

By every indicator, the quality of the air we breathe and the water we drink in the U.S. is better today than that it's been for decades. According to the Council on Environmental Quality, ambient air pollution levels (nitrogen oxides, ozone, sulfur oxide, carbon monoxide and lead) have been steadily decreasing for decades, along with a consistent decrease in air pollution in major American cities. And the percentage of streams that are "usable for fishing and swimming," once less than one out of three, is now at more than 86 percent. Those achievements are because of a real and ongoing commitment by the federal government, private industry and average citizens to do their part to manage their environmental footprint. The meat and poultry industry is proud of its steady and ongoing contributions and commitment to this national clean-up.

As with any other industry, emissions that we produce that impact the air and water are highly regulated and continuously monitored by both the federal and state governments. These emissions are constantly monitored by the industries that produce them and regularly reported to the federal government.

Federal Regulations

Clean Air

The Clean Air Act is the comprehensive federal law that regulates air emissions from area, stationary, and mobile sources. This law authorizes the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment.

The goal of the Act was to set and achieve NAAQS in every state by 1975. Establishing maximum pollutant standards was coupled with directing the states to develop state implementation plans (SIP's) applicable to appropriate industrial sources in the state.

The Act was amended in 1977 primarily to set new goals for achieving attainment of NAAQS because many areas of the country had failed to meet the deadlines. The 1990 amendments to the Clean Air Act were primarily intended to meet unaddressed or insufficiently addressed problems such as acid rain, ground-level ozone, stratospheric ozone depletion, and

air toxics.

As the graph below shows, major pollutants in the air we breathe have been on the decline for years.

Industry Actions for Cleaner Air

To comply with the law, meat packers and processors must monitor air emissions for a variety of pollutants, including ammonia, mercury, particulate matter, sulfur and nitrogen oxides and other volatile chemicals. They must track and keep constant records of these emissions, and immediately report to the federal government if plants exceed maximum emission thresholds.

Clean Water

Growing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA). The CWA established the basic structure for regulating discharges of pollutants into U.S. waters. It gave EPA the authority to implement pollution control programs, such as setting wastewater standards for industry, and also continued requirements to set water quality standards for all contaminants in surface waters.

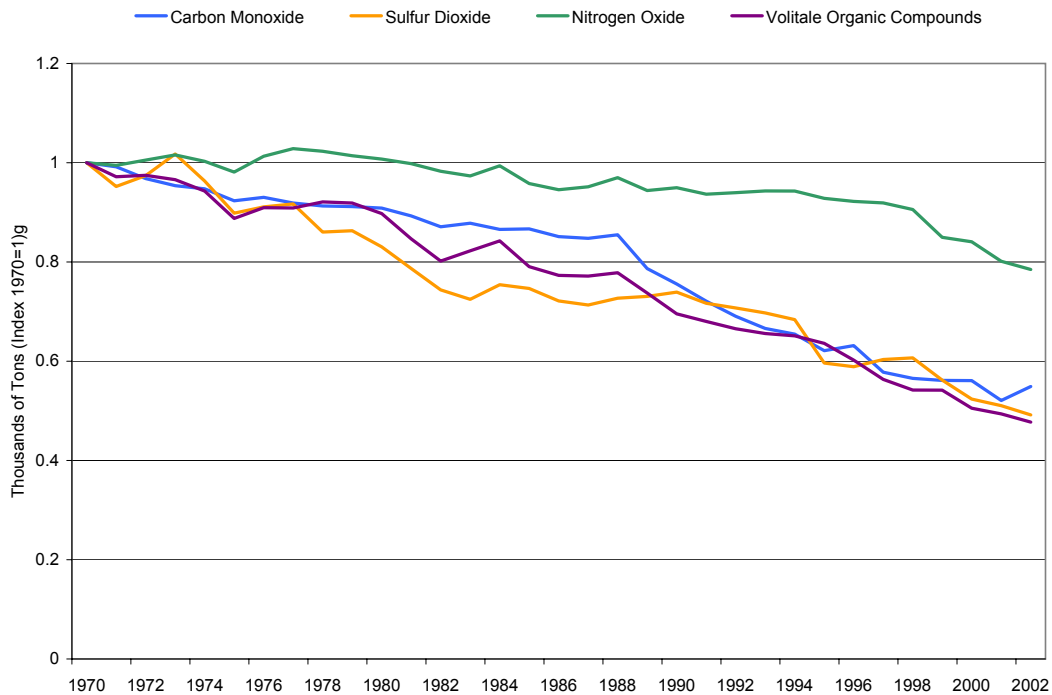
The CWA made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. It also funded the construction of sewage treatment plants under the construction grants program and recognized the need for planning to address the critical problems posed by nonpoint source pollution.

The graph shows, the quality of the water we drink and use for recreation, has been steadily improving.

