

MEMBERS REPRESENTING:

ILLINOIS

INDIANA

KENTUCKY

NEW YORK

OHIO

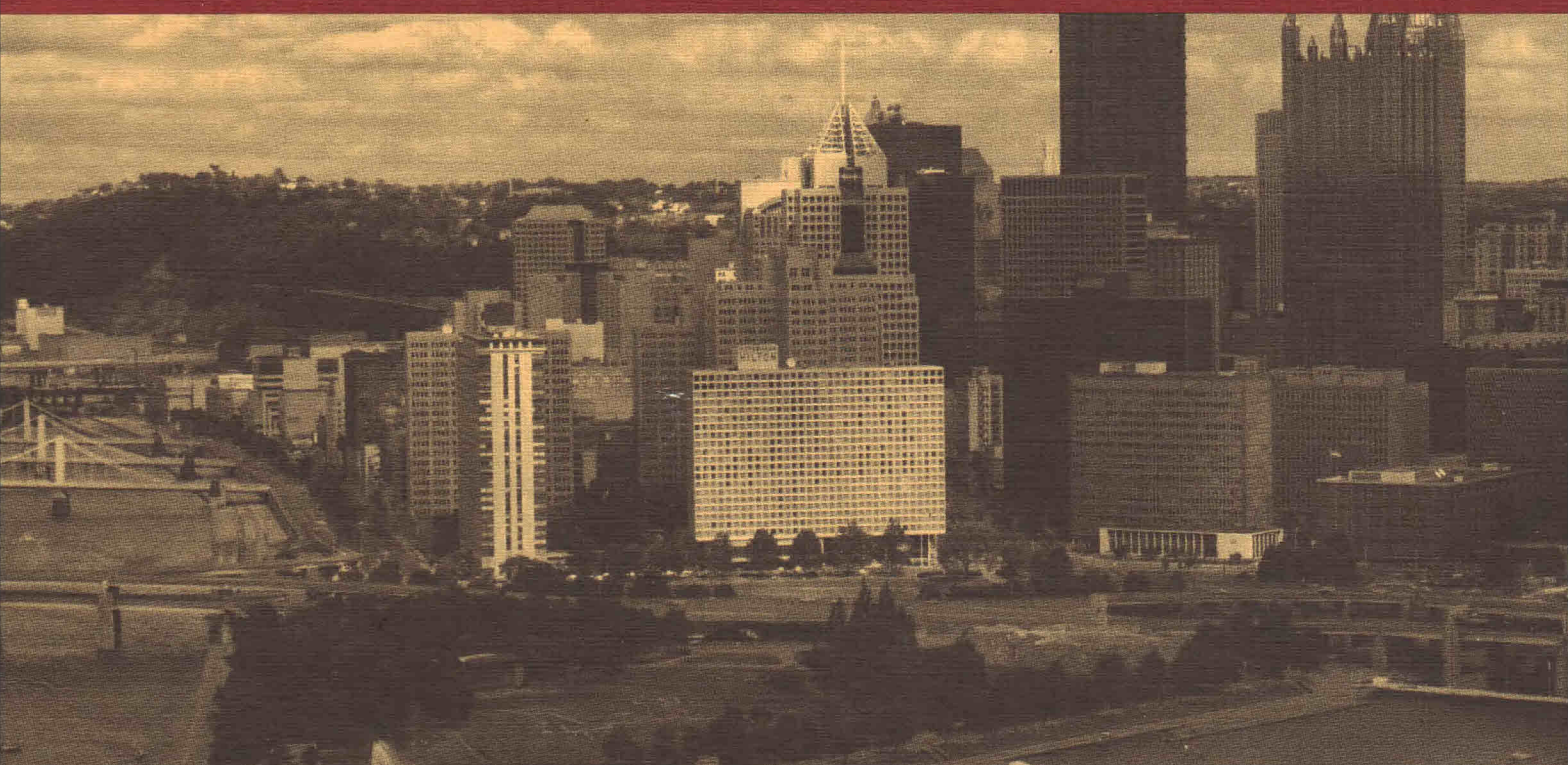
PENNSYLVANIA

VIRGINIA

WEST VIRGINIA

and the UNITED STATES

# THE OHIO RIVER VALLEY WATER SANITATION COMMISSION 1987





TO:

**THE HONORABLE JAMES R. THOMPSON**

*Governor of Illinois*

**THE HONORABLE ROBERT D. ORR**

*Governor of Indiana*

**THE HONORABLE WALLACE G. WILKINSON**

*Governor of Kentucky*

**THE HONORABLE MARIO M. CUOMO**

*Governor of New York*

**THE HONORABLE RICHARD F. CELESTE**

*Governor of Ohio*

**THE HONORABLE ROBERT P. CASEY**

*Governor of Pennsylvania*

**THE HONORABLE GERALD L. BALILES**

*Governor of Virginia*

**THE HONORABLE ARCH A. MOORE, JR.**

*Governor of West Virginia*

AND

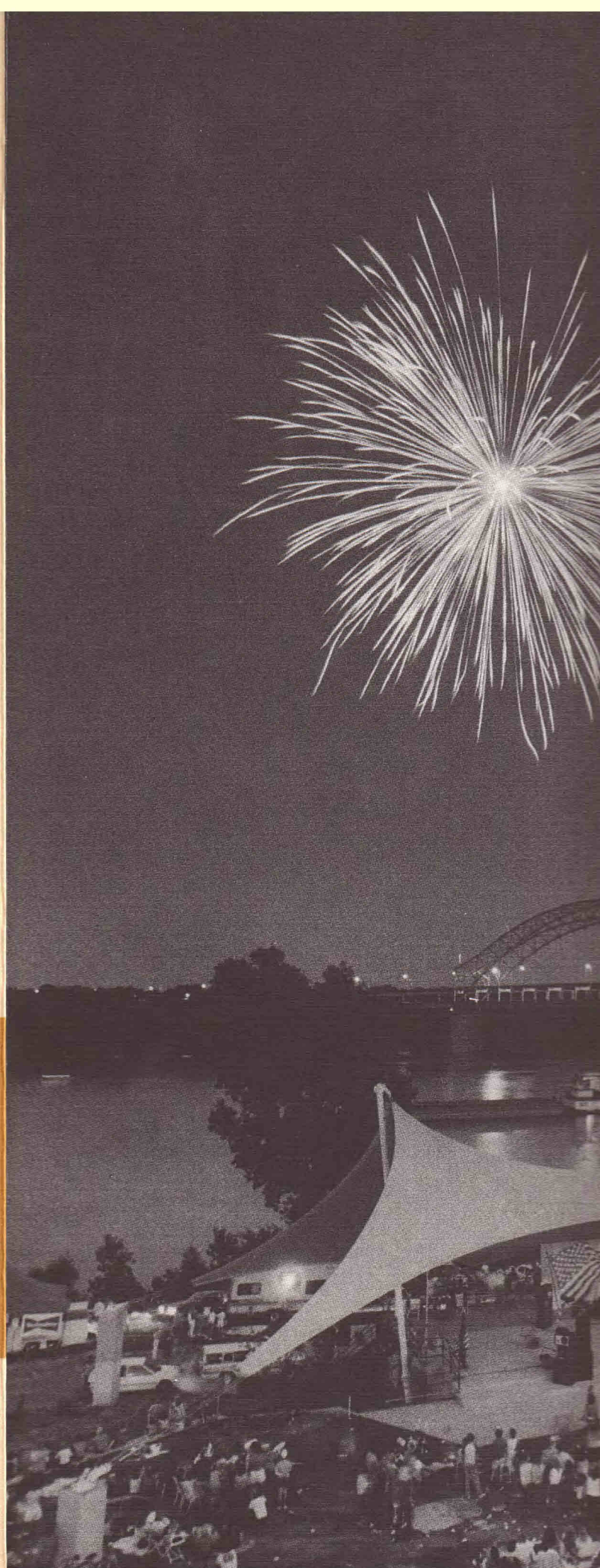
**THE HONORABLE RONALD W. REAGAN**

*President of the United States*

The Commissioners of the Ohio River Valley Water Sanitation Commission (ORSANCO) — an interstate compact water pollution control agency created jointly in 1948 by the State of Illinois, the State of Indiana, the Commonwealth of Kentucky, the State of New York, the State of Ohio, the Commonwealth of Pennsylvania, the Commonwealth of Virginia and the State of West Virginia, with the approval of the Congress of the United States — respectfully submit a review of the Commission's activities in 1987.

