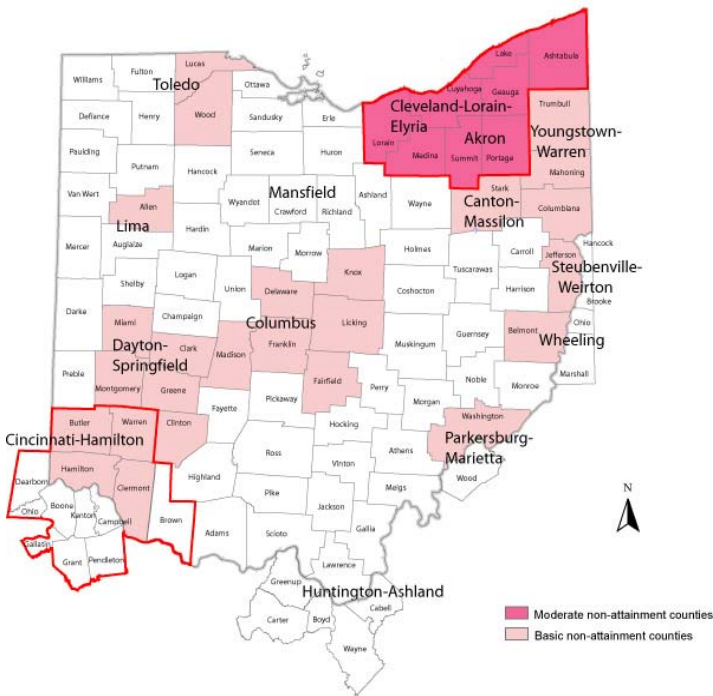


Fact Sheet

Northeast Ohio Is In Nonattainment of the Clean Air Act's National Ambient Air Quality Standards

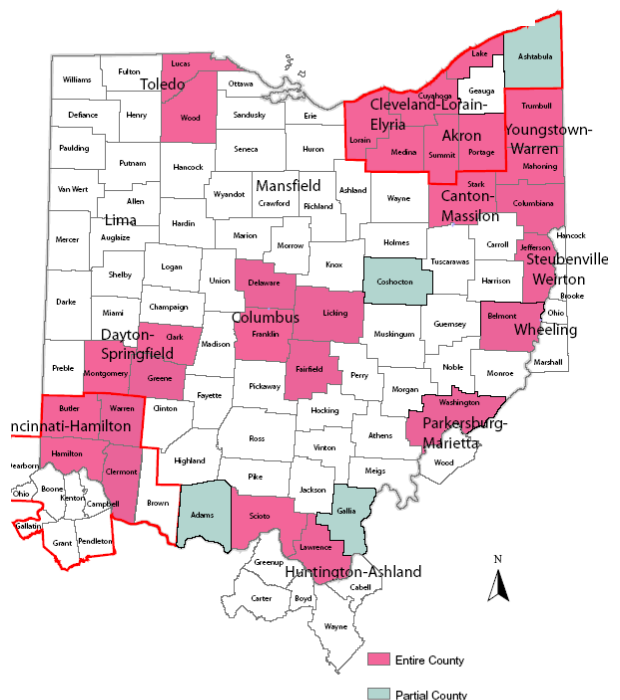
Ohio 8-Hour Ozone Nonattainment Areas

On April 15, 2004, the eight counties of Northeast Ohio were declared by the United States Environmental Protection Agency (USEPA) to be a moderate nonattainment area under the new federal 8-hour ozone standard. This designation includes Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit Counties.



On December 17, 2004, the USEPA designated Ashtabula (partial), Cuyahoga, Lake, Lorain, Medina, Portage, and Summit Counties as in nonattainment for the new fine particulate (PM_{2.5}) standard.

Ohio PM_{2.5} Nonattainment Areas



What Does Nonattainment Mean for the Public's Health?

Northeast Ohio has been designated a nonattainment area for both ozone and for PM_{2.5} because it has levels of those two pollutants that are higher than allowed by the National Ambient Air Quality Standards (NAAQS). The NAAQS are health-based standards designed to protect the public. They are occasionally revised based on new data. Both the ozone standard and the particulate standard were recently made more stringent, resulting in Northeast Ohio's nonattainment status.

The NAAQS for 8-hour ozone is 0.08 parts per million (ppm), averaged over eight hours.

