Polychlorinated Biphenyls in the Ohio River Basin

The Ohio River Watershed Pollutant Reduction Program

The Ohio River Valley Water Sanitation Commission

April 1997

EXECUTIVE SUMMARY

Polychlorinated biphenyls (PCBs) are manmade compounds that were manufactured as hydraulic and dielectric fluids for commercial applications. In the late 1960's, after a poisoning incident in Japan, public fears increased over potential human health impacts associated with the use of PCBs. In response to public concern, Congress passed the Toxic Substances Control Act (TSCA) in 1976 which included the bans on the manufacture, distribution, and unauthorized use of PCBs in the United States. Despite the ban, the chemical stability of PCB compounds has enabled them to persist in the environment some 20 years after TSCA.

Within the Ohio River Basin the identification of PCB sources has been difficult due to their wide variety of industrial uses. To date, over 400 facilities have been classified as *possible* PCB sources within the Ohio River Basin. In addition, 32 National Priority List (NPL) sites with PCB contamination have been identified.

Due to technological constraints, data on the presence of PCBs in the Ohio River Basin is limited. Currently, fish tissue data are used exclusively to evaluate the presence of PCBs in surface water. Using tissue samples collected by ORSANCO from 1988-1995, there appear to be small decreases in PCB concentration in the main stem of the Ohio River. The median concentration of PCBs in fish tissue ranged between 1.2 and 2.6 mg/kg of PCB, with a maximum concentration reaching 9.93 mg/kg in 1992. In addition, throughout the entire sampling period concentrations in carp and channel catfish were found to exceed the Food and Drug Administration (FDA) Tolerance Level of 2.0 ppm PCBs for interstate commerce. Distinct trends also exist in the longitudinal distribution of both PCB concentration and lipid normalized data for fish tissue in the Ohio River. For the eight year period, the median PCB concentration decreases from the headwaters of the Ohio River in Pennsylvania to the mouth in Illinois.

While contamination has been found in fish tissue in the Ohio River, there is still a strong need for atmospheric, sediment, and water column data to better assess PCB contamination in the Ohio River Basin. Recommendations for future work would include monitoring on the main stem of the Ohio River to determine if water quality standards are being met and monitoring major tributaries in order to narrow the scope of source contributors.

INTRODUCTION

Polychlorinated biphenyls (PCBs) are manmade compounds that have been used commercially since 1929. These chemicals were manufactured as combinations of chlorinated biphenyls that differed according to the percentage of chlorine in the mixture. PCBs had a wide variety of industrial applications due to their chemical stability and flame resistance, however these characteristics also enabled them to remain highly persistent in the environment. PCBs were commonly used as plasticizers, heat-transfer fluids, solvent extenders, hydraulic fluids, flame retardants, sealers, ink carriers, organic diluents and dielectric fluids.

The dangers associated with PCBs were first brought to public attention in 1968 when a heat exchanger in a Japanese processing plant leaked PCBs into rice oil, poisoning more than 1,600 local residents due to ingestion. Victims of this incident reported ailments such as chloracne, stomach and respiratory illnesses, joint pain and visual disorders that persisted for more than 10 years following exposure. While there were not any confirmed fatalities or cancers associated with the poisoning incident in Japan, laboratory studies on animals indicated that PCBs could cause reproductive failures, gastric disorders, skin lesions and cancer.

As a result of the incident in Japan and the potential chronic toxicity associated with PCBs, Congress passed the Toxic Substances Control Act (TSCA) in 1976 which, among other regulations, banned the manufacture, distribution and unauthorized use of PCBs in the United States. This ban was followed by subsequent regulations governing the use and disposal of PCBs by focusing primarily on possible leakage and combustion of dielectric fluid in transformers. By 1990, the United States Environmental Protection Agency (USEPA) had required PCB transformers to be removed from areas in or near commercial buildings and food. In addition, USEPA encouraged the process of retrofill, which involves replacing a transformer's dielectric fluid with a non-PCB product. Currently, PCBs are no longer in production in the U.S. but they are permitted to be used, with certain restrictions, in totally enclosed activities.

This report is prepared as part of the Ohio River Watershed Pollutant Reduction Program (ORWPRP) being conducted by the Ohio River Valley Water Sanitation Commission (ORSANCO) with funding assistance from the U. S. EPA and support from the Commission's member states. The goal of ORWPRP is to generate necessary information to evaluate the need for and achieve meaningful reductions of pollutants inhibiting the beneficial uses of the Ohio

River and its tributaries. The purpose of this report is to present the available information on PCBs pertaining to water pollution problems within the Ohio River Basin. Specifically, data is included on the geographic extent and severity of PCB contamination in various aquatic media along with potential sources of such contamination.

METHODS

Information contained in this report was generated through U.S. EPA documents and articles obtained through literature searches in libraries and on the Internet. Data specific to the Ohio River Basin was obtained through personal communication and information requests with employees at federal, state, and local government agencies. Agencies supplying information included: the Ohio Environmental Protection Agency (OEPA) Division of Emergency and Remedial Response, OEPA Division of Surface Water, Ohio Department of Health, Illinois Environmental Protection Agency, Kentucky Division of Water, Indiana Department of Environmental Management, Pennsylvania Department of Environmental Protection, Ohio-Kentucky-Indiana (OKI) Regional Council of Governments, U.S. Army Corps of Engineers, and ORSANCO. In addition, sources of contamination were complied through the Permit Compliance System (PCS) database , Listing of Fish and Wildlife Advisories (LFWA), Toxic Release Inventory (TRI) database, and the National Priority List (NPL) database in CERCLIS. Were possible data was assessed for trends on a spatial and temporal scale in order to quantify changes in contamination within the Basin.

PHYSICAL AND CHEMICAL PROPERTIES

PCBs are a family of compounds produced commercially by the direct chlorination of aromatic organic compounds having a basic structural unit of biphenyl. Chlorination of the biphenyl compound can produce 209 possible congeners with 1 to 10 chlorine atoms substituted on the aromatic rings (see Figure 1). The congeners are divided into ten classes according to the number of substituted chlorines (see Table 1). All compounds within the same class are structural isomers of each other, differing only in the location of the chlorine atoms on the biphenyl ring.

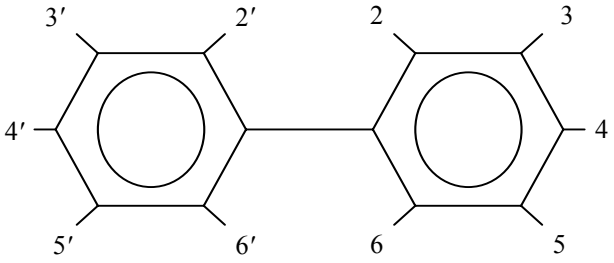


Figure 1. General chemical structure of a chlorinated biphenyl compound with the formula $C_{12}H_{10-x}Cl_x$, where x can be from 1 to 10 (Sawhney, 1986).

Congener Classes (-chlorobiphenyl)	Number of Possible Isomers	Congener Classes (-chlorobiphenyl)	Number of Possible Isomers
Mono-	3	Hexa-	42
Di-	12	Hepta-	24
Tri-	24	Octa-	12
Tetra-	42	Nona-	3
Penta-	46	Deca-	1

Table 1. Classes of chlorobiphenyls and possible isomer combinations (Cairns et al., 1986).

The behavior of PCBs differs depending on the number of chlorine atoms present. In general, these compounds are mobile liquids characterized as being stable, relatively insoluble and having the ability to sorb strongly to organic matter (see Table 2). As the chlorine content increases, the solubility of the compound decreases and the mixture becomes more viscous. In addition, PCBs are highly lipophilic and bioaccumulation in fish tissue can result in concentrations which are considered unsafe for human consumption (USEPA, 1980).

PCBs exist in the atmosphere as vapors or adsorbed to airborne particulates. The gaseous form predominates, typically comprising over 90 percent of the total PCB concentration in air (Atlas et al., 1986). Once in the atmosphere, PCBs can be carried for long distances until they return to earth by wet or dry deposition. On average, PCBs may remain in the atmosphere for more than 10 days (USDHHS, 1995).

Property	Value
Molecular Weight	200.7-375.7 AMU
Physical State	Liquid @ 20°C
Boiling Point	275-420 °C
Density	1.15-1.58 g/cm^3 at 25°C
Water Solubility	.0027-.59 mg/L
Log Octanol-Water Partition Coefficient (Log K_{ow})	4.7-6.8
Soil Adsorption Coefficient (K_{oc})	5.3x10^5 mL/g
Vapor Pressure	7.7x10^{-5}-6.7x10^{-3} mm Hg
Fish Bioaccumulation Factor	26,000-660,000

Table 2. Summary of physical and chemical properties of polychlorinated biphenyls (USEPA, 1990).

The ultimate fate of PCBs in the environment is terrestrial or aquatic sediments. Once released into the environment, PCBs bind strongly to sediments where they remain in place or become transported by erosion. The adsorption of PCBs in soil is directly related to the degree of chlorination and the composition of the soil. Generally, adsorption increases as the chlorination of the compound and/or the organic carbon and clay content of the soil increase (USDHHS, 1995). In addition, experiments have shown that PCBs sorbed by soils remain relatively immobile against leaching with water or sanitary landfill leachate (Sawhney, 1986). However, in the presence of organic solvents, PCBs have been shown to leach significantly in soil thereby, making it a concern at hazardous waste sites (Chou and Griffin, 1986). In surface waters, a small amount of PCBs remain dissolved but, most settle in bottom sediments due to their high specific gravity and affinity for solids.

PCBs persist in the environment and may have an estimated half-life in terrestrial soil of several years (USDHHS, 1995). Sediments containing PCBs at the bottom of a large body of water such as a lake or river generally act as a reservoir from which PCBs may be released in small amounts over time. The breakdown of PCBs in water and soil occurs over several years, or even decades (USDHHS, 1995). The ability of PCBs to be degraded or transformed in the

environment depends in part on the degree of chlorination of the biphenyl molecule. In general, the persistence of PCB congeners increases as the degree of chlorination increases.

PCBs are removed from the environment primarily by photochemical degradation or biodegradation. Photochemical degradation utilizes light energy to replace chlorine atoms with hydroxyls, ultimately dechlorinating PCBs. Generally, chlorobiphenyls with a higher chlorine content undergo degradation faster than those with a lower chlorine content. However, PCBs in bottom sediments not exposed to light will not degrade in this fashion. In biodegradation, both anaerobic and aerobic microorganisms present in soil and sediments decompose and metabolize PCBs. Biodegradation rates are highly variable because they depend on a number of factors including: the degree of chlorination, concentration of PCBs, types of microbial populations present, and the available nutrients and temperature in the subsurface (USDHHS, 1995). Generally, microbial degradation of the lower chlorinated biphenyls has been found to occur at a faster rate than the higher chlorinated biphenyls but, the process can be enhanced by the addition of preexposed microbial populations.

ENVIRONMENTAL AND HUMAN HEALTH CONCERNS

Humans can be exposed to PCBs by the ingestion of contaminated food, inhalation or dermal contact with contaminated media. Since 1985, when PCBs were restricted to sealed systems, ingestion has become the most significant route of exposure to the general population while inhalation and dermal contact are associated more with occupational exposure. Food can become contaminated with PCBs as a result of accidental spills, equipment malfunctions and from contaminated food packaging. Currently, the primary source of PCB ingestion is through the consumption of contaminated fish (USDHHS, 1995).

Fish uptake PCBs in water through their gills and through the food chain by consumption of contaminated aquatic organisms. Once PCBs are absorbed into the bloodstream they accumulate primarily in fatty tissues where they have the ability to biomagnify, or increase in concentration, as the compound is transferred through the food chain. In humans and other mammals, PCBs accumulate in the gastrointestinal tract, adipose tissue and skin.

Opinions vary as to the precise health risks PCBs pose, however they are classified as *probable* human carcinogens and several studies suggest they can enhance the carcinogenicity of other chemicals. Most information regarding health effects of PCBs in humans is generated

from occupational exposure studies. Currently, there is not any conclusive evidence linking exposure of PCBs to cancer in humans. Individuals that have been exposed to PCBs have experienced symptoms such as chloracne, jaundice, numbness and swelling of limbs, spasms, hearing and vision problems, increased eye discharges and gastrointestinal disorders (USEPA, 1980). From epidemiological studies, the major toxic effect in animals appears to be liver damage. Other effects include stomach, thyroid and kidney damage and immunosupressive effects. Further laboratory testing has shown that PCBs are fetotoxic in rats, monkeys, minks and rabbits.

With the designation of PCBs as probable human carcinogens, national regulatory standards and criteria have been established for acceptable levels in surface and drinking water, and freshwater fish (see Table 3). Both the maximum contaminant level (MCL) and the maximum contaminant level goal (MCLG) apply only to finished drinking water. A MCLG is a non-enforceable health goal set at a level to prevent known or anticipated adverse effects in drinking water with an adequate margin of safety. A MCL is an enforceable standard that is set as close to the MCLG as is feasible on the basis of water-treatment technologies and cost. The Food and Drug Administration (FDA) Tolerance Level represents a limit at or above which FDA will take legal action to remove products from the market. This level is based on the unavoidability of the poisonous or deleterious substance and does not represent permissible levels of contamination where it is avoidable (FDA, 1994).

Regulatory Standards and Criteria	**Value**
U.S. EPA Water Quality Criteria for Human Consumption of Water and Organisms	0.044 ug/L (ppb)
U.S. EPA Drinking Water Standards	0.0005 mg/L (MCL) 0 mg/L (MCLG)
Great Lakes Initiative (GLI): Human Cancer Criterion Wildlife Criterion	 .0000039 ug/L (ppb) .000074 ug/L (ppb)
Food and Drug Administration Tolerance Level for Fish and Shellfish*	2 ppm (mg/kg)
U.S. EPA Ambient Water Quality Criteria for Protection of Aquatic Organisms	2.0 ug/L (Acute) 0.014 ug/L (Chronic)

Table 3. National water quality regulations applicable to PCBs (USEPA, 1990 and 1995).

Among national regulations, 0.044 ug/L is the limiting criteria for determining if surface waters meet water quality standards. In addition, three states within the Ohio River Basin have established additional water quality regulations to supplement national standards (see Table 4). States are required to comply with existing federal regulations but can develop more stringent criteria within their boundaries.

State	Regulations	Value
KY	Maximum Contaminant Level	0.000079 ug/L
IN	Chronic Aquatic Criterion Outside Mixing Zone	0.014 ug/L
OH	Outside Mixing Zone: 30-Day Average (Aquatic Life)	0.001 ug/L
OH	Outside Mixing Zone: 30-Day Average (Human Health)	0.00079 ug/L

Table 4. State regulations and guidelines applicable to PCBs (USDHHS, 1995).

FORMATION AND SOURCES

Approximately 99 percent of commercial PCBs produced for U. S. industry were manufactured by Monsanto Chemical Company in Sauget, Illinois and sold under the trade name Aroclor® (USDHHS, 1995). The Aroclors are identified by a four-digit numbering code in which the first two digits denote the number of carbon atoms in the biphenyl group and the last two digits represent the approximate percentage of chlorine in the mixture. The most common PCBs manufactured include Aroclor® 1242, Aroclor® 1248, Aroclor® 1254 and Aroclor® 1260 (Cairns et al., 1986).

PCBs are not naturally occurring compounds so their presence in the environment is a result of anthropogenic activities. Approximately 1.25 billion pounds of PCBs were purchased by U.S. industry by the time production stopped in 1977 (USEPA, 1993). The United States Environmental Protection Agency estimates that 60 percent, or 750 million pounds, of PCBs produced are still in use in the United States in some 150,000 PCB transformers and 2.5 million mineral-oil transformers (Graham, 1987). Another 36 percent (450 million pounds) of PCBs

were either placed in landfills or dumps or were available to biota via air, water, soil and sediments. The remaining 4 percent (55 million pounds) were destroyed by incineration or degraded to the environment (USEPA, 1993).

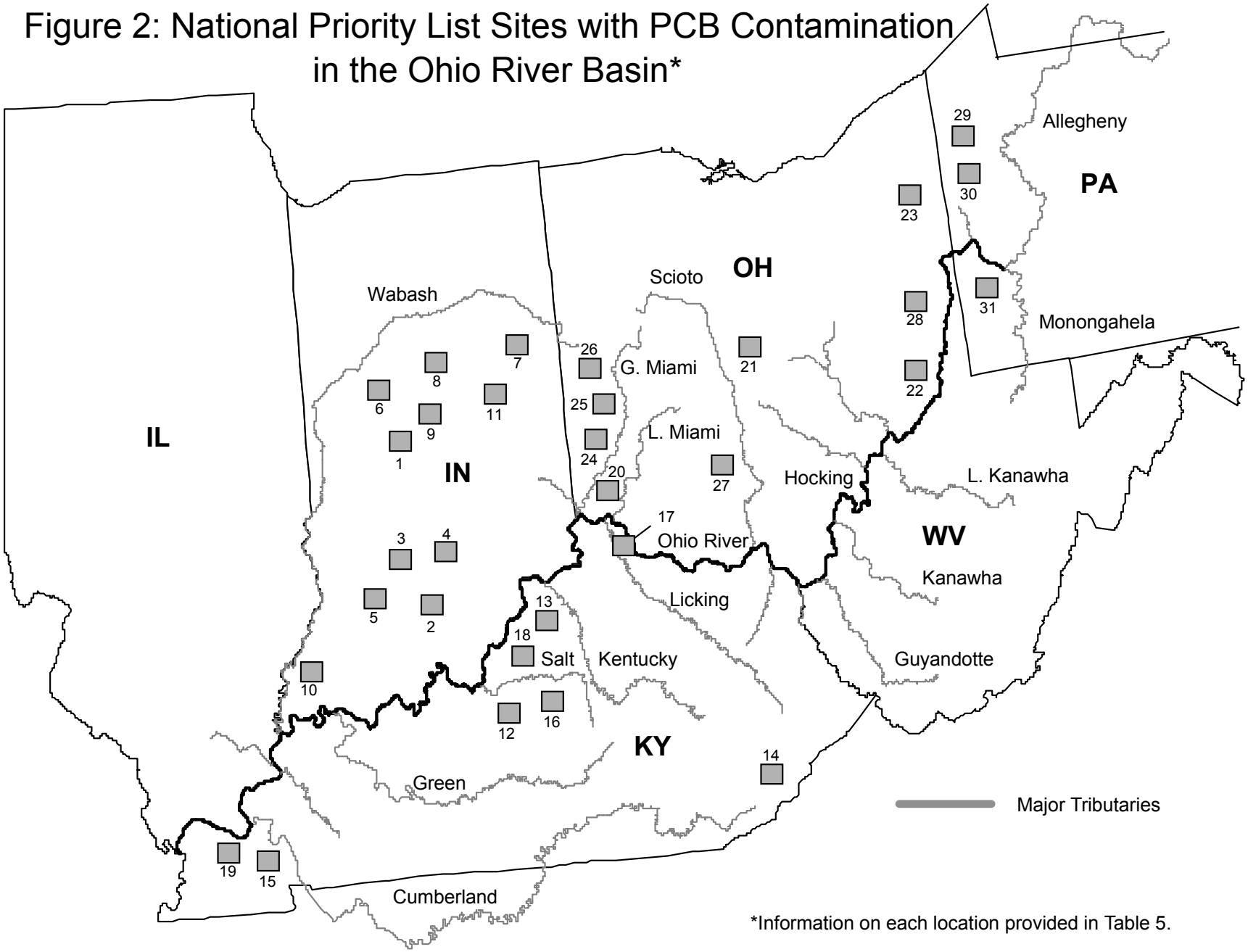
Although uses of PCBs are now limited to closed-system applications such as sealed capacitors and transformers, most contamination reflects a period when PCBs where used in open systems and losses to the environment were likely. Today, PCBs can be released into the environment from poorly maintained hazardous waste sites that contain PCBs, illegal or improper dumping of PCB wastes and leaks or releases from electrical transformers containing PCBs. In addition, when PCBs are incinerated small amounts are released into the atmosphere as a result of incomplete combustion (USDHHS, 1995).

Nationally, PCBs have been identified in at least 387 of 1,416 hazardous waste sites that have been proposed for inclusion in the U.S. EPA's National Priorities List (NPL) (USDHHS, 1995). The NPL is U.S. EPA's list of uncontrolled or abandoned hazardous waste sites identified for possible long-term clean-up under the Superfund Program. Within the Ohio River Basin, 31 NPL sites have been identified (see Figure 2). Of these *potential* sources, 65 percent are former industrial waste landfills or disposal facilities that have soil contaminated with PCBs (CERCLIS, 1996). In addition, seven of the NPL sites are located in close proximity to major tributaries and/or the Ohio River.

Industries associated with the current use of PCBs include electrical equipment and component manufacturers, steel manufacturers, large chemical manufacturers and electric utilities. Within the Ohio River Basin, over 400 of these industries have been identified as *possible* sources of PCBs (see Figure 3). This includes PCB generators and U.S. EPA-permitted storage and disposal facilities. PCB generators are industries that have notified U.S. EPA in the past that they were disposing of PCBs or PCB-contaminated material (see Appendix A). In addition, three facilities within the Ohio River Basin were listed on U.S. EPA's Toxic Release Inventory between 1991 and 1994 (TRI, 1996). At all three locations the industries reported both the presence and offsite transfer of PCBs (see Appendix A).

Currently, there are not any direct discharges of PCBs to the Ohio River and its tributaries since U.S. EPA regulations prohibit their release into surface water. However, one facility, at Ohio River mile 281, is required to include a monitoring requirement for PCBs in their NPDES permit as a result of past PCB spills and leaks into the Ohio River. Another

Figure 2: National Priority List Sites with PCB Contamination in the Ohio River Basin*



*Information on each location provided in Table 5.

