*oppaga*Justification Review

May 2002 Report No. 02-29

Florida's Air Quality Is Generally Good, But Ozone and Air Toxics Are Concerns

at a glance

Florida generally has good outdoor air quality. It meets current state and federal ambient air quality standards for the six "criteria" pollutants identified by the U.S. Environmental Protection Agency (EPA). The Florida Department of Environmental Protection's Air Resources Program also met legislatively approved performance standards relating to air quality. However, some areas within Florida have high ambient concentrations of ozone. The department and the EPA are taking actions to address immediate concerns regarding high ozone levels.

The level of air toxics is also a concern in some areas of the state. The state enforces emission standards for several industries emitting these pollutants. However, limited information exists to assess current human health risks and determine the effectiveness of program activities.

To ensure that Florida adequately addresses air toxics, we recommend that the department develop a statewide air toxics plan in consultation with local pollution control programs and the EPA. The plan should identify current statewide and local air toxic concerns and develop strategies to address those concerns. The plan should be presented to the Legislature prior to the 2003 legislative session.

Purpose^{*}

Section 11.513, *Florida Statutes*, directs the Office of Program Policy Analysis and Government Accountability to complete a program evaluation and justification review of each state agency that is operating under a performance-based program budget. Justification reviews assess agency performance measures and standards, evaluate agency performance, and identify policy alternatives for improving services and reducing costs.

This report reviews the Air Resources Program administered by the Department of Environmental Protection. Appendix A summarizes our conclusions regarding each of nine issue areas the law directs OPPAGA to consider in a program evaluation and justification review.

Background

The Air Resources Program's mission is to protect human health and welfare by maintaining or improving the state's air quality.

Office of Program Policy Analysis and Government Accountability an office of the Florida Legislature

OPPAGA previously issued two reports on Florida's outdoor air quality programs. See Review of Florida's Outdoor Air Quality Program, OPPAGA Report No. 96-33, January 1997, and Followup Report on Florida Air Quality Programs, OPPAGA Report No. 98-21, November 1998.

Prolonged exposure to outdoor air pollutants, such as ozone and particulate matter, poses risks to public health and welfare. Air pollutants contribute to health problems, such as asthma and other respiratory problems, and damage buildings and crops. Florida's elderly, children, and persons with respiratory problems are especially sensitive to air pollutants. These pollutants are emitted from mobile sources such as motor vehicles and stationary sources such as electricity generating plants.

The Department of Environmental Protection's (DEP) Division of Air Resource Management is primarily responsible for implementing requirements of the federal Clean Air Act and state air quality laws and regulations. DEP performs various program activities listed below.

- It operates a statewide ambient monitoring network that measures air quality throughout the state. As of October 2001, the state network consisted of 228 monitors at 145 monitoring sites. Program staff operated 73 monitors at 49 sites; county pollution control program staff operated the remainder. Program staff also conducts quality assurance activities for all of the ambient air quality monitoring throughout the state.
- It issues permits to new and modified sources of air pollutants that specify emission limits, requires air pollution control equipment to bring sources in compliance with state and federal standards, and requires monitoring emission levels. The program issued 1,001 permits during Fiscal Year 2000-01.
- It inspects air pollution sources to ensure that they comply with permit requirements, such as emission limits. The department can impose penalties on sources that violate permit conditions and requirements. Program staff conducted 1,355 compliance inspections during Fiscal Year 2000-01.
- It assists small business owners in complying with applicable air pollution laws and regulations.

 DEP coordinates the interagency review of license applications for electrical power plants, electrical and natural gas transmission lines, high-speed rail systems, and hazardous waste facilities. The Governor and Cabinet, sitting as the Siting Board, issue licenses for such facilities.

The program's activities are largely driven by federal regulations. Most air quality activities involve controlling six "criteria" air pollutants identified by the U.S. Environmental Protection Agency (EPA): ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead. ² The EPA has established national ambient air quality standards for each of these pollutants. ³ These are regulatory health-based standards that set limits for concentrations of pollutants in the ambient air.

The EPA may designate areas that violate federal air quality standards as being in "nonattainment." States containing such areas must submit a plan to the EPA specifying actions that will be taken to bring the areas into attainment. If the state plan is not approved, the EPA may impose sanctions, such as prohibiting the expenditure of federal transportation funds in the affected areas.

During the period from 1987 to 1994, six Florida counties did not meet ambient ozone standards and were designated by the EPA as ozone nonattainment areas. ⁴ As required by the EPA, the department developed a plan to reduce ozone concentrations in these areas. The plan included strategies to reduce emissions from various sources. The plan also relied heavily on pollutant reductions from the federal motor vehicle emissions control program under the Clean Air Act. The six counties attained the

² Health-based criteria have been used to establish ambient air quality standards for these pollutants. Ozone is not directly emitted, but is formed from a chemical reaction involving nitrogen oxides, volatile organic compounds, and sunlight.

³ The state has adopted the federal standards for five of the six criteria pollutants. However, the state's standards for sulfur dioxide are more stringent than the federal standards.

⁴ These counties were Broward, Dade, Duval, Hillsborough, Palm Beach, and Pinellas.

federal ambient air quality standard for ozone by 1996.

Other air pollutants besides the six criteria pollutants pose potential health risks to the public. Air toxics, also referred to as hazardous air pollutants, are chemicals known or suspected to cause cancer or other serious health problems, such as birth defects. The EPA has identified 188 air toxics, but is currently focusing its efforts on assessing 33 air toxics that pose the greatest risk to human health. These 33 air toxics include benzene, which is found in gasoline, and used perchloroethlyene, which is dry-cleaning solvent, a degreasing agent for metals, and a component in manufacturing fluorocarbons used as refrigerants.

The federal Clean Air Act directs the EPA to develop standards for reducing emissions of air toxics. In response, the EPA is establishing technology-based Maximum Achievable Control Technology (MACT) standards for 174 industry groups that emit air toxics. ⁵ These differ from ambient air quality standards because they establish emission limits on specific sources rather than on concentrations of pollutants in the ambient air. The EPA also is required to assess the public health risk remaining after implementing these standards and determine the need for additional regulations.

