

OHIO

The History of the Ohio Environmental Protection Agency
(1970-2001)



A product of DEAL 5 Agency History Team
February 2002

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February 2002

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This document was produced by the Agency History team, as part of a DEAL 5 class project. The document attempts to capture the people and events of the past that have shaped the Ohio EPA. The team recognizes it is not an all inclusive history of the Agency. Although the team tried to confirm facts from several sources and sought review by current employees, there are bound to be errors and omissions for which the team accepts responsibility. The document does not necessarily represent Ohio EPA's official position regarding the matters and issues covered.

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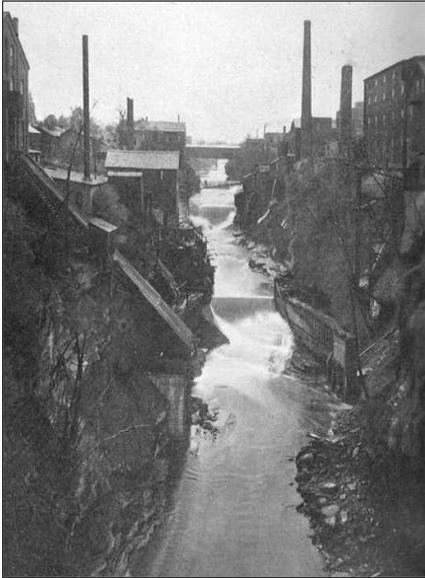
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Ohio Departments of Health and Natural Resources personnel became the core of the Ohio EPA in 1972

Pre-Ohio EPA Era

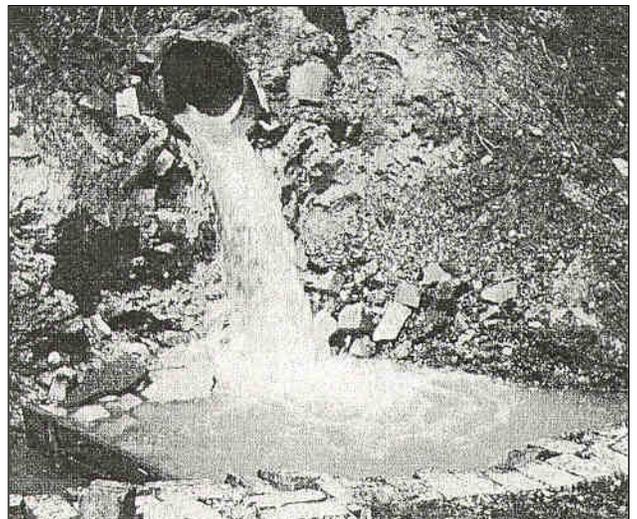
(before 1970)

The environmental movement of the 1960's and early 1970's gave rise to many new federal laws and the creation of the U.S. EPA. However, concern for Ohio's environmental quality and federal and state regulations dealing with environmental matters go back many years prior to 1970. Many of Ohio EPA's first employees were keenly aware of the state of the environment and the sources of air, water and land pollution because they dealt with these matters in their jobs with the Ohio Departments of Health and Natural Resources. These dedicated and professional staff became the core of the Ohio EPA in 1972. Ohio EPA's history is based on the environmental protection efforts initiated by the Departments of Health and Natural Resources and local air agencies. The following paragraphs are but a small extraction of the outstanding legacy of public service, professionalism and scientific understanding that typifies Ohio EPA's roots.

Water Supply and Wastewater Treatment

In the 1800s Ohio's water resources were put to many uses. In these early years it was the water needs of commerce and manufacturing that prompted the first water treatment and distribution systems. Later, the fear of water borne disease led to rudimentary systems of sanitation. By the early 1900's, however, the growing demand for water and the greatly increased populations of Ohio's cities created very serious pollution problems. An epidemic of typhoid fever in Salem in 1920 and further sanitation surveys conducted in the 1920's led State public health officials to seek improved sanitation codes. Because of these events, the Ohio General Assembly passed laws to require all Ohio cities and towns to provide basic water supply treatment and improved sewage disposal. Although these treatments were rudimentary by today's standards, they were successful in greatly reducing water borne illnesses.

Professionals at the Ohio Department of Health worked with their counterparts in other states and the federal government to produce the Ohio River Valley Water Sanitation Compact and the Ohio River Valley Water Sanitation Commission in the 1940's. This brought about a set of uniform treatment standards for



all communities in the Ohio River Valley at a time when the river was severely polluted by municipal and industrial discharges.

The Water Pollution Control Board (WPCB) started issuing discharge permits to Ohio industries and municipalities in 1953. The WPCB was a six member board consisting of the directors of the Ohio Departments of Health, Natural Resources, Commerce and Agriculture and a municipal and industrial representative, with technical support from Ohio Department of Health staff. Department of Health staff also conducted water quality stream surveys, evaluated major sources of pollution such as the paper mills, and prepared reports in the 1960's.

One of Ohio's leaders in water pollution control was F. H. Waring who served as Chief Engineer for the Department of Health for most of his 45 years of public service. He published articles describing in great detail the advances in the treatment of public water supplies and the treatment of sewage in Ohio's cities and villages. When he retired in 1961 Mr. Waring was recognized by his peers for the major contribution he made to the public health and water quality improvements noted above.

Lake Erie

The death of Lake Erie and the Cuyahoga River fire of 1969 are two Ohio events with very significant national impact. During 1969 and 1970 these events would symbolize the dramatic decline in environmental quality in North America.

Oil slicks on the highly industrialized Cuyahoga River had caught fire many times before the 1969 fire and the quality of Lake Erie was on the decline for decades, and yet, because of their unique and sensational quality, these stories began to symbolize the growing environmental movement.

The press coverage, including an article on the Cuyahoga fire in Time Magazine, helped spark public debate and imparted a sense of urgency for sweeping new environmental legislation at the national level.



On a scientific level studies documented that Lake Erie was being "killed" through cultural eutrophication - an excessive loading of the plant nutrient phosphorus which created algal blooms, excessive organic matter, fish kills and oxygen depletion of bottom waters. The good news was that scientists predicted that Lake Erie, and the other Great Lakes, could recover with lower phosphorus loadings. With popular support for a cleaner environment, the United States and Canada set about to pass legislation and sign international agreements aimed at a cleaner environment and specifically at reducing phosphorus loadings. The resulting federal Clean Water Act and the Great Lakes Water Quality Agreement have resulted in a multi-billion dollar commitment to water pollution controls and dramatic water quality improvements in Lake Erie and Ohio's inland waters. These same laws and agreements



continue to provide a framework to address a wide array of water quality issues.

The sanitary landfill was conceived in the early 1900's as a method of using solid wastes to fill land. The City of Columbus was among the first to use the method. Columbus operated a "sanitary landfill" between the years 1906 and 1910. Ohio Department of Health personnel were responsible for the investigation and evaluation of disposal sites and for approving plans for disposal sites. The Department supervised and coordinated the solid waste management

programs and enforcement policies of local health departments. They assisted consulting engineers and public officials to establish good solid waste management policies. This assistance was available through the District offices.

Ohio's first solid waste rules (HE- 24) became effective on July 1, 1968. They prohibited open dumping and open burning and required the submittal of plans for approval. An operational plan was also required; however, there were no closure or post-closure obligations. The rules exempted facilities that produced waste on premises on which disposal facility was located (e.g. industrial waste landfills).

Solid Waste Management

The industrial revolution spurred economic growth and prosperity in Ohio, but also led to degraded air quality. Cincinnati was one of the first cities in the nation to recognize and address air pollution problems, conducting smoke abatement actions as early as 1886. The first smoke ordinance, regulating smoke emissions from boilers, was passed in 1903. Cincinnati was the second city in the nation to adopt a smoke ordinance, preceded only by Chicago. The smoke abatement league of Hamilton County, made up of citizens, was founded in 1906 to help further address air pollution concerns. Even with these pioneering air pollution control efforts, Ohio's air quality worsened as industry grew throughout the state.

By the 1950's, Ohio was recognized as having some of the worst air quality problems in the nation and was one of the top sources of air



Air Pollution Control

pollution. In urban industrial areas cars often had to use headlights during the day due to poor visibility. Growing public concern over killer smog incidents in Pennsylvania (20 persons killed) and New York (260 persons killed) prompted the passage of the Federal Air Pollution Act in 1955 and the Air Quality Act of 1967. To help address air pollution concerns, city, county, and multiple jurisdictional air agencies formed. By the 1960's, there were eleven local air agencies located throughout the state (many still exist in 2002). The agencies helped to characterize air pollution problems and helped to enforce provisions of the Clean Air Act. Initial air quality monitoring was conducted by using "dust buckets" and "sticky tape jars." The dust bucket procedure involved placing a clean bucket in an elevated location (such as a telephone pole) and after a certain amount of time passed weighing the soot that collected in the bottom of the bucket. The sticky tape jars, basically cleansed baby food jars with double stick tape wrapped around them, were placed on a tripod and were used to tell the primary direction from which air particulates originated.

Air monitoring procedures advanced over time and Ohio's air monitoring network became the one of the most extensive in the nation. U.S. EPA maintains data collected from local air agencies as early as 1957. In addition to monitoring conducted by local air agencies, in 1963 the Ohio Department of Health activated the Ohio Air Sampling Network, with 21 air monitoring sites measuring total suspended particulate matter throughout the state.

Unfortunately, the Department of Health and local air agencies had limited control over air emissions and many Ohio cities were still plagued by air quality problems in the late 1960's. In 1969, Steubenville Ohio was labeled the dirtiest city in the country, largely due to its air pollution problems. Staff members at local air agencies and the Department of Health recognized these problems, and many pushed for stricter air standards to protect the health of Ohioans. These individuals were instrumental in the development of Ohio's air pollution control legislation in 1971.

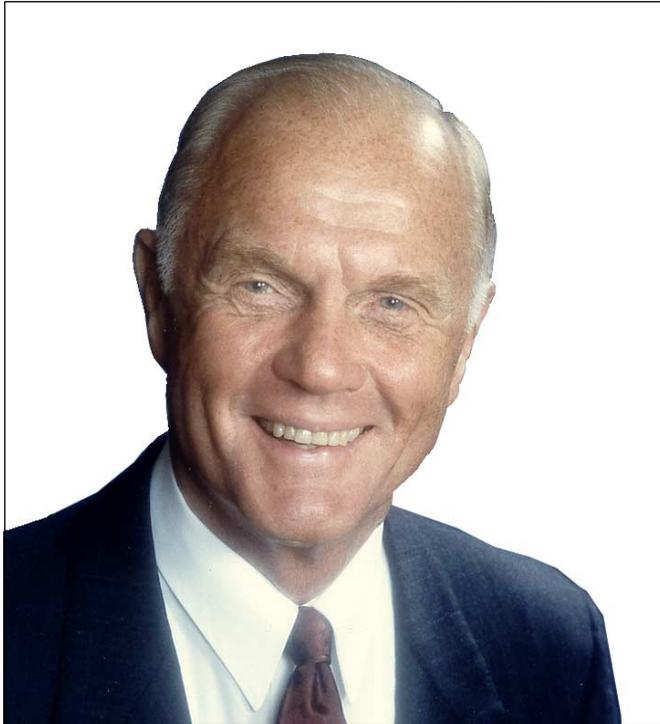
The History of the
Ohio Environmental Protection Agency

Chapter 1

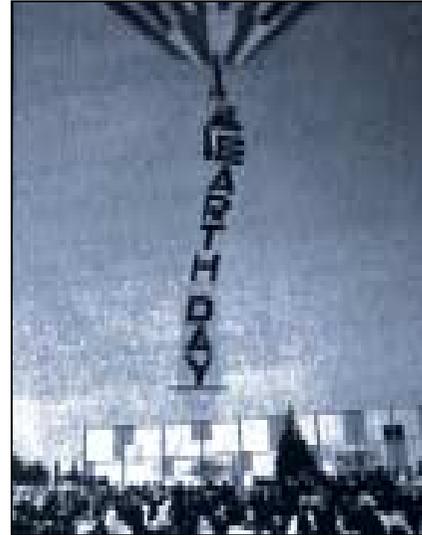
1970s

New Focus on Environmental Protection

Colonel John H. Glenn Jr.
heads task force that helps shape Ohio EPA



First Earth Day April 22, 1970



Summit National



Ira Whitman
first Ohio EPA director

1970

1970

Top Environmental Events

First Earth Day - April 22



Administrative

U.S. EPA established July 1970.

The White House and Congress worked together to establish U.S. EPA in response to the growing public demand for cleaner water, air and land. Previously, the national government was not structured to make a coordinated attack on pollutants that harm human health and degrade the environment. U.S. EPA was assigned to repair the damage already done to the natural environment and establish new criteria to guide Americans in making a cleaner environment a reality.

Air

Clean Air Act



The Clean Air Act as Amended in 1970 increased federal authority and responsibility and articulated national standards for new stationary sources of air pollution. Also included was a requirement for states to attain air

standards for the most common air pollutants within a specified time frame.

1971

Top Environmental Events

Citizens' Task Force on Environmental Protection.

Appointed by Governor Gilligan, and chaired by Colonel John H. Glenn, Jr.

Administrative

John J. Gilligan becomes governor.

Air

Air legislation. The Ohio General Assembly extensively revised Chapter 3704 of the Ohio Revised Code for the express purpose of putting Ohio into compliance with the Clean Air Act, as amended in 1970.

1972

Top Environmental Events

Ohio EPA established, October 23, 1972.

Governor John Gilligan signed S.B. 397 into law in July and on October 23, 1972, the Ohio EPA became an agency. The enactment of this law followed the recommendations of the Citizens' Task Force on Environmental Protection.

First Interstate Air Alert in the Nation.



Ohio was the first state to use statewide, federally approved air pollution regulations to successfully resolve an air pollution emergency over the Steubenville and Weirton (West Virginia) area. During

the emergency particulate air concentrations rose to 700 micrograms per cubic meter (Ohio's standards were 60 micrograms per cubic meter). Emergency orders were issued requiring all those discharging air contaminants to cut back on emissions. The visibility during air alerts was so poor that cars had to use headlights during the day, local football games were canceled because the teams could not see to throw the ball, and drive-in movies were closed because the projected picture could not reach the screen.

Great Lakes Water Quality Agreement, April 15.

The United States and Canada both committed to a cleaner Great Lakes environment. The agreement established guidelines for pollutants using the best avail-

able technology and knowledge. This agreement was the impetus for reducing Lake Erie phosphorus levels.

Administrative

Ira Whitman, Ph.D., appointed Ohio EPA's first director.