*Cover: Top, 1887 view of Pittsburgh, Pennsylvania where the Allegheny and Monongahela Rivers join at the Point to form the Ohio.  
(Photo: Carnegie Library of Pittsburgh).*

*Bottom: Pittsburgh as it is today with Point State Park highlighting the city's riverfront area.*





## ILLINOIS

*Richard J. Carlson, Director, Illinois Environmental Protection Agency*  
*Richard S. Engelbrecht, Ph.D., Professor of Environmental Engineering, University of Illinois*  
*Cordell McGoy, Correctional Lieutenant, Vienna Correctional Center*

## INDIANA

*Joseph H. Harrison, Attorney, Bowers, Harrison, Kent & Miller*  
*Albert R. Kendrick, Jr., Purchasing, Production Planning & Environmental Affairs Superintendent—InnoPak Corporation*  
*Nancy A. Maloley, Commissioner, Department of Environmental Management*

## KENTUCKY

*Gordon R. Garner, Executive Director, Louisville & Jefferson County Metropolitan Sewer District*  
*Carl H. Bradley, Secretary, Natural Resources and Environmental Protection Cabinet*  
*Ted R. Richardson, P.E., Cardinal Engineering Corporation*

## NEW YORK

*Thomas C. Jorling, Commissioner, Department of Environmental Conservation*  
*Thomas A. Storch, Ph.D., Director, Environmental Resources Center, SUNY-Fredonia*

## OHIO

*Lloyd N. Clausing, Senior Engineer, Westinghouse Materials Company of Ohio*  
*Pasquale V. Scarpino, Ph.D., Professor of Environmental Engineering, University of Cincinnati*  
*Richard L. Shank, Director, Ohio Environmental Protection Agency*

## PENNSYLVANIA

*Arthur A. Davis, Secretary, Department of Environmental Resources*  
*Melvin E. Hook, Manager, Fox Chapel Authority*  
*Gerald C. Smith, System Company President, American Water Works Service Company*

## VIRGINIA

*Patrick L. Standing, State Water Control Board*  
*W. Bidgood Wall, Jr., State Water Control Board*  
*Robert C. Wining, State Water Control Board*

## WEST VIRGINIA

*Edgar N. Henry, Director, Water Development Authority*  
*David K. Heydinger, M.D., Director, Department of Health*  
*Ronald R. Potesta, Director, West Virginia Department of Natural Resources*

## UNITED STATES

*Jean M. Barren*

## OFFICERS

*Thomas A. Storch, Ph.D., Chairman*  
*Patrick L. Standing, Vice Chairman*  
*Pasquale V. Scarpino, Ph.D., Secretary*  
*Richard L. Herd, Jr., Treasurer*  
*Alan H. Vicory, Jr., Executive Director and Chief Engineer*

