the EPA and spoke at the UNEP-sponsored PCB Consultation I in Geneva in 2004. Currently assisting in efforts for the EPA to sponsor a second "hemispheric" PCB Consultation in the Americas.

Represented the EPA and spoke at the UNEP-sponsored Workshop on Continuing Polychlorinated Biphenyls (PCBs) Management in Latin American and Caribbean Countries in Panama City, Panama in 2008. Lead EPA's effort to co-fund this workshop.

Represented the EPA and spoke at the "Taller Internacional de Sistemas de Gestión y de Tecnologías de Destrucción de Bifenilos Policlorados," which was held in Mexico City from December 1-2, 2009 after being invited by the United Nations Development Programme and the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), which is the EPA of Mexico. The rough translation of the title of the meeting is "International Conference on Management Systems and Technologies for the Destruction of Polychlorinated Biphenyls (PCBs).

EPA PCB expert witness and expert for the United States Department of Justice and EPA Office of General Counsel and EPA Regional Counsels on a successful PCB criminal case, Superfund cost recovery cases, and administrative cases. (11 years)

Quality assurance manager, auditor and technical consultant for the development of environmental testing guidelines. (7 years)

Project manager and technical advisor to the Office of Pollution Prevention Asbestos Team and the Asbestos Coordination Team (3 years).

Represents the Office of Pollution Prevention and Toxics at national EPA and United States Federal Agency technical meetings about asbestos and vermiculite (4 years).

Project manager and work assignment manager for environmental monitoring contracts, statistical sampling and analysis contract, environmental sampling and analysis contract, quality assurance management, environmental risk assessment contracts, risk assessment training contracts, and applied science experimental design and implementation contracts. (28 years)

#### Federal Government Awards

EPA Merit Pay/Cash Awards Every year since 1978

EPA/OSWER Asbestos Science/Technical Achievement Award (2004)

EPA OPPT Peer Award for the Move to the Federal Triangle Complex (2002)

EPA OPPTS Cash Award for Occupant Emergency Plan Service (2006)

EPA OPPT Peer Award for Transition of PCB Disposal to OSWER (2007)

EPA/OSW Friends of OSW Award for the Transfer of the PCB Disposal Program (2007)

EPA Bronze Medals:

OPPTS - PCB Rulemaking (1987)

OSWER - PCB Waste Cleanup at Superfund Sites (1991)

OECA - Ex-USS Lexington Museum PCB Non-Liquid Use Exemption (1992)

OECA - PCB Disposal at Demilitarized Missile Silos (1995)

OGC - Enforcement Agreement for PCB Cleanup at Mare Island Facility (2002)

OPPTS - Vermiculite Attic Insulation Pamphlet (2004)

OPPTS - Asbestos Activity Plan (2006)

OSWER - PCB Program Transfer Team (2008)

Region 3 – Environmental Protection Services Litigation (2010)

EPA Silver Medal: Stockholm Convention Negotiations (June 2001)

EPA Gold Medal: PCB Disposal Regulation Amendments (June 1999)

US State Department Silver Medal: Stockholm Convention Negotiations (June 2001)

**Complainant's Exhibit 12**

PCB Q & A Manual, 1994 Edition – Forward, Common Trade Names, and  
Chapter I, Transformers Q1 & A1.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

--- PCB Q & A MANUAL ---

An EPA TSCA assistance document designed to provide the regulated community with Agency interpretations to frequently posed questions.\*

Prepared by:

OPERATIONS BRANCH  
CHEMICAL MANAGEMENT DIVISION  
OFFICE OF POLLUTION PREVENTION AND TOXICS

1994 EDITION

\* This publication is an informal document, and persons are directed to the PCB final rules at Title 40 of the Code of Federal Regulations part 761 (40 CFR part 761) except where otherwise noted for specific legal requirements. This document provides information on the regulatory requirements for polychlorinated biphenyls that have been reflected in final regulations published through December 31, 1990. Any past versions of this document either final or in draft form are now obsolete.