Dr. Whitman earned his Ph.D. in environmental civil engineering from John Hopkins in 1968. Dr. Whitman worked for Battelle Laboratories and as a deputy director of the Ohio Department of Health prior to being appointed director of Ohio EPA. Dr. Whitman was also on the Citizens' Task Force that recommended the formation of the Ohio EPA. Dr. Whitman was 32 years old when he was appointed, and as of January 2002 he was the Agency's youngest director.



Agency's first offices at the historic Seneca Hotel.

The hotel was located at 361 East Broad Street in Columbus. There were still some tenants residing in



the building when the employees moved in. Since the Seneca was a historic hotel, mostly still intact, many "offices" had bathrooms, some were still functioning and others not and many bathtubs were

used to contain files. The phones were rotary, and the windows could be opened. The third floor ballroom served as the main conference room, and the former cocktail lounge served as the offices for the Graphics Department of the Public Interest Center.

Agency initially employed 90 employees.

Entry level public health engineers earned \$4.61/hour.

Agency's budget was \$10 million.

First all-Agency staff meeting. Held at the Lincoln Lodge on West Broad Street in October 1972. Governor Gilligan attended the meeting.

Ohio EPA organization. Ohio EPA included only four district offices: Southeast, Southwest, Northeast, and Northwest. Franklin County was part of Southeast District Office.

Adele Mitchell appointed first Ombudsman.

S.B. 397 included an Agency Ombudsman as a point of contact for the citizens of Ohio with the new environmental agency.

Environmental Board of Review (EBR) formed

This predecessor to ERAC was formed to hear appeals of final actions of the director.

Ohio EPA authorized to seek penalties.

Up to \$10,000 per day for violations of air and water laws

Agency newsletter "Newsleaf." Produced bi-monthly starting in November. The newsletter was later called "Point Source."

Water

Federal Water Pollution Control Act (FWPCA) Amendments of 1972

This major change to the federal environmental statute was passed by Congress, over President Nixon's veto, on October 18, five days before the formation of Ohio EPA. These amendments provided funding for the construction grants program aimed at development of water treatment infrastructure. Also, these amendments emphasized the establishment of technology based effluent guidelines in National Pollutant Discharge Elimination System (NPDES) permits for point source dischargers toward the goal of elimination of discharges of pollution to waters of the United States and the attainment of the goals of "fishable and swimmable."



First National Pollutant Discharge Elimination System (NPDES) permits. jointly drafted by Ohio EPA and U.S. EPA.

Ambient ground water monitoring network expanded. The Agency expanded the existing network from 12 to 60 well stations. The purpose of this program is to adequately characterize the ambient ground water quality in Ohio's major aquifers.

Aquatic biology laboratory. The agency's first aquatic lab was set up at 1025 Concord Avenue to conduct bioassays of wastewater effluents using laboratory reared fish and "water fleas" (daphnia). A small net-

work of ambient stations was established and resident macroinvertebrate populations were collected and identified.

Air

Air pollution regulations. In early 1972, the first air regulations were promulgated by the state for the control of particulates, sulfur dioxide, nitrogen oxide, carbon monoxide, and organic compound emissions from stationary sources.

Open burning regulations become effective in Ohio. A regulation against open burning in restricted areas was approved by the federal government as part of the Ohio Air Pollution Implementation Plan.

Water Quality Planning initiated. With the support of Ohio EPA, Clean Water Action Section 208, four area-wide planning agencies initiated the planning.

Liquid Effluent Analysis Program (LEAPS) software. Developed by water programs to store wastewater discharge data and evaluate compliance with NPDES permits. The program also included information on permit applications and issuances.

Hearings held for uniform home sewage disposal standard. On June 21, the Ohio Department of Health, Public Health Council and Ohio EPA held four public hearings on proposed uniform home sewage disposal standards. "Off-lot disposal will be permitted only in exceptional circumstances and the off-lot discharger is requested to comply with current water quality and effluent standards."

1973

Top Environmental Events

Ohio had the largest clean-burning fuel deficit and highest concentration of coal-burning power plants in the United States. When the energy crisis hit, the availability of clean burning fuels (fuel oil, low-sulfur coal, and natural gas) decreased and Ohio had few alternatives except to continue to use high sulfur coal. Approximately 90 percent of Ohio's power plants used high sulfur coal as an energy source.

Administrative

State Facility Needs Assessment Survey. As a result of Governor Gilligan's goal to make Ohio's environmental compliance program a model for the private sector, Ohio EPA conducted an assessment of environmental pollution control needs and estimated costs, and developed a State Agency Compliance Program Implementation Plan. This was an effort to implement environmental compliance at state facilities before enforcing against private entities.

Water

NPDES Program. Ohio EPA received delegation from U.S. EPA for the NPDES permitting program.

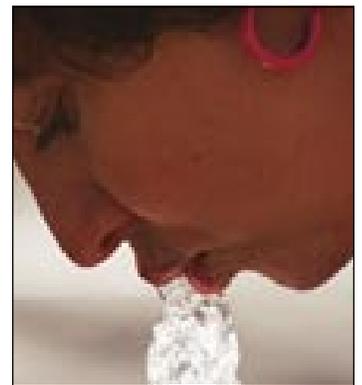
Air

Ohio EPA issues first air permits.

1974

Top Environmental Events

Safe Drinking Water Act of 1974. The first national legislation enacted to safeguard public drinking water supplies. The goal was to assure that drinking water meets certain water quality standards and was tested regularly for various contaminants. The Act authorized U.S. EPA to set national health-based drinking water standards. The Act also created the Sole Source Aquifer Protection Program, to help safeguard critical aquifers.



Administrative

Central District Office formed. Governor Gilligan determined it necessary to have a district office closer to the state capital. The office was located in the Seneca

Hotel Annex on East Broad Street. Central District Office initially had jurisdiction for eight counties.

Agency staff use gas rationing coupons to purchase gas at state highway patrol posts due to the gas shortage and energy crisis.

Water

First NPDES permits issued by Ohio EPA.

Air

More than 3,600 operating and variance permits issued for sources of air pollution.

Air permit and regulation litigation. Thirteen electric utilities filed suit against Ohio EPA contending that Ohio's ambient air quality standards and emission regulations were improperly drafted and did not take into account considerations such as health effects associated with various ambient levels of pollutants, wind speed, topography, and other considerations which they argued were mandated by federal law. They further contended that there was no need for sulfur dioxide emission control in many parts of the state and that emissions control devices for sulfur dioxide were not adequately demonstrated to require the investment of considerable sums of money. Ohio EPA contended that the Ohio ambient air quality standards were necessary to protect the health of Ohio's citizens and it is also contended that the emissions standards were necessary in order to meet ambient levels. Ohio EPA was forced to revise portions of its regulations as a result of this litigation.

1975

Top Environmental Events

First Inland Spills Conference held in Bellefontaine, Ohio. Several other state agencies as well as U.S. EPA and the U.S. Coast Guard participated in this well-received event.

Administrative

James A. Rhodes becomes governor.

Ned E. Williams appointed director.

Mr. Williams was a pilot in the United States Air Force during WWII and the Korean conflict. He earned an engineering degree from the University of Missouri in 1949. Mr. Williams previously worked for private engineering consulting firms, served as Chief Engineer for the Ohio Department of Natural Resources, and was the executive director of the Ohio Water Development Authority.



Agency reorganized into a programmatic structure. The functional structure, which had existed since the Agency was created, was changed to a programmatic structure. The Offices of Regulation and Enforcement; Policy Development; Environmental Program, Management Analysis and Administrative Services; Division of Surveillance; and Division of Waste Management and Engineering became Offices of Air Pollution Control, Wastewater Pollution Control, Public Water Supply, Land Pollution Control, Operational Support and District Operations.

Budget cuts and layoffs. State agencies experienced a budget cut and a two percent budget impoundment by Office of Budget and Management. The Agency laid off 62 people along with the attrition of 86 others; resulted in a staff level of approximately 408 by year's end.

Water

\$264 million in grant awards given to Ohio municipalities for public wastewater infrastructures.

National Interim Primary Drinking Water Standards set. As a result of the Safe Drinking Water Act, 18 standards were set for six synthetic organic chemicals, ten inorganic chemicals, turbidity and total coliform bacteria.

Statewide public water well standards set. These included the regulation of well location, construction, casing material, operation and maintenance, abandonment and plan approval requirements.

More than 1,500 NPDES permits issued.

Water

Land

Ohio is among nation's leading states in the production of industrial wastes, according to a survey conducted by Ohio EPA, Ohio Manufacturers' Association and the Ohio Petroleum Institute.

Air

Fourty-four air pollution alerts issued; 32 in Steubenville.

1976

Top Environmental Events

Great Miami River fish kill traced to Chem-Dyne in Butler County. Endrin released from Chem-Dyne, caused one of at least five fish kills related to this site and extended for nearly 37 miles along the Great Miami River to the Ohio River. Investigation leads to eventual enforcement case (see 1981 and 1985).



Administrative

Environmental Scientist and Engineer classifications established. Ohio EPA received these new staff classifications to replace existing Departments of Health and Transportation classifications.

New management analysis approach. Annual report mentions the new approach that will use zero based budgeting.

Division of Wastewater Pollution Control begins using WANG Word Processors. The Permits and Compliance Program switched from using mag cards and MTST's to two Wang WPS-30's, sixteen video display workstations, a 200-character/second matrix printer, a 425-line/minute printer and seven 40-character/second daisy wheel printers. This greatly improved the speed and accuracy of permit processing, eliminating the need for Correctype to correct typing errors.

Agency gets legislative authority for deep well injection program. Deep injection wells are considered Class I injection wells. These are technically sophisticated wells that inject large volumes of hazardous and non-hazardous wastes into deep, isolated rock formations that are separated from the lowermost underground source of drinking water by many layers of impermeable clay and rock.

First nitrate, radiological and pesticide tests. First year that Agency tests drinking water supplies for nitrate, and small systems begin testing for radiological and pesticide parameters.

Land

Solid Waste Regulations. Agency completes first revision of ODH's solid waste regulations (HE-24). The 1976 rules became effective July 29 and required a Permit To Install (PTI) with detailed plans and a license. A call-in schedule was established for any sites not subject to HE-24 (e.g. captive industrial waste sites). Closure and post-closure requirements were specified and any site operating prior to July 29, 1976 had to submit an operational report to the director.

Federal Resource Conservation and Recovery Act (RCRA) enacted. Amended the Solid Waste Disposal Act (SWDA). The primary objectives of RCRA are to protect human health and the environment, and to conserve valuable material and energy resources. The most important aspect of RCRA is its establishment of "cradle-to-grave" management and tracking of hazardous waste, from generator to transporter to treatment, storage and disposal.

Toxic Substances Control Act (TSCA) implemented. TSCA required those who manufacture and process chemical substances and mixtures to develop adequate data with respect to the effect of chemical substances and mixtures on health and the environment. It also banned the manufacture, processing, distribution and certain uses of polychlorinated biphenyls (PCBs).

TSCA has a preemption standard which prevents state delegation of certain programs, including PCBs. TSCA also established the asbestos abatement and indoor radon programs.

“Resource Recovery from Municipal waste” study completed by Ohio EPA’s Land Pollution Control Office (predecessor of DSIWM/DHWM). Plan looked at the feasibility of resource recovery through analysis of existing disposal practices.

Air

Statewide hearings held on sulfur dioxide (SO₂) compliance plan. Due to failed attempts to gain Region V approval of air program SO₂ regulations, U.S. EPA wrote the rules for Ohio.

Crop damage is linked to air pollution. Studies conducted by the U.S. Department of Agriculture show the negative effects of air pollution on crop production.

1977

Top Environmental Events

Blizzard related power outages affect water and wastewater treatment plants in Ohio.

Administrative

Deferred Compensation Program was first offered to employees.

Ohio EPA numbered 514 employees.

Entry level engineers/scientists earned \$6.12/hour.

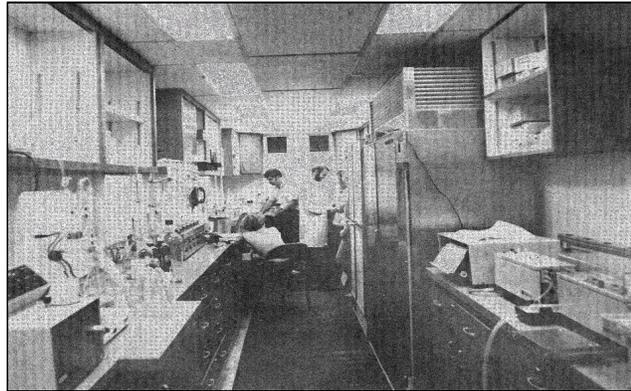
Agency’s budget was \$16.6 million.

Agency Newsletter renamed “Point Source.”

Water

Clean Water Act passed. Amendments to the federal 1972 Water Pollution Control Act were passed and the act was renamed.

Mahoning River standards adopted. Water Quality Standards were adopted with opposition from the steel industry.



Mobile Water Quality Lab created. Mobile Water Quality Laboratory does river and wastewater source investigations (started by Rich Shank). The lab was the precursor to the Division of Environmental Services lab. It was housed in a 320-square foot trailer, and had a total laboratory staff of two. Chemical analyses were limited to BOD, COD, nitrate/nitrite, TKN, phosphorus, pH, and conductivity.

Land

Ohio EPA contracts with Battelle Laboratories. The contract validated the Ohio EPA 1975 industrial waste survey, and involved the first hazardous waste plan prepared to address Subtitle C of the Resource Conservation and Recovery Act (RCRA).

1978

Top Environmental Events

The Great Lakes Water Quality Agreement of 1978 (GLWQA) signed by United States and Canada. This led to increased emphasis on funding and implementing programs to address the water quality prob-

lems in Lake Erie. In addition to a continued focus on phosphorus loading reductions, this new agreement added focus to controlling the discharge of toxic chemicals and the clean up of numerous "legacy" sites (Remedial Action Plan -RAP- areas) having polluted sediments.

Emergency response ranked second in nation.

U.S. EPA report "Survey of States on Response to Environmental Emergencies" lists Ohio as one of only 11 states with a dedicated emergency response program. The report ranked Ohio's program second in the nation.

Water

State's surface water quality standard rules changed.

Rich Shank (as staff member) and others assisted with major revisions of these rules. Ohio promulgated first subcategories of aquatic life use standards, including higher uses such as exceptional warmwater habitat and downgraded uses to recognize impacts of point source discharges.

Additional staff hired in Division of Public Water Supply

to begin conducting sanitary surveys of non-municipal community public water systems (nursing homes, trailer parks, housing subdivisions, etc.)

