

EPA-800-F-92-001
July 1992



U.S. Environmental Protection Agency

Office of Science and Technology:

*Working
to Ensure
Abundant,
Safe, and Clean
Water Resources*



U.S. Environmental Protection Agency
Office of Science and Technology


401 M Street, S.W.
Washington, D.C. 20460

Official Business

Penalty for Private Use \$300



Recycled/Recyclable
Printed with Soy/Canada Ink on paper that
contains at least 50% recycled fiber



EPA's overall goal, in support of the Clean Water Act and the Safe Drinking Act, is to reduce risks to both ecological systems and human health.

The Office of Science and Technology plays a key role in fulfilling this commitment to protecting our nation's waters.

Developing the Scientific Basis for a Regulatory Framework

The Office of Science and Technology (OST) is located in the U.S. Environmental Protection Agency's Office of Water. Our office works cooperatively with other organizations to develop scientifically defensible criteria, guidelines, regulations, and advisories that provide the regulatory framework for:

- Restoring and maintaining the physical, chemical, and biological integrity of the nation's water resources,
- Protecting the nation's public water supplies, and
- Achieving technology-based pollution prevention requirements.

The office issues health advisories for use by the states in protecting drinking water supplies under the Safe Drinking Water Act and sponsors extensive research on the effects of pollutants on aquatic organisms, fish, and wildlife. This information is used by federal, state, and local governments to set limits on the kinds of pollutants that may be discharged by industries and that may be present in public drinking water supplies. Working closely with industries, trade associations, and environmental groups, we also help to incorporate

techniques into manufacturing processes to prevent polluting chemicals from being created or used in many industries.

While OST provides the scientific basis for many programs that protect human health and the environment, the information is communicated to the state and local governments through EPA's ten regional offices. The regions provide the tools and training needed to incorporate the technical requirements into state programs.

①

②



Producing Diverse Programs

The three divisions that make up OST are committed to protecting human health and the environment by carrying out research on the effects of pollutants that are discharged into our nation's surface waters. They focus on such diverse programs as technology-based controls and pollution prevention techniques for industrial dischargers, human health and environmental risks, risk assessments, and state water quality standards.

Engineering and Analysis Division (EAD)

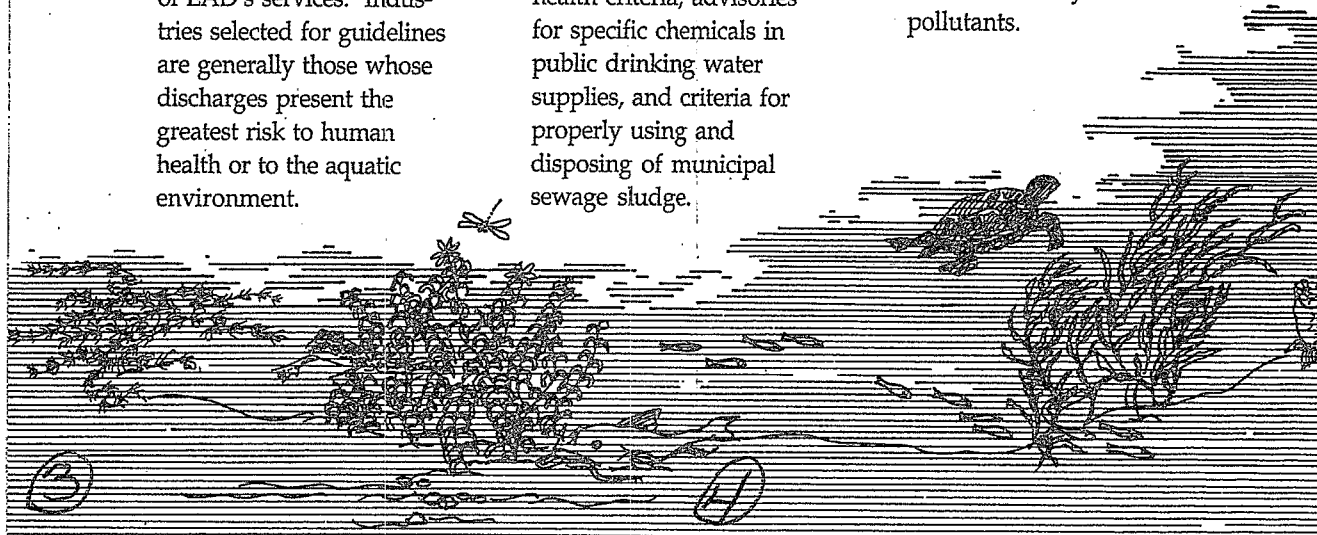
This division is knowledgeable in all aspects of manufacturing processes and pollution treatment technologies. Its mission is to develop industrial discharge guidelines and effluent standards for industries that discharge directly into surface waters or into municipal treatment plants. Industrial pollution prevention is a key aspect of EAD's services. Industries selected for guidelines are generally those whose discharges present the greatest risk to human health or to the aquatic environment.

Health and Ecological Criteria Division (HECD)

Well-trained in assessing the behavior of chemicals in the environment, this division conducts extensive investigations on chemicals that may pose health risks to humans and aquatic ecosystems. These analyses focus on pollutant pathways and effects on humans and aquatic life. They result in the issuance of ecological and human health criteria, advisories for specific chemicals in public drinking water supplies, and criteria for properly using and disposing of municipal sewage sludge.

Standards and Applied Science Division (SASD)

Staffed by a highly diversified group of environmental specialists, scientists, and engineers, this division works closely with the EPA regional offices to help states incorporate criteria developed by other OST divisions into their water quality standards. The staff also assesses potential risks to humans resulting from fish and sediment that have been contaminated by toxic pollutants.



Providing Risk Assessment Support

OST develops methods and assesses risks to help predict the effects of different levels of pollutants on human health and the environment. Using information from risk analyses, we provide support to Agency and State water pollution control programs that address:

- Point source discharges,
- Non-point source discharges,
- Wetland protection,
- Drinking water protection, and
- National resource protection.

The office also sponsors seminars for scientists in both the public and private sectors to help them understand the technical aspects of risk assessments and methodologies.

Providing National Scientific Support

Our diversified staff includes scientists, biologists, chemists, engineers, environmental specialists, economists, statisticians, and other skilled professionals. These professionals rely on research conducted either independently by the Agency or jointly with other federal agencies, research and academic institutions, and environmental groups. This consortium has a common focus: to acquire information that will help us better understand the effect of pollutants on the aquatic environment and to develop ways to reduce the risk from harmful pollutants.

*For additional information
you may contact:*

United States
Environmental Protection Agency
Office of Water Resource Center
(WH-556-RC)
401 M Street, S.W.
Washington, D.C. 20460
(202) 260-7786