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--FOREWORD--

The PCB Q & A Manual has been prepared to assist the user in answering frequently asked questions on the PCB regulations. It is a quick source of information that will be updated as new rules and policies become final. The looseleaf style and pagination within chapters will facilitate updating as needed. Each time a new chapter is added, a new table of contents and a new alphabetical list of chapters will also be generated. All persons to whom EPA has sent the PCB Q & A Manual will automatically receive updates with instructions to add and/or replace pages already in the binder. Please complete the following Update Request Form and mail this entire page to: Environmental Assistance Division (7408), Environmental Protection Agency, 401 M St. S.W., Washington, DC 20460, or call the TSCA Assistance Information Service at 202-554-1404 to receive the PCB Q & A Manual Updates and Revisions.

- PCB Q & A MANUAL -

Update Request Form

FACILITY: \_\_\_\_\_  
STREET ADDRESS: \_\_\_\_\_  
CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
ATTENTION: \_\_\_\_\_

- INTRODUCTION -

The term PCB is an acronym for polychlorinated biphenyl. PCBs are produced by attaching one or more chlorine atoms to a biphenyl molecule. As one of the most stable organic compounds known, their properties made them useful as dielectric fluid in various types of electrical equipment and heat transfer systems.

Monsanto Corporation was the principal manufacturer of PCBs for use as a fire-resistant or nonflammable insulating fluid in electrical and heat transfer equipment. In 1977, Monsanto voluntarily ceased production of PCBs because of widespread environmental concerns about the chemical.

PCBs were sold under the trade name "Aroclor." However, companies that used PCBs in the manufacture of transformers and capacitors, and for other uses, often used other trade names. Common trade names for PCBs include the following:

COMMON TRADE NAMES

Aroclor	Chlorinol	Fenclor	Nonflammable Liquid
Arochlor B	Chlorphen	Hyvol	Phenoclor
ALC	Clophen	Inclor	Pydraul
Apirolio	Clorinol	Inerteen	Pyralene
Asbestol	Diaclor	Keneclor	Pyranol
ASK	DK	Kenneclor	Pyroclor
Askarel*	Dykanol	Magvar	Saf-T-Kuhl
Adkarel	EEC-18	MCS 1489	Santotherm
Capacitor 21	Elemex	No-Flamol	Santovac 1 and 2
Chlorextol	Eucarel	Nepolin	

\*Askarel is also the generic term used for nonflammable insulating liquid in transformers and capacitors.

"Askarel" PCBs are chemical mixtures containing many different PCB congeners. They have a heavy, liquid, oil-like consistency, and weigh 10 to 15 pounds per gallon. They are very stable, exhibit low water solubility, low vapor pressure, low flammability, high heat capacity, low electrical conductivity, and have a favorable dielectric constant for use in electrical equipment.

When PCBs were manufactured as dielectric fluid for transformers, they were often mixed with certain organic solvents such as

chlorinated benzenes. Therefore, the dielectric fluids present in the electrical transformers containing PCBs are usually not pure PCB. The presence of these other chemicals influences the physical/chemical properties of the Askarel fluid. PCBs are also produced as byproducts and process impurities in certain chemical manufacturing processes. They may vary from a single isomer to a variety of congeners and display different physical and chemical properties, depending on the number of isomers and the degree of chlorination (the number of chlorine atoms attached to the biphenyl molecule). PCBs with fewer chlorine atoms are, in general, less persistent, more water soluble, and more flammable than PCBs with more chlorine atoms.

PART A

- TRANSFORMERS -

Transformers are used to raise and lower voltage. As voltage is transmitted from a generating facility through transmission and distribution systems, it may be raised or lowered a number of times depending on the technical configuration of the system and the varying voltage requirements of the customer.

A large transformer may be several times the size of an automobile and contain hundreds or even thousands of gallons of oil or other dielectric fluid. Such transformers are typically located in generating facilities or substations. However, the vast majority of transformers are considerably smaller.