Land

S.B. 266 passed by Ohio General Assembly which is first step in Ohio's Hazardous Waste Management Program. This bill adds the first hazardous waste provisions to ORC 3734. When Governor Rhodes signed the legislation, he said that hazardous waste will be a top priority for the State of Ohio during the next several years.

Air

More than 12 ozone air alerts issued. This becomes Ohio's most pressing air pollution problem.

Air Enforcement. This marked the true beginning of the Agency's Air Enforcement Program. At this time, approximately 70-80 percent of major facilities were in compliance with air regulations.

1979

Top Environmental Events

State monies spent at Summit National site in Portage County to protect surface and ground waters. This site would later become a Superfund site.



Administrative

James Rhodes becomes governor for a second term.

James F. McAvoy appointed director.



Mr. McAvoy received an engineering degree from the Maine Maritime Academy. He served three years in the Navy, followed by 15 years in the private sector as an engineer and manager. Mr. McAvoy then worked as a management consultant for the State of Virginia and then joined the Ohio Department of Mental Health and Retardation in 1973. He served as deputy director in that department from 1977 to 1979.

Staff encouraged to work four 10-hour days a week (instead of standard five-day work week) to save energy. This policy lasted two years.

Agency analytical chemistry laboratory relocated from the mobile lab trailer to Concord Avenue facility, with 1,667 square feet of space.

Water

Initial Section 208 water quality management plans certified. The agency released numerous river basin Section 208 plans. These plans and similar documents from the areawide planning agencies addressed area-wide wastewater treatment needs in both large and small communities across the state. This paved the way for receiving federal grant monies for facility improvements.

Formal biological and water quality survey program initiated. Program leads to development of numeric biocriteria for Ohio water quality standards. Ohio EPA goes on to become recognized national leader in biological assessment methods.



Agency gains primacy for implementation of Safe Drinking Water Act after the passage of S.B. 45 and adoption of drinking water rules.

Air

More than \$1 billion spent by Ohio industries on air pollution control equipment since 1975.

First RACT rules issued for VOCs and ozone. The first in a series of Reasonably Available Control Technology (RACT) rules, i.e. RACT I, are issued on October 19 for volatile organic compound (VOCs) emissions to achieve the National Ambient Air Quality Standard (NAAQS) for ozone.

Chapter 2

1980s

Early Successes and New Challenges

Chem Dync



Stream Survey



Ground water sampling



Lake Erie improvements

1980

Top Environmental Events

Federal Superfund program established by Comprehensive Environmental Response Compensation Liability Act (CERCLA). Superfund established a program to address sites where there is a threat or actual release of hazardous substances into the environment. The goal of the program is to clean up contaminated sites through enforcement and/or fund-financed remediation efforts.



Administrative

Ten-year report on Ohio's environment issued by Ohio EPA. The report contains figures on air pollutant decline and monies spent on pollution equipment (air and water); hundreds of dumps closed since 1969.

Water

New public drinking water regulations require detail plan approval by the director prior to the construction, modification or operation of a public water system.

Land

S.B. 269 became effective. This bill did three important things to control hazardous waste in Ohio. First, Ohio's rules must be consistent with federal regulations. Second, it created the Hazardous Waste Facility Approval Board to issue permits. Finally, it set up a fee system under which generators of hazardous waste must pay a disposal fee for each load of waste they send off their property.

Air

Particulate emissions regulations were expanded to include the more stringent regulation of fugitive dust sources, for purposes of achieving the National Ambient Air Quality Standard (NAAQS) for total suspended particulates.

Director McAvoy interviewed by ABC news regarding acid rain. He specifically discussed Ohio EPA differences with U.S. EPA in air program regulations and Ohio's coal-burning power plants.

Governor Rhodes creates the Scientific Advisory Task Force on Acid Rain to review scientific information regarding acid rain and advise him of appropriate actions. An Acid Rain Section was created (in DAPC) as a result of the task force report.

1981

Top Environmental Events

Concern over PCB contamination. PCBs received special attention as a result of a New York natural gas company's line found to contain PCBs. The Office of Emergency Response assumed a lead role in sampling utilities' gas lines in Ohio. This led to Ohio EPA's first PCB cooperative agreement with U.S. EPA. Under this agreement, Ohio EPA received federal funding to conduct facility inspections as representatives of U.S. EPA for compliance with the federal PCB regulations.

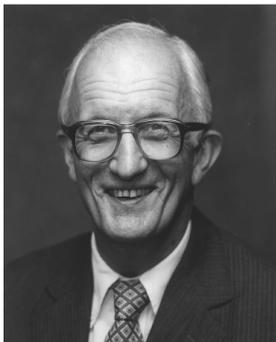
Two significant enforcement cases filed were Chem-Dyne Corporation (Butler County) and Georgehoff "Summit National" (Portage County). Both cases concerned hazardous waste dumps. The Chem-Dyne case led to one of the most significant Superfund decisions to date, which holds chemical companies individually (i.e.



"jointly and severally") liable for the total cost of clean up and remediation of a hazardous waste site (see 1985).

Administrative

Ohio EPA Director James McAvoy was nominated by President Reagan to head the Council on Environmental Quality; however, he was not confirmed by the Senate.



Wayne Nichols appointed director. Mr. Nichols graduated from West Point and held a Masters Degree in Civil Engineering from the University of Illinois. Mr. Nichols was a Brigadier General in the U.S. Army and was in charge of construction in Vietnam. He began his State employment career with Ohio DNR where he was deputy director for three years.

Division of Water Quality Monitoring and Assessment and the Division of Ground Water merge.

Quality assurance/control program established for the Agency analytical chemistry laboratory.

Fees. The Division of Public Water Supply (precursor to DDAGW), Division of Water Pollution Control, and the Division of Air Pollution Control initiated a fee system. The Division of Public Water Supply used fee money for services including review of detail plans, surveys of laboratories for certification, and certification of operators of public water systems. The Division of Water Pollution Control used fee money to help process Permits To Install (PTI) and NPDES permit applications.

Water

Division of Construction Grants established. The precursor of DEFA was established and began administering a \$19.3 million grant from U.S. EPA. The grant program offered 75 percent federal grants (with 25 percent local match) to villages, cities and county governments to plan, design and construct wastewater treatment facilities to correct existing water pollution problems.

Biological and Water Quality Survey program expanded. Division of Water Pollution Control (precursor to DSW), Surveillance and Standards Section expanded the program from an average of five study areas per year to 18 study areas.

Land

Ohio adopted its first hazardous waste rules on April 15.

All operating Treatment, Storage and Disposal facilities are permitted. On October 8, Ohio became the first state in the nation to issue permits to all of its 336 facilities.

Number of landfills decreases from 640 dumps/landfills in 1968 to 225 landfills.

Critical shortage of landfill life identified. Ohio's Solid Waste Management Plan identified this shortage as a major problem. The Division of Land Pollution Control developed a local/regional planning program to identify those counties that face landfill shortages within the next five years.

Division of Hazardous Materials Management created. Precursor of DHWM created to address the problem of hazardous waste generation, storage, treatment, disposal and transportation as outlined in S.B. 269.

Hazardous Waste Facility Board approved permits for three hazardous waste disposal sites. These sites were: Vickery Environmental, Inc. (a.k.a. Chemical Waste Management and Ohio Liquid Disposal, Sandusky County), EnviroSafe (a.k.a. Fondessy Hazardous Waste Landfill, Lucas County), and CECOS (a.k.a. Clermont Environmental Reclamation and NEWCO, Clermont County).

Air

RACT II Rules. The second set of Reasonably Available Control Technology (RACT) rules, i.e. RACT II, are issued on March 27 for the control of additional categories of volatile organic compound (VOCs) emissions.

1982

Top Environmental Events

Cruise ship Canadiana in the Cuyahoga River loses several thousand gallons of diesel from its fuel tanks. The Coast Guard called in the Atlantic Strike Team to assist with the clean up.

\$2.4 million surface cleanup finished at the Summit National site (Portage County).

Additional settlement monies were collected in a fund to be used to clean up the subsurface.



Administrative

Bioassay and analytical chemistry laboratories relocated from Concord Avenue facility to 1030 King Avenue facility, with approximately 7,000 square feet of space.



Entry level engineers/scientists earned \$7.96/hour.

Agency's budget was \$18.7 million.

Water

The Division of Public Water Supply discontinued free state laboratory services for required sampling and analysis. Public water systems were directed to use state certified private and commercial laboratories.

Chlorination of all community public water systems required by state law.

The Division of Construction Grants delegates U.S. EPA grant program. DCG assumed full delegation of the major functions of the program initiated in 1981.

Land

Insufficient funding results in unfilled vacancies in the Division of Land Pollution Control (precursor to DSIWM & DHWM).

Akron and Columbus agree to new incinerators for solid waste. Both the City of Akron's Recycle Energy Plant (Summit County) and the City of Columbus' Resource Recovery Facility (Franklin County) finalized agreements to initiate burning of solid waste at new incinerators.

Used Oil Directory published. As a result of the Used Oil Task Force, the Division of Land Pollution Control published the directory listing oil collectors, processors and re-refiners that collect used oil in Ohio. This Used Oil Directory fostered responsible oil recycling in Ohio.

Air

Leaded fuel and tampering investigations began. U.S. EPA authorized Ohio EPA's Division of Air Pollution Control to inspect gasoline stations to insure that leaded fuel was not introduced into cars designed for unleaded fuel. In addition, investigations were conducted of new and used car dealers and the repair industry for evidence of tampering of vehicles.

1983

Top Environmental Event

First criminal conviction under Ohio's hazardous waste regulations when John Campbell (Medina County) was found guilty of illegally transporting and storing hazardous waste. This investigation, with the assistance of undercover Rich Shank, led to the development of the Special Investigations Unit. This was the first criminal conviction in Ohio based on non-compliance with environmental regulations.

Administrative

Richard F. Celeste becomes governor.

Robert Maynard appointed director. Mr. Maynard earned law degrees from Georgetown University and Baylor University Law Schools. Prior to joining an Ohio law firm, Mr. Maynard was involved in the development of environmental law and policy as a U.S. Senate staff aide, Special assistant to the Solicitor of the U.S. Department of Interior, and as an attorney with the U.S. Department of Justice.



Employee newsletter, "New(s)Source," formerly called "Point Source," started in December.

Central District Office (CDO) merges with Central Office. CDO loses administrative support due to budget constraints and moves in with Central Office still located at the Seneca Hotel on East Broad Street. Each former Central District program became assimilated into its respective Central Office division, but still had the responsibilities to serve the ten CDO counties.

Water

Ohio EPA was delegated the Clean Water Act program for federal facilities and the pretreatment program by U.S. EPA.

Division of Public Water Supply began regulating schools that had their own water system.

VOC surveys conducted for community PWSs. Division of Public Water Supply began conducting a VOC survey of all Community Public Water Systems' untreated source water.

Land

Ohio authorized to administer Phase I of the federal hazardous waste program under the Resource Conservation and Recovery Act (RCRA). This gave Ohio EPA responsibility for inspections, compliance monitoring, and enforcement at permitted hazardous waste facilities.

1984

Top Environmental Events

Largest environmental settlement by a state agency in U.S. history.

Chemical Waste Management, Inc. settled for a \$10 million fine and \$10 million in improvements to the Vickery facility (Sandusky County) where PCBs were illegally stored and six hazardous waste injection wells leaked.



Significant Ohio EPA involvement in the cleanup of federal facilities began

when inspectors visited the Department of Energy (DOE) Feed Material Production Center located near Cincinnati. DOE said that Ohio EPA inspectors could tour the site but they had no authority under RCRA based on DOE's protection under the Atomic Energy Act. The inspection yielded many violations of hazardous waste laws and later that year we became aware of violations of CWA and CAA as well as uranium ground water contamination of the Great Miami aquifer. This began a long process of litigation, working with U.S. EPA, site investigation and cleanup. Similar events occurred at the DOE Mound and Portsmouth sites (with SEDO staff) and the Department of Defense (DOD) Wright Patterson Air Force Base near Dayton.

Administrative

Superfund and Remedial Investigation Unit created.

Division of Solid and Hazardous Waste Management (DSHWM) formed. The Division of Land Pollution Control and Division of Hazardous Materials Management merged to form DSHWM.

Water

First water samples analyzed for organic compounds by the Agency analytical chemistry laboratory.

First sediment samples analyzed for inorganic compounds (metals) by the Agency analytical chemistry laboratory.

Administrative

Land

Hazardous and Solid Waste Amendments (HSWA) strengthen RCRA. Main components of HSWA prohibited landfilling of hazardous waste under most conditions, prohibited land filling bulk non-containerized liquids on land, salt domes, or above drinking water; required a program for Underground Storage Tanks (USTs); and strengthened enforcement of RCRA by establishing criminal conditions and penalties.

Waste Technologies Industries permitted to construct and operate a hazardous waste facility. Hazardous Waste Facility Board issued the permit for the facility in East Liverpool (Columbiana County). This is the fourth incinerator in the nation to be sited since passage of federal hazardous waste laws.

Eleven Ohio sites receive Superfund money. U.S. EPA allocates the funds for the preparation of cleanup plans at 11 Ohio sites and preliminary studies at 16 other sites. \$6.06 million is allocated with another \$3.3 million set aside for actual cleanup actions.



Warren Tyler appointed director. Mr. Tyler earned a degree in secondary education from Cheyney State College in Pennsylvania, and had worked extensively in the banking industry. He entered public service in 1983 as director of the Department of Commerce and took the Ohio EPA directorship at Governor Celeste's request. Mr. Tyler's strength was in management systems, and he personally inter-

viewed all final job candidates to foster equal employment opportunities at Ohio EPA.

Agency staff are unionized through the Ohio Civil Service Employee Association (OCSEA). OCSEA is Local 11 in the American Federation of State, County and Municipal Employees (AFSCME) parent union. AFSCME is a nationwide organization and is the largest public employee union in the AFL-CIO.

Fee system established. The Ohio legislature authorized the establishment of a fee system that was to provide Ohio's 10 percent share of Superfund cleanup costs and pay for long-term maintenance at sites where cleanup was complete.

1985

Water

Top Environmental Events

Chem-Dyne settlement with more than 100 companies funds \$21 million cleanup. Ohio EPA and the State Attorney General reach a settlement with more than 100 companies that sent waste to the Chem-Dyne hazardous waste site (Butler County). The firms helped pay for the \$21 million cleanup of the site. This was the first site clean-up under Super-fund in Ohio.