Industry Actions for Cleaner Water

To comply with the requirements of the Clean Water Act, as well as state and local regulations, meat packers and processors must have in place the proper equipment, procedures and constant monitoring necessary to limit the flow of pollutants including fats, oil and grease, biological oxygen demand, total

National Ambient Air Quality



Source: EPA Office of Air Quality, Planning and Standards (Research Triangle Park, N.C.)

suspended solids, pH, ammonia and nitrogen into the nation's waterways. Specific equipment for removing these wastes, coupled with specialized training and monitoring ensure that water pollutant emissions remain below the minimum thresholds established by the federal government. Meat packers and processors operate under enforceable wastewater permits and must meet their numeric and narrative standards.

Federal Monitoring and Compliance

EPA's national compliance monitoring program is responsible for maximizing compliance with federal environmental statutes dealing with prevention and control of air pollution, water pollution, hazardous waste, toxic substances and pesticides. Under these statutes, EPA and its regulatory partners monitor activities under 44 separate statutory programs. The statutory and regulatory requirements of these programs apply to approximately 41 million regulated entities, such as sewage treatment plants, gas stations and hospitals.

EPA regulates chemicals and monitors compliance with environmental laws and regulations designed to reduce pollution to protect public health and the environment. Without compliance with these

environmental requirements, the promulgation of laws and regulations has little impact. Compliance monitoring consists of a variety of activities including:

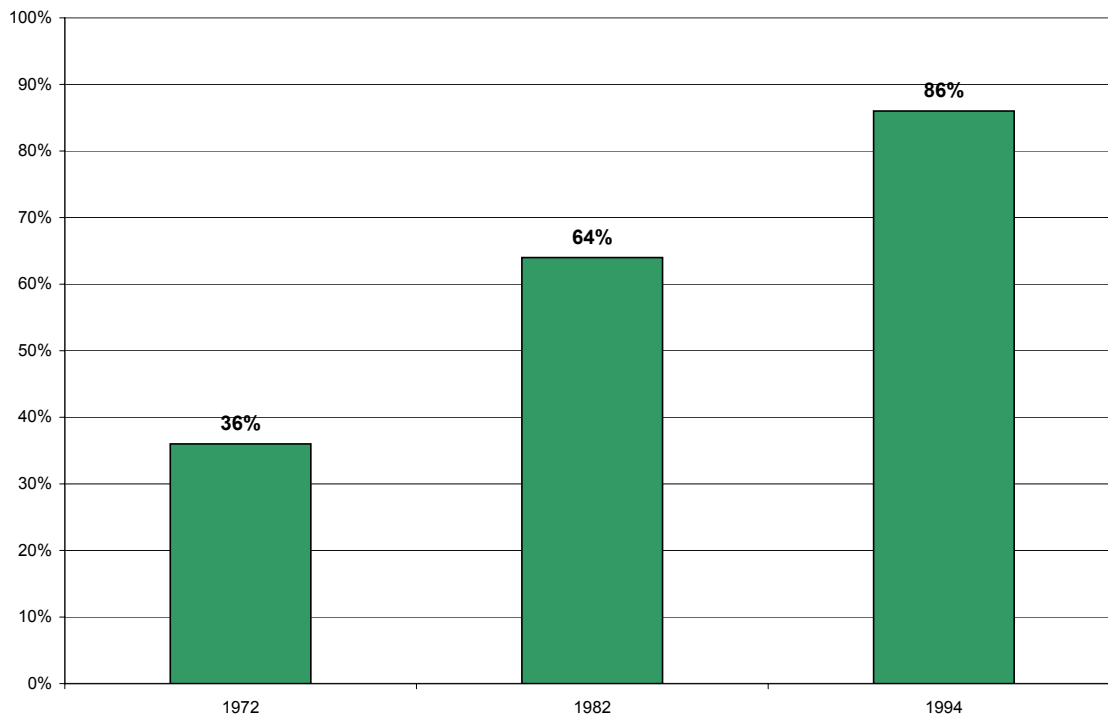
- Conducting compliance inspections, civil investigations, and evaluations under the air program
- Determination of facility/site compliance status
- Entering results of activities into national data systems
- Responding to citizen complaints
- Participation in development of rules to ensure they are enforceable
- Development of compliance monitoring tools such as inspection checklists/guides
- Funding and oversight of regional, state and tribal compliance monitoring programs.

EPA may conduct compliance monitoring activities independently or through the states and tribes under a cooperative agreement.

State and Local Requirements

In addition to federal regulations controlling water and air pollutant emissions, many states have regulations designed to control solid waste recycling or disposal, and promote water and energy conservation. Also, local communities often expect meatpackers and processors to comply with regulations addressing odor, traffic, light and noise pollution.