Between the extremely large transformers used to transmit power and the extremely small overhead transformers used to bring power into homes, there are numerous transformers of assorted size and voltage ratings used to adjust voltage to the requirements of all types of commercial and industrial customers. Prior to EPA's regulations of PCBs, when these transformers were located indoors, fire codes often encouraged the use of PCBs as an insulating fluid.

Today, for purposes of regulation, EPA classifies transformers into three basic categories - "PCB," "PCB-Contaminated," and "Non-PCB." A "PCB Transformer" is one which contains 500 parts per million (ppm) or greater PCBs. A "PCB-Contaminated Transformer" is one which contains 50-499 ppm PCBs. And finally, a "Non-PCB Transformer" contains less than 50 ppm PCBs.

EPA also categorizes transformers by their type, location, and secondary voltage. As these various categories of transformers are regulated to different degrees, it is important to know the type of transformer in question.

**Q1:** Do transformers have to be tested to determine their PCB concentration? If not, how can I determine the equipment's classification?

**A1:** The regulations do not require that these types of equipment be tested to determine the PCB concentration in their fluid. However, in the absence of a test, certain assumptions must be made about the equipment. For example, if the nameplate

indicates that the equipment contains PCB dielectric fluid (see table of trade names on p.i), or, if there is any reason to believe that the equipment at one time contained PCB dielectric fluid, or, if there is no nameplate on the equipment or other information to indicate the type of dielectric fluid, then the equipment must be assumed to be a PCB Transformer (500 ppm or greater). Transformers which are known to contain mineral oil dielectric fluid and whose PCB concentration is unknown, must be assumed to be PCB-Contaminated Electrical Equipment (50-499 ppm) and must be treated as such. However, if the PCB concentration has ever been known or if a person has reason to know the concentration equalled or exceeded 500 ppm PCBs, the transformer must be treated as a PCB Transformer. These "assumption rules" effectively apply to all regulatory requirements relating to the equipment including: use and servicing, leaks and spills, sale for reuse, storage for disposal, and disposal.

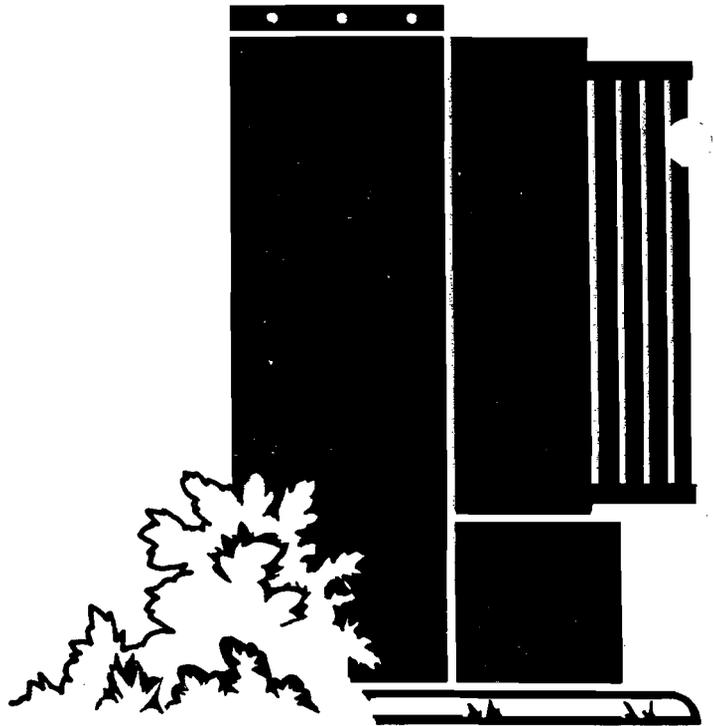
**Complainant's Exhibit 13**

PCB Transformers and the Risk of Fire, dated April 1986.



# **PCB Transformers and the Risk of Fire**

## **A Guide for Building Owners**



The greatest danger from a fire usually is not the flames or the heat but the smoke and gases given off from burning substances. The burning of chemicals as toxic as PCBs (polychlorinated biphenyls) produces gases which are particularly dangerous.