The Division of Water Pollution Control has best managed wastewater pretreatment program in the region. DWPC received an award from U.S. EPA, Region V. The pretreatment program regulates the discharge of industrial wastes to publicly owned wastewater treatment plants, also known as publicly owned treatment works (POTWs).

Funding approved for 300 percent increase in ground water staff. The General Assembly approved sufficient funding to support this increase in the staff of the Ground Water Protection Section of the Division of Water Quality Monitoring and Assessment. Plans were developed to prepare a statewide ground water protection strategy.

First fish tissue samples analyzed for inorganic compounds (metals) by the Agency analytical chemistry laboratory.

Land

H.B. 445 raised hazardous waste fees. This is the first time fees were raised since H.B. 694 was enacted in 1982.

CECOS (Clermont County) ordered to temporarily cease accepting waste after a preliminary report indicated that ground water contamination occurred. The ground water was contaminated with heavy metals, PCBs, dioxin, and total organic halogens. The landfill also had an intentional discharge of leachate to a creek that was the source water for a community public water system.

Methane gas migrated from the City of Akron's Hardy Road landfill (Summit County) to several nearby homes. One home exploded, several others were evacuated, condemned and purchased by the City of Akron. This incident increased the awareness of methane gas migration. As a result, legislation was passed in 1988 and an emergency rule became effective in 1989.



animal fat in two tankers. When the tankers ruptured the elemental phosphorus ignited and resulted in several days of fire with toxic fumes. This spill took almost a year to clean up due to the rerouting of Bear Creek.

Superfund Amendments and Reauthorization Act (SARA) extended CERCLA for 5 years. It also created a fund for the cleanup of underground storage tanks containing petroleum. Title III of SARA created the Emergency Planning and Community Right-to-Know (EPCRA). EPCRA requires emergency release notification and chemical inventory reporting. It also required the establishment of local emergency planning committees (LEPCs).

Administrative

First personal computer in Agency was an Apple IIc utilized in the Division of Wastewater for tracking of operator certification information. The computer was given to the Agency by U.S. EPA.

Air

First computerized system of air pollution control monitors implemented by the Division of Air Pollution Control the largest in the U.S., with more than 400 sites.

DAPC begins to analyze new sources for toxic emissions. The Division of Air Pollution Control began using a new policy entitled "Review of New Sources of Air Toxic Emissions". This new policy required new sources of air toxic emissions be evaluated in order to limit public exposure from such emissions to a concentration below a level specified in the policy. The concentration was defined by comparison to a published occupational safety level, adjusted with extra safety factors to protect the general public.

Water

Ground Water Protection and Management Strategy signed by Governor Celeste. The strategy describes Ohio's ground water resources, summarizes the threats to ground water, outlines existing ground water programs, and recommends initiatives to better protect and manage ground water.

Safe Drinking Water Act Amendments and Reauthorization required a schedule for future regulation of additional contaminants, certain filtration requirements for surface water sources, a ban on lead solder, utilization of best available technology and monitoring of unregulated contaminants. In addition, the focus began to shift from treatment as the means to ensuring safe drinking water to source protection with the development of the Wellhead Protection Program.

U.S. EPA established the Office of Wetlands Protection reflecting an increased priority at the national level. The office later merged into the Office of Wetlands, Oceans and Watersheds.

DDAGW began regulating non-transient, non-community public water systems, which include places of business. Initial monitoring requirements included total coliform bacteria and nitrate.

1986

Top Environmental Events

Miamisburg train derailment in Montgomery County forces the largest inland evacuation in the history of the U.S. (approximately 40,000 people). CSX Railroad was carrying elemental phosphorus and

Air

RACT III Rules. The third set of Reasonably Available Control Technology (RACT) rules, i.e. RACT III, are issued on May 9 for the control of additional categories of volatile organic compound (VOCs) emissions.

1987

Top Environmental Events

Used syringes wash up at Edgewater Park (Cuyahoga County) on the shores of Lake Erie. This incident combined with wash-up incidents on the East Coast leads to the regulation of sharps and infectious waste.

Sherwin Williams warehouse fire in Montgomery County. The reportedly "fireproof" facility was located in one of the City of Dayton's wellfields, over an aquifer that is the sole source of drinking water for 1.5 million people. Emergency responders let the site burn to the ground rather than douse it with water that would immediately seep into the ground, carrying toxic solvents into the drinking water supply. Clean up and subse-

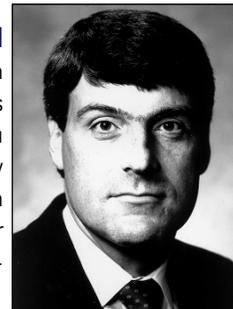


quent monitoring cost an estimated \$12 million. This event was the impetus for the City of Dayton to develop a comprehensive wellhead protection plan.

Administrative

Richard F. Celeste becomes governor for a second term.

Richard L. Shank appointed director. Dr. Shank worked in Ohio EPA's water and hazardous waste programs and earned a Ph.D. in Environmental Toxicology from Ohio State University in 1984. Dr. Shank had worked for Battelle Laboratories before being appointed director in June.



Central Office and Central District Office move to WaterMark from the historic Seneca Hotel located on East Broad Street. The new, four story, 97,500 ft. building on WaterMark Drive was located on the west side of Columbus. CDO staff were reunited and given

administrative support to function as a district office. Much of the old furniture was left behind, since the move brought about the use of cubicles for most employees.



Ohio EPA numbered 630 employees.

Entry level engineers/scientists earned \$10.38/hour.

Agency's budget was \$34.4 million.

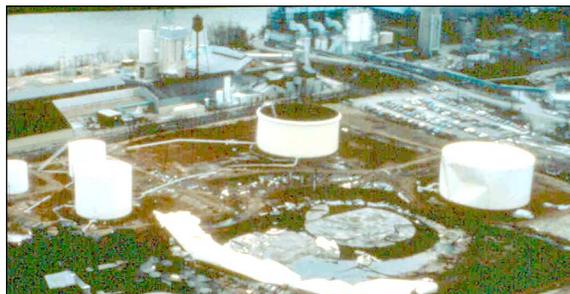
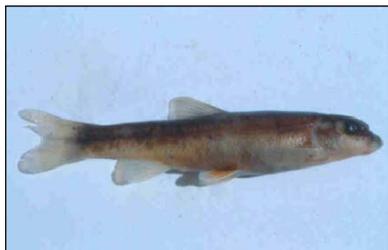
Water

Division of Ground Water created in February. Previously, it was part of the Division of Water Quality Monitoring and Assessment. The new division was to act as a catalyst in implementation of Ohio's Ground Water Protection and Management Strategy.

Surface water quality standards revised to emphasize monitoring and controlling toxins.

Sole Source Aquifers. The Pleasant City aquifer and the Catawba Island aquifer were the first aquifers in the state to receive designation as sole source aquifers by U.S. EPA.

First fish tissue samples analyzed for organic compounds by the Agency analytical chemistry laboratory.



coordinate the monitoring of diesel fuel in the Ohio River and spill containment and clean up efforts. The Division of Public Water Supply provided technical assistance to numerous water treatment plants to help protect the water systems from contamination.

Land

Infamous garbage barge from New York results in increased public awareness of out-of-state waste issues.

Corrective Action Section created in DSHWM. This Section was responsible for monitoring sites contaminated with hazardous substances.

Air

First air filter samples analyzed for inorganic compounds (metals) by the Agency analytical chemistry laboratory.

Air pollution toxicologist hired. Division of Air Pollution Control hired an air pollution toxicologist to further develop the air toxics program.

1988

Top Environmental Events

Ashland Oil diesel fuel spill. On January 2, the Ashland Oil company released more than three million gallons of diesel fuel at an oil refinery near Pittsburgh, Pennsylvania when a storage tank suffered a structural failure. Almost one million gallons of the diesel fuel flowed into the Monongahala River and subsequently into the Ohio River. The diesel fuel flowed down the Ohio River and caused every water treatment plant along the river to shut off their intakes. Many areas were evacuated as cities along the river struggled to provide water to their citizens. The Northeast District, Emergency Response Section worked with U.S. EPA, the United States Coast Guard, the Ashland Oil Company, and many other state and local agencies in Ohio and Pennsylvania to

Administrative

Ohio EPA designated as head of a 32 member State Emergency Response Commission that would oversee the Emergency Planning and Right-to-Know program. The fees submitted with the mandatory chemical inventory reports were distributed by the Commission as grants to fire departments to pay for special training.

Laboratory Services Rotary created. The rotary allowed the Agency analytical chemistry laboratory to charge for services and access the income for subsequent laboratory expenses.

First sediment samples analyzed for organic compounds by the Agency analytical chemistry laboratory.

Staff move and laboratory expands. Ecological assessment staff moved out of King Avenue facility and Agency analytical chemistry laboratory expanded to basement space. Bioassay and chemistry laboratory space reached 10,500 square feet.

Water

Pesticide Monitoring. All community public water systems required to begin annual monitoring for eight pesticides. Previously, just those using surface water as a source were required to monitor for six of these compounds once every three years.

New Water Quality Criteria. Water Quality based permitting for controlling toxic chemical and whole effluent toxicity hits full stride employing new water quality criteria and implementation policies. Environ-

mental risks are looked at with a “weight of evidence approach”, as opposed to the “independent application” of worst case scenarios. Philosophical differences with U.S. EPA over the application of biological monitoring data begin to arise.

Clean Water Act mandated effluent limits. All Publicly Owned Treatment Works were required to achieve effluent limits of high enough quality to maintain all applicable water quality standards no later than July 1. Alternatively, a court ordered consent decree could stipulate a schedule for achieving the treatment. The Agency’s water program and the Attorney General’s Office (AGO) invested a great deal of effort on stream surveys, permit development and legal negotiations to meet this milestone of water quality based permitting. The Agency referred over 200 municipalities to the AGO for not meeting the July 1, 1988 deadline.

Public water systems and farmers were hard hit by a drought during the summer and early fall. The governor opened the state Emergency Operations Center to coordinate the state wide effort to address the problem. The drought reinforced engineering standards for raw and finished water storage needs. Agency employees spent time coordinating with water systems and tracking water shortage problems.

Great Miami Sole Source Aquifer. The Great Miami aquifer received designation as a sole source aquifer by U.S. EPA.

Presidential candidate George Bush makes a campaign pledge for a new federal policy of “no net loss of wetlands.” The federal policy emphasis on the protection and regulation of wetlands continued through the Bush and Clinton administrations.

Toluene spill in Sandusky River threatened Fremont’s water supply.

Substitute H.B. 65 passed and required periodic evaluations of explosive gas concentrations at certain operating and closed landfills.

The first deadline for companies to report the nature and amounts of hazardous materials at their facilities was March 1988. This reporting requirement was a result of the Emergency Planning and Community Right-to-Know Act, a portion of the 1986 amendments to the Superfund program. More than 5,000 reports were received.

Air

Automobile inspection and maintenance (AIM) program began by Ohio EPA on February 1, in



Hamilton, Butler, Lake, Lorain, and Cuyahoga Counties, as required by the U.S. EPA. Local gas stations inspected vehicles for properly connected emissions systems, however, the function of emissions systems was not tested.

RACT rules. On May 25, Non-control Technique Guideline Reasonably Available Control Technology (RACT) rules were promulgated for several facilities throughout the state that were not regulated under RACT I, II, or III rules.

1989

Land

First infectious waste management law was passed (S.B. 243, later modified by H.B. 592) and first infectious waste treatment facilities are permitted. This law established infectious waste as a new and distinct waste type and provided a comprehensive regulatory framework for management.

First comprehensive solid waste rule revisions passed (H.B. 592). The rules updated the standards for all solid waste disposal facilities and set in motion a local and statewide planning process to promote recycling and to ensure that enough environmentally sound disposal options will be available to meet our needs in the future.

Top Environmental Events

Rebirth of Lake Erie. The quality of Lake Erie showed improvements throughout the 1980s and continuing into the 1990s. Phosphorus loading reductions played a key role in lessening cultural eutrophication and oxygen depletion of bottom waters. A resurgent sports fisheries and the reappearance of the bottom burrowing mayfly epitomized the re-birth of Lake Erie.



Administrative

Don Schregardus serves as deputy director of water programs. A U.S. EPA employee, Schregardus took a temporary interagency re-assignment serving as Ohio EPA deputy director of water programs for two years.

Division of Emergency and Remedial Response (DERR) was organized to bring together the Office of Emergency Response, the Special Investigations Unit and the Office of Corrective Actions; Jenny Tiell became the first Chief of DERR.

Division of Environmental Services established. The Division incorporated analytical chemistry, quality assurance, and bioassay operations from the Division of Water Quality Monitoring and Assessment (now Division of Surface Water).

Division of Water Quality Planning and Assessment and the Division of Ground Water created. The Division of Water Quality Monitoring and Assessment and the Division of Environmental Planning and Management reorganized to create these divisions.

Central District Office, now with a staff of 46, moved to their own offices on Westbrooke Drive near the I-270/Roberts Road interchange.

Water

Zebra mussels invade Lake Erie. The Division of Public Drinking Water coordinated with the Division of Water Quality Planning and Assessment and the Division of Water Pollution Control to address the infestation. All the public water systems using Lake Erie as a source were visited to determine the extent of the infestation. The mussels had also spread into the



Grand and Maumee rivers.

Volatile organic chemical monitoring. All public water systems serving 3,300 to 10,000 people were required to begin monitoring quarterly for volatile organic chemicals.

Certified operator survey. Beginning in January, the Division of Public Drinking Water contacted over 900 public water systems to ensure an adequately certified operator was in charge of the treatment plant. Sixty percent employed properly certified operators and the remaining were issued compliance schedules to have a certified operator employed.

Industrial wastewater control. The Division of Water Pollution Control initiated a permit program to control industrial users in municipalities which do not have wastewater pretreatment programs. Permits were issued to 31 industrial users.

Land

Solid Waste Management Districts. The State Solid Waste Management Plan set a goal to reduce and recycle 25 percent of the solid waste generated in Ohio. Local solid waste management districts were created to meet this goal.

Out-of-state waste disposal peaks at 3.7 million tons or nearly 20 percent of all the trash disposed.

DSHWM gained its base program authorization in June. Ohio received RCRA authorization and the compliance monitoring and enforcement program was recognized by U.S. EPA as outstanding in its timeliness and consistency.

Land Disposal Restrictions (LDRs) for the first series of wastes were authorized in Ohio in December. This restricted the land disposal of specific hazardous wastes until they met certain treatment standards.