## LEGAL COUNSEL

*Leonard A. Weakley, Taft, Stettinius & Hollister*

# Members of the Commission\*

\*As of April 1, 1988



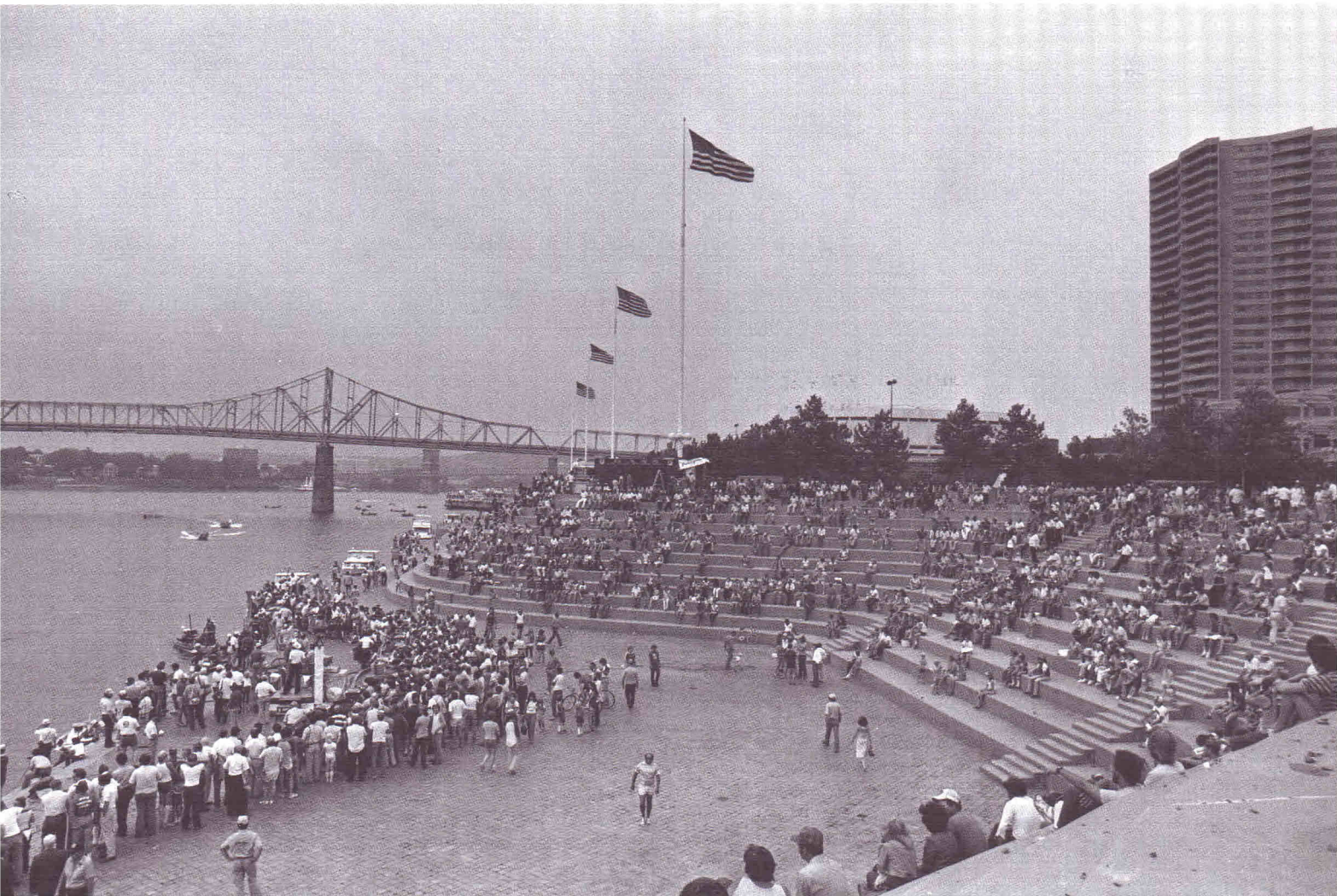
## CHAIRMAN'S MESSAGE

# Showcasing the river...

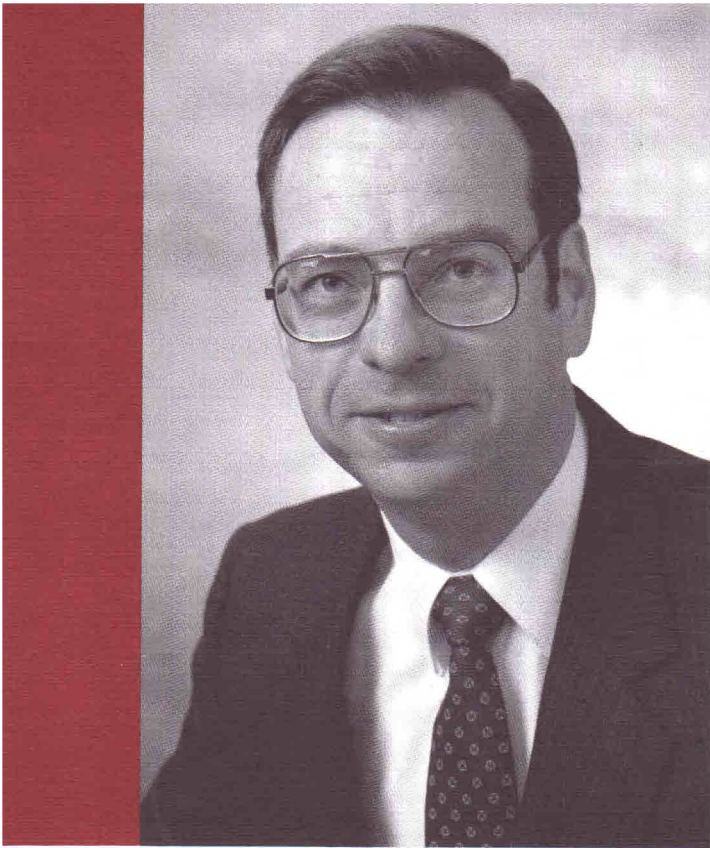
The Ohio River and its tributaries are invaluable resources. Without them there would be no Charleston, Cincinnati, Pittsburgh, Louisville, or other large and small river communities. Our rivers have influenced all of us in many

ways: economically, as transportation arteries; aesthetically, as complements to our hillsides, parks and vistas; recreationally, as playgrounds for boating, fishing and water sports; and culturally, in their influence on our history, architec-

*Cincinnati's Serpentine Wall during National Bass Anglers Tourney.*







*Dr. Thomas A. Storch, Chairman*

ture and way of looking at life.

At one time, residents of the Valley considered the Ohio River an inconvenience; sometimes they were forced to flee the river when it flooded. More often the river was considered to be an obstacle that had to be crossed by ferry or bridge in order to travel to another state or town. Although the river has served as an important mode of transportation for generations, many people thought of it as a back-yard sewer. Buildings in downtown areas turned their backs to the river, their facades to the streets. River views were disregarded or even avoided by home owners and apartment dwellers.

Today, all of this has changed as a result of the efforts of state and federal agencies, industries, communities and the general public, working with the Ohio River Valley Water Sanitation Commission. The Ohio River is now considered an attraction for citizens who live or choose to relocate and settle in this Valley. Communities now view the river as a resource to be showcased. Festivals fea-

turing regattas, fishing tournaments and fireworks displays are an annual event. Many of these festivals are held at shoreline parks and facilities such as Pittsburgh's Point State Park, Cincinnati's Serpentine Wall, Huntington's D.W. Harris Park and New Albany's Riverfront Park.

The Commission stands upon the threshold of its 40th Anniversary. While indeed we have made great progress, problems do remain. They are as subtle as the presence of minute quantities of toxic substances and as diverse as pollutants contributed by rainfall and runoff. Addressing these problems will require aggressive and innovative approaches.

Nineteen eighty seven was a year of preparedness for the Commission's fifth decade and beyond. New Pollution Control Standards for discharges to the Ohio River were adopted which reflect latest scientific knowledge and include new objectives for stream quality. In addition, long range planning received special emphasis to assure that the Commission's programs are innovative, aggressive and focused upon the current as well as emerging pollution control challenges. At the same time we continued to expand and improve important ongoing efforts such as our Toxic Substances Control Program and Organics Detection System.

As ORSANCO approaches its 40th Anniversary, we are indeed proud of what has been accomplished, in terms of water quality as well as in public interest and perception. By working together, I am confident that we will continue to successfully meet our higher goals for water quality improvement, and that the Ohio River will continue to be considered a resource to be showcased regionally, nationally and world wide.



# Pollution Control Standards

The Compact authorizes the Commission to adopt standards for wastewater treatment to protect the interstate streams of the District. The Commission has exercised this authority along the Ohio River and maintains state-of-the-art requirements through triennial review of its Pollution Control Standards.

In September 1987, the Commission's standards were modified to update requirements established in 1984. The updated standards include new stream quality objectives or criteria and more definitive requirements for alternative sewage treatment facilities such as lagoons and trickling filters.

More specifically, the new stream criteria include levels to protect against both acute (short-term exposure) and chronic (long-term exposure) toxicity to aquatic life. For several constituents, the

chronic aquatic life criteria are considerably lower than the previous stream criteria. As a result, comparisons of the new criteria to the Commission's water quality monitoring data indicated more samples exceeded the limits than when the former criteria were used. This is illustrated in the accompanying figures which compare measured levels of cadmium, lead and phenolics in the Ohio River to the 1984 and revised 1987 criteria.

In order to attain the specified revised stream quality objectives, programs to control pollution from non-point sources such as agricultural and urban runoff will need to be implemented. Such programs are now in place or under development by the states and have received a high priority for implementation under the Federal Clean Water Act of 1987.

*John Trapp, Greater Cincinnati Metropolitan Sewer District, addresses ORSANCO's Pollution Control Standards Committee during public hearing.*





Fig. 1.

## CADMIUM CRITERIA

OHIO RIVER

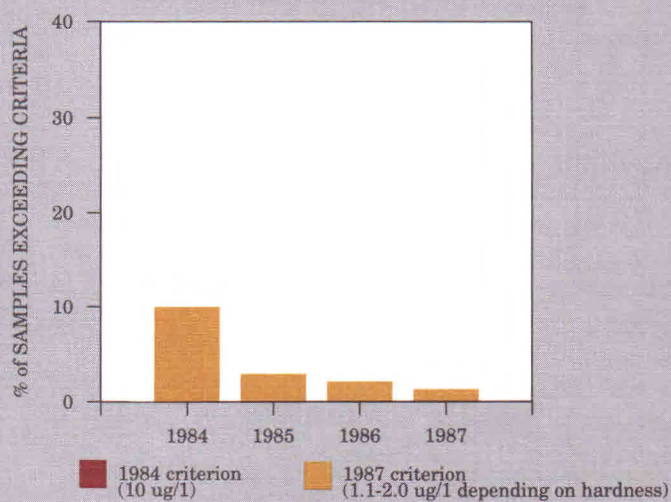


Fig. 2.

## LEAD CRITERIA

OHIO RIVER

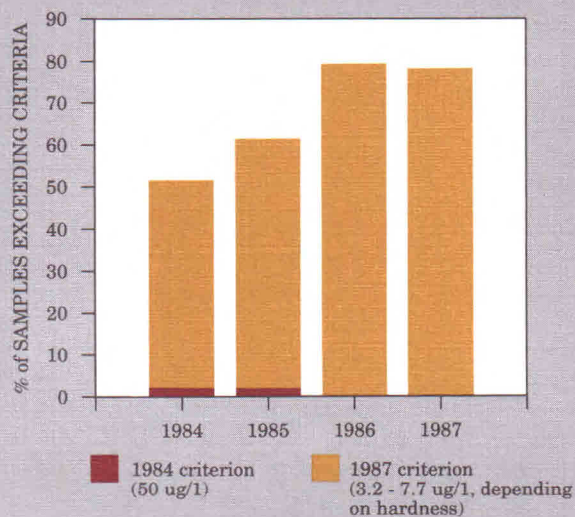
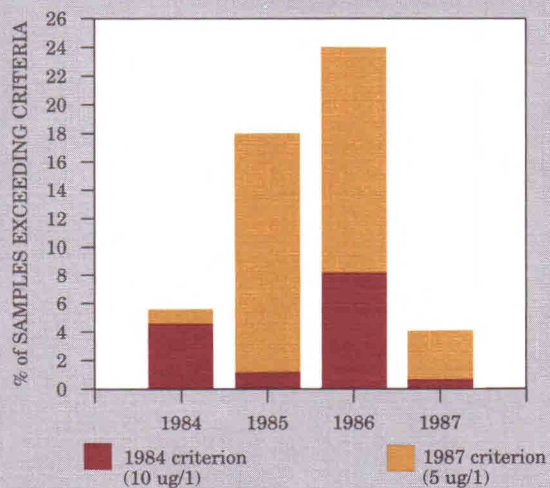


Fig. 3.