Individuals may be exposed to PCB gases if a fire occurs in or near an electrical transformer which uses PCBs in its insulating fluid.

If you are the owner of a commercial building, you have a special responsibility to reduce the threat to the health of your tenants and local fire fighters that could stem from a fire in or near a PCB transformer. (A commercial building is a non-industrial building—such as an apartment house, school, meeting hall, or store—which is typically accessible to the general public.)

PCB electrical transformers were manufactured between 1929 and 1977. An estimated 77,000 PCB transformers are in use in this country today. Only about 18,000 of these are owned by utility companies. The great majority of PCB transformers belong to building owners.

U.S. Environmental Protection Agency regulations now require owners of PCB transformers to take specific actions to help ensure the public safety.

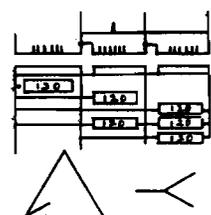
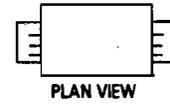
#### Do You Own a PCB Transformer?

As a building owner, you need to know if you own the electrical transformer(s) for your building. If you are uncertain, contact your local utility company. If the utility does not own the transformer in your building, then you do.

If you own the transformer in your building, your next step is to determine if it contains PCBs.

The transformer will be in or near the building it serves. It may be on the roof, in the basement, in the parking lot, on an exterior wall, in a vault under the sidewalk, or in some other location close to where the power cables enter the building.

Generally, a transformer will have a nameplate attached to one side of the unit.

<b>Trade Name</b>																											
THREE PHASE TRANSFORMER 08692747008																											
500	TYPE	AT	CYCLES 60 6644																								
RISE 55	%C IMPED 5.17	% B.L.H.V. 95	KV BLLV 130 KV																								
H. 13200		L.V. 208Y/120																									
<table border="1"> <thead> <tr> <th>HIGH VOLT VOLTS</th> <th>TAP CHANGER AMPS</th> <th>DIAL</th> <th>CONNECTS</th> </tr> </thead> <tbody> <tr> <td>13860</td> <td>20.6</td> <td>A</td> <td>1 to 2</td> </tr> <tr> <td>13530</td> <td>21.3</td> <td>B</td> <td>2 to 3</td> </tr> <tr> <td>13200</td> <td>22.8</td> <td>C</td> <td>3 to 4</td> </tr> <tr> <td>12870</td> <td>22.4</td> <td>D</td> <td>4 to 5</td> </tr> <tr> <td>12540</td> <td>23.0</td> <td>E</td> <td>5 to 6</td> </tr> </tbody> </table>		HIGH VOLT VOLTS	TAP CHANGER AMPS	DIAL	CONNECTS	13860	20.6	A	1 to 2	13530	21.3	B	2 to 3	13200	22.8	C	3 to 4	12870	22.4	D	4 to 5	12540	23.0	E	5 to 6		
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		<p>APPROX. WEIGHTS IN POUNDS</p> <table border="1"> <tr> <td>WHEN UNTANKING</td> <td>3000</td> </tr> <tr> <td>TANK IN FITTING</td> <td>1565</td> </tr> <tr> <td>OIL (PYRANOL)</td> <td>1685</td> </tr> <tr> <td>TOTAL</td> <td>6250</td> </tr> </table>		WHEN UNTANKING	3000	TANK IN FITTING	1565	OIL (PYRANOL)	1685	TOTAL	6250																
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TOTAL	6250																										
GALLONS OF OIL 135																											

Since PCBs were marketed under different trade names, the nameplate on a PCB transformer may not carry the specific term "PCBs." Trade names for PCBs include:

Chlorextol	Pyranol
EEC-18	Chlophen
Kennechlor	Pyralene
Abestol	Non Flammable Liquid
No-Flamol	Fenclor
Aroclor	Solvol
Askarel	Saf-T-Kuhl
Inerteen	DK
Phenoclor	

If the nameplate says "PCBs" or any of the names on the above list, then the transformer most likely contains PCBs in concentrations of between 600,000 and 700,000 parts per million (ppm). Any transformer containing PCBs at a concentration of 500 ppm or greater is subject to the new EPA regulations listed below.