Capacity Assurance Plan (CAP) was completed by the Division of Solid and Hazardous Waste Management which detailed hazardous waste generation and management capacity in Ohio over the next 20 years. CAP included an interstate agreement with the other Region V states and the formulation of a 50 percent goal for hazardous waste minimization in Ohio. U.S. EPA recognized Ohio's exemplary performance in the preparation of its CAP, and the input Ohio EPA made to the national capacity assurance effort.

Chapter 3

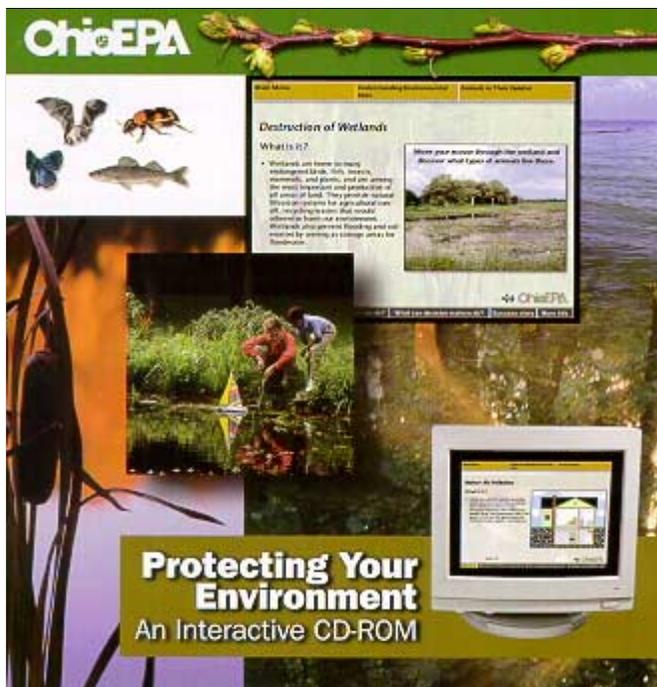
1990s

Technical Assistance, Pollution Prevention, and Environmental Education

Explaining drinking water protection



Adopt-A-School



Educational CD-Rom



Assistance with landfill closure

Top Environmental Events

Oil Pollution Act (OPA). This Act was signed into law in response to public concern regarding major oil releases. This followed the Exxon Valdez incident where a tanker ran aground on the Bligh Reef and released millions of gallons of oil into the Prince William Sound in Alaska. OPA improved the nation's ability to prevent and respond to oil spills by establishing provisions that expand the federal government's ability, and provide the money and resources necessary, to respond to oil spills. It also provided new requirements for contingency planning by industry and government, and preserved state authority to establish law governing oil spill prevention and response.

GSX Chemical Services of Ohio (Cuyahoga County) was shutdown by Ohio EPA because of operational problems. Judicial action was taken against the Cleveland facility because of numerous hazardous waste violations, spills, lab fires and explosions.

Administrative

Gerry G. Ioannides appointed interim director.

Mr. Ioannides graduated from Ohio State University with B.S. and M.S. degrees in Chemistry and Microbiology. He began his career with the Department of Health in 1976 and was one of the first employees with Ohio EPA's laboratory and later the chief of the laboratory. Mr. Ioannides served in this interim role for approximately 5 months and then served as assistant director.



Division of Environmental and Financial Assistance (DEFA) created following the conversion of the federal construction grants program (Office of Construction Grants) to the State Revolving Loan program. DEFA administers the Water Pollution Control Loan Fund that was authorized by the Ohio General Assembly in 1989 (ORC 6111.036).

Ohio Lake Erie Commission and the Lake Erie Protection Fund were created when the Ohio General Assembly passed H.B. 804. The Commission was established to ensure the coordination of policies and programs of state government pertaining to water quality, toxins and coastal resource management. The fund



was established to award small grants for research, monitoring, demonstration and education projects concerning Lake Erie, the shoreline and watershed.

New Water Quality Standards were adopted

by the Division of Water Quality Planning and Assessment. They were among the first in the nation to include ecologically based biological criteria for in-stream water quality. In addition, the rules included a numerical criteria for the protection of human health for more than 80 chemicals.

Land

Ohio EPA's landfill regulations were updated

in response to H.B. 592. These are commonly called the "BAT" rules (best available technology).

Air

Clean Air Act was amended - Created Title V permit program and upgraded federal air pollution standards on municipal solid waste incinerators, affecting facilities in Akron, Columbus and Dayton.

Air emissions reduced. During the period from 1980 to 1990, Ohio emissions of particulates, VOC, and sulfur dioxide were reduced by 74.8, 51.8, and 9.9 percent, respectively, and major strides were made in achieving the National Ambient Air Quality Standards.

Ozone non-attainment. Clean Air Act amendments classified all major metropolitan areas of Ohio as not meeting air quality standards for ozone which resulted in Ohio developing ways to reduce air emissions. Programs including E-Check, stage 2 vapor control at gasoline pumps and reductions of other industrial emissions were developed.

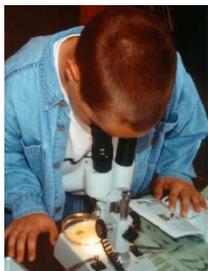
Laboratory capacity expanded. First air filter samples analyzed by the Division of Environmental Services for organic compounds (base-neutral acid extractables).

Pollution Prevention and Education

Pollution Prevention Act (P2) was implemented that focused industry, government, and public attention on reducing pollution through cost-effective changes in operation, production, and raw materials use. P2 includes conserving our resources and practices that increase efficiency in the use of energy, water, or other natural resources.

Ohio Environmental Education Fund. Governor Celeste signed H.B. 804 into law, creating the Ohio Environmental Education Fund.

Ohio Environmental Education Fund awards more than \$1 million annually in grants to primary and secondary schools, universities, environmental advocacy groups, industry associations, nonprofit groups and others for projects that increase awareness and understanding of environmental issues throughout Ohio. Monies credited to the Environmental Education Fund consist of half of all penalties collected by Ohio EPA air and water pollution control programs, as well as gifts, grants, and contributions.



manding a halt to all activities at Waste Technologies Industries' (WTI) incinerator until a full scale review of the permit was completed.

CECOS (Clermont County) pleaded guilty to a criminal charge for illegally dumping toxic waste into a drinking water supply and agreed to pay a total of \$3.5 million in civil fees and also agreed to permanently close.

Administrative

George V. Voinovich becomes governor.

Donald Schregardus appointed director. Mr.



Schregardus received a bachelors degree in physics and a masters degree in environmental sciences from Miami University. His career included 15 years with the U.S. EPA at the Westlake, Ohio office and as head of Water Enforcement at Region V. Before becoming director, Mr. Schregardus served as Ohio EPA's deputy director for water programs from 1989 to 1991. As of January

2002, Mr. Schregardus was the longest serving director of the Ohio EPA, eventually serving over 7.5 years.

Director gained authority to process hazardous waste permit renewals, which had previously been processed by the Hazardous Waste Facility Approval Board.

Governor Voinovich created the Operations Improvement Task Force (OITF) to evaluate state agencies and report on many improvement suggestions. These suggestions were then reported on by each agency and tracked for several years by the Governor's Office.

1991

Top Environmental Events



Protesters invade Director's Office. On December 17, ten Greenpeace protesters were arrested after chaining themselves to Director Schregardus' desk de-

Water

Division of Drinking and Ground Waters created by combining the Division of Public Drinking Water and the Division of Ground Water. John Sadzewicz was chief.

Land

Division of Solid and Hazardous Waste Management split to form the Division of Hazardous Waste Management and the Division of Solid and Infectious Waste Management in September.

Hazardous waste explosion results in manslaughter conviction. Organic Technologies (Licking County) was convicted of manslaughter after an employee died as a result of an explosion at the Newark manufacturing plant. The material involved in the explosion proved to be hazardous waste.

Air

E-Check legislation. Ohio EPA developed legislation to create an annual testing program (E-Check) for tailpipe emissions from automobiles.

New air rules for Cuyahoga County. In June and December, additional particulate emission control rules were promulgated for Cuyahoga County to achieve the National Ambient Air Quality Standards for particulates (PM₁₀).

Pollution Prevention and Education

Free pollution prevention assessments were conducted by the Pollution Prevention Section of DHWM. A P2 Assessment is an on-site survey of a company's operations to identify and evaluate opportunities to reduce wastes and pollution. After the assessment is complete a report that includes recommendations on improved operating practices, material substitutions, process modifications, and recycling is provided to the company. Estimated economic and environmental benefits are also provided to illustrate potential waste reduction savings.

Ohio Environmental Education Fund received 116 applications for funding and awarded \$593,873 to 34 projects in its first year.



Pollution Prevention Workgroup established.

Governor Voinovich establishes a workgroup of state agency directors and representatives of trade associations, environmental groups and industry to develop a pollution prevention strategy for Ohio.

1992

Top Environmental Events



DDAGW's Well-head Protection Program

was approved by U.S. EPA. This program provides support and guidelines to public water systems using ground water on how to determine a

drinking water protection area, inventory potential contaminant sources within the protection area, and develop protection strategies.

Administrative

Ohio EPA celebrated its 20th anniversary. Fifty of the original employees still worked at the Agency.

QSIP. The Agency began training all employees in "Quality Service Through Partnership," the state's version of total quality management.

Entry level engineers/scientists earned \$13.54/hour.

The Agency's budget was \$73.5 million.

Division of Environmental Services moved to Murray Hall on the OSU campus.

Square footage for laboratory and office space approximately doubled, providing space for the Division to add staff and equipment needed to expand services.

Water

Ohio EPA was delegated the Clean Water Act general permit program by U.S. EPA. Division of Water Pollution Control issued storm water general permits for industrial and construction activity.

Allen County Sole Source Aquifer. The Allen County area Combined Aquifer System received designation as a sole source aquifer by U.S. EPA.

Land

Out-of-state solid waste. U.S. Supreme Court decisions limit attempts by states to reduce disposal of out-of-state solid waste.



Composting Program established by DSIWM to provide an alternative to landfill disposal for biodegradable wastes.

Pollution Prevention and Education

Pollution Prevention Section split from DHWM to create the Office of Pollution Prevention. Governor Voinovich allocates \$500,000 of OEEF monies to educate small and medium sized businesses on pollution prevention.

1993

Top Environmental Events

Protestors arrested at White House. On May 18, the Washington Post reported that, "Fifty-three opponents of an Ohio incinerator (Waste Technologies Industries), including actor Martin Sheen, were arrested yesterday across from the White House after some hand-

cuffed themselves to a truck and others formed a circle around the vehicle."

Flooded mine leads to polluted streams. Due to the flooding of their Meigs Mine and the potential loss of eight hundred jobs, the Southern Ohio Coal Company (SOCCo) received authorization from Director Schregardus to discharge one billion gallons of untreated



acid mine water to nearby Meigs, Vinton, and Gallia County streams. The discharge resulted in the destruction of much of the aquatic life in approximately sixty miles of streams.

SOCCo paid approximately \$1.8 million in fines for damages through a U.S. EPA consent agreement. The company also agreed to monitor the streams to document the recovery of aquatic life.

Administrative

Division of Surface Water created by merging the Division of Water Pollution Control and the Division of Water Quality Planning and Assessment.

Water

Link Deposit Loan Program created. Ohio is the first state to provide Water Pollution Control Loan Funds (WPCLF) for nonpoint source pollution improvements to individuals through a linked deposit loan program. Instead of borrowing directly from the Fund, a linked deposit loan is made to the applicant by a private lending institution. The below-market interest rate for the loan is supported by a WPCLF-funded certificate of deposit with the lender. Linked deposits were first used in the Killbuck Creek watershed to establish an agricultural nonpoint source control program. The Ohio EPA has since expanded the availability of linked deposits to a wider variety of projects, such as urban stormwater runoff control, stream corridor restoration, forestry and land development best management practices.

Blue Ribbon Task Force on Water Resources Planning and Development convened by Governor Voinovich. The Task Force conducted an extensive study of Ohio's Water resources and recommended form-

ing the Ohio Water Resource Council to develop a plan to ensure the quantity and quality of Ohio's water resources.

Drinking Water Protection Fund and the Surface Water Protection Fund created by the General Assembly as part of the biennium budget. This landmark legislation (ORC 6109.30 & 6111.038) implemented new and increased fees to fund both the Surface Water and Drinking and Ground Waters programs.

First sediment bioassays conducted by DES.

Polychlorinated Ethylene contaminates aquifer at Lincoln Fields, Madison Township (Richland County). Over 300 private home wells and 20 commercial establishments were initially contaminated. Over 100 public water systems were identified within a two mile radius of the contaminant plume. Madison township was the most densely populated township in Ohio with separate public water systems.

Land

Hazardous waste generation decreased. Ohio companies produced the smallest amount of hazardous waste since Ohio EPA began keeping records in 1982.

Scrap tire management law passed (S.B. 165). This is the first state law that specifically addresses scrap tires. The law establishes the permitting, registration and licensing of scrap tire transporters and facilities.

On-Site inspectors hired. To ensure that Ohio's four large commercial hazardous waste facilities were operating safely, Governor Voinovich proposed mandating full-time, on-site inspections at EnviroSafe (Lucas County), Ross (Lorain County), WTI (Columbiana County) and Chemical Waste Management (Sandusky County).

Incinerator moratorium was enacted, which prohibits the Hazardous Waste Facility Board from issuing permits for new incinerators unless additional incinerator capacity is necessary.

Out-of-state waste fees challenged. Federal court resolves the challenge to the constitutionality of Ohio's 1:2:3 tiered solid waste disposal fees (National Solid Wastes Management Association v. Voinovich). Higher fees for disposal of out-of-state waste were changed to a flat rate for state fees. Disposal fees levied by local solid waste management districts were changed to a 1:2:1 ratio on in-district, out-of-district, and out-of-state waste, and remained controversial and the subject of litigation for several more years.

Pollution Prevention and Education

P2 initiative gets results. Governor Voinovich asks the top 100 toxic releasers in the state to voluntarily prepare pollution prevention plans. Over 160 facilities respond to this request and prepare plans as part of the Ohio Prevention First initiative.

1994

Top Environmental Events



Chevron Before

voluntary cleanup of potentially contaminated sites. It removed some of the environmental and legal barriers that have stalled redevelopment and reuse of contaminated properties.



Chevron After

VAP created. Ohio EPA's Voluntary Action Program (VAP) began as a result of S.B. 221. This program encourages the

Explosion at Shell Chemical plant near Belpre (Washington County), led to the release of ethylene dibromide into the Ohio River and required the cities of Ironton and Portsmouth to shut off their water intakes.