## PHENOLICS CRITERIA

OHIO RIVER





# Wastewater Treatment

## Status of Facilities

Information concerning the extent to which industrial and municipal wastewaters discharged to the Ohio River and its tributaries are receiving adequate treatment provides important evidence of progress towards clean streams in the Compact District. Accordingly, the Commission has conducted periodic surveys since 1951 to document accomplishments and needs.

In 1987, a survey of wastewater treatment facilities was conducted which updated information obtained in 1985. Comparative data are shown in Figures 4 and 5. The results of these studies show continued significant progress in addressing needs for major improvements to municipal wastewater facilities in the Compact District as well as along the Ohio River.

The Commission's surveys also provide information concerning the population in the District and along the Ohio River served by facilities designed to

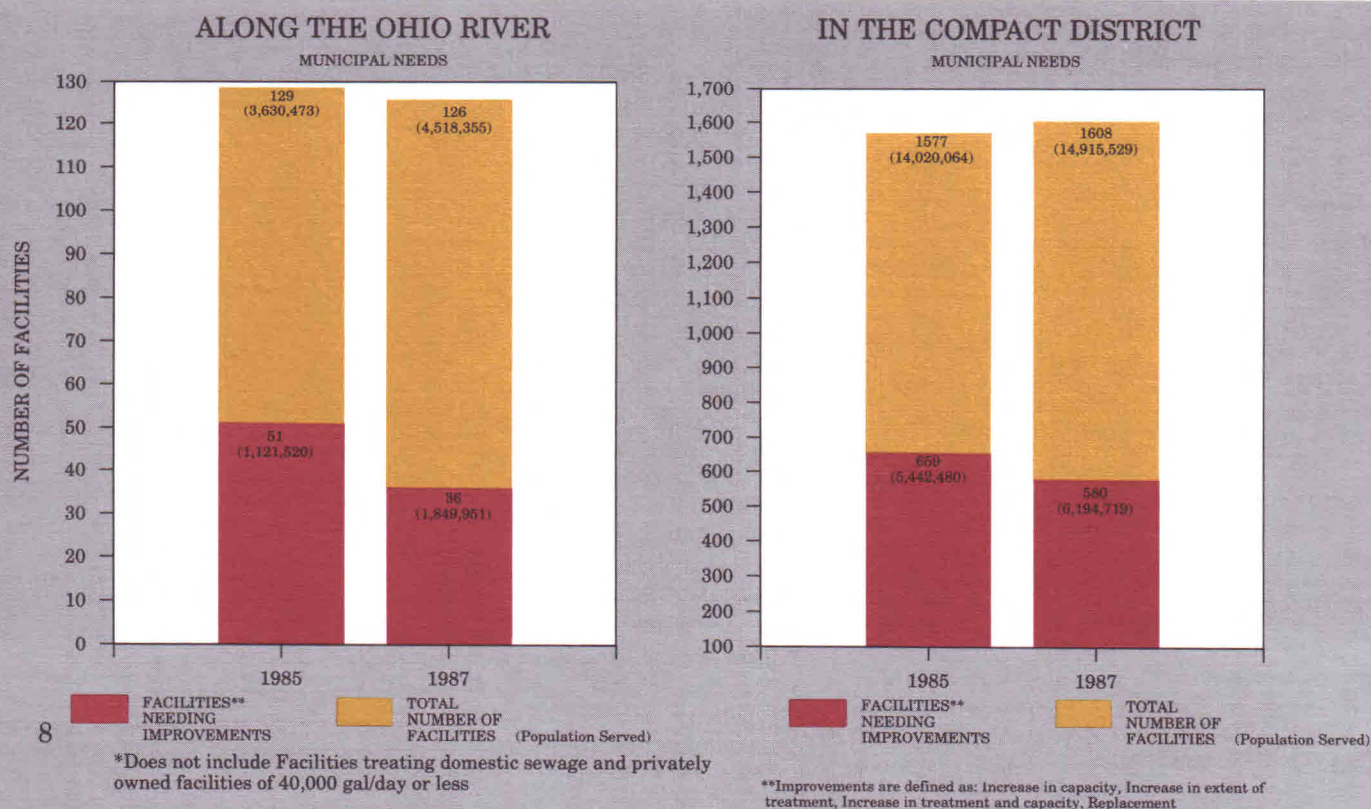
provide secondary level treatment, as required by Commission state and federal regulations. In 1987, 14.1 million people, or 97% of the population in the district was served by facilities constructed to provide the minimum of secondary level treatment. Along the Ohio River 98% of a total population of 4.4 million were served by secondary treatment plants.

## Compliance Programs

Construction of adequate treatment facilities is only part of the challenge; in order to achieve the ultimate goal of clean streams, the facilities must be operated properly.

To provide critical information regarding the extent to which the Commission's Pollution Control Standards are being achieved, certain Ohio River Discharges are routinely tracked for compliance with the Standards. In 1987, a total of 32 facilities were monitored for compliance. Fifteen were monitored due

FIG. 4. STATUS OF MUNICIPAL WASTEWATER FACILITIES\*  
1985-1987





to their large volume of discharge (greater than 10 million gallons per day) while 17 discharges were monitored due to previous compliance problems.

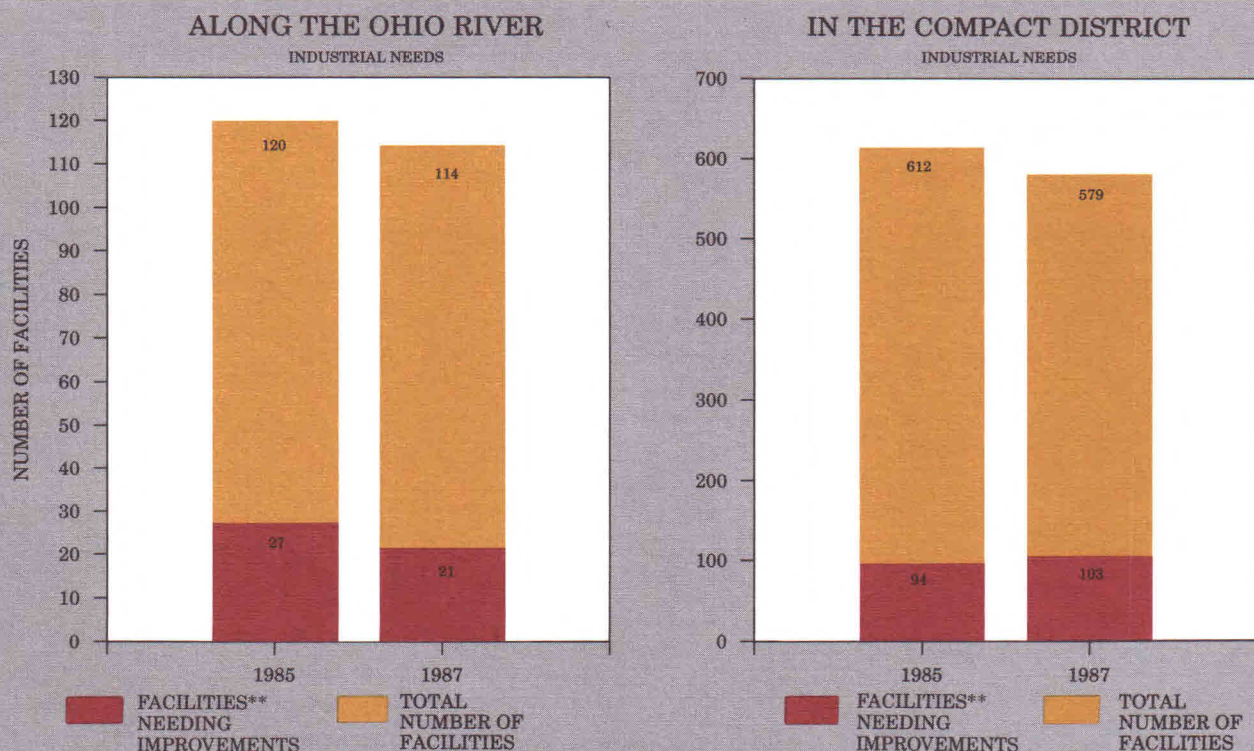
In the event needed, the Commission can be called upon to apply its enforcement powers to correct compliance problems. Such action is required only occasionally due to the effectiveness of state and federal efforts. In 1987, the Commission cooperatively participated in enforcement actions for two facilities along the Ohio River. For the Cincinnati Metropolitan Sewer District-Mill Creek Sewage Treatment Plant, the Commission continued to work with the Ohio Environmental Protection Agency and U.S. Environmental Protection Agency in the administration of a Consent Order established in 1985. Negotiations between ORSANCO, Ohio EPA and U.S. EPA are in progress to achieve a Consent Order for the City of Wellsville, Ohio.