Florida's DEP has adopted the MACT standards and enforces them through its permitting and compliance activities. These standards specify emission reductions based on levels achieved by the best performing facilities in an industry. For example, the department may require a dry-cleaning facility to install a refrigerated condenser to control emission levels of perchloroethlyene in order to comply with the MACT standard.

The department has delegated some air pollution control responsibilities to eight Florida counties. ⁶ In most, but not all of these counties,

responsibilities include monitoring air pollution levels, issuing permits to regulated facilities, and ensuring that these facilities comply with permit conditions.

Program Resources. The program was allocated \$26.5 million and 198 positions in Fiscal Year 2001-02. This includes \$10.1 million allocated to the eight county air quality programs and \$6.1 million allocated to the department's six districts. Of the 198 total positions, 99 are assigned to the department's central office in Tallahassee while the remaining 99 are assigned to district offices.

Program Benefit

The Air Resources Program provides beneficial services to the public by helping to maintain or improve Florida's air quality and should be continued. The program implements the federal Clean Air Act and state air pollution laws, monitors the state's air quality, administers Florida's air pollution control programs, promotes pollution prevention, and coordinates program activities with other local, state, and federal air quality programs. As such, it serves an important role in protecting human health and welfare in the state.

If the program were discontinued, the EPA could take over enforcing federal Clean Air Act requirements in Florida. These requirements include creating and administering a state plan for maintaining national ambient air quality standards and regulating major stationary sources of air pollutants.

The EPA also can impose sanctions on Florida if the program was discontinued. The Clean Air Act authorizes the EPA to sanction a state that fails to submit a plan or implement any part of its approved plan. These sanctions may include withholding federal funding including highway transportation funds. In addition, the EPA can develop and enforce a federal plan in lieu of an inadequate state plan.

Discontinuing the program would also eliminate the flexibility currently exercised by the department in taking into account local

⁵ These are also known as National Emission Standards for Hazardous Air Pollutants (NESHAP).

⁶ These counties are Broward, Dade, Duval, Hillsborough, Orange, Palm Beach, Pinellas, and Sarasota.

conditions in enforcing provisions of the Clean Air Act. The act recognizes that state governments are better able to address air pollution problems because they have a greater understanding of local conditions and issues.

Finally, discontinuing the program and allowing the EPA to administer and enforce the Clean Air Act in Florida could result in higher costs for various stakeholders. For example, the department currently charges permitted major air pollutant sources an annual fee of \$25 per ton of allowable pollutant emitted. However, as of January 1, 2001, the EPA charges such sources \$36.07 per ton. ⁷

Measuring Program Performance

To assess program performance, we reviewed ambient air monitoring data and other information reported by the department. We also reviewed the program's performance-based legislatively approved program budgeting (PB²) measures. include outcome measures that can be used to assess the program's performance in controlling the levels of the six criteria pollutants and output measures that provide information on program inspection and permitting activities. However, the department has not developed performance measures for assessing air toxics.

The department's inspector general is required by law to determine the validity of each legislatively approved measure and the accuracy of the measure's associated data. ⁸ The department's Inspector General's Office has assessed the validity and reliability of the program's outcome measures and data on air quality levels in the state. However, the office has not tested the accuracy of the data for some of the program's output measures.

Findings-

Florida generally has good outdoor air quality. It meets current state and federal ambient air quality standards for the six criteria pollutants. The department's Air Resources Program also met legislatively approved performance standards relating to air quality.

However, some areas within Florida have high ambient concentrations of ozone. Current ozone ambient concentrations in Escambia and Sarasota counties violate a new federal ozone standard that has not yet been fully implemented by the EPA. Other counties are also close to violating this new standard. The department and the EPA are taking actions to address immediate concerns regarding high ozone levels.

The level of air toxics is also a concern in some areas of the state. The state enforces emission standards for several industries emitting these pollutants. However, limited information exists to assess current human health risks and determine the effectiveness of the program's air toxics activities.

Florida's air quality meets current state and federal standards statewide

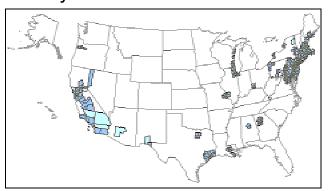
As of April 2002, the state met current federal and state ambient air quality standards. ⁹ The levels of criteria pollutants are lower in Florida than in many other highly populated states. For example, urban areas in California, Texas, Illinois, Pennsylvania, and New York violate the current federal ozone standard (see Exhibit 1).

⁷ Title V of the federal Clean Air Act requires most large sources of air pollution to obtain an operating permit. State and local permitting authorities issue most of these permits. However, the U.S. EPA also issues these permits in Indian lands and some other parts of the country.

⁸ See s. <u>20.055</u>, *Florida Statutes*.

These results are based on data obtained by ambient air quality monitors throughout the state. During Fiscal Year 2000-01, 89.5% of Florida's population lived in counties with monitors. As of October 2001, 33 of Florida's 67 counties had monitors. Ambient monitors are generally placed in urban areas where high concentrations are likely to occur.

Exhibit 1
Populated States Other than Florida Violate Federal
Air Quality Standards for Ozone¹



¹ This exhibit shows areas that violate the federal one-hour ozone standard and that are designated as nonattainment areas as of January 2002.

Source: U.S. Environmental Protection Agency.

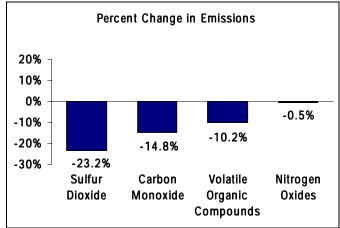
Further, the department met the legislatively approved outcome performance measures and standards relating to air quality in Fiscal Year 2000-2001. For example, the department met the legislatively approved performance standard that the monitored population in Florida breathed good or moderate quality air 99.3% of the time.

The department and county program staffs attribute Florida's overall good air quality to factors including the state's generally flat terrain and prevailing winds that tend to blow pollution away from the state. Also, state and federal regulations have reduced motor vehicle and industrial source pollution.