Table 5: *Potential* PCB Sources in the Ohio River Basin: National Priority List Sites (CERCLIS, 1996).					
Label	**State**	**County**	**Facility**	**Nearby River**	**Activity**
1	IN	Boone	Wedzeb Enterprises, Inc	-----	Storage warehouse
2	IN	Monroe	Neal's Landfill (Bloomington)	Richland Creek	Industrial and municipal landfill
3	IN	Monroe	Lemon Lane Landfill	-----	Industrial and municipal landfill
4	IN	Monroe	Bennett Stone Quarry	Stout Creek	Dump
5	IN	Owen	Neal's Dump (Spencer)	-----	Dump
6	IN	Tippicanoe	Tippicanoe Sanitary Landfill Inc.	-----	Landfill
7	IN	Allen	Fort Wayne Reduction Dump	Maumee River	Industrial waste disposal facility
8	IN	Howard	Contential Steel Corporation	Kokomo Creek	Steel manufacturer
9	IN	Boone	Envirochem Corporation	Finley Creek	Inactive solvent facility
10	IN	Knox	Prestolite Battery Division	Kelso Creek/Wabash R.	Lead-acid battery manufacturer
11	IN	Delaware	Feeney Farm	-----	Dump
12	KY	Bullitt	Smith's Farm	Bluelick Creek	Landfill and dump
13	KY	Oldham	Red Penn Sanitation Company Landfill	Floyd's Creek	Industrial waste landfill
14	KY	Harlan	National Electric Coil Co./ Cooper Industries	Cumberland River	Electric motor/transformer manufacturer
15	KY	Marshall	AIRCO	Tennessee River	Industrial landfill
16	KY	Bullitt	A.L. Taylor (Valley of Drums)	Ohio tributary	Waste disposal site
17	KY	Campbell	Newport Dump	Licking River	Commercial and residential landfill
18	KY	Bullitt	Tri-City Disposal Site	Knob Creek	Industrial disposal site
19	KY	McCraken	Paducah Gaseous Diffusion Plant	Ohio River	Unranium enrichment facility
20	OH	Butler	Skinner Landfill	East Fork Mill Creek	Hazardous waste landfill
21	OH	Franklin	Air Force Plant 85	Big Walnut Creek	Aircraft production/maintance facility
22	OH	Monroe	Ormet Corp.	Ohio River	Aluminum processing plant
23	OH	Stark	TRW, Inc (Minerva Plant)	-----	Manufacturing facility
24	OH	Butler	Chem-Dyne	Ford Canal/Great Miami R.	Chemical storage and disposal facility
25	OH	Montgomery	North Sanitary Landfill	-----	Industrial and municipal landfill
26	OH	Miami	Miami County Incinerator	Great Miami River	Incinerator and landfill
27	OH	Pickaway	Bowers Landfill	Scioto River	Industrial and domestic landfill
28	OH	Tuscarawas	Alsco Anaconda	Tuscarawas River	Disposal site
29	PA	Mercer	River Roal Landfill	Shenango River	Industrial waste landfill
30	PA	Mercer	Osborne Landfill	Swamp Run/Wolf Creek	Industrial landfill
31	PA	Allegheny	Breslube-Penn, Inc.	Montour Run	Waste oil processing facility

facility, the Paducah Gaseous Diffusion Plant, has PCB monitoring requirements in their NPDES permits for outfalls in Little Bayou Creek and Big Bayou Creek, which are two small tributaries to the Ohio River.

PRESENCE IN THE OHIO RIVER BASIN

Data on the presence of PCBs within the Ohio River Basin is limited. Over the past eight years, fish tissue has been analyzed for the main stem of the Ohio River. However, water column and sediment data is limited. Atmospheric data for PCBs in the Ohio River Basin has not been identified.

Currently, fish tissue data are used to evaluate the presence of PCBs in surface water since concentrations of the pollutant are usually below detection levels in water and sediment. Due to technological constraints, further monitoring has not been conducted to determine if water quality criterion has been exceeded. The use of tissue data as an indicator of presence of PCBs in the basin is problematic since fish bioconcentrate PCBs. Therefore, high PCB concentrations in fish tissue may not necessarily mean high concentrations in surface water.

Fish tissue samples collected by ORSANCO in the Ohio River between 1988-1995 indicate small decreases in PCB concentrations within the eight year period (see Appendix B). A graph of the annual distribution of PCBs in channel catfish (see Figure 4a) shows a 1.2 mg/kg reduction in the median PCB concentration over the past eight years. For five out of the eight years reported the median concentration in fish tissue was below the FDA Tolerance Level of 2 mg/kg PCBs with values ranging between 1.2 and 2.6 mg/kg of PCB. However, the concentrations of PCBs in fish tissue fluctuate throughout the eight year period with samples reaching a maximum of 9.93 mg/kg in 1992 to a minimum of below detection level in 1988 and 1991. This similar pattern was found when the data was lipid normalized to display the concentration of PCBs, in milligrams, per kilogram of lipid (see Figure 4b). Lipid normalized data is significant because contaminants tend to accumulate in the fatty tissues. In addition, throughout the entire eight year period samples were found to exceed the Food and Drug Administration Tolerance Level for PCBs in fish and shellfish (Table 6). In 1995, ten fish samples were at or above the FDA Tolerance Level of 2.0 ppm PCBs for interstate commerce. However, the number of fish samples above FDA action levels does not appear to indicate any patterns of PCB concentrations in fish tissue. As of 1997, five states within the basin have

Figure 3: Counties with Potential PCB Sources in the Ohio River Basin

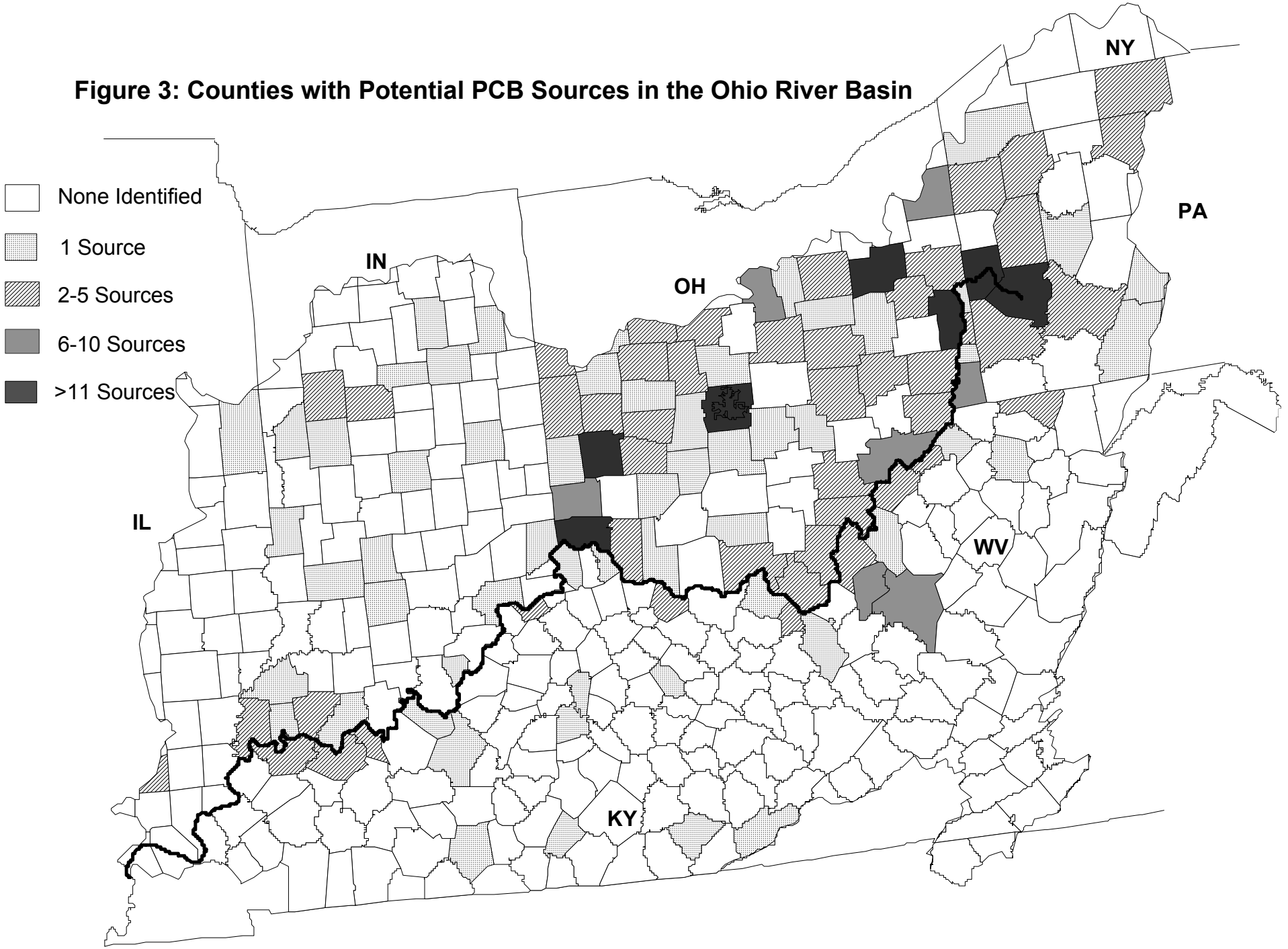
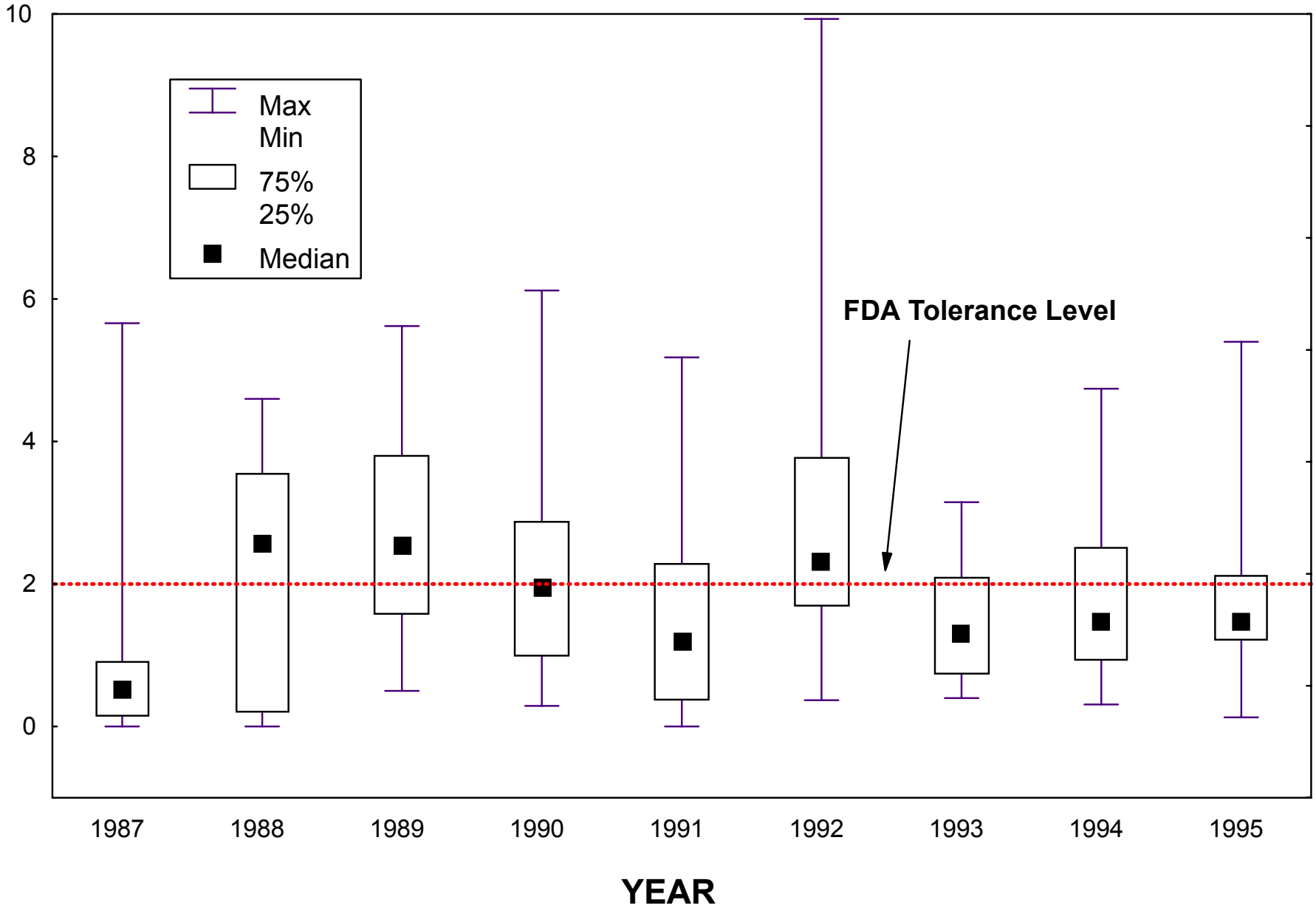


Figure 4a: Anual Distribution of PCBs in Fish Tissue*

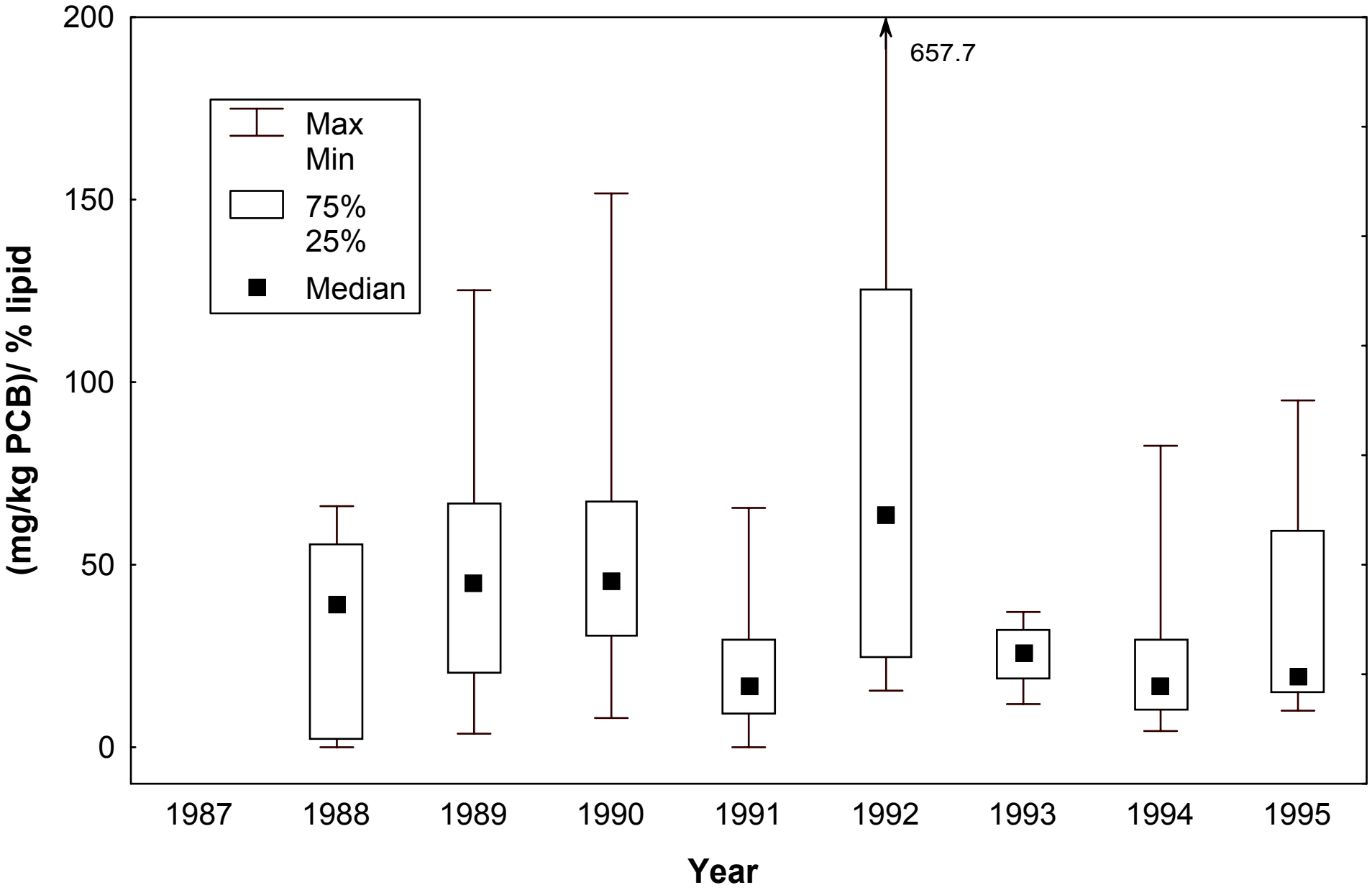
Channel Catfish



*Fish from all sampling locations combined.

Figure 4b: Annual Distribution of Lipid Normalized PCBs in Fish Tissue*

Channel Catfish



*Fish from all sampling locations combined.

issued Ohio River fish consumption advisories along with 23 tributary advisories due to high levels of PCBs found in tissue (see Figure 5).

	1988	1989	1990	1991	1992	1993	1994	1995
Channel Catfish	4	7	14	10	20	5	8	7
Carp	3	5	3	5	7	2	0	3
Sample Number	16	22	50	43	51	36	24	35

Table 6. Number of fish samples where PCB concentrations are at or above the FDA tolerance level of 2 ppm.

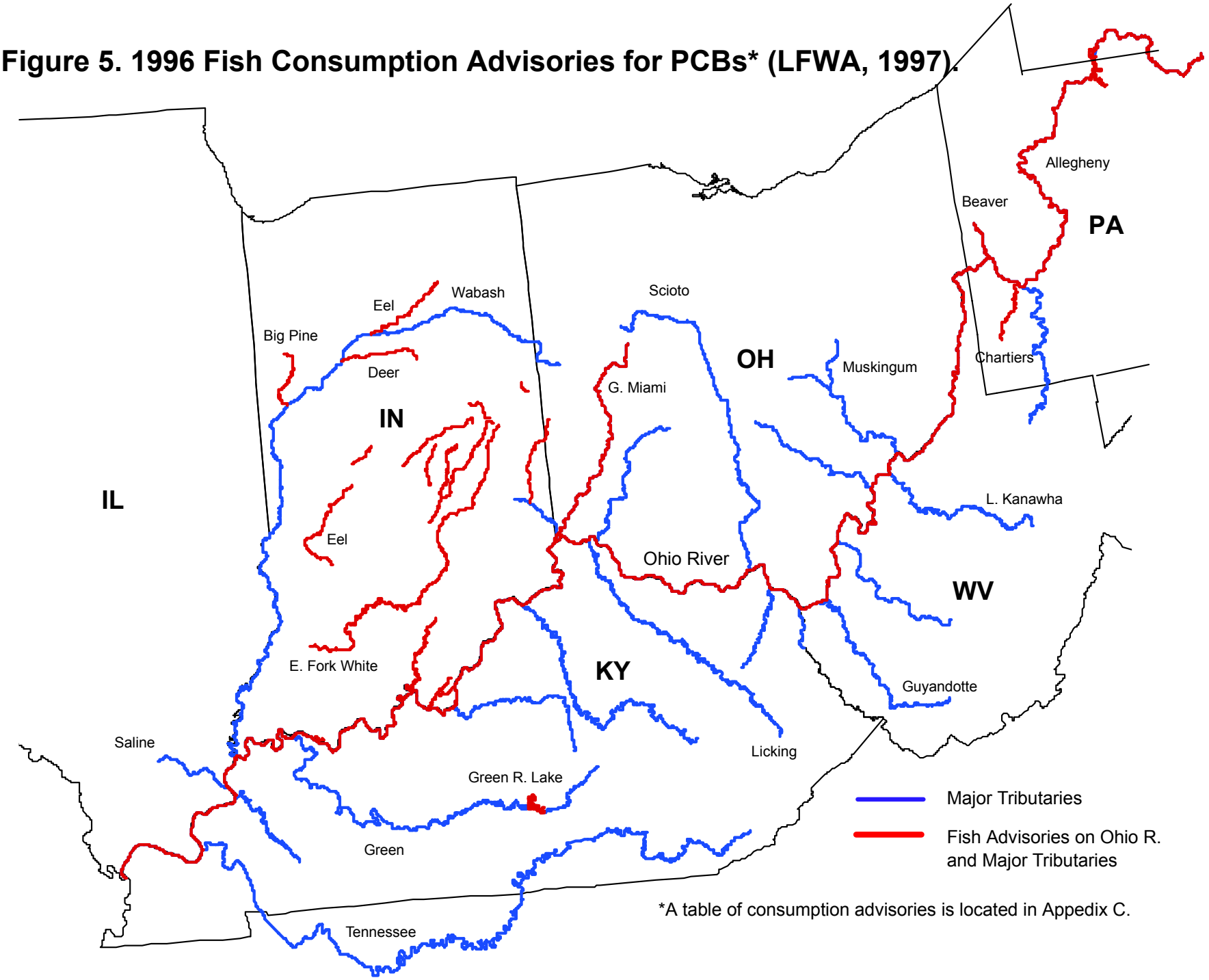
Distinct trends do exist in the spatial distribution of PCBs within the Ohio River. Figures 6a and 6b indicate that both total median PCB concentrations and lipid normalized median PCBs over the entire period 1988-1995 are lower in the downstream portion of the Ohio River compared to its headwaters. In both instances the concentration of PCBs decreases by more than half towards the downstream portion of the river.

Elutriate data for the main stem of the Ohio River, collected by the U.S. Army Corps of Engineers (USACOE) from 1980 to 1996, are inconclusive in terms of PCB concentration (see Appendix B). Elutriate samples represent the concentration of PCBs released into the water column from a mixture of sediment and water. For the entire sixteen year period, samples were constantly below detection levels for all seven Arochlors® that were analyzed. In addition, one sediment sample collected from the main stem of the Ohio River in 1985 by the USACOE resulted in PCB concentrations less than the detection limit of 1000 ug/kg for six Arochlors® analyzed (Appendix B).

CONCLUSIONS

The presence of PCBs in the environment is a result of nearly fifty years of commercial applications. Twenty years after TSCA banned the unauthorized use of PCBs, contamination is still present in all media of the environment. PCBs pose health concerns to humans since they have been linked to cancer in laboratory animals.

Figure 5. 1996 Fish Consumption Advisories for PCBs* (LFWA, 1997).



*A table of consumption advisories is located in Appedix C.