## Registry of Distinguished Operators

Most of the wastewater treatment facilities in the Compact District are operated effectively. This is due in large part to the efforts of the operators. In 1986, the Commission established a Registry of Distinguished Operators in order to recognize the performance of operators of both water and wastewater facilities in providing safe drinking water and clean streams to the citizens of the Ohio Valley. Candidates for the Registry are nominated by state agencies and professional societies in the Compact District. They are then evaluated by a group of their peers who visit the facility to interview the nominee and observe the operation. A recommendation is then presented to the Commission, which considers the nominee for election.

In September, 1987, the Commission inaugurated the Registry by electing Michael Justice of Springfield, Ohio as its first member.

FIG. 5. STATUS OF INDUSTRIAL WASTEWATER FACILITIES\*  
1985-1987





# OHIO RIVER FISH STUDIES



The Commission coordinates multi-agency studies to provide information on the number and species of fish present in the Ohio River. The results provide a measure of the degree to which the Commission's goal of water quality "capable of maintaining fish and other aquatic life" is met. The presence of pollution sensitive fish species is an excellent indicator of improving water quality conditions.

In conjunction with these fish population surveys, samples of fish fillets are collected for analysis of certain pesticides, Polychlorinated Biphenyls (PCBs) and trace metals. These substances can accumulate in fish to the point where consumption of the fish could be harmful to humans. Most recent test results on fillets, collected in 1985, show

that four isolated samples out of 84 exceeded U.S. Food and Drug Administration guidelines for PCB's. This reflects a decreasing trend since 1975 when tissue analysis was first initiated.

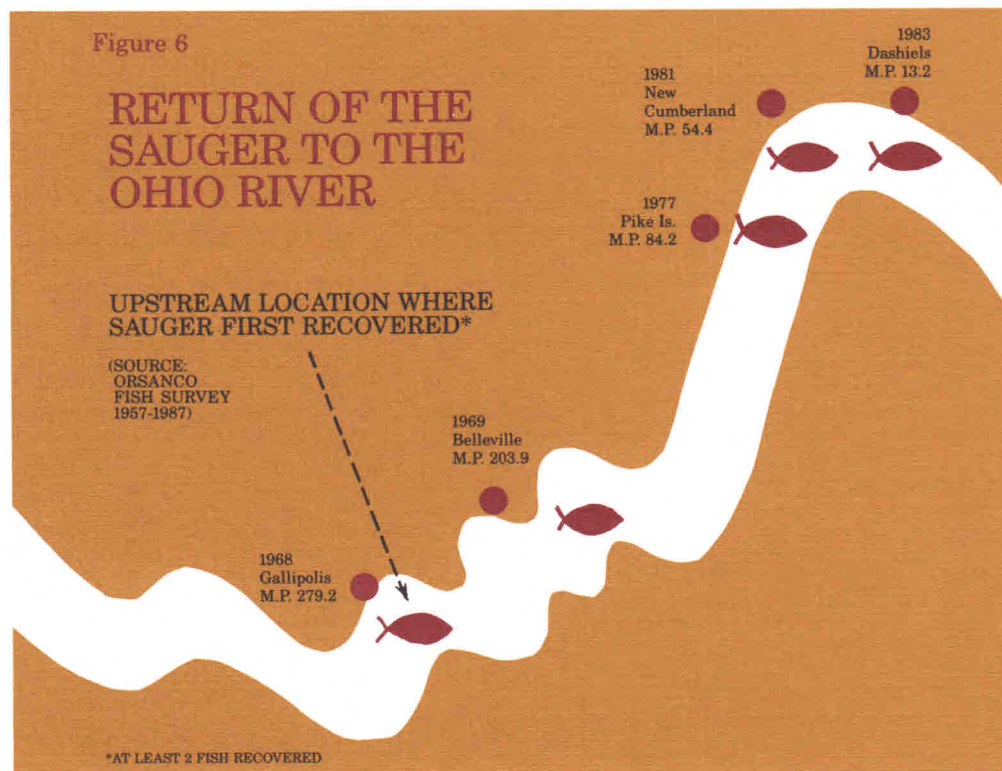
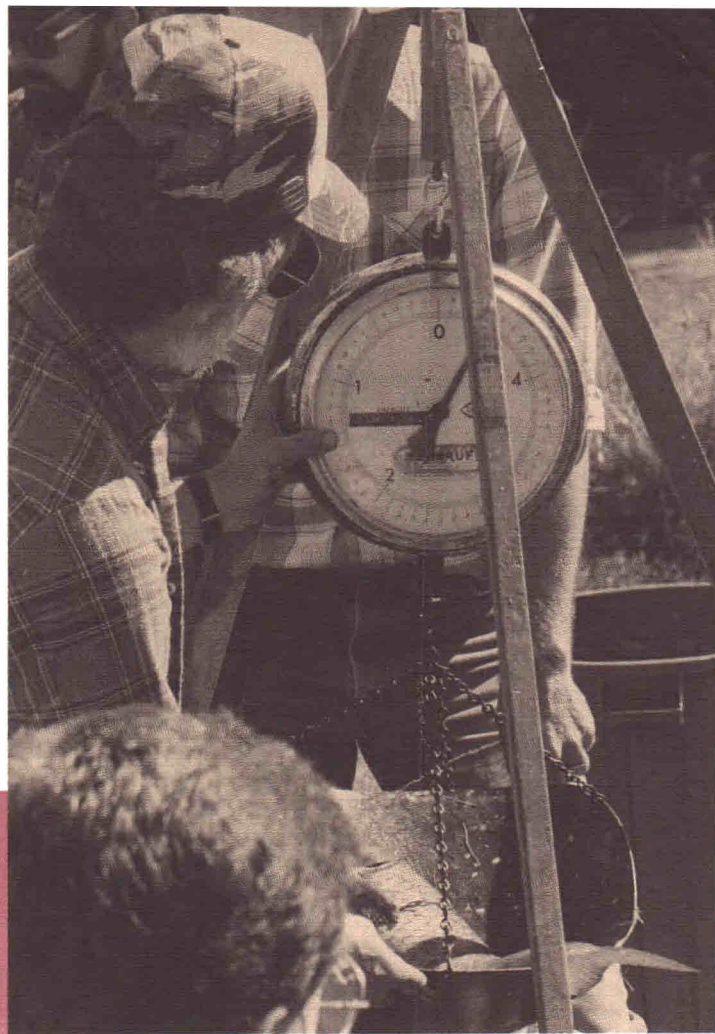
In 1987, fish surveys were conducted at 21 lock chambers throughout the Ohio River Basin. The data from these surveys indicate continued improvement in the number and species of fish, particularly in the upper Ohio River. For example, as indicated by the accompanying figure, Sauger, a popular sport fish in the Valley, shows a dramatic return to the Ohio over the last 30 years. Similar trends are expected for other species as the Commission and its member states continue to gather information on fish diversity in the Ohio.