Most major pollutant emissions decreased or remained stable over time

Emissions of several major air pollutants have remained stable or decreased over time. Exhibit 2 shows that emissions of several major pollutants, such as sulfur dioxide and nitrogen oxides, decreased or remained stable over the period from 1991 to 2000.

Exhibit 2 Emissions for Four Air Pollutants Remained Stable or Decreased from 1991 to 2000¹



¹ Data for 2000 is preliminary.

Source: Department of Environmental Protection.

Ozone Levels Improved, But Concerns Persist in Some Florida Locations

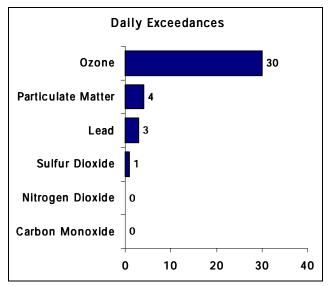
Ozone polluant remains a concern. Florida's air quality is generally good; however, high ozone levels have historically been a concern in some areas of the state. As noted previously, six Florida counties did not meet the EPA's ambient ozone standards during the period from 1987 to 1994 and were not all designated as being in attainment until 1996 (see page 2).

Although the state is now meeting the federal ambient air quality standard for ozone, this pollutant remains a concern. As shown in Exhibit 3, ozone levels within the state have exceeded the one-hour standard more times than any other criteria pollutant exceeded standards since 1996. ¹⁰

ozone standard over a three-year period.

¹⁰ An exceedance occurs when the amount of a pollutant in the ambient air is greater than the air quality standard. A violation of an ambient standard occurs when there are multiple exceedances of the standard within a specific time period. An example of a violation would be one or more exceedances of the one-hour

Exhibit 3
Air Quality Standards Exceedances for Ozone
Higher Than Exceedances for Other Criteria
Pollutants Since 1996

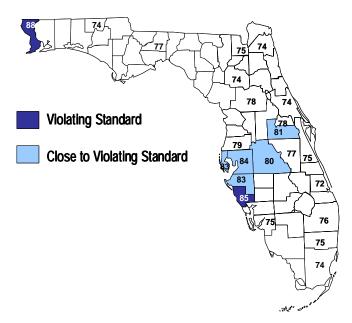


Source: U.S. Environmental Protection Agency.

Further, current pollutant concentrations in two areas of the state exceed a new, more stringent federal ozone standard. The EPA proposed a more stringent eight-hour ambient air quality standard for ozone in 1997 after studies found that adverse health effects occur at lower levels of ozone for prolonged periods. ¹¹

After years of litigation, a federal appeals court upheld the new standard on March 26, 2002. ¹² Although the EPA is determining how to implement the new standard, Escambia and Sarasota counties currently violate this standard and could be designated as nonattainment areas. Further, ozone levels in Hillsborough, Manatee, Pinellas, Polk, and Orange counties are close to violating the standard. (See Exhibit 4.)

Exhibit 4
Some Areas Would Likely Exceed
New Ozone Standard¹



¹ The EPA considers an area in nonattainment if the average of the annual fourth highest ozone readings at any ozone monitor for any three-year period equals or exceeds 85 parts per billion. Exhibit 4 shows a three-year average (1999-2001) of the fourth highest daily value of those counties with monitors.

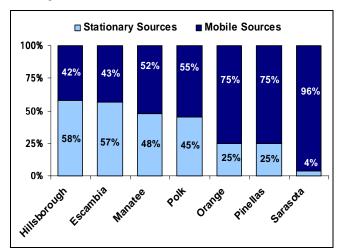
Source: Department of Environmental Protection.

Actions are being taken to reduce emissions in counties with high ozone levels. pollution is primarily formed by emissions from motor vehicle and major stationary sources, such as electric power plants. As shown in Exhibit 5, most emissions of nitrogen oxides (a major contributor to ozone formation) in Orange. Pinellas, and Sarasota counties are from mobile sources. In contrast, most emissions of nitrogen oxides in Escambia and Hillsborough counties are from stationary sources. For example, electric power plants in Hillsborough County accounted for 96% of stationary source emissions of nitrogen oxides in 2000. Emissions in Polk Manatee and counties are evenly distributed between stationary and mobile sources.

¹¹ The new standard is .08 parts per million during an eight-hour period. The current standard is 0.12 parts per million during a one-hour period.

¹² American Trucking Associations, Inc., et al. v. Environmental Protection Agency, U.S. Circuit Court of Appeals for the District of Columbia, No. 97-1440, March 26, 2002.

Exhibit 5
Emission Sources of Nitrogen Oxides Vary
Among Counties With Ozone Problems¹



¹ Data is presented for the calendar year 2000 and are preliminary. Source: Department of Environmental Protection.

The department and the federal EPA are implementing several strategies to reduce ozone concentrations by seeking to lower nitrogen oxides and other pollutant emissions from these sources.

- The EPA has developed new federal motor vehicle and gasoline standards that are expected to reduce significantly mobile source emissions. The EPA established new tailpipe standards to reduce emissions for sport utility vehicles, minivans, and light-duty trucks. Low sulfur gasoline also is expected to decrease emissions by improving the effectiveness of emission control devices. Further, new engine standards for heavy-duty trucks and buses are expected to reduce diesel emissions. Implementation of these standards will begin in 2004, and their effects will not be apparent for several years.
- The department is working with Gulf Power, a major utility, to encourage the company to voluntarily reduce emissions from the company's power plants in Northwest Florida. If successful, emission reductions by

- Gulf Power would help Escambia County avoid a nonattainment designation. 13
- The Tampa Electric Company entered into agreements with the department and the EPA in December 1999 and February 2000, respectively. Under the agreements, the company would make improvements at two of its older power plants to reduce emissions contributing to ozone formation. 14 According to DEP, improvements implemented by 2010 are expected to reduce annual emissions of nitrogen oxides by 94% and concentrations in the Tampa Bay Area by 50%. 15 The department projects that planned emission reductions at these two electrical power plants may sufficiently reduce ozone concentrations to avoid nonattainment in the Tampa/St. Petersburg metropolitan area.