The NAAQS for PM_{2.5} include an annual standard set at 15 micrograms per cubic meter, based on the 3-year average of annual mean PM_{2.5} concentrations and a 24-hour standard of 65 micrograms per cubic meter, based on the 3-year average of the 98th percentile of 24-hour concentrations.

Ozone (O₃) is a colorless gas formed by sunlight and the products of combustion, which causes lung irritation and can worsen existing respiratory conditions.

Failure to achieve the NAAQS means that the public health is at risk. According to USEPA, ozone can irritate the respiratory system, causing coughing and throat irritation. It can also reduce lung function and make it more difficult to breathe deeply. Ozone can aggravate asthma. When ozone levels are high, more people with asthma have attacks that require a doctor's attention

or use of medication. One reason this happens is that ozone makes people more sensitive to allergens, the most common triggers of asthma attacks. Finally, ozone can increase susceptibility to respiratory infections and it can inflame and damage the lining of the lungs, resulting in permanent loss of lung function and a lower quality of life.

Regarding PM_{2.5}, health studies have shown a significant association between exposure to fine particles and premature death from heart or lung disease. Fine particles can aggravate heart and lung diseases and have been linked to effects such as: cardiovascular symptoms; cardiac arrhythmias; heart attacks; respiratory symptoms; asthma attacks; and bronchitis. These effects can result in increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days. Individuals that may be particularly sensitive to fine particle exposure include people with heart or lung disease, older adults, and children.

Fine particle pollution, also called PM_{2.5}, is made up of particles smaller than 2.5 micrometers in diameter. PM_{2.5} is a mixture of microscopic solids and liquid droplets suspended in air. It can be emitted directly (such as smoke from a fire) or formed in the atmosphere from power plant, industrial and mobile source emissions of gases such as sulfur dioxide and nitrogen oxides.

What Does Nonattainment Mean for Northeast Ohio?

Nonattainment has economic and quality of life impacts on Northeast Ohio. Once designated, nonattainment areas are subject to New Source Review requirements. New Source Review is a permitting program for industrial facilities to ensure that new and modified sources of pollution do not impede progress toward cleaner air. Offsets of pollution are required that sometimes deter new businesses from moving into a nonattainment area. This puts Northeast Ohio at a competitive disadvantage.

Failure to achieve the NAAQS after the required deadlines can result in even more stringent offset requirements for new businesses. It can also result in a loss of federal highway funds as a sanction on the area.

How Will Northeast Ohio Avoid Sanctions and Achieve the NAAQS?

In order to improve air quality, states must draft a plan known as a state implementation plan (SIP) to improve the air quality in nonattainment areas. The plan outlines the measures that the state will take in order to improve air quality. Once a nonattainment area meets the standards and additional redesignation requirements in the Clean Air Act, § 107(d)(3)(E), the USEPA will designate the area to attainment as a "maintenance area."

NOACA has convened a public participation process to generate recommendations to the Ohio EPA for inclusion in the SIP for both ozone and PM_{2.5}.

How Long Does Northeast Ohio Have to Attain Clean Air?

Ozone nonattainment areas are required to submit to USEPA a SIP by June 2007. Control measures have to be in place by 2009. The area must demonstrate attainment of clean air by June 2010.

PM_{2.5} nonattainment areas are required to submit to USEPA a SIP by April 2008. Control measures have to be in place by 2009. The area must demonstrate attainment by April 2010, with possible extensions available until 2015, if control measures are not feasible.

Ohio EPA is responsible for submitting all SIPs for Ohio. NOACA will contribute recommendations for the two SIPs for Northeast Ohio.

What Goes Into A SIP?

Through SIPs, states design their approach to reducing pollution levels. The comprehensive approach to reducing criteria air pollutants taken by the Clean Air Act covers many different sources and a variety of clean-up methods. SIPs will have to ensure that power plants, factories, and other pollution sources meet clean-up goals by working through the air pollution permitting process that applies to industrial facilities. State must also implement programs to further reduce emissions from sources such as cars, trucks, buses, trains, off-road construction and agricultural equipment, small businesses, and consumer products and activities.

Where Do I Go For Further Information?

Visit NOACA's webpage at www.noaca.org/sipplan.html

Or USEPA's Ozone webpage at <http://www.epa.gov/ozonedesignations>

And USEPA's PM_{2.5} webpage at <http://www.epa.gov/pmdesignations>