Figure 6a: Longitudinal Distribution of PCBs in FishTissue

Channel Catfish 1988-1995

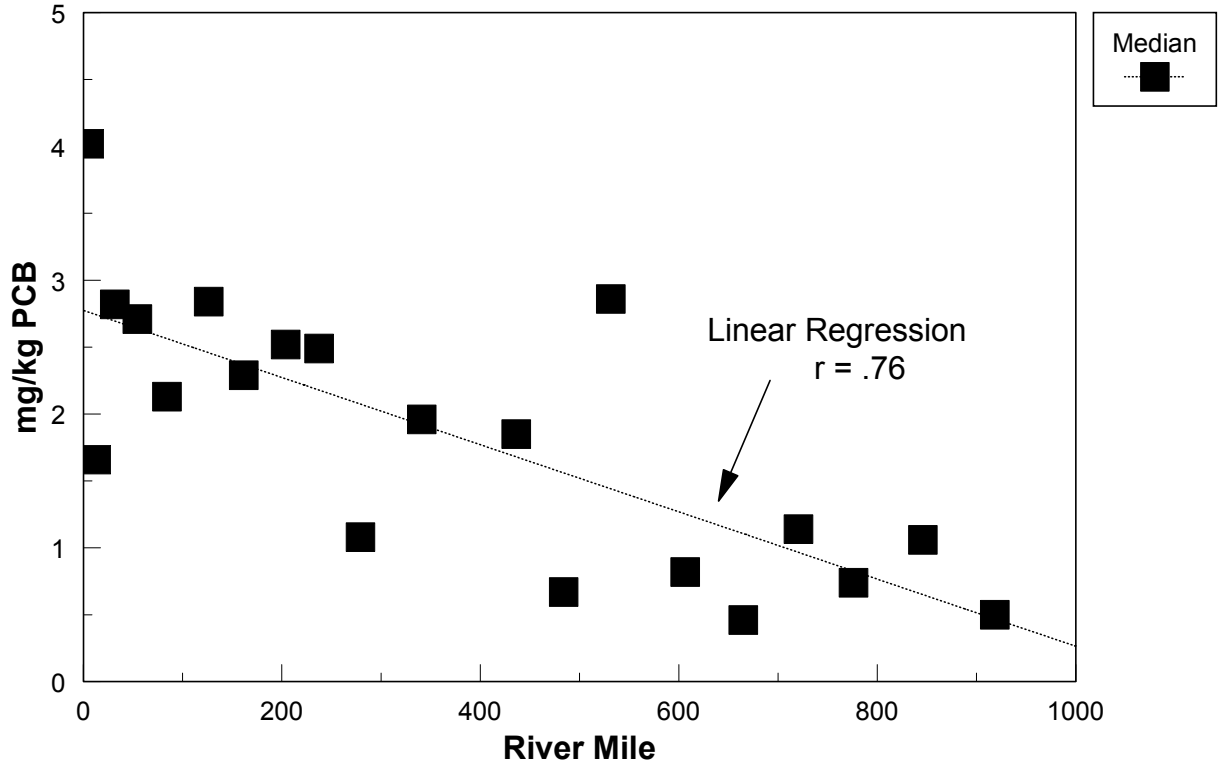
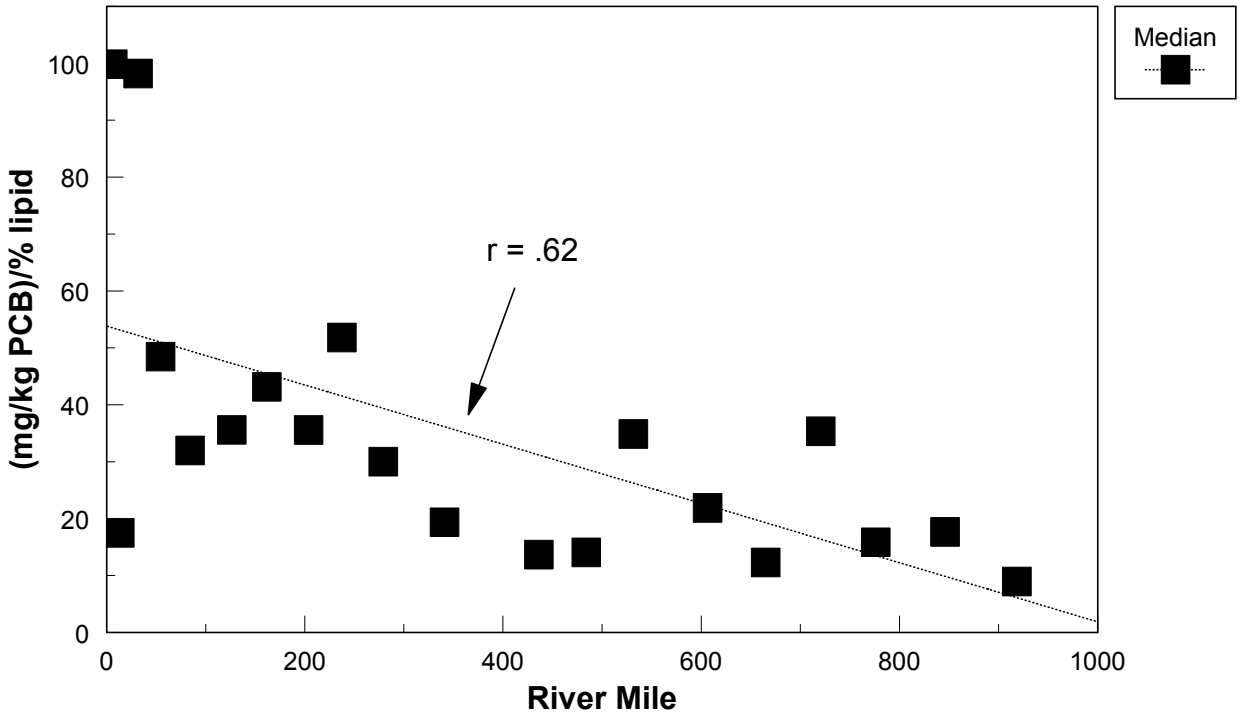


Figure 6b: Longitudinal Distribution of Lipid Normalized PCBs in Fish Tissue

Channel Catfish 1988-1995



More than 400 *possible* sources of PCBs have been identified throughout the Ohio River Basin. However, the identification of potential PCB sources has been difficult due to their wide variety of industrial uses. In addition, data on PCB contamination is limited throughout the basin due to technological constraints. Available data from fish tissue analyses does indicate that there is a longitudinal decrease of PCB concentrations in fish on the Ohio River. Furthermore, there appears to be a temporal decrease in PCB concentrations in fish tissue from 1988-1992 and 1993-1995.

A strong association between the location of possible PCB sources and fish consumption advisories suggests that PCB contamination remains close to its source in the environment. While contamination has been found in fish tissue samples on the main stem of the Ohio River there is still a strong need for water column, sediment and atmospheric data in order to better assess the extent of PCB contamination and to determine if water quality criteria are being exceeded in the Ohio River Basin.

RECOMMENDATIONS

1) Monitor for Violations in Water Quality Standards

To date, states within the Ohio River Basin have relied on fish tissue data to determine presence of PCBs in the environment since detection levels are greater than water quality criteria. Water column monitoring needs to be conducted on the main stem of the Ohio River in order to determine if violations are occurring in water quality standards.

2) Monitor to Identify Source Contributors

Monitoring for PCBs needs to be conducted on the main stem of the Ohio River and its tributaries in order to identify specific source contributors within the Ohio River Basin. Tributary monitoring should be conducted in a phased approach by first focusing on the lower reaches of major tributaries and then working up the watershed to narrow the scope of source identification.

3) Monitor for Biological Trends

Fish tissue monitoring for PCBs should be continued in the Ohio River in order to assess trends of the pollutant in the biological community and to provide states with data for issuance of fish consumption advisories.

REFERENCES

Atlas, E., T. Bidleman, and C.S. Giam. 1986. "Atmospheric Transport of PCBs to the Oceans." *PCBs and the Environment Volume I*. Ed. John S. Waid. Boca Raton, Florida. CRC Press: p. 80-96.

Cairns, Thomas et al. 1986. "Analytical Chemistry of PCBs." *PCBs and the Environment Volume I*. Ed. John S. Waid. Boca Raton, Florida. CRC Press: p. 2-45.

CERCLIS. 1996. National Priority List Database. U.S. Environmental Protection Agency. Washington, DC.

Chou, S.F. and R.A. Griffin. 1986. "Solubility and Soil Mobility of Polychlorinated Biphenyls." *PCBs and the Environment Volume I*. Ed. John S. Waid. Boca Raton, Florida. CRC Press: p.102-118.

Graham, F.J. 1987. "Eliminating PCBs." *American City and County* 102: p. 134-137.

LFWA. 1997. Listing of Fish and Wildlife Advisories – 1996. U. S. Environmental Protection Agency. Washington, DC.

Monsanto, 1995, Material Safety Data Sheet: Polychlorinated Biphenyls, St. Louis, MO.

Ohio Environmental Protection Agency (OEPA). 1997. Listing of PCB Generators, Storers, Disposers, and Transporters in Ohio. Division of Emergency and Remedial Response. Columbus, OH.

Ohio Environmental Protection Agency (OEPA). 1998. Fish Tissue Database: 1994 - 1996. Division of Surface Water. Columbus, OH.

Ohio-Kentucky-Indiana Regional Council of Governments (OKI). 1992. *Index of Potential Sources of Groundwater Pollution in Butler, Clermont, Hamilton, and Warren Counties, Ohio*. Cincinnati, OH.

Permit Compliance System (PCS). 1997. Information Database. U.S. Environmental Protection Agency. Washington, DC.

Sawhney, B.L. 1986. "Chemistry and Properties of PCBs in Relation to Environmental Effects." *PCBs and the Environment Volume I*. Ed. John S. Waid. Boca Raton, Florida. CRC Press: p. 48-61.

Toxic Release Inventory (TRI). 1996. Information database. U.S. Environmental Protection Agency. Washington, DC.

U.S. Department of Health & Human Services (USDHHS). 1993.*ToxFAQs: Polychlorinated Biphenyls (PCBs)*. Agency for Toxic Substances and Disease Registry. Atlanta, GA.

U.S. Department of Health & Human Services (USDHHS). 1995. *Toxicological Profile for Polychlorinated Biphenyls*. Agency for Toxic Substances and Disease Registry. Atlanta, GA.

U. S. Environmental Protection Agency (USEPA). 1980. *Ambient Water Quality Criteria for Polychlorinated Biphenyls.* Office of Water Regulations and Standards. Washington, GPO.

U. S. Environmental Protection Agency (USEPA). 1990. *Bioaccumulation of Selected Pollutants in Fish: A National Study Volume II*. Office of Water Regulations and Standards. Washington, GPO.

U.S. Environmental Protection Agency (USEPA). 1993. *Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories: Volume I Fish Sampling and Analysis*. Office of Water. Washington, GPO.

U.S. Environmental Protection Agency (USEPA). 1994. *Common Chemicals Found at Superfund Sites.* Office of Emergency and Remedial Response. Washington, GPO.

U.S. Environmental Protection Agency (USEPA). 1995. *Final Water Quality Guidance for the Great Lakes System; Final Rule.* Federal Register 60: 15366-15425. Washington, DC.

U.S. Food and Drug Administration (USFDA). 1994. Action Levels for Poisonous or Deleterious Substances in Human Food and Animal Feed. Washington, DC.

U.S. Geological Survey (USGS). 1995. *Contaminants in the Mississippi River, 1987-1992*. Circular 1133, Denver, CO.

Appendix A

Potential Sources of PCBs

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
WV	BROOKE	BEECH BOTTOM	WHEELING PITTSBURGH STEEL CORP.	MANUFACTURING - METALS
WV	BROOKE	FOLLANSBEE	WHEELING PITTSBURGH STEEL CORP.	MANUFACTURING - STEEL
WV	BROOKE	FOLLANSBEE	KOPPERS INDUSTRIES, INC	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	BROOKE	FOLLANSBEE	WHEELING-NISSHIN INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
WV	BROOKE	FOLLANSBEE	WHEELING-PITTSBURGH STEEL CORP	MANUFACTURING - BLAST FURNACES & STEEL MILLS
WV	FAYETTE	ALLOY	ELKEM METALS CO.	MANUFACTURING - ELECTROMETALLURGICAL PRODUCTS
WV	HANCOCK	WEIRTON	WEIRTON STEEL CORPORATION	MANUFACTURING - STEEL
WV	HARRISON	ANMOORE	UCAR CARBON, INC.	MANUFACTURING - CARBON & GRAPHITE PRODUCTS
WV	JACKSON	RAVENSWOOD	RAVENSWOOD ALUMINUM CORP.	MANUFACTURING - PRIMARY ALUMINUM
WV	KANAWHA	BELLE	E.I.DU PONT DE NEMOURS & CO.	MANUFACTURING - NITROGENOUS FERTILIZERS
WV	KANAWHA	BELLE	OCCIDENTAL ELECTROCHEMICALS	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	KANAWHA	INSTITUTE	RHONE-POULENC AG CO.	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	KANAWHA	S. CHARLESTON	CLEARON CORPORATION	MANUFACTURING - INDUSTRIAL INORGANIC CHEMICALS
WV	KANAWHA	S. CHARLESTON	FMC CORPORATION	MANUFACTURING - INDUSTRIAL INORGANIC CHEMICALS
WV	KANAWHA	S. CHARLESTON	UNION CARBIDE CORPORATION	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	MARION	FAIRMONT	PHILIPS LIGHTING CO.	MANUFACTURING - ELECTRIC LAMPS
WV	MARSHALL	BENWOOD	WHEELING PITTSBURGH STEEL CORP.	MANUFACTURING - STEEL
WV	MARSHALL	MOUNDSVILLE	OHIO POWER CO.	POWER GENERATOR
WV	MARSHALL	MOUNDSVILLE	OHIO POWER CO.	POWER GENERATOR
WV	MARSHALL	MOUNDSVILLE	OLIN CORPORATION	MANUFACTURING - CHEMICALS
WV	MARSHALL	MOUNDSVILLE	L.C.P. CHEMICALS - W.V., INC.	MANUFACTURING - ALKALIES & CHLORINE
WV	MARSHALL	NATRIUM	P.P.G. INDUSTRIES, INC.	MANUFACTURING - ALKALIES & CHLORINE
WV	MARSHALL	NEW MARTINSVILLE	BAYER CORPORATION	MANUFACTURING - CYCLIC CRUDES & INTERMEDIATES
WV	MASON	NEW HAVEN	CENTRAL OPERATING CO.	POWER GENERATOR
WV	MASON	APPLE GROVE	GOODYEAR TIRE & RUBBER CO.	MANUFACTURING - PLASTICS MATERIALS & RESINS
WV	MASON	GALLIPOLIS FERRY	AKZO NOBEL CHEMICALS INC.	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	MASON	NEW HAVEN	APPALACHIAN POWER CO.	POWER GENERATOR
WV	MONONGALIA	MORGANTOWN	GE SPECIALTY CHEMICALS, INC.	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	MONONGALIA	MORGANTOWN	GE SPECIALTY CHEMICALS, INC.	MANUFACTURING - CYCLIC CRUDES & INTERMEDIATES
WV	OHIO	WHEELING	ENVIRONMENTAL PROTECTION SVC.	PCB STORER
WV	PLEASANTS	WILLOW ISLAND	MONONGAHELA POWER CO.	POWER GENERATOR
WV	PLEASANTS	WILLOW ISLAND	CYTEC INDUSTRIES	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	PUTNAM	NITRO	FLEXSYS AMERICA, L.P.	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	PUTNAM	NITRO	FMC CORPORATION	MANUFACTURING - INDUSTRIAL INORGANIC CHEMICALS
WV	PUTNAM	NITRO	KINCAID ENTERPRISES	MANUFACTURING - INDUSTRIAL INORGANIC CHEMICALS
WV	PUTNAM	SCOTT DEPOT	PAYNE ENGINEERING CO. INC	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
WV	PUTNAM	ST. ALBANS	APPALACHIAN POWER CO.	MANUFACTURING - MOTORS & GENERATORS
WV	PUTNAM	ST. ALBANS	TOW MAINTENANCE & CLEANING,INC	MANUFACTURING - INDUSTRIAL ORGANIC CHEMICALS
WV	TYLER	SISTERSVILLE	OSI SPECIALTIES, INC.	MANUFACTURING - PLASTICS MATERIALS & RESINS
WV	WAYNE	NEAL	ARISTECH CHEMICALS CORP.	MANUFACTURING - PLASTICS MATERIALS & RESINS
WV	WOOD	PARKERSBURG	E.I.DU PONT DE NEMOURS & CO.	MANUFACTURING - CHEMICALS
WV	WOOD	WASHINGTON	E.I.DU PONT DE NEMOURS & CO.	MANUFACTURING - PLASTICS MATERIALS & RESINS

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
WV	WOOD	WASHINGTON	GENERAL ELECTRIC CO.	MANUFACTURING - PLASTICS MATERIALS & RESINS
PA	ALLEGHENY	BRACKENRIDGE	ALLEGHENY LUDLUM STEEL	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ALLEGHENY	CLAIRTON CITY	USX CORP - US STEEL GROUP	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ALLEGHENY	COLLIER TWP	UNIVERSAL STAINLESS & ALLOY PR	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ALLEGHENY	CORAOPOLIS BORO	PITTSBURGH FORGINGS CO.	MANUFACTURING - METALS
PA	ALLEGHENY	CRESCENT TWP	DUQUESNE LIGHT CO.	POWER GENERATOR
PA	ALLEGHENY	DRAVOSBURG BORO	USS IRVIN PLANT	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ALLEGHENY	HARMAR TWP	WESTINGHOUSE ELEC CORP	MANUFACTURING - MOTORS & GENERATORS
PA	ALLEGHENY	JEFFERSON	HERCULES INC.	MANUFACTURING - PLASTICS MATERIALS & RESINS
PA	ALLEGHENY	LEETSDALE	HUSSEY COPPER, LTD	MANUFACTURING - COPPER ROLLING & DRAWING
PA	ALLEGHENY	MCKEES ROCK	UNITED STATES STEEL CORP.	MANUFACTURING - STEEL
PA	ALLEGHENY	NEVILLE ISLAND	ARISTECH CHEMICAL CORPORATION	MANUFACTURING - CHEMICALS
PA	ALLEGHENY	NEVILLE ISLAND	SHENANGO INC-NEVILLE COKE&IRON	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ALLEGHENY	NEVILLE TWP	NEVILLE CHEMICAL CO.	MANUFACTURING - PLASTICS MATERIALS & RESINS
PA	ALLEGHENY	NORTH BRADDOCK	USX CORP	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ALLEGHENY	PITTSBURGH	DUQUESNE LIGHT CO.	POWER GENERATOR
PA	ALLEGHENY	PITTSBURGH	ALLIS-CHALMERS CORP PGH	MANUFACTURING - TRANSFORMERS
PA	ALLEGHENY	PITTSBURGH	KOPPERS CO	MANUFACTURING - ELECTRICAL INDUSTRIAL APPARATUS
PA	ALLEGHENY	PITTSBURGH	LTV STEEL CO.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ALLEGHENY	PITTSBURGH	PITTSBURGH FLATROLL CO.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	ARMSTRONG	APOLLO	BABCOCK & WILCOX CO.	MANUFACTURING - INDUSTRIAL INORGANIC CHEMICALS
PA	BEAVER	AMBRIDGE BORO	BABCOCK & WILCOX CO.	MANUFACTURING - STEEL PIPES
PA	BEAVER	AMBRIDGE BORO	H.H. ROBERTSON CO.	MANUFACTURING - METAL PANELS
PA	BEAVER	BEAVER BORO	CUTLER-HAMMER INC.	MANUFACTURING - SWITCHGEARS & SWITCHBOARDS
PA	BEAVER	BEAVER COUNTY	KOPPEL STEEL CORP	MANUFACTURING - STEEL PIPE & TUBES
PA	BEAVER	BEAVER FALLS	TELEDYNE INDUSTRIES INC	MANUFACTURING - COLD FINISHING OF STEEL SHAPES
PA	BEAVER	MIDLAND	J & L SPECIALTY STEEL, INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	BEAVER	MIDLAND BORO	LTV STEEL CO., INC.	MANUFACTURING - STEEL
PA	BEAVER	MONACA	SUPERIOR DRAWN STEEL CO.	MANUFACTURING - STEEL
PA	BEAVER	MONACA BORO	AMPCO PITTSBURGH CORPORATION	MANUFACTURING - STEEL
PA	BEAVER	POTTER TWP	ARCO CHEMICAL CO.	MANUFACTURING - PLASTICS MATERIALS & RESINS
PA	BEAVER	POTTER TWP	BASF CORPORATION	MANUFACTURING - SYNTHETIC RUBBER
PA	BEAVER	POTTER TWP	ZINC CORP OF AMERICA	MANUFACTURING - PRIMARY NONFERROUS METALS
PA	BEAVER	SHIPPINGPORT BORO	DUQUESNE LIGHT CO.	POWER GENERATOR
PA	BEAVER	SHIPPINGPORT BORO	PENNSYLVANIA POWER CO.	POWER GENERATOR
PA	BEAVER	VANPORT TWP	WESTINGHOUSE ELECTRIC CORP	MANUFACTURING - SWITCHGEARS & SWITCHBOARDS
PA	BEAVER		LTV STEEL CO. INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	BUTLER	EAST BUTLER BORO	MAGNETICS INC/DIV OF SPRANG IN	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
PA	BUTLER	EAST BUTLER BORO	SPANG AND CO.	MANUFACTURING - ELECTRONIC COMPONENTS
PA	BUTLER	MARS BORO	JAMES AUSTIN CO.	MANUFACTURING - HOUSEHOLD VACUUM CLEANERS
PA	BUTLER	PETROLIA BORO	WITCO CORP - PETROLIA FACILITY	MANUFACTURING - SURFACE ACTIVE AGENTS
PA	CAMBRIA	JOHNSTOWN	SCM METAL PRODUCTS INC.	MANUFACTURING - PRIMARY METAL PRODUCTS