Administrative

Ohio Comparative Risk Project began which ranked potential threats to health, ecosystems, and quality of life in Ohio. Comparative risk is an effort to look at environmental conditions and compare threats to the environment holistically based on both science and public values. More than 20,000 Ohio citizens and scientists participated.

Staffing levels increase. A large budget increase leads to hiring efforts that bring staff levels to 1400.

Environmental justice. President Clinton issued Executive Order 12989 on environmental justice to focus federal attention on the environmental and human health conditions of minority communities and low-income communities and required federal agencies to make achieving environmental justice part of their mission. This resulted in Ohio EPA explaining how to address environmental justice in federal grant applications and was included in Ohio EPA's Comparative Risk project.

Office of Federal Facility Oversight (OFFO) was created in SWDO to manage and coordinate the investigations and cleanup of federal facilities in Ohio. OFFO works on federal facilities in SWDO and coordinates with DERR staff in the other district offices. Although DOE sites are still a significant portion of OFFO's work, there has been a steady increase in the amount of work related to DOD, including Formerly Used Defense sites (e.g., Marion River Valley Schools) and the Army's Ravenna Ammunition Plant (Portage County). The Department of Defense signed a MOA with the state to give Ohio EPA oversight authority at federal facility cleanups. Funding for this program is received through Cost Recovery Grants and Cooperative Agreements with the federal government.

CDO moves. Central District Office outgrows their offices and moves to Alum Creek Drive on the south side of Columbus. The new offices tripled the space available for staff and equipment.

Water

Fish Tissue Consumption Program funded. The General Assembly approved General Revenue Funds for the Fish Tissue Consumption Program, a partnership between ODNR, ODH and Ohio EPA (DSW and DES). For the first time, adequate funds were provided for the collection and analysis of fish tissue samples around Ohio to determine if the levels of lead, mercury, cadmium, pesticides and PCBs in fish samples warranted issuance of consumption advisories.

DES chemistry laboratory is certified as a drinking water laboratory under state regulations.

Drinking Water Program expands. The Division of Drinking and Ground Waters began regulating transient non-community water systems (restaurants, campgrounds, roadside rest areas, etc.).

First Community Public Water System Infrastructure Needs Survey conducted by the Division of Drinking and Ground Waters.

Land

Solid waste facilities. There were 57 licensed municipal landfills, 22 captive industrial landfills, nine licensed solid waste incinerators and 56 licensed transfer stations.

Ohio solid waste landfill rules were revised to incorporate new federal Resource Conservation and Recovery Act (RCRA) Subtitle D requirements and U.S. EPA granted primacy to Ohio EPA's solid waste regulatory program. DSIWM estimated that 18.4 years of landfill disposal capacity were available statewide.

U.S. Supreme Court decision limits the ability of local communities to direct solid waste to particular facilities (C & A Carbone v. Town of Clarkstown, New York). Another U.S. Supreme Court decision resulted in stricter controls on the management of ash from municipal solid waste incinerators (City of Chicago v. Environmental Defense Fund). These combined with the high cost of mandated Clean Air Act upgrades and local controversy about dioxin emissions all contributed to decisions by Ohio's four largest incinerators/resource recovery facilities (Columbus, Dayton, and two in Montgomery County) to close between 1994 and 1996.

Pollution Prevention and Education

Governor Voinovich announced the Ohio Pollution Prevention Loan Program (PPLP) to provide financial assistance to small and medium sized businesses to make improvements at their facility through pollution prevention activities. This includes buying or renovating machinery and equipment or architectural/engineering costs.

1995

Top Environmental Events

Unfunded mandates. The middle 1990s sparked an era of unfunded mandates rebellion by local governments against the cost of implementing state and federal regulations. Columbus Environmental Health Director

Mike Pompili led the charge by calling national attention to a U.S. EPA rule that required Columbus' drinking water system to test for an agricultural chemical used only on pineapples grown in Hawaii. Congress responded by giving U.S. EPA more leeway in setting new drinking water standards and by enacting a law that limits new mandates, unless the federal government assists in covering the cost.

Summit National Superfund site. NEDO oversaw final cleanup of the Summit National Superfund site in Portage County. Cleanup included excavation, on-site incineration and ground water collection, extraction and treatment. As of 2002, the ground water system remains in operation.



Administrative

George V. Voinovich becomes governor for a second term.

Land

Recycling goal. Ohio sets new goal to reduce or recycle 50 percent of all solid waste generated statewide, as set in the second State Solid Waste Management Plan.

Air

STARS. The first major information management system was implemented by the Division of Air Pollution Control. STARS, (State Air Resource System) was created in response to the 1990 Clean Air Act Amendments. With the software, staff can develop permits and track their status and progress. STARShip, the external interface developed later, allows regulated entities to submit Title V permits and emissions reports.

Ohio EPA's Title V Program was approved by U.S. EPA. The Title V Program was created by the 1990 amendments to the Clean Air Act. Under Title V of the amendments, facilities that have the potential to emit certain amounts of air pollution are required to apply for

and obtain a state-federal operating permit and pay emission fees. Ohio's emission rules are contained in Section 3745.11 of the Ohio Revised Code and Chapters 3745-77 and 3745-78 of the Ohio Administrative Code.

1996

Top Environmental Events

First Covenant Not to Sue under the VAP program is issued to Kessler Products in Mahoning County. This resulted in the creation of 40 jobs by Kessler Products.

Major landfill landslide occurred on March 9 at the Rumpke Hughes Road Sanitary Landfill in Hamilton County. This incident resulted in the largest civil penalty in the history of Ohio EPA's solid waste program: \$500,000 in penalties and \$500,000 in contributions towards environmentally related projects. DSIWM oversaw remediation.



E-Check program began in the Cincinnati, Cleveland, Akron, and Dayton municipal areas in January.



Water

Safe Drinking Water Act Amendments and Reauthorization. These amendments focused on setting a new priority for how contaminants get selected for regulation. The Drinking Water State Revolving Loan Fund, Source Water Assessment and Protection Program, Consumer Confidence Reporting Requirements, and expanded certified operator requirements were included in the Amendments.

Revised antidegradation rules were adopted to comply with the criteria established by the Ohio General Assembly (ORC 6111.12) and the "Metroparks" Ohio Supreme Court decisions.

Land

Cessation of Regulated Operations (CRO) program became effective on July 1, as a result of H.B. 98. The CRO program helps to ensure hazardous substances are properly removed from facilities before they are closed or abandoned.

C & DD landfills. Agency's first rules to exclusively regulate construction and demolition debris (C & DD) landfills become effective in September.



Scrap tires. Senate Bill 165 (effective March 1) gave Ohio EPA new authority to regulate scrap tires. This comprehensive regulatory program governs the transportation, collection, storage, recycling and disposal of scrap tires. It also established approximately ten million dollars in funding over a five-year period to cover tire removal actions.

Corrective Action Program. U.S. EPA authorizes Ohio's Resource Conservation and Recovery Act's (RCRA) Corrective Action Program. This provided Ohio with the authority to require permitted facilities to institute corrective actions at their facilities as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any waste management unit at the facility, regardless of the time at which waste was placed in the unit. Ohio's authorization for RCRA Corrective Action directly impacts the 48 permitted facilities in Ohio and any facilities to whom Ohio issues a post closure permit. In addition to the 48 permitted facilities, U.S. EPA lists approximately 430 facilities that do not have permits but corrective actions can be imposed on them by a federal or state enforcement order.

Dry Cleaners Initiative. The Division of Hazardous Waste management implemented a Dry Cleaners Initiative. As part of this initiative, Ohio EPA provided technical assistance to Ohio dry cleaners through the preparation of an environmental guide with a summary of environmental laws, fact sheets and compliance visits. The hazardous waste, air emissions and wastewater generated by dry cleaners can pose a threat to the environment and to public health and safety. DHWM offered dry cleaners the opportunity to participate in an on-site compliance assistance visit program that resulted in 227 visits.

Solid waste facilities. There were 54 licensed municipal landfills, 12 industrial landfills, 10 residual landfills, and 53 licensed transfer stations. A total of ten incinerators were licensed, however only three were operating.

Air

E-Check program in Cincinnati is stopped in August due to concerns about the accuracy of the emissions data provided by the contractor running the program.

Expanded laboratory capacity. First air canister samples analyzed by DES for volatile organic compounds (VOCs).

Pollution Prevention and Education

Small Business Assistance Office (SBAO) began providing free confidential technical and compliance assistance to businesses with less than 100 employees in counties within CDO's jurisdiction.



Adopt-A-School. Central Office employees begin helping local elementary school children as part of the Adopt-A-School Program. Several Ohio EPA district offices also instituted Adopt-A-School Programs.

1997

Top Environmental Events

Hazardous waste criminal convicted. The Division of Emergency and Remedial Response, Special Investigations Unit (SIU) assisted in the prosecution of Noble Cunningham, one of the first environmental violators to appear twice on America's Most Wanted television program. Mr. Cunningham accepted and illegally stored hazardous waste on his farm. In 1988, the SIU searched and sampled the hazardous wastes stored at the farm and informed Cunningham to properly dispose of the waste. Mr. Cunningham, under cover of darkness, had truckers transport hundreds of tons of the hazardous waste to Atlanta, Georgia where he attempted to dump the hazardous waste into a sanitary landfill outside the City. Mr. Cunningham then went into hiding, but was eventually caught and was sentenced in March to over four years of prison and \$157,000 in penalties.

Industrial accident causes fatality and releases chemicals.



CDO staff responded to an explosion at the Georgia Pacific Resins Plant in Columbus (Franklin County) on September 10. The explosion resulted in the release of a large quantity of phenolic resin and smaller quantities of other chemicals within the facility. One Georgia Pacific employee was killed, 13 employees were treated for injuries, and 15 homes were evacuated. The blast was felt over three miles away from the facility. The incident was the impetus for U.S. EPA and the Occupational Safety and Health Administration (OSHA) to develop national guidance on how to avoid phenol-formaldehyde runaway reactions.

ELIMS. Electronic Laboratory Information Management System (ELIMS) brought on line by DES for tracking of inorganic sampling results.

Water

Great Lakes Water Quality Initiative. Rules adopted to implement the federally mandated Great Lakes Water Quality Initiative (GLI). Rules were developed with the assistance of advisory groups.

Ohio EPA assists flood victims. March flooding in



seventeen southern Ohio counties caused the Agency to staff the State Emergency Management Center fifteen hours a day in order to address Ohio EPA flood related issues. Governor Voinovich declared a state of emergency and the area was declared a disaster area by the federal government. Debris management was a major issue and all flood related solid waste was designated as demolition debris to ease disposal. DSIWM assisted in the disposal of all the debris from the cleanup. Initially 37 public water systems were on water use advisories due to flooded and contaminated wells. In addition, seven wastewater treatment plants were offline or damaged.

Administrative

Performance Partnership Agreements with U.S. EPA began giving Ohio EPA potential flexibility in addressing its priorities while still following federal requirements.

TAS. The Agency begins using TAS (Time Accounting System) an electronic means of preparing time cards, completing supervisor's sign-off and managing payroll.

Ohio EPA numbered 1400 employees. Entry level engineers/scientists earned \$16.17/hour.

Agency's budget was \$117.7 million.

VAP laboratory certification program, including staff, transferred to DES.

Audit Bill becomes effective. Substitute Senate Bill 138 became effective which created Ohio's environmental audit privilege and immunity law. Ohio codified this law in Ohio Revised Code 3745.70 to 3745.74. Depending on the circumstances, this law allows the owner or operator of a facility to make a voluntary disclosure to the state to receive immunity against enforcement action. A proper disclosure does not guarantee that the party will receive administrative and civil penalty immunity for the violation(s) disclosed. Nor is a disclosure an automatic request for immunity. Amended Substitute Senate Bill 219 later amended this bill, signed by Governor Voinovich on July 1, 1998. The law will sunset on January 1, 2004.

Drinking Water SRF. DDAGW began implementing the Drinking Water State Revolving Loan Fund as a result of 1996 Amendments to the SDWA. The fund was established to assist public water systems in financing needed infrastructure improvements. Loans to eligible systems are available at or below market interest rates.

DES named primacy laboratory. The Division of Environmental Services (DES) chemistry laboratory is named the state drinking water primacy laboratory. Previously, the ODH laboratory served as the state drinking water primacy lab.

Laboratory certification staff move. The drinking water laboratory certification program, including five staff, was transferred from ODH to Ohio EPA, DES in late June.

Air

Proposed E-Check modifications. General Assembly passed a bill purported to make the E-Check program more simple. The bill would have changed the test from “enhanced” to “basic” Governor Voinovich vetoed the bill.

U.S. EPA proposes stricter standards for ozone and particulates and wants utilities to do more to control nitrogen oxides emissions. A group of northeast states petition U.S. EPA to get Ohio and others to do more to control ozone. Governor Voinovich opposed the proposed new standards.

DAPC began issuing Title V permits in June. Facilities that have the potential to emit certain amounts of air pollution are required to apply for and obtain a Title V operating permit and pay emission fees. Fee money is used for air pollution monitoring, inspections and for providing technical assistance.

WTI Permit became effective. The final Part B permit for Waste Technologies Industries (WTI) in Columbiana County became effective. The incinerator had been operating since 1993 under interim standards with complete Part A and Part B permits submitted.

“Governor’s Awards for Excellence in Environmental Protection Research” to the best junior and senior high school science projects at State Science Day. Many Ohio EPA employees serve as judges for local and district science fairs as well as the state championship.

1998

Top Environmental Events

Highest level of PCBs in U.S. Ohio EPA led the multi-agency effort to remediate an unnamed tributary to the Ottawa River which reported the highest level of PCBs detected in waters of the United States at 74,000 ppm. 16,000 tons of PCB-contaminated sediment were removed from the tributary.



Pollution Prevention and Education

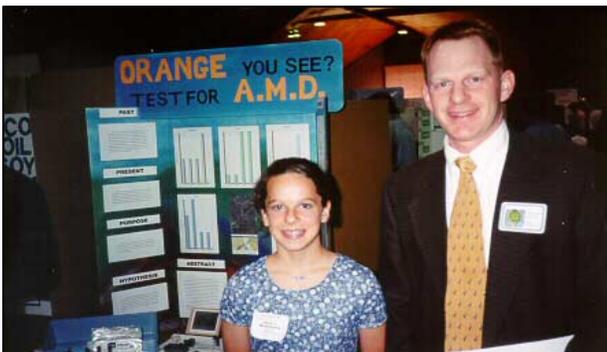
OPP receives a national award for innovative programs for the Ohio Prevention First Initiative.