Program Efforts to Assess Current Air Toxics Risks Are Limited

Estimated risks for some air toxics in Florida exceeded benchmark concentrations in 1996. Air toxics are chemicals that are known or suspected to cause cancer or other serious health problems. In 2002, the EPA released to the

¹³ On March 22, 2002, the 2002 Legislature passed House Bill 1601 that would allow the company to recover costs that it would incur pursuant to an agreement entered into before October 1, 2002, between the company and the department or the EPA to ensure compliance with ozone ambient air quality standards. If approved by the Public Service Commission, the company would be allowed to recover these costs through the rates charged to its customers. As of May 16, 2002, the bill was awaiting the governor's signature.

¹⁴ Electrical power plants built before 1971 are not subject to national emission standards that require pollution controls, unless plants are modified. The U.S. Justice Department, on behalf of the EPA, filed lawsuits against utilities that allegedly tried to avoid installing pollution controls when modifying older coal-fired power plants. Defendants included the Southern Company that operates plants in northwest Florida and the Tampa Electric Company that operates plants in the Tampa Bay Area.

¹⁵ The improvements also are expected to result in a 96% reduction in sulfur dioxide emissions by 2010. Sulfur dioxide is a component of acid rain that can adversely affect aquatic ecosystems.

department its estimates of the amount of air toxics that people breathe and the resulting health risk for the year 1996. These risk estimates are based on the EPA's 1996 emission inventory, the most complete and up-to-date available data, and estimates of population exposure to these chemicals. ¹⁶

The department's analysis of EPA estimates indicates that risk levels of 14 air toxics exceeded benchmark concentrations in Florida. 17 noted in its response to this justification review (See Appendix C, p. 17) that these estimates are based on 1996 data that the EPA indicated was "subject to a number of limitations and uncertainties" and that the data was "not designed to characterize or compare risks at local levels." Instead, the data was intended to "indicate where additional data collection efforts should be directed to reduce uncertainties." OPPAGA recognizes the data limitations, however, the data is still a cause for concern because 13 of the 14 air toxics exceeding benchmark concentrations are likely or known to cause cancer. Generally, highly urbanized areas had the highest estimated levels of air toxics.

Primary sources for most of the air toxics in Florida are gasoline and diesel engines. prescribed burning **Emissions** from contribute to high levels in some counties. 18 Several of these chemicals have high estimated background levels that result from natural

The department's analysis also indicates that estimated risk levels in some Florida counties were among the highest in the nation. estimated levels of certain air toxics in Broward, Dade, Hillsborough, Leon, Orange, Osceola, Pinellas, and Seminole counties were among the top 10% of all U.S. counties. 19 (See Exhibit 6.). Department staff attributes high levels to urbanization, high population density, and

distant sources.

Florida).

heavy traffic. See Exhibit B-2 (page 14) for more detail on the number of air toxics exceeding benchmark concentrations in Florida counties in 1996.

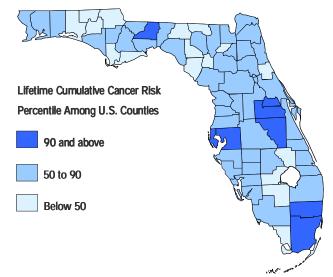
sources, persistence in the environment of past

years' emissions, and long-range transport from

information about air toxics of concern in

(See Appendix B for more

Exhibit 6 Estimated Air Toxics Levels in Eight Florida Counties Were Among the Highest in the Nation in 1996



Source: Department of Environmental Protection.

8

¹⁶ The EPA's 1996 estimates became available to the department in 2002. The EPA has begun analyzing 1999 National Toxics Inventory data in order to estimate 1999 concentrations. It expects to release the 1999 estimated concentrations by 2003. Exposures to air toxics depend on several factors, including indoor versus outdoor activities and breathing rates.

¹⁷ A benchmark concentration is the amount of a pollutant below which there is likely no public health concern. For example, the benchmark concentration for a carcinogen is the probability that one individual in a million population will develop cancer as a result of being exposed to an air toxic over a 70-year lifetime. The EPA does not use benchmark concentrations for regulatory purposes.

¹⁸ Department staff believes that the EPA's estimates overstate emissions from prescribed burning. The EPA's estimates assume that emission levels from prescribed burning are uniform throughout the year, but emissions from prescribed burns may last only a few days or weeks.

¹⁹ Department staff believes that the EPA estimates significantly overstate the level of formaldehyde in Osceola County. Staff noted that EPA 's source data indicates that 70% of Osceola County's 1996 formaldehyde emissions came from stationary internal combustion engines burning natural gas and 30% came from wildfires and prescribed burning operations. Staff indicated that Osceola County would have to burn 133 times the amount of natural gas burned statewide in 1996 in order to produce the EPA's estimated formaldehyde level.

Monitoring data from some Florida counties confirms the EPA's estimates of high air toxics concentrations. ²⁰ For example, levels of several air toxics, such as benzene and chloroform, measured at two monitoring sites in Pinellas County in 1996 were equal to or exceeded the EPA's estimated concentration level. In Broward County, monitoring data were comparable to modeled concentrations for four air toxics at five monitoring sites.

The EPA plans to place more emphasis on addressing air toxics. In September 2001, the EPA issued a work plan for developing a national air toxics program. The work plan specifies activities to be performed by the EPA, such as expanding air toxics monitoring, updating emission inventories, and establishing deadlines for conducting the activities. The EPA has also included proposed goals for reducing the potential health risks from air toxics and a process for achieving these goals. ²¹

However, the EPA's work plan does not address key issues that state and local governments would face if required to implement air toxics programs. For example, it does not indicate whether the EPA will provide any funding to support the additional activities that states will be required to perform. The EPA plans to provide more information on these issues within the next 24 months.

Limited information impedes the department's ability to assess current human health risks caused by air toxics. The state has limited information for assessing current health risks posed by air toxics.

The department does not monitor for air toxics concentrations in Florida. In September 2000, department staff estimated that it would cost \$304,540 to establish 12 air toxics monitoring sites in counties without local monitoring programs.

²⁰ Dade, Broward, Palm Beach, Pinellas, Hillsborough, and Duval counties conduct ambient monitoring for air toxics.