## OHIO RIVER FISH STUDIES PARTICIPATING AGENCIES

Pennsylvania Department of Environmental Resources  
 Pennsylvania Fish Commission  
 Ohio Environmental Protection Agency  
 Ohio Department of Natural Resources  
 West Virginia Division of Water Resources  
 West Virginia Division of Fish and Wildlife  
 Kentucky Division of Water  
 Kentucky Department of Fish and Wildlife  
 Indiana Department of Environmental Management  
 Indiana Department of Natural Resources  
 Illinois Environmental Protection Agency  
 U.S. Environmental Protection Agency  
 U.S. Fish and Wildlife Service  
 U.S. Army Corps of Engineers





# Stream Quality Monitoring...

The Commission conducts stream monitoring programs on the Ohio River and its major tributaries which provide information on chemical, physical and biological parameters that are primary indicators of water quality. The data gathered through these monitoring activities enable the Commission, state and federal agencies to identify sources of pollutants, establish control measures and determine progress in meeting water quality goals. Present monitoring systems include: manual sampling, fecal coliform and dissolved oxygen measurements during the recreational season, the Organics Detection System and a Water Users Network. The Commission's monitoring network is illustrated on the accompanying map. These programs are conducted in cooperation with member state agencies, U.S. EPA, U.S. Corps of Engineers and Water Users in the Ohio Valley.

## Manual Sampling

Each month river water samples are collected at 36 stations. Twenty two are located on the Ohio River and 14 on the lower reaches of the major tributaries. This network represents key locations above and below major population cen-

ters and spans the entire river. The samples are analyzed for 30 chemical and physical parameters including metals, cyanide and phenolics. The selection of locations and parameters as well as the sampling frequencies is developed cooperatively with state and federal agencies to assure the needs of their water pollution control programs are met.

During 1987, a total of 450 samples were tested and the results reported in the Commission's Quality Monitor (issued quarterly). Most parameters measured during this period indicated overall improvement in river water quality, but problem areas still remain for certain trace metals. These are under investigation in the Commission's Toxic Substances Control Program.

## Organics Detection System

The Organics Detection System (ODS) consists of 13 laboratory stations operated cooperatively by 11 water utilities and 2 industries along the Ohio and three major tributaries. Each station performs daily analysis by gas chromatography for selected organic compounds in river water. Established in 1978 to detect spills and provide advance warning to

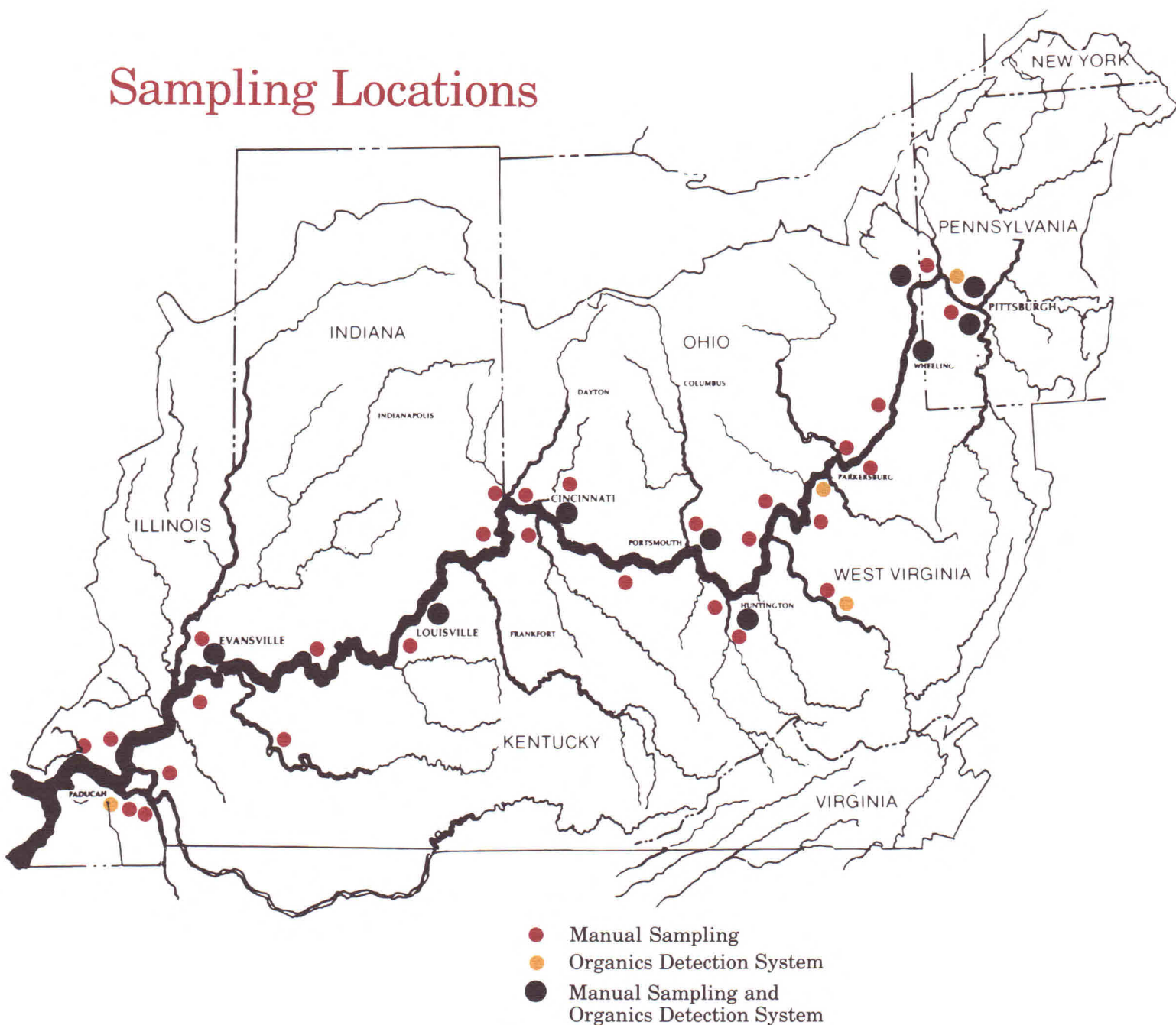
Compounds  
Monitored by  
ORSANCO's  
Organics  
Detection  
System

Methylene Chloride  
Trichlorofluoromethane  
1,1 Dichloroethylene  
Bromochloromethane  
1,1-Dichloroethane  
Chloroform  
1,2-Dichloroethane  
1,1,1-Trichloroethane  
Carbon Tetrachloride  
Bromodichloromethane  
1,2-Dichloropropane

Trichloroethylene  
Dibromochloromethane  
Bromoform  
Tetrachloroethylene  
Benzene  
Toluene  
Chlorobenzene  
Ethylbenzene  
1,2-Dichlorobenzene  
1,3-Dichlorobenzene  
1,4-Dichlorobenzene



# Sampling Locations



downstream water users, the ODS continues to be an important source of data on the ambient levels of volatile organics in the river.

In 1987, a significant upgrade and improvement in ODS capability was achieved with the purchase of six new gas chromatographs. These units represent the latest technology used in laboratory analysis and permit increased detection capability. Along with improvements in analytical instrumentation, work has

begun to enhance quality control activities that will insure more reliable data at the low parts per billion level.