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
PA	CRAWFORD	SAEGERTOWN	SPECTRUM CONTROL	MANUFACTURING - SEMICONDUCTORS
PA	ELK	RIDGWAY	QUALITY COMPONENTS, INC.	MANUFACTURING - SEMICONDUCTORS
PA	ELK	SAINT MARYS	KEYSTONE THERMOMETRICS	MANUFACTURING - ELECTRONIC RESISTORS
PA	ELK	SAINT MARYS	ST MARYS CARBON CO. INC	MANUFACTURING - CARBON & GRAPHITE PRODUCTS
PA	ELK	SAINT MARYS	STACKPOLE CARBON CO	MANUFACTURING - CARBON & GRAPHITE PRODUCTS
PA	MCKEAN	BRADFORD	CORNING GLASS WORKS	MANUFACTURING - ELECTRONIC RESISTORS
PA	MCKEAN	KANE	STACKPOLE MAGNETIC SYSTEMS INC	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
PA	MCKEAN	KANE AUTHORITY	HOUSTON ELECTRONICS	MANUFACTURING - ELECTRON TUBES
PA	MCKEAN	KANE AUTHORITY	SEMICONDUCTOR SPECIALTIES CORP	MANUFACTURING - SEMICONDUCTORS
PA	MCKEAN	MOUNT JEWETT	KEYSTONE THERMOMETRICS	MANUFACTURING - ELECTRONIC RESISTORS
PA	MERCER	FARRELL	CAPARO STEEL CO. INC	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	MERCER	PERRY TWP	COMPONENT INTERTECHNOLOGIES	MANUFACTURING - SEMICONDUCTORS
PA	MERCER	SHARON	ARMCO INC.	MANUFACTURING - STEEL PIPE & TUBES
PA	MERCER	SHARON	WESTINGHOUSE ELECTRIC CORP.	MANUFACTURING - CURRENT-CARRYING WIRING DEVICES
PA	MERCER	WHEATLAND	WHEATLAND TUBE CO	MANUFACTURING - STEEL PIPE & TUBES
PA	SOMERSET	STONYCREEK TWP	VANYO INC	MANUFACTURING - TRANSFORMERS
PA	VENANGO	OIL CITY	GTE OPERATIONS SUPPORT INC	MANUFACTURING - ELECTRONIC CONNECTORS
PA	VENANGO	OIL CITY	PFV ENTERPRISES INC	MANUFACTURING - ELECTRONIC CONNECTORS
PA	WASHINGTON	ALLENPORT	WHEELING-PITTSBURGH STEEL CORP.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	WASHINGTON	CANNONSBURG BORO	MCGRAW-EDISON POWER SYS DIV	MANUFACTURING - TRANSFORMERS
PA	WASHINGTON	CANTON TWP	JESSOP STEEL/WASHINGTON	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	WASHINGTON	CHARTIERS TWP	RCA CORP-MEADOW LANDS	MANUFACTURING - COMMUNICATION EQUIPMENT
PA	WESTMORELAND	SALEM TWP	TALON DIVISION OF TEXTRON	MANUFACTURING - WIRING DEVICES
PA	WESTMORELAND	VANDERGRIFT	ALLEGHENY LUDLUM CORP	MANUFACTURING - BLAST FURNACES & STEEL MILLS
PA	WESTMORELAND	WEST LEECHBURG	ALLEGHENY LUDLUM CORP	MANUFACTURING - COLD FINISHING OF STEEL SHAPES
PA	WESTMORELAND	YOUNGWOOD	POWEREX, INC	MANUFACTURING - SEMICONDUCTORS
OH	ALLEN	LIMA	BP OIL LIMA REFINERY	PCB GENERATOR
OH	ALLEN	LIMA	FORD MOTOR COMPANY	PCB GENERATOR
OH	ALLEN	LIMA	NATIONAL LIME & STONE CO.	PCB GENERATOR
OH	ALLEN	LIMA	WESTINGHOUSE ELECTRIC CORP.	PCB GENERATOR
OH	ALLEN	LIMA	DANA CORPORATION	PCB GENERATOR
OH	ALLEN	SPENCERVILLE	TRIM TRENDS INC.	PCB GENERATOR
OH	ASHLAND	PERRYSVILLE	CGST-LUCAS COMPRESSOR STA.	PCB GENERATOR
OH	ATHENS	ALBANY	COMPRESSOR STATION 204	PCB GENERATOR
OH	ATHENS	ATHENS	TEXAS EASTERN GAS	PCB GENERATOR
OH	AUGLAIZE	ST MARYS	CITY OF ST MARYS	PCB GENERATOR
OH	BELMONT	MARTINS FERRY	WHEELING PITTSBURGH STEEL CORP.	MANUFACTURING - STEEL
OH	BELMONT	SHADYSIDE	OHIO EDISON CO.	POWER GENERATOR
OH	BELMONT	SHADYSIDE	OHIO EDISON CO.	PCB GENERATOR
OH	BROWN	ABERDEEN	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	BUTLER	HAMILTON	CHAMPION INTERNATIONAL	PCB GENERATOR
OH	BUTLER	HAMILTON	ELECTRIC DISTRIBUTION DIV STOR	PCB GENERATOR

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
OH	BUTLER	HAMILTON	HAMILTON CY ELEC DTRB DIV STRG	PCB GENERATOR
OH	BUTLER	HAMILTON	HAMILTON MUNICIPAL GARAGE	PCB GENERATOR
OH	BUTLER	MIDDLETOWN	CINCINNATI GAS & ELECTRIC CO.	PCB GENERATOR
OH	BUTLER	MIDDLETOWN	AK STEEL CORPORATION	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	CARROLL	CARROLLTON	CARROLL ELEC COOP	PCB GENERATOR
OH	CARROLL	CARROLLTON	TENNESSEE GAS PIPELINE STA 214	PCB GENERATOR
OH	CHAMPAIGN	URBANA	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	CLARK	SPRINGFIELD	DYNEX INDUSTRIES INC.	PCB GENERATOR
OH	CLARK	SPRINGFIELD	KELSEY-HAYES BUILDING	PCB GENERATOR
OH	CLARK	SPRINGFIELD	OHIO EDISON CO.	PCB GENERATOR
OH	CLARK	SPRINGFIELD	OHIO EDISON CO.	PCB GENERATOR
OH	CLERMONT	GOSHEN	GOSHEN LOCAL SCHOOLS	PCB GENERATOR
OH	CLERMONT	MOSCOW	CINCINNATI GAS & ELECTRIC CO.	POWER GENERATOR
OH	CLERMONT	NEW RICHMOND	CINCINNATI GAS & ELECTRIC CO.	POWER GENERATOR
OH	CLINTON	WILMINGTON	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	COLUMBIANIA	LEETONIA	TCO-BRINKER COMPRESSOR STATION	PCB GENERATOR
OH	COLUMBIANIA	SALEM	CGST	PCB GENERATOR
OH	COSHOCTON	COSHOCTON	THE FRONTIER POWER COMPANY	PCB GENERATOR
OH	COSHOCTON	COSHOCTON	ARMCO INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	CRAWFORD	BUCYRUS	BUCYRUS PLANT	PCB GENERATOR
OH	CRAWFORD	BUCYRUS	CGST	PCB GENERATOR
OH	CRAWFORD	GALION	GALION LIGHT & POWER	PCB GENERATOR
OH	DARKE	ARCANUM	ARCANUM WATER AND LGT PLANT	PCB GENERATOR
OH	DARKE	GREENVILLE	DARKE RURAL ELEC COOP INC.	PCB GENERATOR
OH	DARKE	GREENVILLE	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	DELAWARE	DELAWARE	DELAWARE REC OXFORD SUBSTA	PCB GENERATOR
OH	FAIRFIELD	LANCASTER	S. CENTRAL POWER CO.	PCB GENERATOR
OH	FAYETTE	WASHINGTON COURT	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	CGST	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	CGST	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	CITY OF COLUMBUS DIV OF ELECTRIC	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	COLUMBUS SOUTHERN POWER	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	DEFENSE CONSTRUCTION SUPPLY CTR	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	IBM BUILDING	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	PCB DESTRUCTION UNIT	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	USAF PLANT 85	PCB GENERATOR
OH	FRANKLIN	COLUMBUS	BATTELLE MEMORIAL INSTITUTE	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
OH	FRANKLIN	GROVE CITY	ROBERTSHAW CONTROLS CO.	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
OH	FRANKLIN	HILLIARD	ARCA OHIO, INC..	PCB GENERATOR
OH	FRANKLIN	WESTERVILLE	WESTERVILLE ELECTRIC DIVISION	PCB GENERATOR
OH	GALLIA	CHESHIRE	GAVIN PLANT	PCB GENERATOR
OH	GALLIA	CHESHIRE	OHIO POWER CO.	POWER GENERATOR

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
OH	GALLIA	CHESHIRE	OHIO VALLEY ELECTRIC CORP.	POWER GENERATOR
OH	GALLIA	GALLIPOLIS	BUCKEYE RURAL ELECTRIC	PCB GENERATOR
OH	GREENE	CEDARVILLE	COLUMBIA GAS HOWELL REGULATOR	PCB GENERATOR
OH	GREENE	FAIRBORN	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	GREENE	FAIRBORN	DYNEX INDUSTRIES, INC.	PCB GENERATOR
OH	GREENE	FAIRBORN	WRIGHT PATTERSON AFB	PCB GENERATOR
OH	GREENE	XENIA	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	GUERNSEY	CAMBRIDGE	CGST	PCB GENERATOR
OH	GUERNSEY	CAMBRIDGE	TCO-GUERNSEY COMPRESSOR STA	PCB GENERATOR
OH	GUERNSEY	CAMBRIDGE	TTR, INC.	PCB GENERATOR
OH	HAMILTON	ADDYSTON	MONSANTO PLASTICS & RESIN CO.	MANUFACTURING - PLASTICS & RESINS
OH	HAMILTON	CINCINNATI	A. B. STEEL MILL	PCB GENERATOR
OH	HAMILTON	CINCINNATI	CECOS INTERNATIONAL INC.	PCB GENERATOR & STORER
OH	HAMILTON	CINCINNATI	CINCINNATI GAS & ELECTRIC CO.	PCB GENERATOR
OH	HAMILTON	CINCINNATI	CINCY RECYCLE	PCB GENERATOR
OH	HAMILTON	CINCINNATI	ENVIRONMENTAL ENTERPRISES INC.	PCB GENERATOR
OH	HAMILTON	CINCINNATI	GE AIRCRAFT ENGINES	PCB GENERATOR
OH	HAMILTON	CINCINNATI	GENERAL ELECTRIC SERVICE CENTER	PCB GENERATOR
OH	HAMILTON	CINCINNATI	USEPA RESEARCH CTR	PCB GENERATOR
OH	HAMILTON	CINCINNATI	USEPA TEST EVALUATION FAC	PCB GENERATOR
OH	HAMILTON	CINCINNATI	WESTINGHOUSE ELECTRIC CORP.	PCB GENERATOR
OH	HAMILTON	CINCINNATI	KDI PRECISION PRODUCTS INC..	PCB GENERATOR
OH	HAMILTON	CINCINNATI	SPRING GROVE RESOURCE RECOVERY	PCB GENERATOR
OH	HAMILTON	CINCINNATI	THE ELECTRIC SERVICE CO., INC.	PCB GENERATOR
OH	HAMILTON	CINCINNATI	WESTINGHOUSE ELECTRIC CORP.	PCB GENERATOR
OH	HAMILTON	CINCINNATI	CITY OF HAMILTON	MANUFACTURING - COMMUNICATION EQUIPMENT
OH	HAMILTON	FERNALD	US DOE FEED MATERIALS PROD CTR	PCB GENERATOR
OH	HAMILTON	HARRISON	HAMILTON FOUNDRY & MACHINE CO.	PCB GENERATOR
OH	HAMILTON	NORTH BEND	CINCINNATI GAS & ELECTRIC CO.	POWER GENERATOR
OH	HAMILTON	NORTH BEND	KAISER ALUMINUM & CHEMICAL CO.	MANUFACTURING - CHEMICALS
OH	HAMILTON		ELECTRIC SERVICE CO, INC.	PCB GENERATOR
OH	HARDIN	KENTON	OCCIDENTAL CHEM CORP.	PCB GENERATOR
OH	HARDIN	KENTON	UNITED R ELECTRIC INC.	PCB GENERATOR
OH	HOLMES	MILLERSBURG	HOLMES-WAYNE ELECTRIC COOP INC.	PCB GENERATOR
OH	JEFFERSON	BRILLANT	OHIO POWER CO.	POWER GENERATOR
OH	JEFFERSON	BRILLIANT	TIDD POWER PLANT	PCB GENERATOR
OH	JEFFERSON	MINGO JUNCTION	WHEELING PITTSBURG STEEL CORP.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	JEFFERSON	STEUBENVILLE	WEIRTON STEEL CORPORATION	MANUFACTURING - STEEL
OH	JEFFERSON	STEUBENVILLE	WHEELING-PITTSBURGH STEEL CORP.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	JEFFERSON	STRATTON	OHIO EDISON CO.	POWER GENERATOR
OH	JEFFERSON	STRATTON	OHIO EDISON CO.	PCB GENERATOR
OH	JEFFERSON	SUGAR GROVE	COLUMBIA GAS	PCB GENERATOR

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
OH	JEFFERSON	SUGAR GROVE	TCO-CRAWFORD COMPRESSOR STA	PCB GENERATOR
OH	JEFFERSON	TORONTO	OHIO EDISON CO.	POWER GENERATOR
OH	JEFFERSON	TORONTO	OHIO EDISON CO.	PCB GENERATOR
OH	JEFFERSON	TORONTO	TITANIUM METALS CORP.	MANUFACTURING - NONFERROUS ROLLING & DRAWING
OH	JEFFERSON	YORKVILLE	WHEELING PITTSBURG STEEL CORP.	MANUFACTURING - COLD FINISHING OF STEEL SHAPES
OH	KNOX	GAMBIER	CGST	PCB GENERATOR
OH	KNOX	MT VERNON	CGST	PCB GENERATOR
OH	LAWRENCE	IRONTON	ALLIED SIGNAL	PCB GENERATOR
OH	LAWRENCE	IRONTON	IRONTON IRON, INC.	MANUFACTURING - IRON
OH	LAWRENCE	SOUTH POINT	ASHLAND OIL CO., INC.	MANUFACTURING - CHEMICALS
OH	LAWRENCE	SOUTH POINT	COLUMBIA GAS	PCB GENERATOR
OH	LOGAN	BELLEFONTAINE	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	LOGAN	BELLEFONTAINE	LOGAN COUNTY COOP	PCB GENERATOR
OH	LOGAN	WEST LIBERTY	PMI FOOD- EQUIP GROUP (HOBART)	PCB GENERATOR
OH	MADISON	PLAIN CITY	RANCO INCORPORATED	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
OH	MARION	MARION	EATON-FORGE DIVISION	PCB GENERATOR
OH	MARION	MARION	OHIO EDISON CO.	PCB GENERATOR
OH	MARION	MARION	WHIRLPOOL CORP.	MANUFACTURING - LAUNDRY EQUIPMENT
OH	MEDINA	MEDINA	CGST-MEDINA COMPRESSOR STA.	PCB GENERATOR
OH	MEDINA	MEDINA	CGST-YORK COMPRESSOR STATION	PCB GENERATOR
OH	MEDINA	WADSWORTH	NATIONAL METAL ABRASIVE, INC.	PCB GENERATOR
OH	MEIGS	POMEROY	CGST	PCB GENERATOR
OH	MEIGS	RACINE	OHIO POWER CO.	POWER GENERATOR
OH	MERCER	CELINA	CELINA MUNICIPAL UTILITIES	PCB GENERATOR
OH	MERCER	COLDWATER	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MIAMI	PIQUA	PIONEER REC	PCB GENERATOR
OH	MIAMI	TIPP CITY	TIPP CITY LIGHT PLANT	PCB GENERATOR
OH	MIAMI	TIPP CITY	A. O. SMITH	MANUFACTURING - MOTORS & GENERATORS
OH	MIAMI	TROY	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MIAMI	TROY	HOBART CORPORATION	PCB GENERATOR
OH	MONROE	HANNIBAL	ORMET CORPORATION	PCB GENERATOR
OH	MONROE	LEWISVILLE	TEXAS EASTERN GAS	PCB GENERATOR
OH	MONTGOMERY	CENTERVILLE	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	DAYTON	ACUSTAR INC.	PCB GENERATOR
OH	MONTGOMERY	DAYTON	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	DAYTON	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	DAYTON	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	DAYTON	DAYTON PWR & LIGHT RESEARCH PK	PCB GENERATOR
OH	MONTGOMERY	DAYTON	DAYTON WEST SERVICE CENTER	PCB GENERATOR
OH	MONTGOMERY	DAYTON	DEFENSE ELECTRONICS SUPPLY CTR	PCB GENERATOR
OH	MONTGOMERY	DAYTON	DELCO MORAINE NDH	PCB GENERATOR
OH	MONTGOMERY	DAYTON	GENERAL MOTORS CORP.	PCB GENERATOR

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
OH	MONTGOMERY	DAYTON	GENERAL MOTORS CORP.	PCB GENERATOR
OH	MONTGOMERY	DAYTON	HIGH VOLTAGE MAINTENANCE CORP	PCB GENERATOR
OH	MONTGOMERY	DAYTON	MENDELSON ELECTRONICS	PCB GENERATOR
OH	MONTGOMERY	DAYTON	TRAFFIC SIGNAL SHOP	PCB GENERATOR
OH	MONTGOMERY	DAYTON	LABINAL COMPONENTS, INC.	MANUFACTURING - MOTORS & GENERATORS
OH	MONTGOMERY	ENGLEWOOD	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	HUBER HEIGHTS	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	KETTERING	GENERAL MOTORS CORP.	PCB GENERATOR
OH	MONTGOMERY	MIAMISBURG	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	MIAMISBURG	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	MONTGOMERY	MIAMISBURG	HAYDEN ENVIRONMENTAL GROUP	PCB GENERATOR
OH	MONTGOMERY	MIAMISBURG	US DOE MOUND	PCB GENERATOR
OH	MONTGOMERY	MORAINE	GENERAL MOTORS CORP.	PCB GENERATOR
OH	MONTGOMERY	MORAINE	GENERAL MOTORS CORP.	PCB GENERATOR
OH	MUSKINGUM	NEW CONCORD	GUERNSEY MUSKINGUM ELEC COOP	PCB GENERATOR
OH	MUSKINGUM	ZANESVILLE	ARMCO INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	MUSKINGUM	ZANESVILLE	BURNHAM CORPORATION	MANUFACTURING - IRON FOUNDRIES
OH	MUSKINGUM	ZANESVILLE	MCGRAW-EDISON CO.	MANUFACTURING - TRANSFORMERS
OH	PERRY	SOMERSET	TEXAS EASTERN GAS	PCB GENERATOR
OH	PICKAWAY	CIRCLEVILLE	P.P.G. INDUSTRIES, INC.	PCB GENERATOR
OH	PIKE	PIKETON	USDOE PORTSMOUTH DIFFUSION PLT	PCB GENERATOR
OH	PREBLE	EATON	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	RICHLAND	LUCAS	CGST-WEAVER COMPRESSOR STA.	PCB GENERATOR
OH	RICHLAND	LUCAS	VILLAGE OF LUCAS ELECTRIC	PCB GENERATOR
OH	RICHLAND	MANSFIELD	CGST	PCB GENERATOR
OH	RICHLAND	MANSFIELD	OHIO EDISON CO.	PCB GENERATOR
OH	RICHLAND	MANSFIELD	ARMCO INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	RICHLAND	MANSFIELD	IDEAL ELECTRIC CO.	MANUFACTURING - MOTORS & GENERATORS
OH	RICHLAND	MANSFIELD	WESTINGHOUSE AIR BRAKE CO.	MANUFACTURING - WIRING DEVICES
OH	RICHLAND	SHELBY	COPPERWELD CORP	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	SCIOTO	HAVERHILL	ARISTECH CHEMICAL CORPORATION	MANUFACTURING - CHEMICALS
OH	SCIOTO	PORTSMOUTH	NEW BOSTON COKE CORP.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	SCIOTO	WHEELERSBURG	TEXAS EASTERN GAS	PCB GENERATOR
OH	SHELBY	SIDNEY	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	STARK	CANTON	TIMKEN CO HARRISON STEEL PLNT	PCB GENERATOR
OH	STARK	CANTON	BUCKHILL STATION	PCB GENERATOR
OH	STARK	CANTON	ENSR CORP.	PCB GENERATOR
OH	STARK	CANTON	FORD MOTOR COMPANY	PCB GENERATOR
OH	STARK	CANTON	GENERAL SERVICE CENTER	PCB GENERATOR
OH	STARK	CANTON	WADSWORTH ALERT LABORATORIES	PCB GENERATOR
OH	STARK	CANTON	WARREN CONS IND METFAB	PCB GENERATOR
OH	STARK	LOUISVILLE	MAGNETEK OHIO TRANSFORMER	PCB GENERATOR