- Currently, only some county air programs (Dade, Broward, Palm Beach, Pinellas, Hillsborough, and Duval counties) conduct ambient monitoring for air toxics. However, most of these counties have not analyzed current monitoring data. ²² Further, some counties with high 1996 risk levels of air toxics (Leon, Orange, Osceola, and Seminole counties) do not have delegated air pollution programs that monitor air toxics.
- The department does not have sufficient data to assess trends in air toxics emissions because the department did not begin requiring major facilities to report air toxics emissions data until 2000. These facilities are not required to report such data again until 2005. In addition, the department does not collect emissions data from mobile sources.

As a result of this limited data collection, the department cannot determine the current health risks posed by air toxics throughout the state. The department is also hampered in its ability to assess changes in air toxic trends and to evaluate the effectiveness of its air toxics activities. For instance, several technology-based standards intended to reduce air toxic emissions have been implemented since 1996 and their effects were not captured in the EPA's 1996 estimates. Consequently, current concentrations and risk levels may differ from the 1996 estimates.

The department will need to improve its air toxics data collection and analysis systems if the EPA requires states to implement an air toxics program.

Conclusions and Recommendations

The state is meeting current state and federal air quality standards. The department's Air Resources Program met legislatively approved air quality performance standards. Some areas of the state have high ambient levels of ozone;

²¹ State and local governments would have to complete an assessment, develop a program, implement the program, evaluate its success, and establish an audit process.

²² Broward County recently released air toxics data for the period from 1996 to 2000.

however, the department and the EPA are acting to reduce emissions emitted by sources of ozone.

The department's analysis of 1996 EPA data indicates that estimated risks of 14 air toxics exceeded benchmark concentrations in Florida. The department's analysis also indicates that estimated risk levels in eight Florida counties were among the top 10% of all U.S. counties. Monitoring data from some Florida counties confirms the EPA's estimates of high air toxics concentrations.

The EPA plans to place more emphasis on air toxics. The agency has proposed goals for reducing the potential health risks from air toxics, and states would have to establish programs to meet these goals. State and local pollution control managers should be prepared to implement an air toxics program, if the EPA requires them to do so.

State efforts to assess current air toxics risks are limited. The state does not conduct air toxics monitoring, and only a few counties with air quality programs do so. Further, available emissions data covers only some stationary sources and is not collected frequently enough to allow the department to assess trends.

To ensure that Florida adequately addresses air toxics concerns, we recommend that the department develop a statewide air toxics plan in consultation with local pollution control programs and the EPA. The plan should be presented to the Legislature prior to the 2003 legislative session.

The plan should identify current statewide and local air toxic concerns and present strategies to address those concerns. Specifically, the plan should address the need for statewide ambient monitoring, development of emissions inventories to assess trends in air toxics emissions (including the timeliness of reporting emission data by facilities), analysis of air toxics data, strategies for reducing air toxic emissions, and approaches for providing information on air toxics to the public. The plan should also propose measures that can be used to assess the

program's effectiveness in addressing air toxic problems.

The plan should also present timeframes and costs for implementing program activities. It should also identify potential funding sources for implementing these activities, including federal funds and state funds that could be shifted from lower priority programs that could be either eliminated or reduced.

We also recommend that once the program has developed appropriate air toxics performance measures, it provide them to the Legislature for its use in overseeing the program's performance.

Appendix A

Statutory Requirements for Program Evaluation and Justification Review

Section 11.513(3), *Florida Statutes*, provides that OPPAGA program evaluations and justification reviews shall address nine issue areas. Our conclusions on these issues related to the Department of Environmental Protection's Air Resources Program are summarized below.

Table A-1
Summary of the Program Evaluation and Justification Review of the Air Resources Program

Issue	OPPAGA Conclusion
The identifiable cost of the program	The program was allocated \$26.5 million and 198 positions in Fiscal Year 2001-02. This includes \$10 million to local air quality programs and \$6.1 million to the department's six districts. (See page 3.)
The specific purpose of each program, as well as the specific public benefit derived therefrom	The Air Resources Program's mission is to protect human health by developing and implementing rules and regulations to conserve the state's air resources and ecosystems, to monitor all criteria pollutants, and to improve the air quality in the State of Florida. The program is responsible for implementing requirements of the federal Clean Air Act. (See page 2.)
Progress toward achieving the outputs and outcomes associated with each program	The state is meeting current state and federal air quality standards. Further, the program is meeting legislatively approved performance standards. The monitored population in Florida breathed good or moderate quality air 99.3% of the time during Fiscal Year 2000-01. (See pages 4,5.)
An explanation of circumstances contributing to the state agency's ability to achieve, not achieve, or exceed its projected outputs and outcomes, as defined in s. 216.011, <i>F.S.</i> , associated with each program	State and federal efforts are expected to address immediate ozone problems. Pending federal regulations will likely reduce emissions from motor vehicles, a major source of ozone. The program and the U.S. EPA are also taking steps to reduce emissions emitted by stationary sources, particularly older electric power plants. However, local air pollution program ambient monitoring has also detected high levels of air toxics. Although the state enforces emission standards for several industries emitting these pollutants, other state efforts are limited. (See pages 4-10.)
Alternate courses of action that would result in administration of the same program in a more efficient or effective	To ensure that Florida adequately addresses air toxics concerns, we recommend that the department develop a statewide air toxics plan in consultation with local pollution control programs and the EPA. The plan should be presented to the Legislature prior to the 2003 legislative session.
manner	The plan should identify current statewide and local air toxic concerns and present strategies to address those concerns. Specifically, the plan should address the need for statewide ambient monitoring, development of emissions inventories to assess trends in air toxics emissions (including the timeliness of reporting emission data by facilities), analysis of air toxics data, strategies for reducing air toxic emissions, and approaches for providing information on air toxics to the public. The plan should also propose measures that can be used to assess the program's effectiveness in addressing air toxic problems.
	The plan should also present timeframes and costs for implementing program activities. It should also identify potential funding sources for implementing these activities, including federal funds and state funds that could be shifted from lower priority programs that could be either eliminated or reduced.
	We also recommend that once the program has developed appropriate air toxics performance measures, it provide them to the Legislature for its use in overseeing the program's performance. (See page 10.)