Should your transformer's nameplate not carry any of the above labels, or if the label is missing or illegible, your utility company may be able to tell you if the transformer contains PCBs. Otherwise, the only way to be certain is to have the fluid tested.

## New Requirements

For some time, regulations have been in effect which govern the use, servicing, and disposal of PCB transformers. The recently issued rule described here applies to all PCB transformers in commercial buildings and establishes strict requirements for the owners of those transformers.

- Installation of PCB transformers in, or near, commercial buildings is prohibited. (Although PCBs are no longer manufactured for use in transformers, many PCB transformers are currently in storage for reuse.)
- Owners must register PCB transformers with their local fire department.
- Utility companies that own PCB transformers located in or near commercial buildings must register the transformers with building owners as well as with their fire department.
- PCB transformer areas, excluding grates and manhole covers, must be marked.
- Combustible materials cannot be stored within a PCB-transformer enclosure or within five meters (approximately 16 feet) of an unenclosed transformer.
- Owners of PCB transformers which are involved in a fire must report the incident immediately to the U.S. Coast Guard National Spill Response Center by calling 800-424-8802 toll-free. (In the Washington, DC metropolitan area, call 426-2675.)

As of October 1, 1990:

- The use of PCB units that EPA believes have a relatively high probability of electrical failure is prohibited.
- Improved electrical protection must be installed on other PCB transformers to avoid fires caused by electrical faults.

It is critically important that commercial building owners register PCB transformers with local fire departments or brigades. PCB fires pose serious risks to building occupants and fire fighters. If fire fighters and other emergency personnel know they may be dealing with PCBs, they can be prepared and equipped to deal with the fire. Both fire fighters and building owners also should be aware of the need to quickly evacuate occupants in an emergency situation, and of the need to insure that proper and adequate cleanup occurs prior to reoccupation of the building.