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
OH	STARK	LOUISVILLE	J&L SPECIALITY STEEL, INC.	MANUFACTURING - COLD FINISHING OF STEEL SHAPES
OH	STARK	MASSILLON	REPUBLIC ENGINEERED STEELS	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	STARK	MASSILLON	NATIONAL FEEDSCREW & MACHINING	PCB GENERATOR
OH	STARK	MASSILLON	OHIO EDISON CO.	PCB GENERATOR
OH	STARK	NAVARRE	PSA LABORATORY SERVICES	PCB GENERATOR
OH	STARK	NORTH CANTON	ENSECO-WADSWORTH/ALERT LAB	PCB GENERATOR
OH	STARK		MERCURY STAINLESS INC	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	SUMMIT	AKRON	LORAL DEFENSE SYSTEM	PCB GENERATOR
OH	SUMMIT	AKRON	OHIO EDISON CO.	PCB GENERATOR
OH	SUMMIT	AKRON	OHIO EDISON CO.	PCB GENERATOR
OH	SUMMIT	AKRON	OHIO EDISON CO.	PCB GENERATOR
OH	TRUMBULL	NILES	OHIO EDISON CO.	PCB GENERATOR
OH	TRUMBULL	NILES	WARREN CONS INDUSTRIES	PCB GENERATOR
OH	TRUMBULL	NILES	RMI TITANIUM CO.	MANUFACTURING - NONFERROUS ROLLING & DRAWING
OH	TRUMBULL	WARREN	AUTUMN INDUSTRIES INC.	PCB GENERATOR
OH	TRUMBULL	WARREN	OHIO EDISON CO.	PCB GENERATOR
OH	TRUMBULL	WARREN	GENERAL MOTORS CORP.	PCB GENERATOR
OH	TRUMBULL	WARREN	CSC INDUSTRIES INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	TRUMBULL	WARREN	LTV STEEL CO.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	TRUMBULL	WARREN	THOMAS STEEL STRIP CORP.	MANUFACTURING - COLD FINISHING OF STEEL SHAPES
OH	TRUMBULL	WARREN	WARREN CONSOLIDATED INDUSTRY	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	TUSCARAWAS	DOVER	ARMCO INC.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
OH	UNION	MARYSVILLE	DAYTON POWER & LIGHT CO.	PCB GENERATOR
OH	UNION	MARYSVILLE	UNION RURAL ELEC COOP, INC.	PCB GENERATOR
OH	VINTON	MCARTHUR	TCO-MCARTHUR COMPRESSOR STA	PCB GENERATOR
OH	WASHINGTON	BELPRE	OHIO POWER CO.	POWER GENERATOR
OH	WASHINGTON	BELPRE	SHELL CHEMICAL CO.	MANUFACTURING - CHEMICALS
OH	WASHINGTON	BEVERLY	MUSKINGUM RIVER PLANT	PCB GENERATOR
OH	WASHINGTON	MARIETTA	ELKEM METALS CO.	PCB GENERATOR
OH	WASHINGTON	MARIETTA	AMERICAN MUNICIPAL PWR	PCB GENERATOR
OH	WASHINGTON	MARIETTA	MARIETTA POLYSTYRENE PLANT	PCB GENERATOR
OH	WASHINGTON	MARIETTA	WASHINGTON ELEC COOP WHSE	PCB GENERATOR
OH	WAYNE	BIG PRAIRIE	CGST MILEY COMPRESSOR STATION	PCB GENERATOR
OH	WAYNE	ORRVILLE	ORRVILLE ELEC UTIL	PCB GENERATOR
OH	WAYNE	WOOSTER	CGST-WOOSTER AREA OFFICE	PCB GENERATOR
OH	WAYNE	WOOSTER	THE GERSTENSLAGER COMPANY	PCB GENERATOR
OH		WELLS TWP	OHIO POWER CO.	POWER GENERATOR
OH		WESTVILLE	CGST-GROVE REGULATING STATION	PCB GENERATOR
KY	BARREN		BATTERY PROPERTIES INC	MANUFACTURING - PRIMARY BATTERIES
KY	BOONE	RABBIT HASH	CINCINNATI GAS & ELECTRIC CO.	POWER GENERATOR
KY	BOYD	ASHLAND	ARMCO STEEL CO.	MANUFACTURING - IRON
KY	BOYD	ASHLAND	AK STEEL CORP COKE PLANT	MANUFACTURING - BLAST FURNACES & STEEL MILLS

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
KY	BOYD	CATLETTSBURG	ASHLAND OIL CO., INC.	MANUFACTURING - CHEMICALS
KY	BOYD	CATLETTSBURG	INCO ALLOYS INTERNATIONAL INC	MANUFACTURING - NONFERROUS ROLLING & DRAWING
KY	BOYD		AK STEEL CORP WEST WORKS	MANUFACTURING - BLAST FURNACES & STEEL MILLS
KY	CAMPBELL	WILDERS	NEWPORT STEEL CORP.	MANUFACTURING - STEEL PIPE & TUBES
KY	CARROLL	CARROLLTON	KAWNEER CO., INC.	MANUFACTURING - METALS
KY	CARROLL	GHENT	KENTUCKY UTILITIES CO.	POWER GENERATOR
KY	CLARK	WINCHESTER	OSRAM SYLVANIA INC	MANUFACTURING - ELECTRIC LAMPS
KY	DAVIESS	OWENSBORO	OWENSBORO MUNICIPAL UTILITIES	POWER GENERATOR
KY	DAVIESS	OWENSBORO	W.R. GRACE AND CO.	MANUFACTURING - PLASTICS
KY	DAVIESS	OWENSBORO	GREEN RIVER STEEL CORP.	MANUFACTURING - BLAST FURNACES & STEEL MILLS
KY	GREENUP	WURTLAND	E.I.DU PONT DE NEMOURS & CO.	MANUFACTURING - CHEMICALS
KY	HANCOCK	HAWESVILLE	ALUMAX ALUMINUM CORPORATION	MANUFACTURING - ALUMINUM
KY	HANCOCK	HAWESVILLE	BIG RIVERS ELECTRIC CORP.	POWER GENERATOR
KY	HANCOCK	HAWESVILLE	NATIONAL ALUMINUM CORP.	ALUMINUM CASTING
KY	HANCOCK	HAWESVILLE	NATIONAL SOUTHWIRE ALUMINUM CO.	MANUFACTURING - PRIMARY ALUMINUM
KY	HANCOCK	LEWISPORT	COMMONWEALTH ALUMINUM	MANUFACTURING - ALUMINUM ROLLING & DRAWING
KY	HARDIN	ELIZABETHTOWN	SUPERIOR CABLE	MANUFACTURING - TELEPHONE & TELEGRAPH APPARATUS
KY	HARLAN	DAYHOIT	COOPER IND	MANUFACTURING - MOTORS & GENERATORS
KY	HENDERSON	HENDERSON	HENDERSON POWER & LIGHT	POWER GENERATOR
KY	HENDERSON	HENDERSON	UNISON TRANSFORMER SERVICES	PCB GENERATOR
KY	HENDERSON		ALCAN INGOT SEBREE ALUMINUM	MANUFACTURING - PRIMARY ALUMINUM
KY	JEFFERSON	LOUISVILLE	B.F. GOODRICH CHEMICAL CO.	MANUFACTURING - RESINS & RUBBER
KY	JEFFERSON	LOUISVILLE	BORDEN CHEMICAL A&C	MANUFACTURING - CHEMICALS
KY	JEFFERSON	LOUISVILLE	LOUISVILLE GAS & ELECTRIC CO.	POWER GENERATOR
KY	JEFFERSON	LOUISVILLE	LOUISVILLE GAS & ELECTRIC CO.	POWER GENERATOR
KY	JEFFERSON	LOUISVILLE	LOUISVILLE GAS & ELECTRIC CO.	POWER GENERATOR
KY	JEFFERSON	LOUISVILLE	LOUISVILLE GAS & ELECTRIC CO.	POWER GENERATOR
KY	JEFFERSON	LOUISVILLE	LOUISVILLE GAS & ELECTRIC CO.	POWER GENERATOR
KY	JEFFERSON	LOUISVILLE	GENERAL ELECTRIC CO	MANUFACTURING - ELECTRON TUBES
KY	JEFFERSON		ALPHA ENVIR SERVICES INC	MANUFACTURING - STORAGE BATTERIES
KY	JEFFERSON		KY ASSOC OF ELECTRIC COOP INC	MANUFACTURING - TRANSFORMERS
KY	KNOX		WAITSBORO MFG	MANUFACTURING - CURRENT-CARRYING WIRING DEVICES
KY	LOGAN	RUSSELLVILLE	BTR PRECISION DIE CASTING INC.	MANUFACTURING - ALUMINUM FOUNDRIES
KY	MADISON		YUASA-EXIDE INC	MANUFACTURING - STORAGE BATTERIES
KY	MASON	MAYSVILLE	E. KENTUCKY POWER COOPERATIVE	POWER GENERATOR
KY	MASON	MAYSVILLE	WALD MANUFACTURING CO., INC.	ELECTROPLATING OPERATION
KY	McCRACKEN	WEST PADUCHAH	TENNESSEE VALLEY AUTHORITY	POWER GENERATOR
KY	MEADE	BRADENBURG	OLIN CORPORATION	MANUFACTURING - CHEMICALS
KY	MERCER	BURGIN	KEYSTONE BRUSH & CONTACT CO	MANUFACTURING - CARBON & GRAPHITE PRODUCTS
KY	MONTGOMERY	MOUNT STERLING	A. O. SMITH ELECTRICAL PROD	MANUFACTURING - MOTORS & GENERATORS
KY	RUSSELL		SUPERIOR BATTERY MFG CO INC	MANUFACTURING - STORAGE BATTERIES
KY	WOODFORD	VERSAILLES	OSRAM SYLVANIA INC	MANUFACTURING - ELECTRIC LAMPS

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

POTENTIAL PCB SOURCES IN THE OHIO RIVER BASIN : GENERATORS & ASSOCIATED INDUSTRIES (PCS, 1997 AND OEPA, 1997)*				
STATE	**COUNTY**	**CITY**	**FACILITY NAME**	**ACTIVITY**
IN	CLINTON	FRANKFORT	MALLORY CONTROLS	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
IN	CLINTON	FRANKFORT	MALLORY CONTROLS, EMERSON ELEC	MANUFACTURING - RELAYS & INDUSTRIAL CONTROLS
IN	DEARBORN	LAWRENCEBURG	INDIANA & MICHIGAN POWER CO.	POWER GENERATOR
IN	FLOYD	NEW ALBANY	PSI ENERGY	POWER GENERATOR
IN	FOUNTAIN	ATTICA	C & D CHARTER POWER SYSTEMS	MANUFACTURING - STORAGE BATTERIES
IN	GIBSON	PRINCETON	HANSEN MANUFACTURING CO.	MANUFACTURING - MOTORS & GENERATORS
IN	GRANT	MARION	THOMSON CONSUMER ELECTRONICS	MANUFACTURING - ELECTRON TUBES
IN	GREENE	LINTON	GENERAL ELECTRIC CO.	MANUFACTURING - MOTORS & GENERATORS
IN	HENRY	NEW CASTLE	ALLEGHENY LUDLUM STEEL	MANUFACTURING - COLD FINISHING OF STEEL SHAPES
IN	HOWARD	KOKOMO	DELCO ELECTRONICS CORP.	MANUFACTURING - SEMICONDUCTORS
IN	JEFFERSON	MADISON	INDIANA-KENTUCKY ELECTRIC CORP.	POWER GENERATOR
IN	LAWRENCE	BEDFORD	G.M. CORP., POWERTRAIN DIV.	MANUFACTURING - ALUMINUM FOUNDRIES
IN	MARION	INDIANAPOLIS	QUEMETCO (RSR CORPORATION)	MANUFACTURING - SECONDARY NONFERROUS METALS
IN	MONROE	BLOOMINGTON	ABB POWER T & D CO., INC.	MANUFACTURING - ELECTRICAL APPARATUS
IN	MONTGOMERY	CRAWFORDSVILLE	MIDSTATES WIRE	MANUFACTURING - STEEL WIRE & RELATED PRODUCTS
IN	POSEY	MT. VERNON	BABCOCK & WILCOX CO.	MANUFACTURING - COMPONENTS
IN	POSEY	MT. VERNON	GENERAL ELECTRIC CO.	
IN	SPENCER	ROCKPORT	INDIANA & MICHIGAN POWER CO.	POWER GENERATOR
IN	TIPPECANOE	LAFAYETTE	ALUMINUM CO. OF AM. (ALCOA)	MANUFACTURING - SECONDARY METALS
IN	TIPPECANOE	WEST LAFAYETTE	CTS MICROELECTRONICS, INC.	MANUFACTURING - SEMICONDUCTORS
IN	VANDERBURGH	EVANSVILLE	SOUTHERN INDIANA GAS & ELECTRIC CO.	POWER GENERATOR
IN	VIGO	TERRE HAUTE	ALCAN ROLLED PRODUCTS CO.	MANUFACTURING - ALUMINUM
IN	WABASH	WABASH	BULLDOG BATTERY CORPORATION	MANUFACTURING - STORAGE BATTERIES
IN	WARRICK	NEWBURGH	SOUTHERN INDIANA GAS & ELECTRIC CO.	POWER GENERATOR
IN	WARRICK	NEWBURGH	ALUMINUM CO. OF AMER. (ALCOA)	MANUFACTURING - PRIMARY ALUMINUM
IN	WELLS	BLUFFTON	INDIANA ACOUSTICAL COMPONENTS	MANUFACTURING - ELECTRON TUBES
IL	MASSAC	JOPPA	ELECTRIC ENERGY, INC.	POWER GENERATOR
IL	VERMILION	DANVILLE TWP	VALMONT ELECTRIC INC.	MANUFACTURING - TRANSFORMERS

*Information compiled in this list includes industries ***associated*** with the use of PCBs therefore, many facilities may not be actual PCB sources.

Appendix B

ORSANCO Fish Tissue Data, OEPA Fish Tissue Data,
USACOE Elutriate and Sediment Data

U.S. Army Corps of Engineers Elutriate Data					
Station names are derived from river-mile and percent distance from left decending bank					
Example: Station 33899					
River Mile = 338.9					
Percent distance from left bank = 90%					
(L) = actual value < result					
River	**Station**	**Date**	**Chemical Name**		**Result (ug/L)**
Ohio	33909	800515	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	34180	800514	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	37860	800514	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	40690	800513	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	42409	800513	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	42661	800513	PCB Arochlor 1260, Elutriate		0.7
Ohio	43680	800512	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	16230	810407	PCB Arochlor 1016, Elutriate	L	1
Ohio	16230	810407	PCB Arochlor 1221, Elutriate	L	1
Ohio	16230	810407	PCB Arochlor 1232, Elutriate	L	1
Ohio	16230	810407	PCB Arochlor 1242, Elutriate	L	1
Ohio	16230	810407	PCB Arochlor 1248, Elutriate	L	1
Ohio	16230	810407	PCB Arochlor 1254, Elutriate	L	1
Ohio	16230	810407	PCB Arochlor 1260, Elutriate	L	1
Ohio	20429	810407	PCB Arochlor 1016, Elutriate	L	1
Ohio	20429	810407	PCB Arochlor 1221, Elutriate	L	1
Ohio	20429	810407	PCB Arochlor 1232, Elutriate	L	1
Ohio	20429	810407	PCB Arochlor 1242, Elutriate	L	1
Ohio	20429	810407	PCB Arochlor 1248, Elutriate	L	1
Ohio	20429	810407	PCB Arochlor 1254, Elutriate	L	1
Ohio	20429	810407	PCB Arochlor 1260, Elutriate	L	1
Ohio	34122	810410	PCB Arochlor 1016, Elutriate	L	1
Ohio	34122	810410	PCB Arochlor 1221, Elutriate	L	1
Ohio	34122	810410	PCB Arochlor 1232, Elutriate	L	1
Ohio	34122	810410	PCB Arochlor 1242, Elutriate	L	1
Ohio	34122	810410	PCB Arochlor 1248, Elutriate	L	1
Ohio	34122	810410	PCB Arochlor 1254, Elutriate	L	1
Ohio	34122	810410	PCB Arochlor 1260, Elutriate	L	1
Ohio	43689	810409	PCB Arochlor 1016, Elutriate	L	1
Ohio	43689	810409	PCB Arochlor 1221, Elutriate	L	1
Ohio	43689	810409	PCB Arochlor 1232, Elutriate	L	1
Ohio	43689	810409	PCB Arochlor 1242, Elutriate	L	1
Ohio	43689	810409	PCB Arochlor 1248, Elutriate	L	1
Ohio	43689	810409	PCB Arochlor 1254, Elutriate	L	1
Ohio	43689	810409	PCB Arochlor 1260, Elutriate	L	1
Ohio	20439	830414	PCB Arochlor 1016, Elutriate	L	1
Ohio	20439	830414	PCB Arochlor 1221, Elutriate	L	1
Ohio	20439	830414	PCB Arochlor 1232, Elutriate	L	1
Ohio	20439	830414	PCB Arochlor 1242, Elutriate	L	1
Ohio	20439	830414	PCB Arochlor 1248, Elutriate	L	1
Ohio	20439	830414	PCB Arochlor 1254, Elutriate	L	1
Ohio	20439	830414	PCB Arochlor 1260, Elutriate	L	1
Ohio	23791	830405	PCB Arochlor 1016, Elutriate	L	1
Ohio	23791	830405	PCB Arochlor 1221, Elutriate	L	1
Ohio	23791	830405	PCB Arochlor 1232, Elutriate	L	1
Ohio	23791	830405	PCB Arochlor 1242, Elutriate	L	1
Ohio	23791	830405	PCB Arochlor 1248, Elutriate	L	1
Ohio	23791	830405	PCB Arochlor 1254, Elutriate	L	1

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	23791	830405	PCB Arochlor 1260, Elutriate	L	1
Ohio	30109	830505	PCB Arochlor 1016, Elutriate	L	1
Ohio	30109	830505	PCB Arochlor 1221, Elutriate	L	1
Ohio	30109	830505	PCB Arochlor 1232, Elutriate	L	1
Ohio	30109	830505	PCB Arochlor 1242, Elutriate	L	1
Ohio	30109	830505	PCB Arochlor 1248, Elutriate	L	1
Ohio	30109	830505	PCB Arochlor 1254, Elutriate	L	1
Ohio	30109	830505	PCB Arochlor 1260, Elutriate	L	1
Ohio	30520	830401	PCB Arochlor 1016, Elutriate	L	1
Ohio	30520	830401	PCB Arochlor 1221, Elutriate	L	1
Ohio	30520	830401	PCB Arochlor 1232, Elutriate	L	1
Ohio	30520	830401	PCB Arochlor 1242, Elutriate	L	1
Ohio	30520	830401	PCB Arochlor 1248, Elutriate	L	1
Ohio	30520	830401	PCB Arochlor 1254, Elutriate	L	1
Ohio	30520	830401	PCB Arochlor 1260, Elutriate	L	1
Ohio	30609	830401	PCB Arochlor 1016, Elutriate	L	1
Ohio	30609	830401	PCB Arochlor 1221, Elutriate	L	1
Ohio	30609	830401	PCB Arochlor 1232, Elutriate	L	1
Ohio	30609	830401	PCB Arochlor 1242, Elutriate	L	1
Ohio	30609	830401	PCB Arochlor 1248, Elutriate	L	1
Ohio	30609	830401	PCB Arochlor 1254, Elutriate	L	1
Ohio	30609	830401	PCB Arochlor 1260, Elutriate	L	1
Ohio	33899	830406	PCB Arochlor 1016, Elutriate	L	1
Ohio	33899	830406	PCB Arochlor 1221, Elutriate	L	1
Ohio	33899	830406	PCB Arochlor 1232, Elutriate	L	1
Ohio	33899	830406	PCB Arochlor 1242, Elutriate	L	1
Ohio	33899	830406	PCB Arochlor 1248, Elutriate	L	1
Ohio	33899	830406	PCB Arochlor 1254, Elutriate	L	1
Ohio	33899	830406	PCB Arochlor 1260, Elutriate	L	1
Ohio	34122	830406	PCB Arochlor 1016, Elutriate	L	1
Ohio	34122	830406	PCB Arochlor 1221, Elutriate	L	1
Ohio	34122	830406	PCB Arochlor 1232, Elutriate	L	1
Ohio	34122	830406	PCB Arochlor 1242, Elutriate	L	1
Ohio	34122	830406	PCB Arochlor 1248, Elutriate	L	1
Ohio	34122	830406	PCB Arochlor 1254, Elutriate	L	1
Ohio	34122	830406	PCB Arochlor 1260, Elutriate	L	1
Ohio	42399	830404	PCB Arochlor 1016, Elutriate	L	1
Ohio	42399	830404	PCB Arochlor 1221, Elutriate	L	1
Ohio	42399	830404	PCB Arochlor 1232, Elutriate	L	1
Ohio	42399	830404	PCB Arochlor 1242, Elutriate	L	1
Ohio	42399	830404	PCB Arochlor 1248, Elutriate	L	1
Ohio	42399	830404	PCB Arochlor 1254, Elutriate	L	1
Ohio	42399	830404	PCB Arochlor 1260, Elutriate	L	1
Ohio	42640	830404	PCB Arochlor 1016, Elutriate	L	1
Ohio	42640	830404	PCB Arochlor 1221, Elutriate	L	1
Ohio	42640	830404	PCB Arochlor 1232, Elutriate	L	1
Ohio	42640	830404	PCB Arochlor 1242, Elutriate	L	1
Ohio	42640	830404	PCB Arochlor 1248, Elutriate	L	1
Ohio	42640	830404	PCB Arochlor 1254, Elutriate	L	1
Ohio	42640	830404	PCB Arochlor 1260, Elutriate	L	1
Ohio	43689	830404	PCB Arochlor 1016, Elutriate	L	1
Ohio	43689	830404	PCB Arochlor 1221, Elutriate	L	1
Ohio	43689	830404	PCB Arochlor 1232, Elutriate	L	1
Ohio	43689	830404	PCB Arochlor 1242, Elutriate	L	1
Ohio	43689	830404	PCB Arochlor 1248, Elutriate	L	1
Ohio	43689	830404	PCB Arochlor 1254, Elutriate	L	1
Ohio	43689	830404	PCB Arochlor 1260, Elutriate	L	1