Justification Review

Issue	OPPAGA Conclusion
The consequences of discontinuing such program	If the program were discontinued, the EPA could take over enforcing federal Clean Air Act requirements in Florida. These requirements include creating and administering a state plan for attaining national ambient air quality standards and regulating major stationary sources of air pollutants.
	The EPA can also impose sanctions on Florida if the program was discontinued. The Clean Air Act authorizes the EPA to sanction a state that fails to submit a plan or implement any part of its approved plan. These sanctions may include withholding federal funding including highway transportation funds. In addition, the EPA can develop and enforce a federal plan in lieu of an inadequate state plan.
	Discontinuing the program would also eliminate the flexibility currently exercised by the department in taking into account local conditions in enforcing provisions of the Clean Air Act. The act recognizes that state governments are better able to address air pollution problems because they have a greater understanding of local conditions and issues.
	Finally, discontinuing the program and allowing the EPA to administer and enforce the Clean Air Act in Florida could result in higher costs for various stakeholders. For example, the department currently charges permitted major air pollutant sources an annual fee of \$25 per ton of allowable pollutant emitted. However, as of January 1, 2001, the EPA charges such sources \$36.07 per ton. (See pages 3 and 4.)
Determination as to public policy, which may include recommendations as to whether it would be sound public policy to continue or discontinue funding the program, either in whole or in part, in the existing manner	The Air Resources Program provides beneficial services to the public by helping to maintain or improve Florida's air quality and should be continued. The program implements the federal Clean Air Act and state air pollution laws, monitors the state's air quality, administers Florida's air pollution control programs, promotes pollution prevention, and coordinates program activities with other local, state, and federal air quality programs. As such, it serves an important role in protecting human health and welfare in the state. (See page 3.)
Whether the information reported pursuant to s. 216.031(5), <i>F.S.</i> , has relevance and utility for the evaluation of each program	To assess program performance, we reviewed ambient air monitoring data and other information reported by the department. We also reviewed the program's legislatively approved performance-based program budgeting (PB²) measures. These include outcome measures that can be used to assess the program's performance in controlling the levels of the six criteria pollutants and output measures that provide information on program inspection and permitting activities. However, the department has not developed performance measures for assessing air toxics. (See page 4.)
Whether state agency management has established control systems sufficient to ensure that performance data is maintained and supported by state agency records and accurately presented in state agency performance reports	The department's inspector general is required by law to determine the validity of each legislatively approved measure and the accuracy of the measure's associated data. ²³ The department's Inspector General's Office has assessed the validity and reliability of the program's outcome measures and data on air quality levels in the state. However, the office has not tested the accuracy of the data for some of the program's output measures. (See page 4.)

²³ See Section <u>20.055</u>, *Florida Statutes*.

Air Toxics of Concern in Florida

The following section presents information from the U.S. Environmental Protection Agency's 1996 National Air Toxics Assessment. The goal of the national-scale assessment is to identify those air toxics that are of greatest potential concern, in terms of contribution to health risk. The EPA's 1996 assessment became available in 2002 and includes the latest available data.

Table B-1
Estimated Risks for 14 Air Toxics Exceeded Benchmark concentrations in 1996¹

Air Toxic	EPA Classification	Emission Sources in Florida
Chromium	Known human carcinogen of high carcinogenic hazard	Chromium electroplating operations and municipal waste combustors
Benzene	Known human carcinogen of medium carcinogenic hazard	Background levels are 40% of estimated concentrations. ² On-road and off-road engines, gasoline service stations, wildfires, and prescribed burning
Acetaldehyde	Probable human carcinogen of low carcinogenic hazard	On-road and off-road engines, wildfires, and prescribed burning ³
Carbon Tetrachloride	Probable human carcinogen of low carcinogenic hazard	Background levels from former emission sources ²
Chloroform	Probable human carcinogen of low carcinogenic hazard	Background levels from former emission sources ²
Ethylene Dichloride	Probable human carcinogen of low carcinogenic hazard	Background levels from former emission sources ²
1,3 Butadiene	Probable human carcinogen of medium carcinogenic hazard	On-road and off-road engines and prescribed burning ³
Cadmium compounds	Probable human carcinogen of medium carcinogenic hazard	Battery manufacturing facility (Alachua County)
Ethylene Dibromide	Probable human carcinogen of medium carcinogenic hazard	Background levels from former emission sources ²
Formaldehyde	Probable human carcinogen of medium carcinogenic hazard	On-road and off-road engines, background concentrations, prescribed burning, and wildfires ³
Perchloroethylene	Between possible and probable human carcinogen	Background levels are 60% of estimated concentrations. ² Dry cleaning facilities and degreasing operations
Acrolein ⁵	Possible human carcinogen	On-road and off-road engines, and prescribed burning ³
Polycyclic Organic Matter	See footnote 4	Consumer product usage, residential wood combustion (fireplaces and wood stoves), wildfires, and prescribed burning ³
7-PAH (Polynuclear aromatic hydrocarbon)	See footnote 4	Consumer product usage, residential wood combustion (fireplaces and wood stoves), wildfires, and prescribed burning ³

¹ These air toxics exceed benchmark concentrations established by the EPA. For carcinogens, the benchmark concentration is the probability that one individual in a million population will develop cancer as a result of being exposed to an air toxic over a 70-year lifetime. For non-carcinogens (i.e., Acrolein), the benchmark concentration is based on potential exposure to the compound and the level at which no adverse effects are expected to occur.

Source: Department of Environmental Protection and U.S. Environmental Protection Agency.

² The estimated background level can result from natural sources, persistence in the environment of past years' emissions, and long-range transport from distant sources.

³ Department staff believes that the EPA's estimates overstate emissions from prescribed burning. The EPA's estimates assume that emission levels from prescribed burning are uniform throughout the year, but emissions from prescribed burns may last only a few days or weeks.

⁴ Polycyclic organic matter (POM) and polynuclear aromatic hydrocarbons (PAH) are two closely related groups of chemicals. 7-PAH is a subset of POM. Chemicals are difficult to measure and their toxicity is not well understood. However, chemicals studied within these groups have shown to be potent carcinogens. The EPA has classified benzo(a) pyrene as a probable carcinogen of medium carcinogenic hazard.

