FLORIDA'S **AIR QUALITY**



Florida's air is among the nation's cleanest. The Florida Department of Environmental Protection's (DEP) Division of Air Resource Management protects Florida's air quality through monitoring, permitting and compliance of emission sources. In fact, DEP has one of the most robust outdoor air quality monitoring networks in the country, enabling the department to provide accurate and timely data.

Monitoring Florida's Air Quality

To ensure human health and safety, DEP's network continuously monitors Florida's air and collects data on nine key pollutants, including the following:

» Carbon Monoxide (CO)

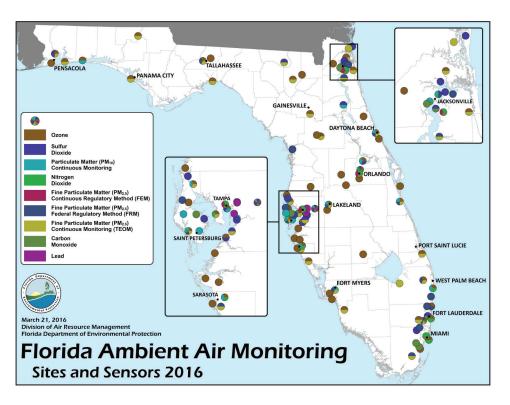
Carbon monoxide is produced primarily by motor vehicles. Long-term monitoring in Florida shows a significant decrease in carbon monoxide concentrations. Since 2000, CO concentrations in Florida have dropped 63 percent on average.

» Nitrogen Dioxide (NO₂)

Nitrogen dioxide, which is a primary component of nitrogen oxide (NO_x), is produced when fuel is burned in motor vehicles, power plants, industrial boilers and other sources. Monitors in Florida have never measured a violation of the ambient standard for NO₂.

» Ozone (O₃)

Ozone also occurs naturally near the earth's surface. However, man-made emissions of volatile organic compounds (VOCs) and other oxides of nitrogen can cause additional ozone, the primary component of urban smog, to be formed. All areas in Florida comply with the U.S. Environmental Protection Agency's ozone standard, and Florida's ozone levels continue to trend downward.



» Particulate Matter (PM_{2.5} and PM₁₀)

Particulate matter (PM) is made of very small dust and soot particles. All areas in Florida comply with the U.S. Environmental Protection Agency's standards for PM, and particle levels in the state continue to trend downward. Fine particles ($PM_{2.5}$) can result directly from emissions of fuel combustion from motor vehicles, power generation and industrial facilities as well as from residential fireplaces and wood stoves. Coarse particles (PM₁₀) are generally emitted from sources such as vehicles traveling on unpaved roads, materials handling, crushing and grinding operations and windblown dust.

» Sulfur Dioxide (SO₂)

Sulfur dioxide is produced by power plants and industries that burn fossil fuels that contain sulfur, such as coal and oil, and by the phosphate industry through its production of sulfuric acid. Florida has made great strides in controlling sulfur dioxide since the early 1970s when control strategies were first implemented. During the past 30 years, SO₂ emissions in Florida have decreased by more than 78 percent.

Air Regulatory Programs

Federal and state regulations keep the air clean by limiting the amount of emissions from stationary and area sources. DEP issues permits for the construction and operation of these sources. In addition, the department confirms that sources are in compliance with applicable regulations through compliance outreach, conducting air inspections, reviewing reports and pursuing enforcement. DEP also maintains an annual emissions inventory to track the amounts of air pollutants emitted over time (by individual source and statewide).

» Compliance

DEP coordinates statewide air compliance and enforcement activities.

» Permitting

DEP is responsible for reviewing and issuing air permits that regulate major and minor facilities based on emissions.

» Monitoring

DEP monitors air quality to help identify areas where plans are needed to reduce pollutant concentration levels to achieve the standards.

More Information on Regulated Facilities and

Florida's Air Quality

DEP's online search tool, <u>AirInfo</u>, provides public access to information on regulated facilities including general facility data, air permits, compliance data, annual emissions rates and facility locations with GIS mapping capabilities.

Florida's Air Quality System, <u>FLAQS</u>, provides up-to-date air-quality information to the public from an extensive network of monitoring stations located throughout the state.

FAST FACTS

- According to the American Lung Association's 2016 <u>State</u> of the Air report, Florida has 10 counties that are among the cleanest in the nation, which is more counties than any other state.
- DEP has invested nearly \$1.5 million during the past three years to modernize Florida's air monitoring network.
- As the result of vehicle emissions controls and measures to reduce traffic congestion, Florida has not recorded a violation of the carbon monoxide standard since 1986.
- Emissions from Florida's industrial facilities have been reduced by 63 percent since DEP began tracking them in 1985.