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	43689	830428	PCB Arochlor 1016, Elutriate	L	1
Ohio	43689	830428	PCB Arochlor 1221, Elutriate	L	1
Ohio	43689	830428	PCB Arochlor 1232, Elutriate	L	1
Ohio	43689	830428	PCB Arochlor 1242, Elutriate	L	1
Ohio	43689	830428	PCB Arochlor 1248, Elutriate	L	1
Ohio	43689	830428	PCB Arochlor 1254, Elutriate	L	1
Ohio	43689	830428	PCB Arochlor 1260, Elutriate	L	1
Ohio	15491	840508	PCB Arochlor 1016, Elutriate	L	1
Ohio	15491	840508	PCB Arochlor 1221, Elutriate	L	1
Ohio	15491	840508	PCB Arochlor 1232, Elutriate	L	1
Ohio	15491	840508	PCB Arochlor 1242, Elutriate	L	1
Ohio	15491	840508	PCB Arochlor 1248, Elutriate	L	1
Ohio	15491	840508	PCB Arochlor 1254, Elutriate	L	1
Ohio	15491	840508	PCB Arochlor 1260, Elutriate	L	1
Ohio	17190	840508	PCB Arochlor 1016, Elutriate	L	1
Ohio	17190	840508	PCB Arochlor 1221, Elutriate	L	1
Ohio	17190	840508	PCB Arochlor 1232, Elutriate	L	1
Ohio	17190	840508	PCB Arochlor 1242, Elutriate	L	1
Ohio	17190	840508	PCB Arochlor 1248, Elutriate	L	1
Ohio	17190	840508	PCB Arochlor 1254, Elutriate	L	1
Ohio	17190	840508	PCB Arochlor 1260, Elutriate	L	1
Ohio	20439	840507	PCB Arochlor 1016, Elutriate	L	1
Ohio	20439	840507	PCB Arochlor 1221, Elutriate	L	1
Ohio	20439	840507	PCB Arochlor 1232, Elutriate	L	1
Ohio	20439	840507	PCB Arochlor 1242, Elutriate	L	1
Ohio	20439	840507	PCB Arochlor 1248, Elutriate	L	1
Ohio	20439	840507	PCB Arochlor 1254, Elutriate	L	1
Ohio	20439	840507	PCB Arochlor 1260, Elutriate	L	1
Ohio	26969	840507	PCB Arochlor 1016, Elutriate	L	1
Ohio	26969	840507	PCB Arochlor 1221, Elutriate	L	1
Ohio	26969	840507	PCB Arochlor 1232, Elutriate	L	1
Ohio	26969	840507	PCB Arochlor 1242, Elutriate	L	1
Ohio	26969	840507	PCB Arochlor 1248, Elutriate	L	1
Ohio	26969	840507	PCB Arochlor 1254, Elutriate	L	1
Ohio	26969	840507	PCB Arochlor 1260, Elutriate	L	1
Ohio	30109	840416	PCB Arochlor 1016, Elutriate	L	1
Ohio	30109	840416	PCB Arochlor 1221, Elutriate	L	1
Ohio	30109	840416	PCB Arochlor 1232, Elutriate	L	1
Ohio	30109	840416	PCB Arochlor 1242, Elutriate	L	1
Ohio	30109	840416	PCB Arochlor 1248, Elutriate	L	1
Ohio	30109	840416	PCB Arochlor 1254, Elutriate	L	1
Ohio	30109	840416	PCB Arochlor 1260, Elutriate	L	1
Ohio	30520	840416	PCB Arochlor 1016, Elutriate	L	1
Ohio	30520	840416	PCB Arochlor 1221, Elutriate	L	1
Ohio	30520	840416	PCB Arochlor 1232, Elutriate	L	1
Ohio	30520	840416	PCB Arochlor 1242, Elutriate	L	1
Ohio	30520	840416	PCB Arochlor 1248, Elutriate	L	1
Ohio	30520	840416	PCB Arochlor 1254, Elutriate	L	1
Ohio	30520	840416	PCB Arochlor 1260, Elutriate	L	1
Ohio	30609	840416	PCB Arochlor 1016, Elutriate	L	1
Ohio	30609	840416	PCB Arochlor 1221, Elutriate	L	1
Ohio	30609	840416	PCB Arochlor 1232, Elutriate	L	1
Ohio	30609	840416	PCB Arochlor 1242, Elutriate	L	1
Ohio	30609	840416	PCB Arochlor 1248, Elutriate	L	1
Ohio	30609	840416	PCB Arochlor 1254, Elutriate	L	1
Ohio	30609	840416	PCB Arochlor 1260, Elutriate	L	1
Ohio	33899	840419	PCB Arochlor 1016, Elutriate	L	1

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	33899	840419	PCB Arochlor 1221, Elutriate	L	1
Ohio	33899	840419	PCB Arochlor 1232, Elutriate	L	1
Ohio	33899	840419	PCB Arochlor 1242, Elutriate	L	1
Ohio	33899	840419	PCB Arochlor 1248, Elutriate	L	1
Ohio	33899	840419	PCB Arochlor 1254, Elutriate	L	1
Ohio	33899	840419	PCB Arochlor 1260, Elutriate	L	1
Ohio	34122	840417	PCB Arochlor 1016, Elutriate	L	1
Ohio	34122	840417	PCB Arochlor 1221, Elutriate	L	1
Ohio	34122	840417	PCB Arochlor 1232, Elutriate	L	1
Ohio	34122	840417	PCB Arochlor 1242, Elutriate	L	1
Ohio	34122	840417	PCB Arochlor 1248, Elutriate	L	1
Ohio	34122	840417	PCB Arochlor 1254, Elutriate	L	1
Ohio	34122	840417	PCB Arochlor 1260, Elutriate	L	1
Ohio	37840	840418	PCB Arochlor 1016, Elutriate	L	1
Ohio	37840	840418	PCB Arochlor 1221, Elutriate	L	1
Ohio	37840	840418	PCB Arochlor 1232, Elutriate	L	1
Ohio	37840	840418	PCB Arochlor 1242, Elutriate	L	1
Ohio	37840	840418	PCB Arochlor 1248, Elutriate	L	1
Ohio	37840	840418	PCB Arochlor 1254, Elutriate	L	1
Ohio	37840	840418	PCB Arochlor 1260, Elutriate	L	1
Ohio	40690	840419	PCB Arochlor 1016, Elutriate	L	1
Ohio	40690	840419	PCB Arochlor 1221, Elutriate	L	1
Ohio	40690	840419	PCB Arochlor 1232, Elutriate	L	1
Ohio	40690	840419	PCB Arochlor 1242, Elutriate	L	1
Ohio	40690	840419	PCB Arochlor 1248, Elutriate	L	1
Ohio	40690	840419	PCB Arochlor 1254, Elutriate	L	1
Ohio	40690	840419	PCB Arochlor 1260, Elutriate	L	1
Ohio	42399	840418	PCB Arochlor 1016, Elutriate	L	1
Ohio	42399	840418	PCB Arochlor 1221, Elutriate	L	1
Ohio	42399	840418	PCB Arochlor 1232, Elutriate	L	1
Ohio	42399	840418	PCB Arochlor 1242, Elutriate	L	1
Ohio	42399	840418	PCB Arochlor 1248, Elutriate	L	1
Ohio	42399	840418	PCB Arochlor 1254, Elutriate	L	1
Ohio	42399	840418	PCB Arochlor 1260, Elutriate	L	1
Ohio	42640	840418	PCB Arochlor 1016, Elutriate	L	1
Ohio	42640	840418	PCB Arochlor 1221, Elutriate	L	1
Ohio	42640	840418	PCB Arochlor 1232, Elutriate	L	1
Ohio	42640	840418	PCB Arochlor 1242, Elutriate	L	1
Ohio	42640	840418	PCB Arochlor 1248, Elutriate	L	1
Ohio	42640	840418	PCB Arochlor 1254, Elutriate	L	1
Ohio	42640	840418	PCB Arochlor 1260, Elutriate	L	1
Ohio	43689	840418	PCB Arochlor 1016, Elutriate	L	1
Ohio	43689	840418	PCB Arochlor 1221, Elutriate	L	1
Ohio	43689	840418	PCB Arochlor 1232, Elutriate	L	1
Ohio	43689	840418	PCB Arochlor 1242, Elutriate	L	1
Ohio	43689	840418	PCB Arochlor 1248, Elutriate	L	1
Ohio	43689	840418	PCB Arochlor 1254, Elutriate	L	1
Ohio	43689	840418	PCB Arochlor 1260, Elutriate	L	1
Ohio	15490	850409	PCB Arochlor 1016, Elutriate	L	10
Ohio	15490	850409	PCB Arochlor 1221, Elutriate	L	10
Ohio	15490	850409	PCB Arochlor 1232, Elutriate	L	10
Ohio	15490	850409	PCB Arochlor 1242, Elutriate	L	10
Ohio	15490	850409	PCB Arochlor 1248, Elutriate	L	10
Ohio	15490	850409	PCB Arochlor 1254, Elutriate	L	10
Ohio	15490	850409	PCB Arochlor 1260, Elutriate	L	10
Ohio	15491	850409	PCB Arochlor 1016, Elutriate	L	10
Ohio	15491	850409	PCB Arochlor 1221, Elutriate	L	10

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	15491	850409	PCB Arochlor 1232, Elutriate	L	10
Ohio	15491	850409	PCB Arochlor 1242, Elutriate	L	10
Ohio	15491	850409	PCB Arochlor 1248, Elutriate	L	10
Ohio	15491	850409	PCB Arochlor 1254, Elutriate	L	10
Ohio	15491	850409	PCB Arochlor 1260, Elutriate	L	10
Ohio	17200	850409	PCB Arochlor 1016, Elutriate	L	10
Ohio	17200	850409	PCB Arochlor 1221, Elutriate	L	10
Ohio	17200	850409	PCB Arochlor 1232, Elutriate	L	10
Ohio	17200	850409	PCB Arochlor 1242, Elutriate	L	10
Ohio	17200	850409	PCB Arochlor 1248, Elutriate	L	10
Ohio	17200	850409	PCB Arochlor 1254, Elutriate	L	10
Ohio	17200	850409	PCB Arochlor 1260, Elutriate	L	10
Ohio	20439	850429	PCB Arochlor 1016, Elutriate	L	1
Ohio	20439	850429	PCB Arochlor 1221, Elutriate	L	1
Ohio	20439	850429	PCB Arochlor 1232, Elutriate	L	1
Ohio	20439	850429	PCB Arochlor 1242, Elutriate	L	1
Ohio	20439	850429	PCB Arochlor 1248, Elutriate	L	1
Ohio	20439	850429	PCB Arochlor 1254, Elutriate	L	1
Ohio	20439	850429	PCB Arochlor 1260, Elutriate	L	1
Ohio	23791	850429	PCB Arochlor 1016, Elutriate	L	1
Ohio	23791	850429	PCB Arochlor 1221, Elutriate	L	1
Ohio	23791	850429	PCB Arochlor 1232, Elutriate	L	1
Ohio	23791	850429	PCB Arochlor 1242, Elutriate	L	1
Ohio	23791	850429	PCB Arochlor 1248, Elutriate	L	1
Ohio	23791	850429	PCB Arochlor 1254, Elutriate	L	1
Ohio	23791	850429	PCB Arochlor 1260, Elutriate	L	1
Ohio	23819	850410	PCB Arochlor 1016, Elutriate	L	10
Ohio	23819	850410	PCB Arochlor 1221, Elutriate	L	10
Ohio	23819	850410	PCB Arochlor 1232, Elutriate	L	10
Ohio	23819	850410	PCB Arochlor 1242, Elutriate	L	10
Ohio	23819	850410	PCB Arochlor 1248, Elutriate	L	10
Ohio	23819	850410	PCB Arochlor 1254, Elutriate	L	10
Ohio	23819	850410	PCB Arochlor 1260, Elutriate	L	10
Ohio	30109	850328	PCB Arochlor 1016, Elutriate	L	10
Ohio	30109	850328	PCB Arochlor 1221, Elutriate	L	10
Ohio	30109	850328	PCB Arochlor 1232, Elutriate	L	10
Ohio	30109	850328	PCB Arochlor 1242, Elutriate	L	10
Ohio	30109	850328	PCB Arochlor 1248, Elutriate	L	10
Ohio	30109	850328	PCB Arochlor 1254, Elutriate	L	10
Ohio	30109	850328	PCB Arochlor 1260, Elutriate	L	10
Ohio	30119	850328	PCB Arochlor 1016, Elutriate	L	10
Ohio	30119	850328	PCB Arochlor 1221, Elutriate	L	10
Ohio	30119	850328	PCB Arochlor 1232, Elutriate	L	10
Ohio	30119	850328	PCB Arochlor 1242, Elutriate	L	10
Ohio	30119	850328	PCB Arochlor 1248, Elutriate	L	10
Ohio	30119	850328	PCB Arochlor 1254, Elutriate	L	10
Ohio	30119	850328	PCB Arochlor 1260, Elutriate	L	10
Ohio	30609	850327	PCB Arochlor 1016, Elutriate	L	10
Ohio	30609	850327	PCB Arochlor 1221, Elutriate	L	10
Ohio	30609	850327	PCB Arochlor 1232, Elutriate	L	10
Ohio	30609	850327	PCB Arochlor 1242, Elutriate	L	10
Ohio	30609	850327	PCB Arochlor 1248, Elutriate	L	10
Ohio	30609	850327	PCB Arochlor 1254, Elutriate	L	10
Ohio	30609	850327	PCB Arochlor 1260, Elutriate	L	10
Ohio	30619	850327	PCB Arochlor 1016, Elutriate	L	10
Ohio	30619	850327	PCB Arochlor 1221, Elutriate	L	10
Ohio	30619	850327	PCB Arochlor 1232, Elutriate	L	10

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	30619	850327	PCB Arochlor 1242, Elutriate	L	10
Ohio	30619	850327	PCB Arochlor 1248, Elutriate	L	10
Ohio	30619	850327	PCB Arochlor 1254, Elutriate	L	10
Ohio	30619	850327	PCB Arochlor 1260, Elutriate	L	10
Ohio	33899	850411	PCB Arochlor 1016, Elutriate	L	1
Ohio	33899	850411	PCB Arochlor 1221, Elutriate	L	1
Ohio	33899	850411	PCB Arochlor 1232, Elutriate	L	1
Ohio	33899	850411	PCB Arochlor 1242, Elutriate	L	1
Ohio	33899	850411	PCB Arochlor 1248, Elutriate	L	1
Ohio	33899	850411	PCB Arochlor 1254, Elutriate	L	1
Ohio	33899	850411	PCB Arochlor 1260, Elutriate	L	1
Ohio	34122	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	34122	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	34122	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	34122	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	34122	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	34122	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	34122	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	34180	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	34180	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	34180	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	34180	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	34180	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	34180	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	34180	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	36339	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	36339	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	36339	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	36339	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	36339	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	36339	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	36339	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	36820	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	36820	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	36820	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	36820	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	36820	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	36820	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	36820	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	36831	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	36831	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	36831	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	36831	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	36831	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	36831	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	36831	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	37840	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	37840	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	37840	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	37840	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	37840	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	37840	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	37840	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	37860	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	37860	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	37860	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	37860	850412	PCB Arochlor 1242, Elutriate	L	10

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	37860	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	37860	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	37860	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	38809	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	38809	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	38809	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	38809	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	38809	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	38809	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	38809	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	40690	850412	PCB Arochlor 1016, Elutriate	L	10
Ohio	40690	850412	PCB Arochlor 1221, Elutriate	L	10
Ohio	40690	850412	PCB Arochlor 1232, Elutriate	L	10
Ohio	40690	850412	PCB Arochlor 1242, Elutriate	L	10
Ohio	40690	850412	PCB Arochlor 1248, Elutriate	L	10
Ohio	40690	850412	PCB Arochlor 1254, Elutriate	L	10
Ohio	40690	850412	PCB Arochlor 1260, Elutriate	L	10
Ohio	41569	850411	PCB Arochlor 1016, Elutriate	L	10
Ohio	41569	850411	PCB Arochlor 1221, Elutriate	L	10
Ohio	41569	850411	PCB Arochlor 1232, Elutriate	L	10
Ohio	41569	850411	PCB Arochlor 1242, Elutriate	L	10
Ohio	41569	850411	PCB Arochlor 1248, Elutriate	L	10
Ohio	41569	850411	PCB Arochlor 1254, Elutriate	L	10
Ohio	41569	850411	PCB Arochlor 1260, Elutriate	L	10
Ohio	42399	850411	PCB Arochlor 1016, Elutriate	L	10
Ohio	42399	850411	PCB Arochlor 1221, Elutriate	L	10
Ohio	42399	850411	PCB Arochlor 1232, Elutriate	L	10
Ohio	42399	850411	PCB Arochlor 1242, Elutriate	L	10
Ohio	42399	850411	PCB Arochlor 1248, Elutriate	L	10
Ohio	42399	850411	PCB Arochlor 1254, Elutriate	L	10
Ohio	42399	850411	PCB Arochlor 1260, Elutriate	L	10
Ohio	42640	850411	PCB Arochlor 1016, Elutriate	L	10
Ohio	42640	850411	PCB Arochlor 1221, Elutriate	L	10
Ohio	42640	850411	PCB Arochlor 1232, Elutriate	L	10
Ohio	42640	850411	PCB Arochlor 1242, Elutriate	L	10
Ohio	42640	850411	PCB Arochlor 1248, Elutriate	L	10
Ohio	42640	850411	PCB Arochlor 1254, Elutriate	L	10
Ohio	42640	850411	PCB Arochlor 1260, Elutriate	L	10
Ohio	42650	850411	PCB Arochlor 1016, Elutriate	L	10
Ohio	42650	850411	PCB Arochlor 1221, Elutriate	L	10
Ohio	42650	850411	PCB Arochlor 1232, Elutriate	L	10
Ohio	42650	850411	PCB Arochlor 1242, Elutriate	L	10
Ohio	42650	850411	PCB Arochlor 1248, Elutriate	L	10
Ohio	42650	850411	PCB Arochlor 1254, Elutriate	L	10
Ohio	42650	850411	PCB Arochlor 1260, Elutriate	L	10
Ohio	43680	850411	PCB Arochlor 1016, Elutriate	L	10
Ohio	43680	850411	PCB Arochlor 1221, Elutriate	L	10
Ohio	43680	850411	PCB Arochlor 1232, Elutriate	L	10
Ohio	43680	850411	PCB Arochlor 1242, Elutriate	L	10
Ohio	43680	850411	PCB Arochlor 1248, Elutriate	L	10
Ohio	43680	850411	PCB Arochlor 1254, Elutriate	L	10
Ohio	43680	850411	PCB Arochlor 1260, Elutriate	L	10
Ohio	43689	850411	PCB Arochlor 1016, Elutriate	L	10
Ohio	43689	850411	PCB Arochlor 1221, Elutriate	L	10
Ohio	43689	850411	PCB Arochlor 1232, Elutriate	L	10
Ohio	43689	850411	PCB Arochlor 1242, Elutriate	L	10
Ohio	43689	850411	PCB Arochlor 1248, Elutriate	L	10

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	43689	850411	PCB Arochlor 1254, Elutriate	L	10
Ohio	43689	850411	PCB Arochlor 1260, Elutriate	L	10
Ohio	34122	860408	PCB Arochlor 1016, Elutriate	L	50
Ohio	34122	860408	PCB Arochlor 1221, Elutriate	L	50
Ohio	34122	860408	PCB Arochlor 1232, Elutriate	L	50
Ohio	34122	860408	PCB Arochlor 1242, Elutriate	L	50
Ohio	34122	860408	PCB Arochlor 1248, Elutriate	L	50
Ohio	34122	860408	PCB Arochlor 1254, Elutriate	L	50
Ohio	34122	860408	PCB Arochlor 1260, Elutriate	L	50
Ohio	43689	860408	PCB Arochlor 1016, Elutriate	L	50
Ohio	43689	860408	PCB Arochlor 1221, Elutriate	L	50
Ohio	43689	860408	PCB Arochlor 1232, Elutriate	L	50
Ohio	43689	860408	PCB Arochlor 1242, Elutriate	L	50
Ohio	43689	860408	PCB Arochlor 1248, Elutriate	L	50
Ohio	43689	860408	PCB Arochlor 1254, Elutriate	L	50
Ohio	43689	860408	PCB Arochlor 1260, Elutriate	L	50
Ohio	14999	880414	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	14999	880414	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	14999	880414	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	14999	880414	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	14999	880414	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	14999	880414	PCB Arochlor 1254, Elutriate	L	1
Ohio	14999	880414	PCB Arochlor 1260, Elutriate	L	1
Ohio	15491	880414	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	15491	880414	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	15491	880414	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	15491	880414	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	15491	880414	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	15491	880414	PCB Arochlor 1254, Elutriate	L	1
Ohio	15491	880414	PCB Arochlor 1260, Elutriate	L	1
Ohio	17190	880414	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	17190	880414	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	17190	880414	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	17190	880414	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	17190	880414	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	17190	880414	PCB Arochlor 1254, Elutriate	L	1
Ohio	17190	880414	PCB Arochlor 1260, Elutriate	L	1
Ohio	20439	880413	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	20439	880413	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	20439	880413	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	20439	880413	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	20439	880413	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	20439	880413	PCB Arochlor 1254, Elutriate	L	1
Ohio	20439	880413	PCB Arochlor 1260, Elutriate	L	1
Ohio	23791	880413	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	23791	880413	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	23791	880413	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	23791	880413	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	23791	880413	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	23791	880413	PCB Arochlor 1254, Elutriate	L	1
Ohio	23791	880413	PCB Arochlor 1260, Elutriate	L	1
Ohio	30609	880412	PCB Arochlor 1016, Elutriate	L	50
Ohio	30609	880412	PCB Arochlor 1221, Elutriate	L	50
Ohio	30609	880412	PCB Arochlor 1232, Elutriate	L	50
Ohio	30609	880412	PCB Arochlor 1242, Elutriate	L	50
Ohio	30609	880412	PCB Arochlor 1248, Elutriate	L	50
Ohio	30609	880412	PCB Arochlor 1254, Elutriate	L	50

