## Images of Health

## Donora, Pennsylvania: An Environmental Disaster of the 20th Century

William H. Helfand, Jan Lazarus, and Paul Theerman

This photograph of a railcar loading facility in smog-shrouded Donora, Pa, documents one of the worst environmental disasters ever to plague a US city.

Beginning on October 26, 1948, sparse air movement contributed to a temperature inversion in the atmosphere over western Pennsylvania, Ohio, and areas of neighboring states. A fog laden with particulates and other industrial contaminants saturated the air of Donora, a small industrial town on the banks of the Monongahela River, some 30 miles south of Pittsburgh. Visibility was so poor that even locals lost their sense of direction. An estimated 5000 to 7000 persons in a town of 14000 residents became ill, some 400 required hospitalization, and 20 died before rain dispersed the killing smog on October 30 and 31, 1948.

In the aftermath of the disaster, the Pennsylvania Department of Public Health, the United Steelworkers, the Donora Borough Council, and the Division of Industrial Hygiene of the Public Health Service conducted an extensive inquiry. "The investigation was the first time there was an organized effort to document the health impacts of air pollution in the United States." Many labeled the Donora Zinc Works, part of US Steel, as a prime contributor to the tragedy. Indeed, the zinc works was shut down at the height of the incident. The investigation found that the recommended workplace levels of airborne contaminants then in place had not been exceeded, however, and it fixed no firm blame on any party.

The Donora event and other environmental calamities bolstered public support for federal clean air legislation. In 1955, the US Congress passed the Air Pollution Control Act, which provided funds to the Public Health Service to conduct research into the causes and control of air pollution. This act was strengthened by the Clean Air Acts of 1963, 1970, and 1990, which provided for enforcement of air emission standards and other means of control that have been credited with drastic improvements in US air quality and thus the public's health. □

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## References

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