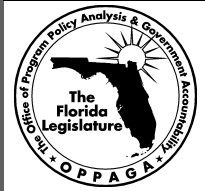




## Office of Program Policy Analysis And Government Accountability



John W. Turcotte, Director

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# Follow-Up Report on Florida's Outdoor Air Quality Programs

## Abstract

Florida has had no official violations of any of the National Air Quality Standards, thus Florida's overall air quality is reasonably good. However, revised federal ozone standards and elevated readings of ozone during 1998 have created concerns about Florida's future air quality compliance. The Department of Environmental Protection reports that it will not know for certain if counties with a history of ozone problems will be redesignated as non-attainment areas until the U.S. Environmental Protection Agency makes that determination in the year 2000.

## Purpose

In accordance with state law, this follow-up report informs the Legislature of actions taken by the Department of Environmental Protection in response to our 1997 report.<sup>1,2</sup> This report presents our assessment of the extent to which the department has addressed the findings and recommendations included in our 1997 report.

## Background

Excessive exposure to air pollutants such as carbon monoxide, lead, and ozone poses risks to human health and can cause such health problems as respiratory irritation and bronchial attacks. Many of Florida's elderly and those with respiratory problems are especially sensitive to ambient pollutants.

The Air Resource Management Program of the Department Environmental Protection (DEP) is responsible for implementing permitting, compliance, and enforcement requirements of the Federal Clean Air Act. The Bureau of Air Regulations and the Bureau of Air Monitoring and Mobile Sources within DEP comprise the Air Resource Management Program.

The Bureau of Air Regulations is responsible for permitting and monitoring stationary sources of air pollution such as power plants, incinerators, chemical manufacturers, and other facilities having the potential to create air pollution. The Bureau of Air Monitoring and Mobile Sources collects daily information concerning ambient (outdoor) air conditions. Further, the bureau monitors and enforces standards for point source emissions (i.e., smoke stacks) and supports several programs aimed at reducing the emissions from motor vehicles, which is one the largest sources of air pollution.

The Motor Vehicle Inspection Program of the Department of Highway Safety and Motor Vehicles also administers Clean Air Act provisions. The program is responsible for annual tailpipe emission inspections in six counties with a history of ozone problems: Broward, Dade, Duval, Hillsborough, Palm Beach, and Pinellas.

The 1996-97 fiscal year budget for DEP's Air Resource Management Program was approximately \$22 million. The source of revenue was the Air Pollution Control Trust Fund, which is supported by federal grants and air pollution permit fees. The Air Resource Management Program has 182 full-time equivalent positions.

<sup>1</sup> Section 11.45(7)(f), F.S.

<sup>2</sup> *Review of Florida's Outdoor Air Quality Programs*, Report No. 96-33, January 9, 1997.

## Prior Findings

Overall air quality has improved since 1987. Between 1987 and 1994, Florida had six non-attainment areas due to high levels of ozone. However, through the efforts to regulate both non-point and point sources of air pollution, all counties of non-attainment reduced pollution to acceptable levels by 1995.

Automobile and stationary source (utilities) emissions are the primary causes of non-attainment of ozone standards. The Motor Vehicle Inspection Program addressed the problem by reducing auto emissions of ozone-creating compounds, especially volatile organic compounds. The combination of volatile organic compounds and nitrogen oxide in warm sunlight produces ozone, which is known as smog.

Since 1985, statewide exceedances of acceptable levels of criteria pollutants decreased from a high of 27 in 1986 to 9 in 1995.<sup>3</sup> An exceedance occurs when the amount of a pollutant in the ambient air surpasses the known, safe concentration level. In addition to reduced exceedances, there had also been a decline in the amount (tonnage) of pollution being discharged into the air. As a result of reduced emissions, in 1994 99% of Floridians lived in areas where the outdoor air was in compliance with ambient air standards, an increasing trend from the early 1980s.

Population growth could reverse current downward trends. According to DEP management, decreases in ambient air pollutants may not continue because of population growth. Furthermore, believing that increasing nitrogen oxide emissions from automobiles and power plants may exceed standards within two to five years unless action is taken, program staff indicated that increased regulations might be necessary to reduce the allowable limits of nitrogen oxide released into the air.

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<sup>3</sup> The U.S. Environmental Protection Agency and DEP have designated six pollutants as criteria pollutants. Criteria pollutants are present in the environment and have the potential to affect people's health at concentrations above known, safe levels in ambient air. These pollutants are nitrogen dioxide, lead, carbon monoxide, particulate matter, sulfur dioxide, and ozone.

## Current Status

Overall, Florida's air quality remains good. However, elevated ozone levels and revised ozone standards raise some concern about future air quality compliance.

**Revised Ozone Standards.** The department reports that since our previous publication, there have been no official violations of any of the National Air Quality Standards, thus air quality is largely the same. However, the EPA revised ozone and particulate matter standards in 1997. Because the standards are more stringent, states have been given until year 2000 to meet the new ozone standards and until year 2003 to comply with the new particulate matter standards. At those times, EPA will determine which areas of the country are in compliance with the new standards.

**Possible Elevated Ozone Levels.** Current conditions related to ozone may indicate potential problems with meeting air quality standards. The department reports that since the beginning of 1998, Florida has experienced a significant number of elevated readings of ozone. For example, in May, DEP recorded 151 elevated readings of ozone. Program staff attribute the increased ozone levels to unusually high temperatures and extended forest fires.

These elevated readings have the department concerned about the state's ability to maintain current ozone attainment status. Further, EPA's revised ozone standards cause additional uncertainty about future air quality compliance. DEP reports that it will not know for certain if counties with a history of ozone problems will be redesignated as ozone non-attainment areas based on the new standards until the year 2000, when EPA will make its determination.<sup>4</sup>

**New Technology for Assessing Particulate Matter.** To address the requirements for particulate matter, the department is currently establishing the technology to collect and assess more data. It will install 46 monitoring sites for fine particulate matter throughout the state along with a specialized laboratory to analyze collected data. Department staff believe that these changes will enable them to determine whether particulate matter levels in Florida pose a public health risk.

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<sup>4</sup> The six counties with a history of ozone problems are Broward, Dade, Duval, Hillsborough, Palm Beach, and Pinellas.

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Project supervised by: Julie Ferris (850/487-4256)

Project conducted by: Lyndon Rodgers (850/487-3805)