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	30609	880412	PCB Arochlor 1260, Elutriate	L	50
Ohio	33899	880420	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	33899	880420	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	33899	880420	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	33899	880420	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	33899	880420	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	33899	880420	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	33899	880420	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	34122	880420	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	34122	880420	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	34122	880420	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	34122	880420	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	34122	880420	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	34122	880420	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	34122	880420	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	42399	880420	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	42399	880420	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	42399	880420	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	42399	880420	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	42399	880420	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	42399	880420	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	42399	880420	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	42640	880420	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	42640	880420	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	42640	880420	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	42640	880420	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	42640	880420	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	42640	880420	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	42640	880420	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	43689	880420	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	43689	880420	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	43689	880420	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	43689	880420	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	43689	880420	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	43689	880420	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	43689	880420	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	15491	890509	PCB Arochlor 1016, Elutriate	L	0.2
Ohio	15491	890509	PCB Arochlor 1221, Elutriate	L	0.2
Ohio	15491	890509	PCB Arochlor 1232, Elutriate	L	0.2
Ohio	15491	890509	PCB Arochlor 1242, Elutriate	L	0.2
Ohio	15491	890509	PCB Arochlor 1248, Elutriate	L	0.2
Ohio	15491	890509	PCB Arochlor 1254, Elutriate	L	0.2
Ohio	15491	890509	PCB Arochlor 1260, Elutriate	L	0.2
Ohio	17190	890510	PCB Arochlor 1016, Elutriate	L	0.2
Ohio	17190	890510	PCB Arochlor 1221, Elutriate	L	0.2
Ohio	17190	890510	PCB Arochlor 1232, Elutriate	L	0.2
Ohio	17190	890510	PCB Arochlor 1242, Elutriate	L	0.2
Ohio	17190	890510	PCB Arochlor 1248, Elutriate	L	0.2
Ohio	17190	890510	PCB Arochlor 1254, Elutriate	L	0.2
Ohio	17190	890510	PCB Arochlor 1260, Elutriate	L	0.2
Ohio	20439	890511	PCB Arochlor 1016, Elutriate	L	0.2
Ohio	20439	890511	PCB Arochlor 1221, Elutriate	L	0.2
Ohio	20439	890511	PCB Arochlor 1232, Elutriate	L	0.2
Ohio	20439	890511	PCB Arochlor 1242, Elutriate	L	0.2
Ohio	20439	890511	PCB Arochlor 1248, Elutriate	L	0.2
Ohio	20439	890511	PCB Arochlor 1254, Elutriate	L	0.2
Ohio	20439	890511	PCB Arochlor 1260, Elutriate	L	0.2

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	22126	890511	PCB Arochlor 1016, Elutriate	L	0.2
Ohio	22126	890511	PCB Arochlor 1221, Elutriate	L	0.2
Ohio	22126	890511	PCB Arochlor 1232, Elutriate	L	0.2
Ohio	22126	890511	PCB Arochlor 1242, Elutriate	L	0.2
Ohio	22126	890511	PCB Arochlor 1248, Elutriate	L	0.2
Ohio	22126	890511	PCB Arochlor 1254, Elutriate	L	0.2
Ohio	22126	890511	PCB Arochlor 1260, Elutriate	L	0.2
Ohio	23791	890511	PCB Arochlor 1016, Elutriate	L	0.2
Ohio	23791	890511	PCB Arochlor 1221, Elutriate	L	0.2
Ohio	23791	890511	PCB Arochlor 1232, Elutriate	L	0.2
Ohio	23791	890511	PCB Arochlor 1242, Elutriate	L	0.2
Ohio	23791	890511	PCB Arochlor 1248, Elutriate	L	0.2
Ohio	23791	890511	PCB Arochlor 1254, Elutriate	L	0.2
Ohio	23791	890511	PCB Arochlor 1260, Elutriate	L	0.2
Ohio	30609	890424	PCB Arochlor 1016, Elutriate	L	0.2
Ohio	30609	890424	PCB Arochlor 1221, Elutriate	L	0.2
Ohio	30609	890424	PCB Arochlor 1232, Elutriate	L	0.2
Ohio	30609	890424	PCB Arochlor 1242, Elutriate	L	0.2
Ohio	30609	890424	PCB Arochlor 1248, Elutriate	L	0.2
Ohio	30609	890424	PCB Arochlor 1254, Elutriate	L	0.2
Ohio	30609	890424	PCB Arochlor 1260, Elutriate	L	0.2
Ohio	33899	890803	PCB Arochlor 1016, Elutriate	L	0.1
Ohio	33899	890803	PCB Arochlor 1221, Elutriate	L	0.1
Ohio	33899	890803	PCB Arochlor 1232, Elutriate	L	0.1
Ohio	33899	890803	PCB Arochlor 1242, Elutriate	L	0.1
Ohio	33899	890803	PCB Arochlor 1248, Elutriate	L	0.1
Ohio	33899	890803	PCB Arochlor 1254, Elutriate	L	0.1
Ohio	33899	890803	PCB Arochlor 1260, Elutriate	L	0.1
Ohio	34122	890803	PCB Arochlor 1016, Elutriate	L	0.1
Ohio	34122	890803	PCB Arochlor 1221, Elutriate	L	0.1
Ohio	34122	890803	PCB Arochlor 1232, Elutriate	L	0.1
Ohio	34122	890803	PCB Arochlor 1242, Elutriate	L	0.1
Ohio	34122	890803	PCB Arochlor 1248, Elutriate	L	0.1
Ohio	34122	890803	PCB Arochlor 1254, Elutriate	L	0.1
Ohio	34122	890803	PCB Arochlor 1260, Elutriate	L	0.1
Ohio	37840	890727	PCB Arochlor 1016, Elutriate	L	0.1
Ohio	37840	890727	PCB Arochlor 1221, Elutriate	L	0.1
Ohio	37840	890727	PCB Arochlor 1232, Elutriate	L	0.1
Ohio	37840	890727	PCB Arochlor 1242, Elutriate	L	0.1
Ohio	37840	890727	PCB Arochlor 1248, Elutriate	L	0.1
Ohio	37840	890727	PCB Arochlor 1254, Elutriate	L	0.1
Ohio	37840	890727	PCB Arochlor 1260, Elutriate	L	0.1
Ohio	42399	890726	PCB Arochlor 1016, Elutriate	L	0.1
Ohio	42399	890726	PCB Arochlor 1221, Elutriate	L	0.1
Ohio	42399	890726	PCB Arochlor 1232, Elutriate	L	0.1
Ohio	42399	890726	PCB Arochlor 1242, Elutriate	L	0.1
Ohio	42399	890726	PCB Arochlor 1248, Elutriate	L	0.1
Ohio	42399	890726	PCB Arochlor 1254, Elutriate	L	0.1
Ohio	42399	890726	PCB Arochlor 1260, Elutriate	L	0.1
Ohio	42640	890726	PCB Arochlor 1016, Elutriate	L	0.1
Ohio	42640	890726	PCB Arochlor 1221, Elutriate	L	0.1
Ohio	42640	890726	PCB Arochlor 1232, Elutriate	L	0.1
Ohio	42640	890726	PCB Arochlor 1242, Elutriate	L	0.1
Ohio	42640	890726	PCB Arochlor 1248, Elutriate	L	0.1
Ohio	42640	890726	PCB Arochlor 1254, Elutriate	L	0.1
Ohio	42640	890726	PCB Arochlor 1260, Elutriate	L	0.1
Ohio	43689	890726	PCB Arochlor 1016, Elutriate	L	0.1

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	43689	890726	PCB Arochlor 1221, Elutriate	L	0.1
Ohio	43689	890726	PCB Arochlor 1232, Elutriate	L	0.1
Ohio	43689	890726	PCB Arochlor 1242, Elutriate	L	0.1
Ohio	43689	890726	PCB Arochlor 1248, Elutriate	L	0.1
Ohio	43689	890726	PCB Arochlor 1254, Elutriate	L	0.1
Ohio	43689	890726	PCB Arochlor 1260, Elutriate	L	0.1
Ohio	14999	920728	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	14999	920728	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	14999	920728	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	14999	920728	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	14999	920728	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	14999	920728	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	14999	920728	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	30609	920805	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	30609	920805	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	30609	920805	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	30609	920805	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	30609	920805	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	30609	920805	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	30609	920805	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	34122	920805	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	34122	920805	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	34122	920805	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	34122	920805	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	34122	920805	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	34122	920805	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	34122	920805	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	37840	920721	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	37840	920721	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	37840	920721	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	37840	920721	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	37840	920721	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	37840	920721	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	37840	920721	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	42640	920721	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	42640	920721	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	42640	920721	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	42640	920721	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	42640	920721	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	42640	920721	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	42640	920721	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	43689	920721	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	43689	920721	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	43689	920721	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	43689	920721	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	43689	920721	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	43689	920721	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	43689	920721	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	14999	930608	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	14999	930608	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	14999	930608	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	14999	930608	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	14999	930608	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	14999	930608	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	14999	930608	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	17190	930608	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	17190	930608	PCB Arochlor 1221, Elutriate	L	0.065

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	17190	930608	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	17190	930608	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	17190	930608	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	17190	930608	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	17190	930608	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	20439	930609	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	20439	930609	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	20439	930609	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	20439	930609	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	20439	930609	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	20439	930609	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	20439	930609	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	23791	930609	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	23791	930609	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	23791	930609	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	23791	930609	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	23791	930609	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	23791	930609	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	23791	930609	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	30609	930506	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	30609	930506	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	30609	930506	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	30609	930506	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	30609	930506	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	30609	930506	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	30609	930506	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	34122	930506	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	34122	930506	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	34122	930506	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	34122	930506	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	34122	930506	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	34122	930506	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	34122	930506	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	37840	930510	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	37840	930510	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	37840	930510	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	37840	930510	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	37840	930510	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	37840	930510	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	37840	930510	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	42640	930517	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	42640	930517	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	42640	930517	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	42640	930517	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	42640	930517	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	42640	930517	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	42640	930517	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	43689	930517	PCB Arochlor 1016, Elutriate	L	0.5
Ohio	43689	930517	PCB Arochlor 1221, Elutriate	L	0.5
Ohio	43689	930517	PCB Arochlor 1232, Elutriate	L	0.5
Ohio	43689	930517	PCB Arochlor 1242, Elutriate	L	0.5
Ohio	43689	930517	PCB Arochlor 1248, Elutriate	L	0.5
Ohio	43689	930517	PCB Arochlor 1254, Elutriate	L	0.5
Ohio	43689	930517	PCB Arochlor 1260, Elutriate	L	0.5
Ohio	14999	940519	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	14999	940519	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	14999	940519	PCB Arochlor 1232, Elutriate	L	0.065

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	14999	940519	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	14999	940519	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	14999	940519	PCB Arochlor 1254, Elutriate	L	0.005
Ohio	14999	940519	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	16199	940524	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	16199	940524	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	16199	940524	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	16199	940524	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	16199	940524	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	16199	940524	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	17190	940519	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	17190	940519	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	17190	940519	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	17190	940519	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	17190	940519	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	17190	940519	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	17190	940519	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	20439	940518	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	20439	940518	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	20439	940518	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	20439	940518	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	20439	940518	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	20439	940518	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	20439	940518	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	23791	940518	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	23791	940518	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	23791	940518	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	23791	940518	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	23791	940518	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	23791	940518	PCB Arochlor 1254, Elutriate	L	0.005
Ohio	23791	940518	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	27940	940518	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	27940	940518	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	27940	940518	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	27940	940518	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	27940	940518	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	27940	940518	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	27940	940518	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	30609	940502	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	30609	940502	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	30609	940502	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	30609	940502	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	30609	940502	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	30609	940502	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	30609	940502	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	34122	940503	PCB Arochlor 1016, Elutriate	L	0.065
Ohio	34122	940503	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	34122	940503	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	34122	940503	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	34122	940503	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	34122	940503	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	34122	940503	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	42399	940526	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	42399	940526	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	42399	940526	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	42399	940526	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	42399	940526	PCB Arochlor 1254, Elutriate	L	0.065

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	42399	940526	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	42640	940526	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	42640	940526	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	42640	940526	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	42640	940526	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	42640	940526	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	42640	940526	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	43689	940526	PCB Arochlor 1221, Elutriate	L	0.065
Ohio	43689	940526	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	43689	940526	PCB Arochlor 1242, Elutriate	L	0.023
Ohio	43689	940526	PCB Arochlor 1248, Elutriate	L	0.065
Ohio	43689	940526	PCB Arochlor 1254, Elutriate	L	0.065
Ohio	43689	940526	PCB Arochlor 1260, Elutriate	L	0.035
Ohio	14999	950427	PCB Arochlor 1221, Elutriate	L	0.0034
Ohio	14999	950427	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	14999	950427	PCB Arochlor 1242, Elutriate	L	0.0102
Ohio	14999	950427	PCB Arochlor 1248, Elutriate	L	0.0397
Ohio	14999	950427	PCB Arochlor 1254, Elutriate	L	0.0108
Ohio	14999	950427	PCB Arochlor 1260, Elutriate	L	0.0119
Ohio	17190	950427	PCB Arochlor 1221, Elutriate	L	0.0034
Ohio	17190	950427	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	17190	950427	PCB Arochlor 1242, Elutriate	L	0.0102
Ohio	17190	950427	PCB Arochlor 1248, Elutriate	L	0.0397
Ohio	17190	950427	PCB Arochlor 1254, Elutriate	L	0.0108
Ohio	17190	950427	PCB Arochlor 1260, Elutriate	L	0.0119
Ohio	27940	950428	PCB Arochlor 1221, Elutriate	L	0.0034
Ohio	27940	950428	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	27940	950428	PCB Arochlor 1242, Elutriate	L	0.0102
Ohio	27940	950428	PCB Arochlor 1248, Elutriate	L	0.0397
Ohio	27940	950428	PCB Arochlor 1254, Elutriate	L	0.0108
Ohio	27940	950428	PCB Arochlor 1260, Elutriate	L	0.0119
Ohio	30609	950414	PCB Arochlor 1016, Elutriate	L	0.0146
Ohio	30609	950414	PCB Arochlor 1221, Elutriate	L	0.0034
Ohio	30609	950414	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	30609	950414	PCB Arochlor 1242, Elutriate	L	0.0102
Ohio	30609	950414	PCB Arochlor 1248, Elutriate	L	0.0397
Ohio	30609	950414	PCB Arochlor 1254, Elutriate	L	0.0108
Ohio	30609	950414	PCB Arochlor 1260, Elutriate	L	0.0119
Ohio	34122	950419	PCB Arochlor 1221, Elutriate	L	0.0034
Ohio	34122	950419	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	34122	950419	PCB Arochlor 1242, Elutriate	L	0.0102
Ohio	34122	950419	PCB Arochlor 1248, Elutriate	L	0.0397
Ohio	34122	950419	PCB Arochlor 1254, Elutriate	L	0.0108
Ohio	34122	950419	PCB Arochlor 1260, Elutriate	L	0.0119
Ohio	42640	950605	PCB Arochlor 1016, Elutriate	L	0.0146
Ohio	42640	950605	PCB Arochlor 1221, Elutriate	L	0.0034
Ohio	42640	950605	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	42640	950605	PCB Arochlor 1242, Elutriate	L	0.0102
Ohio	42640	950605	PCB Arochlor 1248, Elutriate	L	0.0397
Ohio	42640	950605	PCB Arochlor 1254, Elutriate	L	0.0108
Ohio	42640	950605	PCB Arochlor 1260, Elutriate	L	0.0119
Ohio	43689	950605	PCB Arochlor 1016, Elutriate	L	0.0146
Ohio	43689	950605	PCB Arochlor 1221, Elutriate	L	0.0034
Ohio	43689	950605	PCB Arochlor 1232, Elutriate	L	0.065
Ohio	43689	950605	PCB Arochlor 1242, Elutriate	L	0.0102
Ohio	43689	950605	PCB Arochlor 1248, Elutriate	L	0.0397
Ohio	43689	950605	PCB Arochlor 1254, Elutriate	L	0.0108

River	Station	Date	Chemical Name		Result (ug/L)
Ohio	43689	950605	PCB Arochlor 1260, Elutriate	L	0.0119
Ohio	17200	960731	PCB Arochlor 1016, Elutriate	L	0.015
Ohio	17200	960731	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	17200	960731	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	17200	960731	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	17200	960731	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	17200	960731	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	17200	960731	PCB Arochlor 1260, Elutriate	L	0.012
Ohio	20459	960730	PCB Arochlor 1016, Elutriate	L	0.015
Ohio	20459	960730	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	20459	960730	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	20459	960730	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	20459	960730	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	20459	960730	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	20459	960730	PCB Arochlor 1260, Elutriate	L	0.012
Ohio	23819	960809	PCB Arochlor 1016, Elutriate	L	0.015
Ohio	23819	960809	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	23819	960809	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	23819	960809	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	23819	960809	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	23819	960809	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	23819	960809	PCB Arochlor 1260, Elutriate	L	0.012
Ohio	27979	960605	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	27979	960605	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	27979	960605	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	27979	960605	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	27979	960605	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	27979	960605	PCB Arochlor 1260, Elutriate	L	0.012
Ohio	30619	960605	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	30619	960605	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	30619	960605	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	30619	960605	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	30619	960605	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	30619	960605	PCB Arochlor 1260, Elutriate	L	0.012
Ohio	34180	960924	PCB Arochlor 1016, Elutriate	L	0.015
Ohio	34180	960924	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	34180	960924	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	34180	960924	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	34180	960924	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	34180	960924	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	34180	960924	PCB Arochlor 1260, Elutriate	L	0.012
Ohio	37860	960924	PCB Arochlor 1016, Elutriate	L	0.015
Ohio	37860	960924	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	37860	960924	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	37860	960924	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	37860	960924	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	37860	960924	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	37860	960924	PCB Arochlor 1260, Elutriate	L	0.012
Ohio	42650	960912	PCB Arochlor 1016, Elutriate	L	0.015
Ohio	42650	960912	PCB Arochlor 1221, Elutriate	L	0.003
Ohio	42650	960912	PCB Arochlor 1232, Elutriate	L	0.005
Ohio	42650	960912	PCB Arochlor 1242, Elutriate	L	0.01
Ohio	42650	960912	PCB Arochlor 1248, Elutriate	L	0.04
Ohio	42650	960912	PCB Arochlor 1254, Elutriate	L	0.011
Ohio	42650	960912	PCB Arochlor 1260, Elutriate	L	0.012

U.S. Army Corps of Engineers Sediment Data					
Station names are derived from river-mile and percent distance from left decending bank					
Example: Station 33899					
River Mile = 338.9					
Percent distance from left bank = 90%					
(L) = actual value < result					
River	**Station**	**Date**	**Chemical Name**		**Result (ug/kg)**
Ohio	17190	850409	PCB Aroclor 1221, dry wt. Bottom	L	1000
Ohio	17190	850409	PCB Aroclor 1232, dry wt. Bottom	L	1000
Ohio	17190	850409	PCB Aroclor 1242, dry wt. Bottom	L	1000
Ohio	17190	850409	PCB Aroclor 1248, dry wt. Bottom	L	1000
Ohio	17190	850409	PCB Aroclor 1254, dry wt. Bottom	L	1000
Ohio	17190	850409	PCB Aroclor 1260, dry wt. Bottom	L	1000

1987-1997 ORSANCO Fish Tissue Data							
Year	Station	River	River Mile	Species	% Lipid	Total PCB (mg/kg)	LipNorm PCB (mg PCB/ kg lipid)
1987	LOCK #08	ALLEGHENY	-52.6	CARP		1.3	
1987	LOCK #08	ALLEGHENY	-52.6	CHANNEL CAT		0.26	
1987	LOCK #03	ALLEGHENY	-14.5	CARP		4.43	
1987	LOCK #03	ALLEGHENY	-14.5	CHANNEL CAT		0.75	
1987	SEBREE	GREEN	-41.3	CARP		0.13	
1987	SEBREE	GREEN	-41.3	CHANNEL CAT		0.13	
1987	LONDON	KANAWHA	-67.7	CARP		0.94	
1987	LONDON	KANAWHA	-67.7	CHANNEL CAT		0.68	
1987	WINFIELD	KANAWHA	-31.1	CARP		1.06	
1987	WINFIELD	KANAWHA	-31.1	CHANNEL CAT		1.83	
1987	MAXWELL	MONONGAHELA	-61.2	CARP		2.17	
1987	MAXWELL	MONONGAHELA	-61.2	CHANNEL CAT		0.51	
1987	LOCK #02	MONONGAHELA	-12.3	CARP		0.19	
1987	LOCK #02	MONONGAHELA	-12.3	CHANNEL CAT		0.82	
1987	DASHIELDS	OHIO	13.2	CARP		3.78	
1987	MONTGOMERY	OHIO	31.7	CARP		0.89	
1987	NEW CUMBERLAND	OHIO	54.4	CARP		6.68	
1987	HANNIBAL	OHIO	126.4	CARP		0	
1987	WILLOW ISLAND	OHIO	161.7	CARP		2.04	
1987	BELLEVILLE	OHIO	203.9	CARP		0.11	
1987	RACINE	OHIO	237.5	CARP		2.51	
1987	BYRD	OHIO	279.2	CARP		0.14	
1987	GREENUP	OHIO	341	CARP		0.47	
1987	MELDAHL	OHIO	436.2	CARP		0	
1987	MARKLAND	OHIO	531.5	CARP		0.17	
1987	MCALPINE	OHIO	606.8	CARP		0.74	
1987	CANNELTON	OHIO	720.7	CARP		0.18	
1987	NEWBURGH	OHIO	776.1	CARP		0	
1987	UNIONTOWN	OHIO	846	CARP		0.19	
1987	SMITHLAND	OHIO	918.5	CARP		0.45	
1988	MAXWELL	MONONGAHELA	-61.2	CHANNEL CAT	3.7	1.26	34.05
1988	MAXWELL	MONONGAHELA	-61.2	CARP	4.4	0.67	15.23
1988	LOCK #02	MONONGAHELA	-12.3	CHANNEL CAT	2.4	0.13	5.42
1988	LOCK #02	MONONGAHELA	-12.3	CARP	7.2	4.97	69.03
1988	DASHIELDS	OHIO	13.2	CARP	3	1.71	57.00
1988	DASHIELDS	OHIO	13.2	CHANNEL CAT	6.4	3.56	55.63
1988	NEW CUMBERLAND	OHIO	54.4	CARP	5.2	2.51	48.27
1988	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	5.3	2.57	48.49
1988	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	0.2	0	0.00
1988	HANNIBAL	OHIO	126.4	CHANNEL CAT	4.3	2.84	66.05
1988	HANNIBAL	OHIO	126.4	CARP		2.32	
1988	WILLOW ISLAND	OHIO	161.7	CARP	11.7	1.86	15.90
1988	BYRD	OHIO	279.2	CHANNEL CAT	1.1	0.33	30.00
1988	MELDAHL	OHIO	436.2	CARP	2	0.51	25.50
1988	MELDAHL	OHIO	436.2	CHANNEL CAT	8.6	0.2	2.33
1989	LOCK #03	ALLEGHENY	-14.5	CHANNEL CAT	6.54	1.53	23.39
1989	LOCK #03	ALLEGHENY	-14.5	CARP	7.13	2.16	30.29
1989	LOCK #02	MONONGAHELA	-12.3	CHANNEL CAT	5.35	1.46	27.29
1989	LOCK #02	MONONGAHELA	-12.3	CARP	7.38	2.86	38.75
1989	MONTGOMERY	OHIO	31.7	CHANNEL CAT	2.26	1.5	66.37
1989	MONTGOMERY	OHIO	31.7	CARP	9.58	7.48	78.08
1989	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	4.49	5.62	125.17