The Organics Detection System will continue to play a key role in the Commission's Toxic Substances Control Program due to the strategic locations of its monitoring stations. As the directives of the Federal Clean Water Act and the Safe Drinking Water Act are implemented, additional monitoring activities to identify toxic organics will be required.



# Control of Toxic Substances

Because the Ohio River is used extensively as a source of public water supply and resource for recreational activities, the Commission considers the need to understand and control the presence of toxic substances to be of paramount importance. Beginning in 1986, the Commission and its member states significantly increased their efforts to identify and control sources of toxic substances found in the Ohio River with the initiation of a Toxic Substances Control Program. This program consists of three tasks:

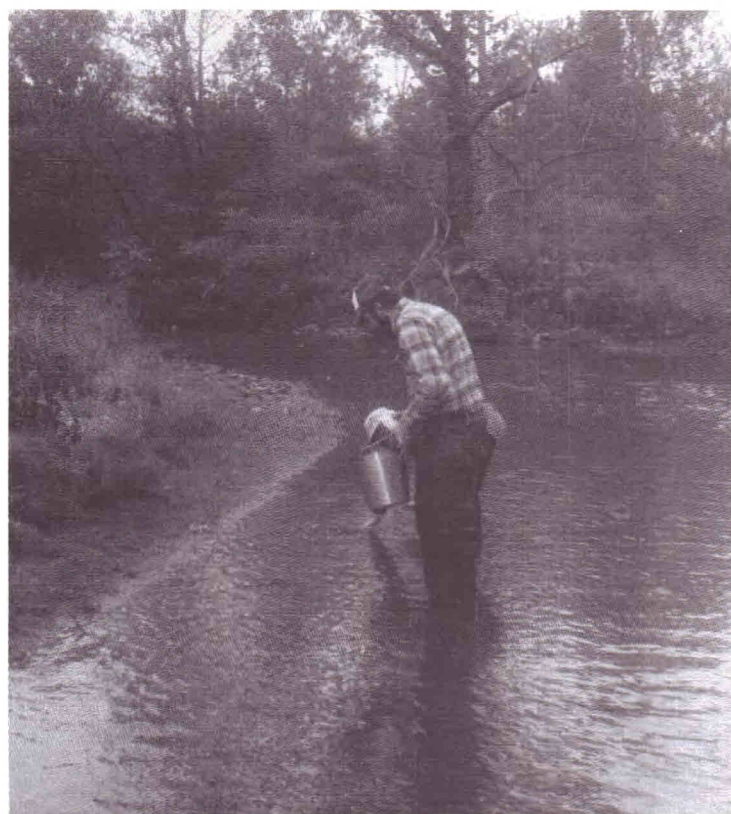
- 1) Compile data on levels of toxic substances in the Ohio River and identify problem areas.
- 2) For each problem area, conduct investigations and analyses to pinpoint sources.
- 3) Develop and implement programs to control identified sources.

The first task was completed in the fall of 1987 with the publication of the report *The Presence of Toxic Substances in the Ohio River*. That report summarized an analysis of data resulting from the Commission's monitoring systems and served to identify specific substances whose presence in the river: exceeds established stream quality criteria; is detected on a frequent basis; increases from the next upstream monitoring point; or has been increasing over time.

The results of this study showed that certain problems exist throughout the Ohio River. For example, levels of PCBs in fish tissue have been highest in the upper river, while chlordane levels in fish have been highest in the lower river. Concentrations of volatile organic compounds have been highest in the upper river, while concentrations of certain metals have been higher in the lower river. The entire river was therefore divided into seven segments for followup investigations.

A segment from Wheeling to Parkersburg was selected for the first followup investigation. Information on potential discharges of toxics was collected from state agency offices. Additional analyses were performed on stream data to identify trends, seasonal behavior, and indications of sources. A program of field studies was developed, including intensive sampling of the Ohio River, tributaries, and wastewater discharges within this segment. The field study was carried out in October with the assistance of the Ohio Environmental Protection Agency, the West Virginia Department of Natural Resources, and the U.S. Environmental Protection Agency. A full report, which will identify a control program, is now under development and is expected to be completed in 1988. Meanwhile, work has already been initiated on a second study segment which extends from Pittsburgh to Wheeling.

*Jim Grow and Marty Kuklis, Ohio EPA, collect samples for the Commission's Toxic Substances Control Program.*





# Spill Response...

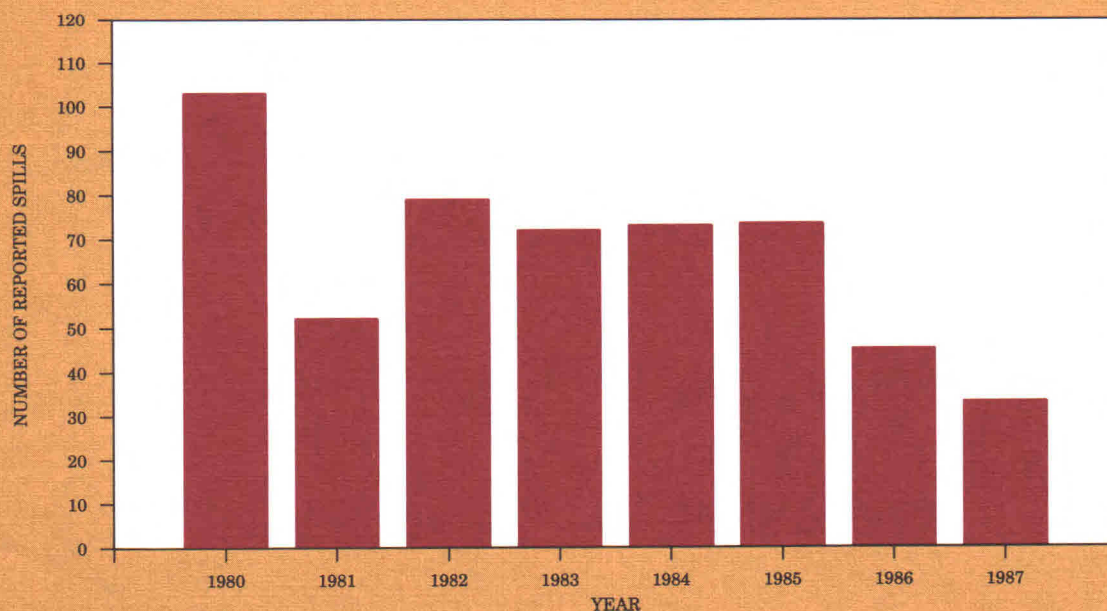
The Commission maintains a spill notification system due to the fact that many spills have potential interstate impacts. The Commission's primary role is to coordinate and communicate information about spills and accidental discharges that occur in the Compact District to the appropriate state and federal agencies and downstream water users. This is accomplished in several ways:

- 1) An Emergency Response Directory is published twice each year with information on how to report spills and to whom.
- 2) A 24-hour telephone service is maintained to receive reports of spills at any time, seven days a week.

- 3) An electronic bulletin board is used to disseminate information quickly to state agencies and water users concerning current status of any spill event.

The total number of spills reported to the Commission each year from 1980 to 1987 are shown graphically in Figure 7. Since 1980, a decreasing trend in spill events has occurred, reflecting the efforts of state and federal agencies as well as industries in establishing spill prevention programs. However, because accidents still occur, the Commission will continue to provide the means for achieving coordinated emergency response activities between the Compact states, federal agencies and the private sector.

FIG. 7. Number of Spills Reported to ORSANCO  
1980-1987





# The Year in Brief

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## The Commission

Thomas A. Storch of New York was elected Chairman and Patrick L. Standing of Virginia was elected Vice Chairman of the Commission for the period July 1, 1987 to June 30, 1988. Pasquale V. Scarpino of Ohio was elected Secretary. Richard L. Herd of the Commission staff was elected Treasurer.