Office of Environmental Education. In August, the director combined the Ohio Comparative Risk Project with the Ohio Environmental Education Fund to create the Office of Environmental Education.

Student Award Program. The Office of Environmental Education begins a multi-year partnership with the Ohio Academy of Science to select recipients of the

Stickney and Tyler Street landfills capped.

The Stickney and Tyler landfills are located adjacent to the Ottawa River in Lucas County. The Stickney Avenue Landfill was used for the disposal of municipal waste between 1958 and 1966. The Tyler Street Dump accepted a variety of wastes (e.g., solvents, oil, sewage, heavy metals, paint) from about 1951 to the early 1970s. U.S. EPA ordered both sites properly capped to reduce risks to human health and the environment. U.S. EPA Region V gave a grant to the Division of Emergency and Remedial Response to provide an extensive technical review of the capping, including ground water flow modeling. As of December 2001, DERR staff are still reviewing operation and maintenance and conducting an evaluation of risk reduction. U.S. EPA estimated the cost for capping the landfills at \$26 million.



Administrative



Central Office moves from WaterMark to three floors of the Lazarus Government Center located on South Front Street in downtown Columbus. The new location consolidated staff from several buildings into this one location. The facility is environmentally friendly

with recycled carpet and energy efficient lighting, heating and ventilation systems.

DEAL. The Agency created the Developing Excellent Agency Leaders (DEAL) program. This program helps Ohio EPA staff develop and enhance their leadership skills through core courses and group projects.

Review of funding needs. An advisory committee composed of Ohio EPA employees, representatives of industry, and environmental advocacy organizations conducted a review of funding needs and program activities of DHWM and DERR. This was required by Ohio's State Fiscal Year (SFY) '98/'99 budget bill. The bill required the director to submit a report of the committee's recommendations to the Speaker of the House of Representatives and the President of the Senate. Many of the committee's recommendations were incorporated into each division's strategic management planning and biennial budget processes for SFY 2000/2001.

ELIMS. Electronic Laboratory Information Management System (ELIMS) brought on line by DES for organic samples.

First turtle tissue samples analyzed by DES for metals, pesticides and PCBs.

wide committee reviews and selects the recipients based on the compliance record and operations of each water system.

First Ohio Drinking Water State Revolving Loan is awarded to the Village of Mendon for \$242,067.

Wetland Protection rules. New water quality standard rules designed to protect wetlands become effective on May 1. This work was funded in part with U.S. EPA special grants and reflected the continued national emphasis on assuring "no net loss of wetlands".

Ohio Water Resources Strategic Plan drafted by the Ohio Water Resources Council. This plan identifies actions for ensuring high quality water resources.

Land

Marion investigations. Community and regulatory agency concerns increased at the River Valley Schools complex and at other various sites throughout Marion County including the former Marion Engineer Depot and Scioto Ordnance Plant. This resulted in increased investigations by several agencies, including Ohio EPA, the Army Corps of Engineers, Ohio Department of Health, and the Agency for Toxic Substances and Disease Registry (ATSDR). These investigations focused on the presence or absence of chemical and radiological contaminants and the incidence of leukemia among Marion County residents for the years 1992-1996.

Hazardous waste rules. Rules created as a result of H.B. 435 allowed Ohio to change their system for modifying hazardous waste permits. The new rules created a permit modification process which closely mirrors the federal permit modification system. This process allows for enhanced public participation and defined time lines for Agency action on permit modification requests.

Scrap tire cleanup. Ohio EPA completed the first state funded clean up of scrap tires using the tire disposal fee account. Over 4 million passenger tire equivalents were removed



Before

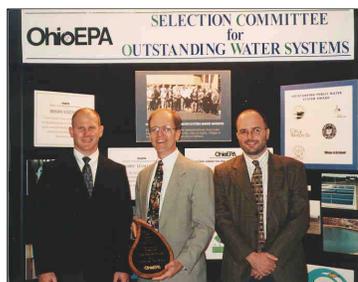
from the ReGenesis Tire site in Summit County.



After

Water

DDAGW awarded its first Outstanding Public Water System Awards to recognize superior achievement in drinking water treatment and operations. The six categories for awards are based on water system type and size. Recommendations are made by each district and a state-



Removal of plutonium-contaminated soils at the DOE Mound site (Montgomery County) was completed and the land was returned to the City of Miamisburg for use as a park.

New used oil regulations, enforced by the Division of Hazardous Waste Management, became effective. The new rules apply to all forms of used oil recycling, whereas the old rules only regulated used oil burned for energy recovery. Any person who markets, generates, burns used oil to recover its energy or re-refines/processes used oil is subject to the used oil rules.

New hazardous waste regulations help save money. New regulations allowed generators to treat hazardous waste in tanks or containers without a permit as long as they comply with certain standards. This significant change affected thousands of hazardous waste generators in Ohio by allowing them to reduce the expense of sending certain wastes off-site for treatment.

Air

Ambient air standards met. Ohio met all of the ambient air standards identified in the 1990 Clean Air Act Amendments.

Pollution Prevention and Education

Ohio Materials Exchange. DSIWM, OPP, and OEEF support the Ohio Materials Exchange, a state-wide newsletter which helps to link unwanted materials or byproducts with other businesses interested in using those materials.

First use of Water Pollution Control Loan Funds (WPCLF) for creek bank conservation. The Division of Environmental and Financial Assistance's WPCLF provided a low-interest loan for \$110,000 to The Nature Conservancy for the purchase of a 154 acre permanent conservation easement along Ohio Brush Creek in Adams County.

Best web site. Pollution Prevention (P2) web site was acknowledged by U.S. EPA as one of the best sites in the nation to obtain information on pollution prevention.

Employees began participating in the Ohio Reads Program with local schools.

1999

Top Environmental Events

Dura Avenue Landfill cleanup. After nearly ten years of negotiating a judicial consent decree for the Dura Avenue Landfill (Lucas County), Ohio EPA reached agreement with the City of Toledo and several of the industrial defendants for site clean up.



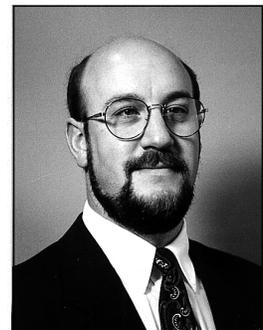
Tire fire at Kirby Tire Recycling in Wyandot County (August 21-25). Approximately 5-7 million tires burned out of an estimated total of 20 million tires on-site. More than 50 Agency staff responded to the

fire and Ohio EPA has accepted responsibility for ongoing remedial work and sampling. Funds from DSIWM's Scrap Tire Management Fund were used to accelerated fire lane development and the clean up of over 600,000 tires.

Administrative

Bob Taft becomes governor.

Christopher Jones appointed director. Mr. Jones earned his bachelor's degree from Ohio Wesleyan University and a law degree from Georgetown University Law Center. He previously served as legislative director for Ohio Congressman Mike DeWine, was an attorney in private practice, and served as chief for the environmental enforcement section of the Ohio Attorney General's Office.



George B. Garrett Award.

Director Jones presented the first George B. Garrett Award for Professional Excellence to 12 employees nominated by their peers at an annual employee recognition meeting. The award was named to honor Mr. Garrett, a dedicated public servant, who spent 34 years with the Ohio Department of Health and

Ohio EPA working for the protection and restoration of Ohio's water resources.

Budget results in staff reassignments. In response to budget shortfalls, DERR returned the PCB program to U.S. EPA, transferred certain programs to other divisions and districts and reassigned 21 staff to critical vacancies within the Agency.

Rural Hardship Grants. DEFA developed and implemented Rural Hardship Grant program for replacing failing septic systems. Ohio EPA was nationally innovative with this one-time appropriation of federal funds.

Register of Ohio. S.B. 11 passes and authorizes the use of advisory committees in developing rules and requires the electronic publication of a Register of Ohio as a means of giving notice of and information about agency rule-making.

Division of Emergency and Remedial Response received the Mobile Field Screening Lab on March 30. The lab provides staff with innovative field screening methods that can be conducted onsite. The screening data can then be evaluated to efficiently select final sampling points for comprehensive laboratory analyses.

Agency Receives Gore's Hammer Award. Ohio EPA has been part of a multi-state/Department of Defense (DOD) team called the Defense and State Cooperative Agreement Guide Team. This team revised the Cooperative Agreement Guide that establishes the process for DOD to provide funding for state oversight of site investigations and cleanups at defense sites across the nation. On May 20, this team was awarded Vice President Al Gore's Hammer Award for "building a government that works better and costs less".

gram expands the existing Wellhead Protection Program (see 1992 bullet item) to include surface water sources of drinking water.

Members of DDAGW received the Quality Innovator's Award from Governor Taft on May 6. The team developed a coordinated approach to using statistics to evaluate permits, closures, enforcement actions, compliance issues, and cleanup projects. The team was also asked by U.S. EPA to review the DRAFT Unified Guidance for Statistics.

Pesticides in Drinking Water Special Study. The Division of Drinking and Ground Waters completed a 4 year study (1995 -1999) that determined the occurrence of commonly used pesticides in the finished water of public water systems using surface water sources. The Division used the study results to adjust the timing and frequency of pesticide sampling required under the Safe Drinking Water Act in order to more accurately determine pesticide exposure concentrations. In addition, this information is being used to make informed decisions regarding both the need for source water protection and additional treatment for water systems that have elevated exposure levels.

First comprehensive Total Maximum Daily Load (TMDL) in Ohio was completed by DSW for the Middle Cuyahoga River.

Ohio Rapid Assessment Method for wetlands. As a follow up to rules adopted in 1998, the Division of Surface Water released a document entitled Ohio Rapid Assessment Method for Wetlands (ORAM v 4.1). It provided Ohio EPA staff and consultants a common methodology to assess wetland quality and guide regulatory decisions.



SWIMS. The Division of Surface Water implemented SWIMS (Surface Water Information Management System) a software program that allows the drafting and tracking of NPDES permits. SWIMware, the external interface, provides the means for regulated entities to submit permit applications and submit monthly reports electronically.

Laboratory capacity expanded. Drinking water laboratory certification program responsibilities at DES are expanded to include review of laboratory certification applications and plans; one staff person from DDAGW is transferred to DES along with the change in program responsibilities.

Compliance Assistance Group assists Mexican wastewater plant. In response to a training request from the U.S./Mexico Foundation for Science staff from the Division of Surface Water traveled to Mexico to

Water

U.S. EPA approved Ohio EPA's Source Water Assessment and Protection (SWAP) Program.

U.S. EPA commended the Agency for developing "one of the best source water protection programs in the country" and acknowledged our "outstanding efforts to get public and stakeholders involvement in the process." This pro-



participate in a comprehensive evaluation of the Nuevo Laredo Wastewater Treatment Plant. The request recognized the outstanding reputation that the Division's Compliance Assistance Group has earned for helping treatment plant operators maximize the performance of Ohio plants. The operators of the Nuevo Laredo plant were very appreciative of the expertise shared by Ohio EPA staff.

Governor Taft formed a Drought Advisory Task Force to assess the implications of the 1999-2000 drought. The Division of Drinking and Ground Waters conducted a Source Water Capacity Survey of all Community Public Water Systems to help assess the impacts of the drought on Ohio's water supplies. DDAGW also produced monthly water use advisory maps.

Land

DHWM staff began promoting integration of pollution prevention during facility inspections.

Remediated site becomes park. The Agency worked with the City of Marysville and Industrial Recovery Capital Holdings Corporation to convert a contaminated former brass foundry to a public park, now known as Eljer Park. Clean up of the property and construction of the park facilities were completed in June.

Survey of old federal facilities. In response to the investigation at River Valley Schools in Marion, OFFO conducted a survey of all Formerly Used Defense Sites in Ohio to determine if school or school-related activities were occurring on these sites. Ohio EPA found 11 sites where school activities occurred and extensive reviews of historical documentation and site walk-over surveys were completed at these sites.

SWDO responds to tornado damage in Hamilton and Clinton Counties. DSIWM SWDO staff assisted in the disposal of all the debris cleanup.

Air

Tree-Planting. At Governor Taft's request, Ohio EPA instituted a program to provide for a portion of air permit penalties to go towards tree-planting efforts throughout the state.



Pollution Prevention and Education

Agency received the "Excellence in Leadership Award" from the Environmental Educators Council of Ohio for "Commitment to Advancing Environmental Education in Ohio."

Ohio is recognized as a national leader on incorporating P2 into enforcement actions (76 as of June, 1999).

Environmental self-assessments. SBAO developed an Environmental Self-Assessment guide and started conducting environmental compliance workshops for small businesses.

Ohio had the best Pollution Prevention Loan Program in the U.S according to the Japan Development Bank in Tokyo.

Loans support pollution prevention activities. The initial \$5 million dedicated in 1994 to the Ohio Pollution Prevention Loan Program was fully utilized by 25 loans that were estimated to prevent: 4.2 million pounds of solid waste, 37,000 pounds of hazardous waste, 1.5 million pounds of air pollution, and over 14 million gallons of wastewater. Additional 200 million pounds of solid waste and 27 million gallons of wastewater were recycled.

Chapter 4

2000s

What lies ahead



2000

Top Environmental Events

State Issue 1 passed. Voters passed a referendum to allow the sale of State bonds to finance the Clean Ohio Fund. This program will provide support for green space preservation, outdoor recreation, brownfield redevelopment, contaminated site remediation, and farmland preservation.

Fertilizer tank spill. Staff from Ohio EPA's DERR and other federal and local officials responded to a 1.5 million gallon fertilizer tank spill that impacted local waterways in Marion County.

Administrative

Twenty-one Ohio EPA employees were recognized through the statewide Innovation Ohio Program.

Permit authority transferred to Department of Agriculture. S.B. 141 transfers permitting authority for the construction and operation of confined animal feeding operations from Ohio EPA to the Ohio Department of Agriculture.

Water

Employees take second place in national training competition. Trainers from DSW's Compliance Assistance Group placed second in the nation in the "Most Improved Small Wastewater Treatment Plant" category in U.S. EPA's Facility Operation and Maintenance Competition. This effort illustrated positive outreach and training on proper wastewater treatment operation to the many small communities in Ohio.

Sludge legislation was passed. H.B. 197, which enabled Ohio EPA to implement the federal sludge management program, took effect March 17



Sampling at Buckeye Egg Farm. A total of 356 water and manure samples were analyzed from Buckeye Egg Farms (313 in the

period of July - September) in support of the ongoing litigation by Ohio EPA.