1987-1997 ORSANCO Fish Tissue Data							
Year	Station	River	River Mile	Species	% Lipid	Total PCB	LipNorm PCB
						(mg/kg)	(mg PCB/ kg lipid)
1989	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	1.29	1.22	94.57
1989	HANNIBAL	OHIO	126.4	CARP	5.02	2.05	40.84
1989	HANNIBAL	OHIO	126.4	CHANNEL CAT	8.2	2.84	34.63
1989	WILLOW ISLAND	OHIO	161.7	CARP	11.34	4.94	43.56
1989	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	11.58	5.21	44.99
1989	BELLEVILLE	OHIO	203.9	CHANNEL CAT	5.58	3.74	67.03
1989	RACINE	OHIO	237.5	CARP	2.55	2.01	78.82
1989	RACINE	OHIO	237.5	CHANNEL CAT	8.81	3.84	43.59
1989	MCALPINE	OHIO	606.5	CHANNEL CAT	5.41	2.68	49.54
1989	CANNELTON	OHIO	720.7	CARP	0.35	0.19	54.29
1989	CANNELTON	OHIO	720.7	CHANNEL CAT	8.98	1.65	18.37
1989	NEWBURGH	OHIO	776.1	CHANNEL CAT	8.22	1.69	20.56
1989	SMITHLAND	OHIO	918.5	CARP	4.64	1.71	36.85
1989	SMITHLAND	OHIO	918.5	CHANNEL CAT	13.49	0.5	3.71
1990	LOCK #03	ALLEGHENY	-14.5	CARP	6.3	2.7	42.86
1990	LOCK #02	MONONGAHELA	-12.3	CHANNEL CAT	1.1	0.86	78.18
1990	LOCK #02	MONONGAHELA	-12.3	CARP	6.1	3.22	52.79
1990	EMSWORTH	OHIO	6.2	CARP	2.7	2.43	90.00
1990	EMSWORTH	OHIO	6.2	CHANNEL CAT	3.2	0.98	30.63
1990	MONTGOMERY	OHIO	31.7	CHANNEL CAT	1.2	1.36	113.33
1990	MONTGOMERY	OHIO	31.7	CARP	2	1.76	88.00
1990	MONTGOMERY	OHIO	31.7	CHANNEL CAT	2.3	3.49	151.74
1990	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	3.9	2.51	64.36
1990	NEW CUMBERLAND	OHIO	54.4	CARP	5.1	0.6	11.76
1990	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	5.7	4.1	71.93
1990	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	3.7	1.96	52.97
1990	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	4.3	2.27	52.79
1990	PIKE ISLAND	OHIO	84.2	CARP	4.8	2.36	49.17
1990	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	6	0.94	15.67
1990	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	6.6	2.12	32.12
1990	WILLOW ISLAND	OHIO	161.7	CARP	9.7	4.35	44.85
1990	BELLEVILLE	OHIO	203.9	CHANNEL CAT	2.7	0.97	35.93
1990	RACINE	OHIO	237.5	CARP	1.5	1.16	77.33
1990	RACINE	OHIO	237.5	CHANNEL CAT	2.6	1.15	44.23
1990	RACINE	OHIO	237.5	CHANNEL CAT	3.7	2.49	67.30
1990	RACINE	OHIO	237.5	CHANNEL CAT	8.1	4.2	51.85
1990	BYRD	OHIO	279.2	CHANNEL CAT	1.8	0.52	28.89
1990	BYRD	OHIO	279.2	CHANNEL CAT	2.7	1.21	44.81
1990	GREENUP	OHIO	341	CARP	1.9	1.86	97.89
1990	GREENUP	OHIO	341	CHANNEL CAT	5.7	0.89	15.61
1990	GREENUP	OHIO	341	CHANNEL CAT	6.7	1.96	29.25
1990	GREENUP	OHIO	341	CHANNEL CAT	7.5	2.51	33.47
1990	MARKLAND	OHIO	531.5	CHANNEL CAT	5.5	4.02	73.09
1990	MARKLAND	OHIO	531.5	CARP	7.4	1.35	18.24
1990	MARKLAND	OHIO	531.5	CHANNEL CAT	8.2	2.86	34.88
1990	MARKLAND	OHIO	531.5	CHANNEL CAT	8.62	6.12	71.00
1990	MCALPINE	OHIO	607.5	CHANNEL CAT	2.5	1.14	45.60
1990	CANNELTON	OHIO	720.7	CARP	0.5	0.27	54.00
1990	CANNELTON	OHIO	720.7	CHANNEL CAT	0.5	0.29	58.00
1990	CANNELTON	OHIO	720.7	CHANNEL CAT	3.7	3.3	89.19
1990	NEWBURGH	OHIO	776.1	CHANNEL CAT	4	0.32	8.00
1990	UNIONTOWN	OHIO	846	CARP	0.7	0.24	34.29
1990	UNIONTOWN	OHIO	846	CHANNEL CAT	1.8	1.06	58.89

1987-1997 ORSANCO Fish Tissue Data							
Year	Station	River	River Mile	Species	% Lipid	Total PCB	LipNorm PCB
						(mg/kg)	(mg PCB/ kg lipid)
1990	UNIONTOWN	OHIO	846	CHANNEL CAT	10.7	1.88	17.57
1991	LOCK #03	ALLEGHENY	-14.5	CHANNEL CAT	2.7	0	0.00
1991	LOCK #03	ALLEGHENY	-14.5	CARP	4.8	0	0.00
1991	DASHIELDS	OHIO	13.2	CHANNEL CAT	3.3	0	0.00
1991	DASHIELDS	OHIO	13.2	CHANNEL CAT	3.3	0	0.00
1991	DASHIELDS	OHIO	13.2	CHANNEL CAT	4.3	0	0.00
1991	DASHIELDS	OHIO	13.2	CARP	10.6	0.11	1.04
1991	NEW CUMBERLAND	OHIO	54.4	CARP	6.1	3.44	56.39
1991	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	8.4	2.29	27.26
1991	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	11.3	3.86	34.16
1991	HANNIBAL	OHIO	126.4	CARP	6.3	2.19	34.76
1991	HANNIBAL	OHIO	126.4	CHANNEL CAT	6.6	2.41	36.52
1991	HANNIBAL	OHIO	126.4	CHANNEL CAT	7.9	5.18	65.57
1991	BELLEVILLE	OHIO	203.9	CHANNEL CAT	6.6	1.96	29.70
1991	BELLEVILLE	OHIO	203.9	CHANNEL CAT	8.9	3.13	35.17
1991	BELLEVILLE	OHIO	203.9	CARP	10.3	2.95	28.64
1991	BYRD	OHIO	279.2	CHANNEL CAT	3.2	0.44	13.75
1991	BYRD	OHIO	279.2	CHANNEL CAT	5.1	1.65	32.35
1991	BYRD	OHIO	279.2	CHANNEL CAT	5.1	1.08	21.18
1991	MELDAHL	OHIO	436.2	CARP	1.5	0	0.00
1991	MELDAHL	OHIO	436.2	CHANNEL CAT	10.4	1.42	13.65
1991	MELDAHL	OHIO	436.2	CHANNEL CAT	11.1	1.85	16.67
1991	MELDAHL	OHIO	436.2	CHANNEL CAT	11.6	1.86	16.03
1991	MCALPINE	OHIO	606.5	CHANNEL CAT	4.1	0.82	20.00
1991	MCALPINE	OHIO	606.5	CHANNEL CAT	8.7	0	0.00
1991	MCALPINE	OHIO	606.5	CHANNEL CAT	12.8	2.8	21.88
1991	NEWBURGH	OHIO	776.1	CHANNEL CAT	2.6	0.35	13.46
1991	NEWBURGH	OHIO	776.1	CARP	3.9	0.34	8.72
1991	NEWBURGH	OHIO	776.1	CHANNEL CAT	6.2	1.13	18.23
1991	SMITHLAND	OHIO	918.5	CHANNEL CAT	3.6	0.37	10.28
1991	SMITHLAND	OHIO	918.5	CARP	6.4	0.48	7.50
1991	SMITHLAND	OHIO	918.5	CHANNEL CAT	8.6	0.77	8.95
1991	SMITHLAND	OHIO	918.5	CHANNEL CAT	14.1	1.18	8.37
1992	LOCK #02	MONONGAHELA	-12.3	CHANNEL CAT	4.4	2.04	46.36
1992	LOCK #02	MONONGAHELA	-12.3	CARP	6.5	3.92	60.31
1992	EMSWORTH	OHIO	6.2	CHANNEL CAT	1	1.25	125.00
1992	EMSWORTH	OHIO	6.2	CHANNEL CAT	7.5	6.79	90.53
1992	EMSWORTH	OHIO	6.2	CHANNEL CAT	9.1	9.93	109.12
1992	MONTGOMERY	OHIO	31.7	CHANNEL CAT	1.4	2.15	153.57
1992	MONTGOMERY	OHIO	31.7	CARP	5.1	2.29	44.90
1992	MONTGOMERY	OHIO	31.7	CHANNEL CAT	6.7	5.57	83.13
1992	MONTGOMERY	OHIO	31.7	CHANNEL CAT	8	5.39	67.38
1992	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	0.3	1.75	583.33
1992	PIKE ISLAND	OHIO	84.2	CARP	1	3.88	388.00
1992	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	4.5	2.51	55.78
1992	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	11.2	2.56	22.86
1992	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	0.5	2.46	492.00
1992	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	0.9	2.79	310.00
1992	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	3	3.77	125.67
1992	WILLOW ISLAND	OHIO	161.7	CARP	12	4.27	35.58
1992	RACINE	OHIO	237.5	CHANNEL CAT	0.5	2.25	450.00
1992	RACINE	OHIO	237.5	CHANNEL CAT	0.9	5.92	657.78
1992	RACINE	OHIO	237.5	CARP	1.5	2.67	178.00

1987-1997 ORSANCO Fish Tissue Data							
Year	Station	River	River Mile	Species	% Lipid	Total PCB	LipNorm PCB
						(mg/kg)	(mg PCB/ kg lipid)
1992	RACINE	OHIO	237.5	CHANNEL CAT	2.6	2.66	102.31
1992	GREENUP	OHIO	341	CHANNEL CAT	3.9	1.21	31.03
1992	GREENUP	OHIO	341	CARP	4.1	1.71	41.71
1992	GREENUP	OHIO	341	CHANNEL CAT	9	5.7	63.33
1992	GREENUP	OHIO	341	CHANNEL CAT	14.2	2.2	15.49
1992	MARKLAND	OHIO	531.5	CARP	2	1.04	52.00
1992	MARKLAND	OHIO	531.5	CHANNEL CAT	5	1.7	34.00
1992	MARKLAND	OHIO	531.5	CHANNEL CAT	5.2	2.01	38.65
1992	MARKLAND	OHIO	531.5	CHANNEL CAT	13.9	3.27	23.53
1992	CANNELTON	OHIO	720.7	CARP	1	0.29	29.00
1992	CANNELTON	OHIO	720.7	CHANNEL CAT	2.4	1.36	56.67
1992	CANNELTON	OHIO	720.7	CHANNEL CAT	2.9	0.71	24.48
1992	CANNELTON	OHIO	720.7	CHANNEL CAT	8.2	2.32	28.29
1992	UNIONTOWN	OHIO	846	CARP	1	0.47	47.00
1992	UNIONTOWN	OHIO	846	CHANNEL CAT	1.8	0.37	20.56
1992	UNIONTOWN	OHIO	846	CHANNEL CAT	5.7	0.99	17.37
1992	UNIONTOWN	OHIO	846	CHANNEL CAT	10	1.72	17.20
1993	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	7.63	1.95	25.56
1993	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	8.5	3.15	37.06
1993	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	9.6	3.07	31.98
1993	PIKE ISLAND	OHIO	84.2	CARP	13.8	3.65	26.45
1993	PIKE ISLAND	OHIO	84.2	CARP	8.52	0.89	10.45
1993	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	5.6	0.66	11.79
1993	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	5.7	1.31	22.98
1993	WILLOW ISLAND	OHIO	161.7	CARP	7.6	2.07	27.24
1993	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	11	2.08	18.91
1993	WILLOW ISLAND	OHIO	161.7	CARP	6.47	2.12	32.77
1993	RACINE	OHIO	237.5	CARP	3.9	1.58	40.51
1993	RACINE	OHIO	237.5	CHANNEL CAT	5.4	0.72	13.33
1993	RACINE	OHIO	237.5	CHANNEL CAT	5.9	2.12	35.93
1993	RACINE	OHIO	237.5	CHANNEL CAT	6.3	1.66	26.35
1993	RACINE	OHIO	237.5	CHANNEL CAT	3.69	0.98	26.56
1993	RACINE	OHIO	237.5	CARP	5.14	1.6	31.13
1993	GREENUP	OHIO	341	CHANNEL CAT	5.06	0.37	7.31
1993	MARKLAND	OHIO	531.5	CHANNEL CAT	2.5	0.39	15.60
1993	MARKLAND	OHIO	531.5	CHANNEL CAT	4.08	0.58	14.22
1993	MARKLAND	OHIO	531.5	CHANNEL CAT	5.46	0.76	13.92
1993	MARKLAND	OHIO	531.5	CHANNEL CAT	5.5	0.87	15.82
1993	MARKLAND	OHIO	531.5	CHANNEL CAT	8.18	0.88	10.76
1993	MARKLAND	OHIO	531.5	CHANNEL CAT	8.94	0.76	8.50
1993	MARKLAND	OHIO	531.5	CHANNEL CAT	4.14	0.96	23.19
1993	MCALPINE	OHIO	606.8	CHANNEL CAT	2.31	0.4	17.32
1993	MCALPINE	OHIO	606.8	CHANNEL CAT	2.34	0.73	31.20
1993	CANNELTON	OHIO	720.7	CHANNEL CAT	1.66	0.32	19.28
1993	CANNELTON	OHIO	720.7	CHANNEL CAT	2.95	0.4	13.56
1993	CANNELTON	OHIO	720.7	CHANNEL CAT	4.5	0.56	12.44
1993	CANNELTON	OHIO	720.7	CHANNEL CAT	2.17	0.92	42.40
1993	UNIONTOWN	OHIO	846	CARP	7.13	0.39	5.47
1993	UNIONTOWN	OHIO	846	CHANNEL CAT	7.36	0.41	5.57
1994	LOCK #01	ALLEGHENY	-14.5	CHANNEL CAT	4.32	1.21	28.01
1994	LOCK #02	ALLEGHENY	-14.5	CARP	12.9	1.03	7.98
1994	DASHIELDS	OHIO	13.2	CHANNEL CAT	9.49	3.32	34.98
1994	DASHIELDS	OHIO	13.2	CARP	18.1	0.63	3.48

1987-1997 ORSANCO Fish Tissue Data							
Year	Station	River	River Mile	Species	% Lipid	Total PCB	LipNorm PCB
						(mg/kg)	(mg PCB/ kg lipid)
1994	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	4.6	2.71	58.91
1994	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	8.1	2.11	26.05
1994	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	14	4.74	33.86
1994	HANNIBAL	OHIO	126.4	CHANNEL CAT	10	2.97	29.70
1994	HANNIBAL	OHIO	126.4	CHANNEL CAT	12	2.14	17.83
1994	BELLEVILLE	OHIO	203.9	CHANNEL CAT	3.1	2.56	82.58
1994	BELLEVILLE	OHIO	203.9	CHANNEL CAT	11.8	2.48	21.02
1994	GREENUP	OHIO	341	CHANNEL CAT	9.39	1.41	15.02
1994	MCALPINE	OHIO	606.8	CHANNEL CAT	10.5	1.53	14.57
1994	MCALPINE	OHIO	606.8	CARP	11	1.71	15.55
1994	CANNELTON	OHIO	720.7	CHANNEL CAT	6.04	0.36	5.96
1994	CANNELTON	OHIO	720.7	CHANNEL CAT	8.07	0.98	12.14
1994	CANNELTON	OHIO	720.7	CHANNEL CAT	6.99	0.88	12.59
1994	NEWBURGH	OHIO	776.1	CHANNEL CAT	2.29	0.68	29.69
1994	SMITHLAND	OHIO	918.5	CHANNEL CAT	12.3	1	8.13
1994	SMITHLAND	OHIO	918.5	CHANNEL CAT	7.01	0.31	4.42
1994	POOL 53/BAYOU CR	OHIO	962	CARP	9.11	1.22	13.39
1994	POOL 53/BAYOU CR	OHIO	962	CHANNEL CAT	17.5	1.1	6.29
1995	BIG SANDY RIVER	BIG SANDY	-1	CHANNEL CAT	4.2	0.43	10.24
1995	MONTGOMERY	OHIO	31.7	CARP	9	3.16	35.11
1995	PIKE ISLAND	OHIO	84.2	CARP	5.5	2.5	45.45
1995	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	7.6	2.13	28.03
1995	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	7.6	1.27	16.71
1995	PIKE ISLAND	OHIO	84.2	CHANNEL CAT	9.6	2.86	29.79
1995	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	1.5	1.26	84.00
1995	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	7	2.89	41.29
1995	WILLOW ISLAND	OHIO	161.7	CHANNEL CAT	7.8	5.4	69.23
1995	WILLOW ISLAND	OHIO	161.7	CARP	8.1	4.3	53.09
1995	RACINE	OHIO	237.5	CHANNEL CAT	5.7	3.38	59.30
1995	BYRD	OHIO	279.2	CHANNEL CAT	1.2	1.14	95.00
1995	BYRD	OHIO	279.2	CARP	4.2	1.97	46.90
1995	GREENUP	OHIO	341	CARP	1.3	0.64	49.23
1995	GREENUP	OHIO	341	CARP	1.4	0.6	42.86
1995	GREENUP	OHIO	341	CHANNEL CAT	9.1	1.38	15.16
1995	GREENUP	OHIO	341	CHANNEL CAT	9.3	1.8	19.35
1995	GREENUP	OHIO	341	CHANNEL CAT	15	2	13.33
1995	MELDAHL	OHIO	436.2	CARP	5.1	1.26	24.71
1995	MELDAHL	OHIO	436.2	CHANNEL CAT	15	2.05	13.67
1995	MARKLAND	OHIO	531.5	CHANNEL CAT	8.6	1.21	14.07
1995	MARKLAND	OHIO	531.5	CHANNEL CAT	5	0.84	16.80
1995	MARKLAND	OHIO	531.5	CARP	6.3	1.41	22.38
1995	MARKLAND	OHIO	531.5	CARP	6.8	0.89	13.09
1995	CANNELTON	OHIO	720.7	CARP	7	0.9	12.86
1995	UNIONTOWN	OHIO	846	CARP	2.8	0.7	25.00
1995	UNIONTOWN	OHIO	846	CHANNEL CAT	4.5	0.87	19.33
1995	UNIONTOWN	OHIO	846	CHANNEL CAT	8.5	1.5	17.65
1995	SMITHLAND	OHIO	918.5	CHANNEL CAT	1.3	0.13	10.00
1995	SMITHLAND	OHIO	918.5	CARP	1.9	0.27	14.21
1996	NEW CUMBERLAND	OHIO	54.4	CHANNEL CAT	4.5	1.12	24.89

Appendix C

Fish Consumption Advisories

SUMMARY OF PCB FISH CONSUMPTION ADVISORIES FROM TRIBUTARIES IN THE OHIO RIVER BASIN*

STATE	RIVER	SPECIES	ADVISORY
PA	ALLEGHENY	CARP, CHANNEL CATFISH	NCGP
PA	BEAVER	CARP, CHANNEL CATFISH	NCGP
PA	CHARTIERS CREEK	CARP, LARGEMOUTH BASS	NCGP
PA	LITTLE CHARTIERS CREEK	CARP, LARGEMOUTH BASS	NCGP
PA	MONONGEHELA	CARP, CHANNEL CATFISH	NCGP
OH	GREAT MIAMI	CARP, CHANNEL CATFISH	NCGP
OH	MAHONING	ALL	NCGP
OH	MILL CREEK	ALL	RGP
OH	SCIOTO	CARP, CHANNEL CATFISH	NCGP
OH	SCIPPO CREEK	ALL	NCGP
OH	WOLF CREEK	ALL	NCGP
IN	SUGAR CREEK	ALL	NCGP
IN	WILDCAT CREEK	ALL	NCGP
IN	BUCK CREEK	CARP	NCGP
IN	CLEAR CREEK	ALL	RGP
IN	E.FORK OF THE WHITE	CARP, CHANNEL CATFISH	NCGP
IN	GREAT MIAMI	CHANNEL CATFISH	NCGP
IN	LITTLE MISSISSINEWA	ALL	NCGP
IN	LITTLE SUGAR CREEK	ALL	NCGP
IN	MISSISSINEWA	CARP, CHANNEL CATFISH	NCGP
IN	PIGEON CREEK	CARP, CHANNEL CATFISH	RGP
IN	PLEASANT RUN CREEK	ALL	NCGP
IN	SALT CREEK	ALL	NCGP
IN	W. FORK OF THE WHITE	ALL	NCGP

NCGP = NO CONSUMPTION ADVISORY FOR THE GENERAL POPULATION
RGP = RESTRICTED CONSUMPTION FOR THE GENERAL POPULATION

* Data taken from the 1995 National Listing of Fish and Wildlife Advisories.

1996 Ohio River PCB Fish Consumption Advisories

State	Carp	Channel Catfish	Freshwater Drum	Sauger	Largemouth Bass	Smallmouth Bass	Spotted Bass	White Bass	Hybrid Striped Bass	Paddlefish	Paddlefish roe	Flathead Catfish
PA	X	X										X
OH	X	X	X	X	X	X		X	X			X
WV	X	X	X	X	X	X		X	X			
IN	X	X	X	X	X	X	X					
KY	X	X						X		X	X	
IL	----------No Advisories----------											