New appointments to the Commission included Thomas C. Jorling, Commissioner, New York Department of Environmental Conservation; Richard L. Shank, Director, Ohio Environmental Protection Agency; W. Bidgood Wall, Virginia State Water Control Board, and Ronald R. Potesta, Director, West Virginia Department of Natural Resources.

The Commission is made up of three representatives from each of the member states who are appointed by their respective governors, and three representatives of the federal government who are appointed by the President. Commissioners participate as a public service and receive only reimbursement for their expenses in performance of Commission-related duties.

During 1987, resolutions were passed by the Commission to recognize the contributions of Commissioners

whose service ended. They were Henry G. Williams (New York), Warren W. Tyler (Ohio), David W. Robinson (West Virginia), and Jack E. Ravan (Federal).

Mr. William L. Klein, Assistant Executive Director, retired May 31, 1987 after serving the Commission for 30 years.

With a deep sense of loss, the Commission records the death on November 11, 1987 of Commissioner Joseph D. Cloud of Richmond, Indiana. Appointed in 1983, Commissioner Cloud was a Federal Commissioner who actively affirmed the goals of the Compact through his contributions to the Commission Programs.

## Advisory Committees

The Commission has a number of advisory committees which provide advice and counsel on matters of public interest. These include: The Water Users Advisory Committee representing companies and agencies which operate water treatment plants; the Publicly Owned Wastewater Treatment Works Advisory Committee representing wastewater treatment departments or districts; the Public Interest Advisory Committee which is composed of citizens residing in the member states; and Industry Action Committees, such as those representing the chemical and power industries, which provide for industrial participation. All advisory committee members serve on a voluntary basis.



## EXECUTIVE DIRECTOR APPOINTED

### Alan H. Vicory, Jr.

Alan H. Vicory, Jr., was named Executive Director and Chief Engineer of the Ohio River Valley Water Sanitation Commission in May, 1987.

Mr. Vicory, a native of Virginia, has been a Commission staff member since 1979, and most recently served as Manager of Technical Programs. Previous to his employment with the Commission, he served with the staff of a major consulting engineering firm. He received a B.S. degree in Civil Engineering from Virginia Military Institute in 1974.

A registered professional engineer, Mr. Vicory is a Diplomat in the American Academy of Environmental Engineers and a member of the Water Pollution Control Federation, National Society of Professional Engineers and the American Public Works Association.



Mr. Vicory is the fourth Executive Director in the 39-year history of the Commission. He succeeds Leo Weaver, who resigned after 12 years to enter private practice.

*Riverfront area of Marietta, Ohio during the annual Sternwheel Festival (Photo by Marietta Times).*





# Publications

Publications are developed to provide information regarding the Commission's water pollution control programs. Charges for publications are levied to cover production costs. These charges are waived when requests are received from government agencies and non-profit organizations and institutions (single copy only). In 1987, the following publications were produced:

## ORSANCO - 1986

Annual Report of activities during 1986 (20 pages, no charge)

## QUALITY MONITOR

A quarterly publication of data summaries from the Manual Sampling Program, Water Users System and the Organics Detection System (no charge)

## EMERGENCY RESPONSE DIRECTORY

A compilation of instructions concerning the appropriate agencies to notify when a spill or accidental discharge occurs on the Ohio River or a tributary (8 pages, no charge)

## RIVER REGISTER

A semi-annual publication that reports general results from the ORSANCO monitoring systems (no charge)

## POLLUTION CONTROL STANDARDS-1987 REVISION

Revised Pollution Control Standards for the Ohio River, superceding Pollution Control Standards (September 13, 1984 revision), including stream criteria and standards of treatment (10 pages, no charge)

## THE PRESENCE OF TOXIC SUBSTANCES IN THE OHIO RIVER

An assessment of the results of stream monitoring from 1976 to 1985 on the Ohio River and certain major tributaries; part of the Toxic Substances Control Program (54 pages, plus appendix, \$5)

## ORSANCO, The Clean Water Connection

An eight minute video on the Ohio River Valley Water Sanitation Commission emphasizing the programs and history of the Commission. (Available on a loan basis)

# Staff

Executive Director and Chief Engineer  
ALAN H. VICORY, JR.

Information Specialist  
JEANNE JAHNIGEN ISON

Administrative Assistant  
MARILYN P. KAVANAUGH

Program Managers:  
Administration  
RICHARD L. HERD, JR.  
Monitoring and Surveillance  
LOUISE AHLES-KEDZIORA  
Water Quality Programs  
PETER A. TENNANT

Environmental Analyst  
PAUL R. McCONOCHA  
Environmental Engineers  
CHRISTIAN G. NORMAN  
VALERIE J. THOMAS  
Coordinator of Field Operations  
JERRY G. SCHULTE  
Computer Operator/Accounting Technician  
DONNA M. CARROLL  
Computer Programmer  
KATHERINE A. DREGER  
Secretaries  
BARBARA A. HORTON  
SANDRA L. JONES



# Financial Report

The following information relative to revenues, expenses and resources was extracted from the Annual Audit Report of Hall & Associates, Certified Public Accountants, for the year ending June 30, 1987.

## STATEMENT OF ACCURED REVENUES AND EXPENSES YEAR ENDING JUNE 30, 1987

### Revenues:

Signatory States	
State of Illinois .....	\$ 34,510
State of Indiana .....	128,710
Commonwealth of Kentucky .....	147,900
State of New York .....	7,180
State of Ohio .....	174,950
Commonwealth of Pennsylvania .....	96,200
Commonwealth of Virginia .....	24,920
State of West Virginia .....	<u>75,780</u>
Total — Signatory States .....	\$ 690,150
U.S. Environmental Protection Agency:	
Water Pollution Control Grant .....	367,844
U.S. Army Corps of Engineers:	
Electronic Monitoring Support .....	29,683
Other Revenues .....	<u>1,820</u>
Total Revenues .....	\$1,089,497
Expenses .....	1,136,326
Excess of Expenses over Revenues .....	<u>\$ 46,829</u>

## STATEMENT OF RESOURCES AT JUNE 30, 1987

Cash .....	\$100,928
Deposits .....	661
Accounts Receivable	
U.S. Environmental Protection Agency .....	\$ 82,492
Signatory States .....	5,290
Employee Travel Advances .....	<u>35</u>
Total Accounts Receivable .....	\$ 87,817
Subtotal .....	\$189,406
Less:	
Accounts Payable .....	\$140,180
Spills Emergency and Compliance Reserve .....	23,617
Resources Available June 30, 1987 .....	<u>\$ 25,609</u>
Resources Available — Beginning of Year .....	\$ 72,438
Excess of Expenses Over Revenues .....	<u>46,829</u>
Resources Available — End of Year .....	<u>\$ 25,609</u>



Regulatory  
Agencies  
of the  
Signatory  
States

OHIO RIVER  
VALLEY WATER  
SANITATION  
COMMISSION

ORSANCO

49 E. Fourth Street • Suite 815  
Cincinnati, Ohio 45202  
(513) 421-1151

ILLINOIS

Division of Water Pollution  
Control  
Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706

INDIANA

Department of Environmental  
Management  
105 S. Meridian Street  
Indianapolis, Indiana 46225

KENTUCKY

Division of Water Quality  
Natural Resources and  
Environmental Protection  
Cabinet  
18 Reilly Road  
Frankfort, Kentucky 40601

NEW YORK

Division of Water  
Department of Environmental  
Conservation  
50 Wolf Road  
Albany, New York 12233

OHIO

Office of Wastewater Pollution  
Control  
Environmental Protection Agency  
Post Office Box 1049  
Columbus, Ohio 43266-0149

PENNSYLVANIA

Bureau of Water Quality  
Management  
Department of Environmental  
Resources  
Post Office Box 2063  
Harrisburg, Pennsylvania 17120

VIRGINIA

State Water Control Board  
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WEST VIRGINIA

Division of Water Resources  
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