



What Businesses Need to Know About National Ambient Air Quality Standards and Nonattainment

The federal Clean Air Act requires U.S. EPA to set national ambient air quality standards for pollutants considered harmful to public health and the environment. U.S. EPA has air quality standards for the following criteria pollutants: carbon monoxide, lead, nitrogen dioxide, particulate matter (PM_{2.5}), ozone and sulfur dioxide.

The pollutants of concern in Ohio are lead, nitrogen dioxide, fine particulate matter, ozone and sulfur dioxide. The Clean Air Act requires U.S. EPA to review air quality standards every five years to determine if they are still protective of human health and the environment.

When a monitor exceeds the standard more than three times in a three-year period, the entire area does not meet the standard.

When an area does not meet the standard, it is classified as being in “nonattainment.” This classification impacts businesses that want to locate or expand an air pollution source in that area. Once an area has three years of data showing that it meets the standard, the State must petition U.S. EPA to reclassify it as being in attainment.

The Clean Air Act gives U.S. EPA up to 18 months to act on a redesignation request. The area is not officially redesignated until U.S. EPA provides an opportunity for public comment and publishes the final action in the Federal Register. Only then is the area relieved of all requirements for nonattainment areas, including the requirement for new or modified facilities to obtain emissions offsets.

Ohio EPA monitors the air and analyzes the data to determine compliance with air quality standards. As of January 2014, Ohio EPA has 198 air monitors at 120 monitoring sites that check levels of sulfur dioxide, lead, particulate matter, nitrogen dioxide, carbon monoxide and ozone.

Ohio EPA submits data and detailed plans to U.S. EPA to demonstrate compliance and the ability to maintain compliance.

Do Nonattainment Areas Affect Businesses?

Yes, nonattainment can be an important consideration for businesses intending to locate or expand in a nonattainment area. However, the nonattainment New Source Review (NSR) requirements apply only to new major stationary sources of air pollutants, or modifications at existing major sources. A new major source in a nonattainment area is one that has the potential to emit more than 100 tons of air pollutants per year. In some instances, the threshold for defining a major source is 250 tons per year in attainment areas. The threshold for a major source modification can be 40, 25, 15 or 10 tons per year.

So, although an important consideration related to business location or expansion, nonattainment is generally related to large business operations that have significant emission levels, such as major manufacturing companies (for example, iron/steel, auto, paper, chemical/petroleum) and utilities.

Nonattainment is NOT applicable to any business activity that is classified as a minor source of air emissions (<100 tons per year). Companies classified as minor sources are required to obtain a permit-to-install and operate (PTIO) from Ohio EPA, but are not subject to nonattainment new source review requirements and do not need to obtain emission (offset) credits, as described below.

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For major sources that are subject to nonattainment New Source Review, the basic requirements related to this are:

- The new/expanding company must obtain emission credits (called offset credits) from existing sources located in the vicinity of a proposed source which (1) offset the emissions increase from the new source or modification and (2) provide a net air quality benefit.
- The new/expanding company must obtain a nonattainment air permit from Ohio EPA which includes installing pollution control equipment that demonstrates the company is achieving the lowest achievable emission rate (LAER).

For every one ton of pollutants the company will emit, it must obtain more than one ton of emissions credits from a company that has reduced its emissions or is no longer operating. Credits must be obtained from a company that is in the same nonattainment area.

The purpose of requiring offset credits is to allow for new economic growth in nonattainment areas without negatively impacting air quality in the area over time. Ohio EPA is not involved in the transaction of purchasing or selling offset credits. This process is arranged between the business parties. However, Ohio EPA can assist any new or expanding business in identifying where there may be sources of emission offset credits, either from facilities that have reduced or closed operations. Ohio EPA has an Emission Reduction Credit (ERC) Banking Program to assist facilities in obtaining emission offsets and maintains a list of companies that have voluntarily reported the availability of offset credits. For more information, see Ohio EPA's ERC website at epa.ohio.gov/dapc/ERC/erc.aspx.

Current Status by Pollutant and Future of Ohio

Carbon Monoxide (CO)

On August 31, 2011, U.S. EPA completed its review of the CO standards that had been in place since 1971. U.S. EPA did not strengthen the standards but retained the standards of 35 parts per million (ppm) in one hour and 9 ppm averaged over eight hours. The State of Ohio meets the current CO standard.

Lead

The current standard is 0.15 micrograms per cubic meter. Ohio has three nonattainment areas, which include parts of Fulton, Logan and Cuyahoga counties. The nonattainment areas are the result of emissions from specific facilities.

Ohio submitted a redesignation request for the Logan County partial area in October 2013. U.S. EPA has 18-months to act on Ohio's request and redesignate the area. Ohio does not have three years of clean data for the remaining two areas. The State must demonstrate attainment by the end of 2015 for these areas.

U.S. EPA began reviewing the lead standard in April 2010 with the expectation of proposing a draft standard in January 2014, and finalizing it by November 2014. However, U.S. EPA is behind schedule with the proposal as of February 2014. If the standard is tightened, this could result in new nonattainment areas being established in the future.

Nitrogen Dioxide (NO₂)

The entire state is in attainment for this standard, which is 53 parts per billion (ppb) in a 24-hour period and 100 ppb in one hour. U.S. EPA established the one-hour standard in January 2010. Ohio does not have any monitors violating this standard, but U.S. EPA is requiring states to add more NO₂ monitors near roads. Three of these monitors are scheduled for installation and operation in early 2014. After three years of data are collected by the new monitors, U.S. EPA may revise its attainment/nonattainment classifications.

Ozone

In March 2008, U.S. EPA finalized a new eight-hour ozone standard of 75 ppb. However, U.S. EPA announced it was reconsidering the standard in September 2009, and proposed a tighter standard in December 2010, and then announced in September 2011 the withdrawal of the reconsideration. U.S. EPA announced it would implement the 2008 standard until a future review is conducted.

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