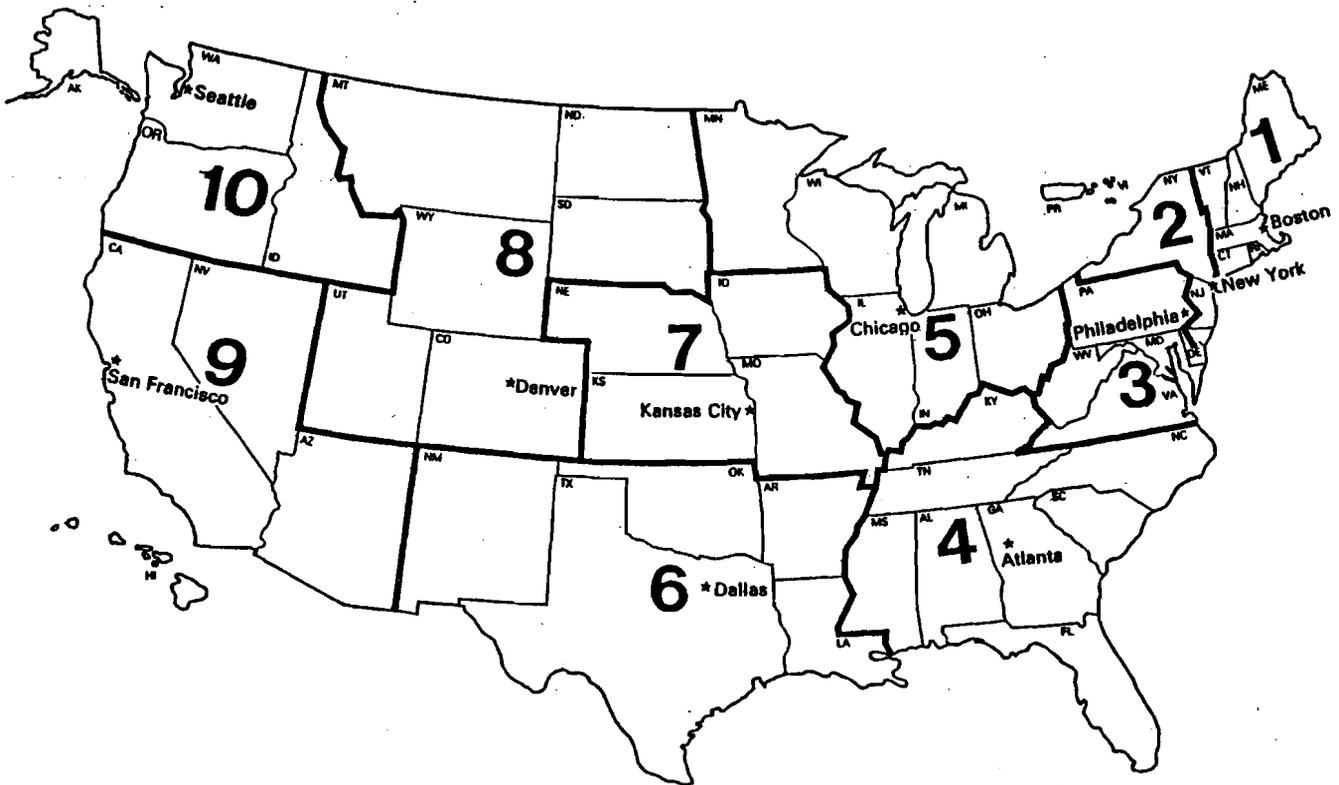
## A Serious Health Concern

EPA's regulations covering transformers are part of a series of rules the Agency has issued in recent years to protect the public from PCBs. There are a number of adverse health effects associated with these chemicals. Tests on animals show that PCBs can harm reproduction and growth, and can cause skin lesions and tumors. When PCB dielectric fluid is partly burned—as it may be in a transformer fire—the PCB fluid produces by-products, which include polychlorinated dibenzodioxin and polychlorinated dibenzofurans, that are much more toxic than the PCBs themselves. Tests on rats show that furans can cause anemia and other blood problems. Dioxin is associated with a number of health risks, and has been shown to cause cancer of the liver, mouth, adrenal gland, and lungs in laboratory animals.

## For More Information

If you need help in complying with the new regulation, please contact your nearest EPA Regional Office (see back cover). For more information about the transformer regulation, or other EPA rules controlling PCBs, write to the Office of Toxic Substances (TS-799), U.S. EPA, Washington, DC 20460, or call that office toll free at 800-424-9065 (in Washington, D.C., call 554-1404).

## EPA's Regional PCB Contacts



**EPA Region 1**  
 John F. Kennedy Federal Building  
 Boston, MA 02203  
 617-223-4857  
 Dr. Harold E. Kazmaier, or  
 Tony Palermo