⁵ The EPA considered acrolein as a non-carcinogen air toxic for the purposes of their risk assessment.

Table B-2
Air Toxics in Florida Exceeded the EPA's Benchmark Concentrations in 1996 for All Florida Counties ¹

Country	Number of Air Toxics Exceeding	Air Tavias Fuescaline Health Levels
County	Health Levels	Air Toxics Exceeding Health Levels
Draward	10	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene
Broward	12	Dibromide, Ethylene Dichloride, Formaldehyde, Perchloroethylene, Polycyclic Organic Matter
Dada	10	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene
Dade	12	Dibromide, Ethylene Dichloride, Formaldehyde, Perchloroethylene, Polycyclic Organic Matter
I lillah arawah	10	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene
Hillsborough	12	Dibromide, Ethylene Dichloride, Formaldehyde, Perchloroethylene, Polycyclic Organic Matter
		Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Loon	12	Ethylene Dichloride, Formaldehyde, Perchloroethylene, Polycyclic Organic Matter, 7-PAH (Polynuclear arcmatic hydrocarbon)
Leon	1Z	aromatic hydrocarbon) Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene
Pinellas	12	Dibromide, Ethylene Dichloride, Formaldehyde, Perchloroethylene, Polycyclic Organic Matter
riilelias	12	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Duval	11	Ethylene Dichloride, Formaldehyde, Perchloroethylene, Polycyclic Organic Matter
Duvai	11	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene
Escambia	11	Dibromide, Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
_SCATTIDIA	11	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Orange	11	Ethylene Dichloride, Formaldehyde, Perchloroethylene, Polycyclic Organic Matter
Orange	11	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene
Seminole	11	Dibromide, Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
Scrinioic	11	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene
/olusia	11	Dibromide, Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
Volusia	11	Acrolein, Benzene, 1,3 Butadiene, Cadmium, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Alachua	10	Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
tiacriaa	10	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Brevard	10	Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
Di oval a	10	Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
DeSoto	10	Dichloride, Formaldehyde, Polycyclic Organic Matter, 7-PAH (Polynuclear aromatic hydrocarbon)
	1.0	Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Lee	10	Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Manatee	10	Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Osceola	10	Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acetaldehyde, Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide,
Pasco	10	Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
Bay	9	Dichloride, Formaldehyde, Polycyclic Organic Matter
-		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
Hardee	9	Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
Hernando	9	Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Chromium, Ethylene Dibromide, Ethylene Dichloride
Marion	9	Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
Okaloosa	9	Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
Palm Beach	9	Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
Polk	9	Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
Sarasota	9	Dichloride, Formaldehyde, Polycyclic Organic Matter
		Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene
St. Lucie	9	Dichloride, Formaldehyde, Polycyclic Organic Matter

	Number of Air Toxics Exceeding	
County	Health Levels	Air Toxics Exceeding Health Levels
Charlotte	8	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
Gridirotto		Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Clay	8	Formaldehyde, Polycyclic Organic Matter
Collier	8	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
Highlands	8	Acrolein, Benzene, 1,3 Butadiene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
		Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Indian River	8	Formaldehyde, Polycyclic Organic Matter Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Lake	8	Formaldehyde, Polycyclic Organic Matter
Martin	8	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
Santa Rosa	8	Acetaldehyde, Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
St. Johns	8	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde, Polycyclic Organic Matter
31. 3011113	0	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Baker	7	Formaldehyde Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Bradford	7	Formaldehyde
Calhoun	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Citrus	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Oillus	,	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Columbia	7	Formaldehyde Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Dixie	7	Formaldehyde
Flager	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Franklin	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
		Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Gadsden	7	Formaldehyde Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Gilchrist	7	Formaldehyde
Glades	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Gulf	7	Formaldehyde Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Hamilton	7	Formaldehyde Accelein Renzono Carbon Tetrachlorido Chloroform, Ethylono Dibromido, Ethylono Dichlorido
Hendry	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Holmes	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
		Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Jackson	7	Formaldehyde Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Jefferson	7	Formaldehyde Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride,
Lafayette	7	Formaldehyde
Levy	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
,	-1	1. 1. 1. 1. 2. 1.

Justification Review

County	Number of Air Toxics Exceeding Health Levels	Air Toxics Exceeding Health Levels
Liberty	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Madison	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Nassau	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Okeechobee	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Putnam	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Sumter	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Suwannee	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Taylor	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Union	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Wakulla	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Walton	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Washington	7	Acrolein, Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde
Monroe	6	Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dibromide, Ethylene Dichloride, Formaldehyde

These air toxics exceed benchmark concentrations established by the EPA. For carcinogens, the benchmark concentration is the probability that one individual in a million population will develop cancer as a result of being exposed to an air toxic over a 70 year lifetime. For non-carcinogens (i.e., Acrolein), the benchmark concentration is based on potential exposure to the compound and the level at which no adverse effects are expected to occur.

Source: Department of Environmental Protection.





Department of

Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

May 14, 2002

Mr. John W. Turcotte, Director The Florida Legislature Office of Program Policy Analysis and Government Accountability 111 West Madison Street, Room 312 Tallahassee, Florida 32399-1475

Re: Office of Program Policy Analysis and Government Accountability (OPPAGA)

Justification Review Response for the Air Resources Program

Dear Mr. Turcotte:

Secretary Struhs received your letter dated April 29 regarding the preliminary findings and recommendations of the Air Resources Program justification review. This letter is in response to that review.

To begin, we feel the **Program Benefit** section of the report portrays an accurate picture of the importance of the State's Air Resources Program with regard to protecting the air quality, as well as a depiction of how the program would be run at the federal level by the Environmental Protection Agency (EPA).

Moving on to the **Measuring Program Performance** section, we would like to speak to the issue on developing performance measures for assessing air toxics. At this time, the department does not have enough data to support an annual measure for assessing air toxics. The trend data that is currently available is limited to a once-every-5-year emissions inventory required by facilities that emit major hazardous air pollutants (HAPs) and mobile and area-source estimates generated by EPA but lagging two to three years behind the current year. The initial facility data requirement was included for the first time in the 2000 emissions inventory. Preliminary and mobile source data are available only for 1999.