Class V injection well regulations. New federal rules banned construction of new cesspools and Class V automotive disposal wells. Existing cesspools and Class V automotive disposal wells will be required to close by 2005 or 2007, respectively (in some cases sooner).

DRINK. The Division of Drinking and Ground Waters implemented DRINK (Drinking and Ground Water Information Network). This software tracks water source and treatment plant inventory information, monitoring data and tracks surveys conducted on public water systems. DRINKware, the external interface, provides the certified laboratories and public water systems a method of electronic submittal of monitoring data.

Lake Erie Lakewide Management Plan (LaMP). Ohio EPA, DSW served as the state lead to develop the Lake Erie Lakewide Management Plan (LaMP) and Lake Erie LaMP 2000 document. Mercury and PCBs were designated as critical pollutants for priority action. A number of other chemicals, metals, nutrients, bacteria and suspended solids were also identified as Lake Erie LaMP pollutants of concern.

Water Resources Restoration Sponsor Program (WRRSP). Provides funds to publicly-owned treatment works to finance planning and implementation of projects that protect or restore water resources, ensuring either maintenance or attainment of aquatic life uses under Ohio Water Quality Standards. Publicly owned treatment works that apply for Water Pollution Control loans are eligible for a reduced interest rate if they agree to implement a water resources restoration project.

Land

Schools move from contaminated site. Director Jones announces agreement to build new schools for River Valley Schools in Marion County (see 1998 River Valley Schools).

Disaster clean-up efforts and training. DSIWM assisted with clean up efforts after the second major



tornado to strike Xenia within the last 25 years. During a disaster, DSIWM provides technical assistance to the local communities to help them with segregating and properly managing their debris. This usually in-

volves helping the local communities with setting up temporary storage sites and getting that waste moved to appropriate disposal facilities or recycling locations. To prepare for future events, DSIWM worked with Ohio EMA to develop a training course for local disaster relief efforts. The course was presented at nearly a dozen counties and will continue as requested.

New “Plain English” hazardous waste regulations adopted. The Division of Hazardous Waste Management rewrote the Cessation of Regulated Operations (CRO) Program rules in “plain language.” The new rules are in an easy to understand format, eliminating the need for the regulated community and the public to read both the statute and rules to determine regulatory requirements. These are Ohio EPA’s first rules written in “plain language” style.

Air

Challenges to revised ozone and particulate standards. The U.S. Supreme Court decides that U.S. EPA has the authority to set ambient air quality standards and does not have to consider the cost/benefit of the revised standard. However, the Court also upheld the State of Ohio’s (and Michigan’s and West Virginia’s) argument that U.S. EPA’s implementation plan was unlawful. This limited U.S. EPA’s ability to enforce the revised ozone standard.

Air permit compliance increases. Compliance for air regulations for major facilities increases to 95 percent.

Pollution Prevention and Education

Scholarship program initiated. OEE developed a new environmental and engineering scholarships program. This program was created to encourage studies in environmental science and engineering, provide additional motivation for students to enter the field of environmental protection, and award merit-based scholarships to outstanding undergraduate students to further their education and enhance their employability in environmental fields. A maximum of \$50,000 in scholarships is available each year for the three-year pilot program.

2001

Administrative

Budget cuts impacted the entire Agency, including staff reductions in the Office of Pollution Prevention and the Division of Environmental Services.

Expanded laboratory capability. Due to concerns about possible environmental impacts of a compound used in the manufacture of carbonless paper (SAS-305), DES developed the capacity to analyze worm tissue and plant samples for this class of semi-volatile organic compounds.

Director’s Office reorganized. A functional structure was adopted to better meet expectations of management.

Permit processing improvement report for the air and water programs provided to the General Assembly. The Agency provided an analysis of Air and Water Program permitting efficiency and improvement steps at the request of the General Assembly. The regulated community had requested action to streamline permit review and issuance.

As of December 1, Ohio EPA numbers 1287 employees.

Entry level engineers/scientists earned \$18.24/hour.

Agency’s proposed budget is \$ 176.6 million.

Water

Isolated Wetland Legislation. Following a U.S. Supreme Court Ruling that pulled back on Clean Water Act authority in “isolated wetlands”, Ohio EPA and the Ohio General Assembly developed legislation for isolated wetlands in Ohio. The new law empowered Ohio EPA to regulate isolated wetlands and require the replacement of lost wetlands.



Fish Tissue Consumption Program. Samples collected throughout Ohio and analyzed for the levels of contamination in fish tissue reached a level of 4,000 total samples collected, each analyzed for metals, pesticides, and PCBs.

Pollution Prevention and Education

Land

The scrap tire disposal fee increased from fifty cents to one dollar per tire. The funds will go to DSIWM's scrap tire management fund. The increase in fees was prompted by the 1999 tire fire at Kirby Tire Recycling in Wyandot County.

SIIMAN. The Division of Solid and Infectious Waste Management implemented SIIMAN (Solid and Infectious Waste Information Management System). This software assists with the drafting of permits, tracking of projects and provides an inspection checklist including specific permit conditions.

Consent Order Signed For Imthurn Drum Site. The Division of Hazardous Waste Management signed a consent order with the Campbells Soup Company on October 16th for the remediation of the Imthurn Drum site. The site was discovered in December of 1996 when Ohio EPA personnel drove past the property and observed drums staged on the property approximately 40 feet from the road. Ohio EPA worked with U.S. EPA to remove approximately 1,800 fifty-five gallon drums containing hazardous wastes and approximately 21 truck-loads of contaminated soil from the site.

2001 Award of Excellence. The Office of the Environmental Education's "Protecting Your Environment: An Interactive CD-ROM" was selected for a 2001 Award of Excellence by the Environmental Education Council of Ohio. The CD-ROM highlights steps that students, citizens and policy makers can take to reduce environmental health risks.



The History of the
Ohio Environmental Protection Agency

Chapter 5

Significant Federal Laws



Significant Federal Laws

SIGNIFICANT FEDERAL LAWS

National Environmental Policy Act (NEPA), 42 U.S.C. s/s 4321 et seq. (1969)

The National Environmental Policy Act was one of the first laws ever written that establishes the broad national framework for protecting our environment. NEPA's basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment.

NEPA requirements are invoked when airports, buildings, military complexes, highways, parkland purchases, and other federal activities are proposed. Environmental Assessments (EA's) and Environmental Impact Statements (EIS's), which are assessments of the likelihood of impacts from alternative courses of action, are required from all Federal agencies and are the most visible NEPA requirements.

Clean Air Act, 42 U.S.C. s/s 7401 et seq. (1970)

The first amendment of federal laws dating to the mid-1950's that initially responded to air pollution problems by offering technical and financial assistance to the states. Amendments in the 1960's expanded federal research and abatement authority. Amendments in 1970 increased federal authority and responsibility and articulated uniform national standards for new stationary sources of air pollution. Also articulated was a requirement for states to attain air standards for common air pollutants within a specified time frame.

Clean Air Act Amendments of 1977

Required measures "to prevent significant deterioration" of air quality in designed areas.

Federal Water Pollution Control Act (FWPCA)

Required state ambient water quality standards and set the basic structure for regulating discharges of pollutants to waters of the United States.

FWPCA Amendments of 1972 (Clean Water Act)

The law gave EPA the authority to set effluent standards on an industry basis (technology-based) and continued the requirements to set water quality standards for all contaminants in surface waters. The Clean Water Act makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained under the Act.

Clean Water Act 1977 Amendments, 33 U.S.C. s/s 1251 et seq. (1977)

These amendments focused on regulating toxic pollutants.

Clean Water Act 1987 Amendments

The Clean Water Act was reauthorized and again focused on toxic substances, authorized citizen suit provisions, and funded sewage treatment plants (POTW's) under the Construction Grants Program.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. s/s 136 et seq. (1972)

The primary focus of FIFRA was to provide federal control of pesticide distribution, sale, and use. EPA was given authority under FIFRA not only to study the consequences of pesticide usage but also to require users (farmers, utility companies, and others) to register when purchasing pesticides.

Through later amendments to the law, users also must take exams for certification as applicators of pesticides. All pesticides used in the U.S. must be registered (licensed) by EPA. Registration assures that pesticides will be properly labeled and that if in accordance with specifications, will not cause unreasonable harm to the environment. This program is administered in Ohio by the Ohio Department of Agriculture.

Safe Drinking Water Act (SDWA), 42 U.S.C. s/s 300f et seq. (1974)

Authorized U.S. EPA to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in public drinking water systems. This included the creation of national interim primary drinking water regulations which were later revised based on a review by the National Academy of Sciences as to the health risks posed to consumers. The Act also included provisions for the Sole Source Aquifer Protection Program.

SDWA Amendments of 1986

The Act was amended slightly in 1977, 1979 and 1980, but the first significant changes occurred when the SDWA was reauthorized in 1986. The amendments required the establishment of a schedule for regulating additional contaminants, specifications on filtration requirements for surface water sources, establishment of monitoring for unregulated contaminants, implementation of a ban on lead-based solder and specifications on best available technology for treating contaminants in the major drinking water contaminant groups. In addition, the focus began to shift from treatment as a means to provide safe water towards source protection with the development of additional programs to protect ground water supplies including wellhead protection.

SDWA Amendments of 1996

Attempts to keep pace with the previously established schedule for regulating additional contaminants were not completely successful, although numerous contaminants were addressed through the new and revised total coliform, surface water treatment, chemical, and lead and copper rules. Therefore,

the Reauthorization in 1996 emphasized setting the priority of contaminant regulation based on the adverse health effects of the contaminant, the occurrence of the contaminant in public water systems and the estimated reduction in health risk from regulation. For each proposed regulation, U.S. EPA must determine the cost to the public water system and the benefits to public health.

The 1996 amendments also further recognized source protection by requiring states to complete source water assessments of all public water systems by 2003. In addition, they established a drinking water state revolving loan fund, added consumer confidence reporting and expanded the certified operator requirements for public water systems.

Resource Conservation and Recovery Act (RCRA), 42 U.S.C. s/s 6901 et seq. (1976)

RCRA defined “hazardous” waste and gave EPA the authority to control hazardous waste from the “cradle-to-grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous wastes.

RCRA 1984 Amendments

HSWA, The Federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA that required phasing out land disposal of hazardous waste. The amendments also established and expanded landfill requirements for lining, leachate collection and ground water monitoring, as well as financial assurance. Some of the other mandates of this strict law include increased enforcement authority for EPA and a comprehensive underground storage tank program (Administered in Ohio through the Bureau of Underground Storage Tank Regulation at the State Fire Marshall’s Office in the Department of Commerce).

RCRA 1986 Amendments

The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. RCRA focuses only on active and future facilities and does not address abandoned or historical sites (see CERCLA).

Toxic Substances Control Act, 15 U.S.C. s/s 2601 et seq. (1976)

The Toxic Substances Control Act (TSCA) of 1976 was enacted by Congress to give EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Also, EPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. EPA then can control these chemicals as necessary to protect human health and the environment. TSCA supplements other Federal statutes, including the Clean Air Act and the Toxic Release Inventory under EPCRA.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. s/s 9601 et seq. (1980) ; revised by Superfund Amendments of 42 U.S.C.9601 et seq. (1986)

Principal purpose is cleanup of leaking hazardous waste sites by private parties, voluntarily or through enforcement.

CERCLA provides a Federal ““Superfund”” to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through the Act, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.

EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed. Title III of the Superfund amendments also authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. In Region 5, CERCLA is administered by the Superfund Division.

Funding was generated by a tax on the chemical and petroleum industries, which has since expired. Congressional appropriations are now the source of Superfund money.

Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. 11001 et seq. (1986)

EPCRA was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards.

To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERC’s were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district.

Broad representation by fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

Water Quality Act of 1987

Added Section 319 funding and established the nonpoint source management programs to complement regulatory authority over point source discharges of pollutants.

Endangered Species Act, 7 U.S.C. 136; 16 U.S.C. 460 et seq. (1973)

The Endangered Species Act provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The U.S. Fish and Wildlife Service of the Department of the Interior maintains the list of 632 endangered species (326 are plants) and 190 threatened species (78 are plants). Species include birds, insects, fish, reptiles, mammals, crustaceans, flowers, grasses, and trees. Anyone can petition FWS to include a species on this list. The law prohibits any action, administrative or real, that results in a "taking" of a listed species, or adversely affects habitat. Likewise, import, export, interstate, and foreign commerce of listed species are all prohibited.

EPA's decision to register a pesticide is based in part on the risk of adverse effects on endangered species as well as environmental fate (how a pesticide will affect habitat). Under FIFRA, EPA can issue emergency suspensions of certain pesticides to cancel or restrict their use if an endangered species will be adversely affected. Under a new program, EPA, FWS, and USDA are distributing hundreds of county bulletins that include habitat maps, pesticide use eliminations, and other actions required to protect listed species.

The act is administered in Ohio through the Ohio Department of Natural Resources.

Oil Pollution Act of 1990, 33 U.S.C. 2702 to 2761

The Oil Pollution Act (OPA) of 1990 streamlined and strengthened EPA's ability to prevent and respond to catastrophic oil spills. A trust fund financed by a tax on oil is available to clean up spills when the responsible party is incapable or unwilling to do so. The OPA requires oil storage facilities and vessels to submit to the Federal government plans detailing how they will respond to large discharges. EPA has published regulations for aboveground storage facilities; the Coast Guard has done so for oil tankers. The OPA also requires the development of Area Contingency Plans to prepare and plan for oil spill response on a regional scale.

Pollution Prevention Act, 42 U.S.C. 13101 and 13102, s/s et seq. (1990)

The Pollution Prevention Act focused industry, government, and public attention on reducing the amount of pollution through cost-effective changes in production, operation, and raw materials use. Opportunities for source reduction are often not realized because of existing regulations, and the industrial resources required for compliance, focus on treatment and disposal. Source reduction is fundamentally different and more desirable than waste management or pollution control.

Pollution prevention also includes other practices that increase efficiency in the use of energy, water, or other natural resources, and protect our resource base through conservation. Practices include recycling, source reduction, and sustainable agriculture.

Freedom of Information Act, 5 U.S.C. s/s 552 (1966)

The Freedom of Information Act provides specifically that "any person" can make requests for government information. Citizens who make requests are not required to identify themselves or explain why they want the information they have requested. The position of Congress in passing FOIA was that the workings of government are "for and by the people" and that the benefits of government information should be made available to everyone.

All branches of the Federal government must adhere to the provisions of FOIA with certain restrictions for work in progress (early drafts), enforcement confidential information, classified documents, and national security information.

Ohio EPA Organizational Time Line