**EPA Region 2**  
 Woodbridge Avenue  
 Edison, NJ 08837  
 212-321-6669  
 Daniel Kraft, or  
 Arthur Gevirtz

**EPA Region 3**  
 841 Chestnut Street  
 Philadelphia, PA 19107  
 215-597-7668  
 Edward Cohen

**EPA Region 4**  
 345 Courtland Street, NE.  
 Atlanta, GA 30365  
 404-881-3864  
 Bob Stryker

**EPA Region 5**  
 230 South Dearborn Street  
 Chicago, IL 60604  
 312-886-6002  
 Karl Bremer

**EPA Region 6**  
 1201 Elm Street  
 Dallas, TX 75270  
 214-767-5322  
 Darl Mount, or  
 Norman Dyer

**EPA Region 7**  
 726 Minnesota Avenue  
 Kansas City, KS 66101  
 816-374-6531  
 Leo Alderman

**EPA Region 8**  
 999 18th Street  
 Denver, CO 80202-2413  
 303-293-1742  
 Steve Farrow

**EPA Region 9**  
 215 Fremont Street  
 San Francisco, CA 94105  
 415-974-8389 Raymond Seid,  
 or Rick Vaille

**EPA Region 10**  
 1200 Sixth Avenue  
 Seattle, WA 98101  
 206-442-2850  
 Anita Frankel

**Complainant's Exhibit 14**

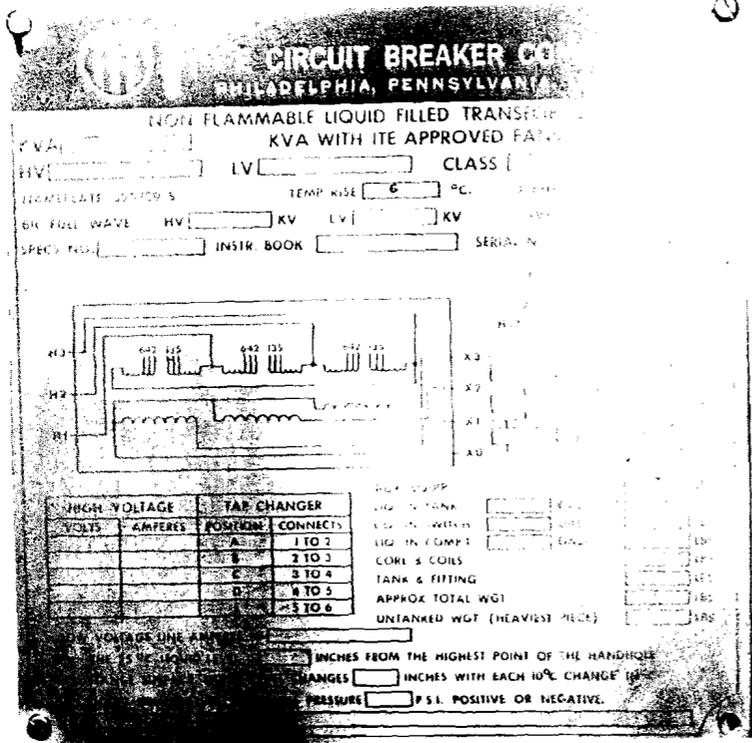
Guidance For Inspection of PCB Transformers Needing Enhanced Electrical Protection, dated September 1989, Figure III-3.

GUIDANCE FOR INSPECTION OF PCB TRANSFORMERS  
NEEDING ENHANCED ELECTRICAL PROTECTION

September 30, 1989

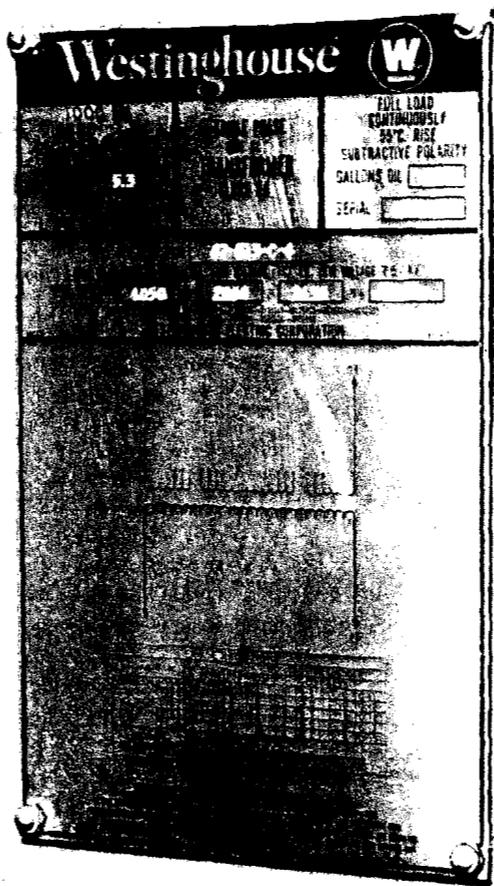
Office of Toxic Substances  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

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a. Three-Phase Transformer

9226-5



b. Single-Phase Transformer

9210-17

FIGURE III-3. TRANSFORMER NAMEPLATES

PCB Transformer  
Inspection Manual  
Site/Building Visit  
Revision 1; September 30, 1989  
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