"More Protection, Less Process"

Mr. John W. Turcotte May 14, 2002 Page 2 of 3

Under the **Findings** section of the report, we would like to clarify some of the information reported in the article on page 8, "Program Efforts to Assess Current Air Toxics Risks are Limited". OPPAGA has relied almost exclusively on EPA's recent National Air Toxics Assessment for 1996 (96 NATA) to support its evaluation of the department's air toxics program. The 96 NATA is a computer projection of the air toxics predicted to be present across the country in 1996, using emission estimates collected by regulatory agencies and default assumptions developed by EPA to fill in missing data. The 96 NATA provides reasonable worst-case estimates of the air toxics present across the U.S. prior to the reductions in these emissions from numerous air toxics regulations, which were finalized in the years following the 1990 changes to the Clean Air Act. EPA developed the 96 NATA to track the national progress in reducing the public's exposure to these air toxics since 1990, and to focus EPA's priorities for collecting additional data to better assess the public health risks from these air toxics.

EPA notes that "given its broad scope, this assessment is subject to a number of limitations and uncertainties" and "this assessment represents an important step in characterizing air toxics nationwide; however, it is not designed to characterize or compare risks at local levels." The department believes it is important for readers of OPPAGA's Justification Review to understand that the 96 NATA's estimates of air toxics in Florida are fairly uncertain, and indicate where additional data collection efforts should be directed to reduce those uncertainties. EPA is currently working on another NATA computer projection based on emission estimates from 1999, and the department is actively supporting EPA's efforts to collect accurate emissions data for the 1999 version. The department is also working with EPA to develop local-scale assessment tools to better characterize the risks from air toxics at the state and county level.

The 1990 Amendments to the Clean Air Act are the regulatory basis for EPA's air toxics program, and the department has requested and received delegation of all federal air toxics rules that support this program. Until 2004, the federal program regulations will be primarily technology-based emission control requirements for all major sources of air toxics. A second phase, based on further reducing public health risks, becomes the dominant air toxics program feature following the initial control technology mandate, for each of the same categories of previously regulated industrial categories. The department has been effective in adopting and implementing each federal air toxics program rule, and we anticipate that our progression to a more risk-based air toxics program will also be effectively managed.

Finally, we would like to comment on the **Conclusions and Recommendations** section of the report. As mentioned throughout the report, the department has limited data and resources directed toward the air toxics program.

The department agrees that air toxics is an emerging national issue. While current national modeling efforts point to air toxics as an issue, EPA has failed to develop air quality standards for air toxics and has analyzed data that shows most air toxics of concern are related to mobile sources. Mobile source emissions are primarily handled at the national level. Taking this into account, the most reasonable strategy for the department to pursue at this time is to obtain actual monitoring data that can confirm the national modeling data being performed by EPA is accurate.

Mr. John W. Turcotte May 14, 2002 Page 3 of 3

Your report suggests the department look at lower priority programs that could be cut to support the implementation of an air toxics program. The department has reviewed the program priorities over the last two budget cycles and determined the statewide air toxics program to be the lowest priority for several reasons. One of the factors that determined the priority to be the lowest is the current operation of air toxics monitors by our Approved Local Air Pollution Control Programs in Broward, Dade, Duval, Hillsborough, Palm Beach, and Pinellas counties. Given the majority of EPA's data shows that most air toxics derive from mobile sources, we feel these counties provide the monitoring needed to collect the hazardous air pollutant data in the larger metropolitan areas. In addition to these metropolitan areas that have existing monitors, the department is proposing through federal funding from EPA to contract with Orange County to implement air toxics monitors in that area. The department has also influenced the use of federal money by the University of West Florida to implement air toxics monitoring in the Escambia/Santa Rosa county area. This monitoring data will enable the department to better assess what is going on with regard to the air quality in these counties. Once we have more accurate data, the department will review prioritization of our air resources program.

Sincerely,

/s/ Howard L. Rhodes, Director Division of Air Resource Management

HLR/bap

Cc: David B. Struhs, Secretary

Allan Bedwell, Deputy Secretary Pinky G. Hall, Inspector General

Joe Aita, Audit Director

The Florida Legislature

Office of Program Policy Analysis and Government Accountability



Visit the <u>Florida Monitor</u>, OPPAGA's online service. See <u>http://www.oppaga.state.fl.us</u>. This site monitors the performance and accountability of Florida government by making OPPAGA's four primary products available online.

- OPPAGA publications and contracted reviews, such as policy analyses and performance reviews, assess the efficiency and effectiveness of state policies and programs and recommend improvements for Florida government.
- <u>Performance-based program budgeting (PB²) reports and information</u> offer a variety of tools.
 Program evaluation and justification reviews assess state programs operating under performance-based program budgeting. Also offered are performance measures information and our assessments of measures.
- <u>Florida Government Accountability Report (FGAR)</u> is an Internet encyclopedia of Florida state government. FGAR offers concise information about state programs, policy issues, and performance. Check out the ratings of the accountability systems of 13 state programs.
- Best Financial Management Practices Reviews of Florida school districts. In accordance with the Sharpening the Pencil Act, OPPAGA and the Auditor General jointly conduct reviews to determine if a school district is using best financial management practices to help school districts meet the challenge of educating their students in a cost-efficient manner.

Subscribe to OPPAGA's electronic newsletter, <u>Florida Monitor Weekly</u>, a free source for brief e-mail announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.

OPPAGA provides objective, independent, professional analyses of state policies and services to assist the Florida Legislature in decision making, to ensure government accountability, and to recommend the best use of public resources. This project was conducted in accordance with applicable evaluation standards. Copies of this report in print or alternate accessible format may be obtained by telephone (850/488-0021 or 800/531-2477), by FAX (850/487-3804), in person, or by mail (OPPAGA Report Production, Claude Pepper Building, Room 312, 111 W. Madison St., Tallahassee, FL 32399-1475).

Florida Monitor: http://www.oppaga.state.fl.us/

Project supervised by Larry Novey (850/487-9243)

Project conducted by Alex Regalado (850/487-9234) and Darwin Gamble (850/487-9247)

Tom Roth, Staff Director (850/488-1024)

John W. Turcotte, OPPAGA Director