Percent of Streams Usable for Fishing and Swimming



Source: Council on Environmental Quality Annual Report

Going Beyond Regulations

Meat packers and processors interact with federal, state and local officials, as well as their communities, both for regulatory matters and for voluntary matters. Going beyond regulations can be a key part of successful environmental programs, for only through such efforts is it possible to recognize expectations, anticipate concerns, and communicate effectively with officials, neighbors and other stakeholders.

Several important tools are available to meatpackers and processors to help in this process. They include the use of Environmental Management Systems (EMS) and American Meat Institute's (AMI) environmental achievement awards programs (MAPS).

Environmental Management Systems

Like other manufacturers, meat and poultry packers and processors are encouraged to develop, implement, and maintain an EMS that is tailored to their specific operation. An EMS is a continual cycle of planning, implementing, reviewing and improving the processes and actions that an organization undertakes to meet its

business and environmental goals.

An EMS can result in both business and environmental benefits. For example, an EMS may help to improve environmental performance, enhance compliance, prevent pollution, conserve resources and mitigate risks.

Developing and implementing an EMS may also have some associated costs, including:

- An investment of internal resources, including staff/employee time
- Costs for training of personnel
- Costs associated with hiring consulting assistance, if needed
- Costs for technical resources to analyze environmental impacts and improvement options.

AMI Environmental Recognition Program

AMI encourages its members to develop and implement an EMS to help manage the impact their operations are having on their environs. AMI's Environmental Recognition Awards were developed to increase the recognition of a company's dedication to Environmental Management Systems development and implementation as a member of the meat and poultry

industry. Four tiers are available to encourage EMS development through a stepwise approach. In 2006, more than 100 meat packing and processing plants were honored for their environmental stewardship efforts as part of the program.

In 2006, nearly 40 plants were honored with the distinction of the Tier 4 Award. The Recognition Awards, which are divided into four tiers to guide plants through the stages of an environmental management program, conclude with an international inspection and ISO 14001 certification.

In addition to the tier awards, plants are recognized with Achievement Awards for their accomplishments and innovations in these areas: training, resource conservation, sustainability, pollution prevention and outreach to the community.

The top award winners in these four categories were:

- Hormel Foods Corporation in Austin, Minn., was awarded first place for a training program that instructs employees in environmental management. They have a Plant Engineering Conference held every two years to improve plant personnel's knowledge of environmental programs and to foster overall Environmental Management improvement. The training programs have been made available on the Hormel intranet for use as an ongoing resource to those who work in the environmental program at Hormel.
- Sun Land Beef in Tolleson, Ariz., was awarded first place for its initiatives in "resource conservation." The plant has taken significant steps in its water conservation efforts by installing reuse tanks and automated control systems that reduce energy, recycle water, and reducing and eliminating uses of previously needed groundwater.
- Smithfield Transportation in Tar Heel, N.C., was awarded first place for environmental sustainability. The plant started filling its truck tires with nitrogen instead of air, thus extending the tire's life by about 22 percent. Nitrogen does not expand and contract so the tires wear more evenly - resulting in a larger surface-to-surface ratio - which increases fuel economy and driving ability. Nitrogen is also a fire suppresser, ensuring that blowouts have less potential for a fire.
- Smithfield Transportation in Smithfield, Va. was awarded first place for pollution prevention. The plant started using a fuel additive to cut back on emissions. During the six-month trial, the additive

cut carbon monoxide emissions by 20 percent, hydrocarbon emissions by 14 percent, solid particle emissions by 43 percent, and particulate carbon emissions by 26 percent. They also started using Auxiliary Power Units (APU), which are cabin climate control monitors that eliminate the need to let the truck idle, saving 1.3 gallons of fuel per hour and reducing pollutants such as CO, CO₂, SO_x and NO_x up to 98 percent over idling.

- Cargill Foods in Dayton, Va. received first place in public outreach. The plant has partnered with Ecology II classes from Turner Ashby High School in Bridgewater, Va. to help restore Cooks Creek, which has suffered from erosion and other environmental concerns in recent years. They have planted more than 150 trees, cattails, and wild-flower patches have been planted riparian buffers and stream bank revetments have built, and "no mowing" signs installed. Since the inception of the revitalization efforts, dissolved oxygen levels, turbidity and aquatic life have all improved.

AMI's Position: Environmental Sustainability

The continued growth of the U.S. population and the resultant urban sprawl, combined with greater demands from overseas for U.S. agricultural products, will mean that U.S. producers and processors will have to continue to be smarter and more efficient about natural resource use, and more vigilant in monitoring waste and pollution. The environmental improvements realized over the past three decades have proven that environmental stewardship and strong economic growth are not mutually exclusive. In fact, economic growth and prosperity has led to smart investments in the environment that will ensure a prosperous and healthy future for the next generation of Americans.

AMI is committed to advancing the principle of environmental sustainability through member and community outreach, training and awards programs.

Helpful Links

American Meat Institute
<http://www.meatami.com>

Environmental Protection Agency
<http://www.epa.gov>