

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**Pre-Hearing SIP Submittal: State Implementation Plan Infrastructure Confirmation  
for the 2010 Revised Nitrogen Dioxide National Ambient Air Quality Standard for  
CAA Section 110(a)(2)(D)(i)(I) prongs 1 and 2**

**Introduction**

On February 9, 2010, the United States Environmental Protection Agency (EPA) revised the National Ambient Air Quality Standard (NAAQS) for nitrogen dioxide (NO<sub>2</sub>). *See* 75 Fed. Reg. 6,474 (Feb. 9, 2010). Pursuant to Clean Air Act (CAA) section 110(a)(1), states must address basic State Implementation Plan (SIP) “infrastructure” elements listed under section 110(a)(2) of the CAA within three years of EPA’s promulgation of a revised NAAQS. EPA has historically referred to the submittals in which states address these requirements as “infrastructure SIPs.”<sup>1</sup>

On January 22, 2013, the Florida Department of Environmental Protection (Department) submitted its infrastructure SIP for the 2010 NO<sub>2</sub> NAAQS. However, due to the vacatur by the D.C. Circuit Court of Appeals of EPA’s Cross State Air Pollution Rule, and a corresponding November 19, 2012 EPA memorandum regarding infrastructure SIPs, the Department did not address the CAA section 110(a)(2)(D)(i)(I) infrastructure element in its initial submittal. This infrastructure SIP amendment is solely meant to address the CAA section 110(a)(2)(D)(i)(I) prongs 1 and 2 infrastructure element.

Section 403.061(35), Florida Statutes, grants the Department the broad authority to “[e]xercise the duties, powers and responsibilities required of the state under the federal [CAA], 42 U.S.C. ss. 7401 et seq” and “implement the programs required under that act in conjunction with its other powers and duties.” By virtue of this statute, the Department has the authority and responsibility to act on behalf of the State of Florida to develop and revise a SIP as required by CAA section 110(a)(1) and to ensure that the SIP adequately addresses the required infrastructure element prescribed under CAA section 110(a)(2)(D)(i)(I) prongs 1 and 2.

The Department hereby confirms that Florida’s SIP has adequate provisions to prohibit sources or other emission activities within the state from emitting NO<sub>2</sub> in amounts that would contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to the 2010 NO<sub>2</sub> NAAQS. As such, Florida’s SIP adequately addresses the infrastructure elements required by section 110(a)(2)(D)(i)(I) prongs 1 and 2 of the CAA with respect to the implementation of the 2010 NO<sub>2</sub> NAAQS. The Department further confirms that this element of Florida’s approved SIP has undergone public notice in accordance with the requirements of 40

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<sup>1</sup> The term “infrastructure SIP” does not appear in the statute, but EPA uses the term to distinguish this particular type of SIP submission designed to address basic structural requirements of a SIP from other types of SIP submissions designed to address different requirements, such as “nonattainment SIP” submissions required to address the nonattainment planning requirements of part D, “regional haze SIP” submissions required to address the visibility protection requirements of CAA section 169A, New Source Review (NSR) permitting program submissions required to address the requirements of parts C and D.

CFR 51.102. This document demonstrates the correlation between the section 110(a)(2)(D)(i)(I) prongs 1 and 2 infrastructure elements and the Florida Statutes and SIP-approved Florida rules that address each such element.

## **Rules and Statutes**

Florida's existing SIP consists largely of Florida Administrative Code (F.A.C.) rules adopted by the Department and approved by EPA through the SIP revision process. The complete list of Department rules approved and incorporated by reference into Florida's SIP is published by EPA in the United States Code of Federal Regulations at 40 CFR 52.520(c). The list includes each F.A.C. rule section number and effective date, with a corresponding EPA approval date for each rule section. The complete F.A.C. rules are available online at the Florida Department of State website (<https://www.flrules.org/default.asp>) and at the Department's Division of Air Resource Management website (<http://www.dep.state.fl.us/air/rules/current.htm>).

There are five rule chapters of the F.A.C. that contain rule sections that directly or indirectly address implementation of the 2010 NO<sub>2</sub> NAAQS:

- **Chapter 62-204, F.A.C., Air Pollution Control – General Provisions.** All EPA regulations cited throughout the Department's air pollution rules are adopted and incorporated by reference in Rule 62-204.800, F.A.C. The purpose and effect of each such adopted regulation is determined by the context in which it is cited. This rule chapter is referenced in the discussion below regarding the requirements in section 110(a)(2)(D)(i) of the CAA.
- **Chapter 62-210, F.A.C., Stationary Sources – General Requirements.** This rule chapter establishes definitions and the general requirements for major and minor stationary sources of air pollutant emissions. It provides criteria for determining the need for an owner or operator to obtain Department authorization by permit to conduct certain activities involving sources of air pollutant emissions, and it establishes reporting requirements and requirements relating to estimating emissions. This chapter also sets forth special provisions related to compliance monitoring, stack heights, circumvention of pollution control equipment, and excess emissions. This rule chapter is referenced in the discussion below regarding the requirements in section 110(a)(2)(D)(i) of the CAA.
- **Chapter 62-212, F.A.C., Stationary Sources – Preconstruction Review.** This rule chapter establishes the preconstruction review requirements for proposed new emissions units, new facilities, and modifications to existing units and facilities. The requirements of this chapter apply to those proposed activities for which an air construction permit is required. This chapter includes general preconstruction review requirements and specific requirements for emissions units subject to both attainment and nonattainment area preconstruction review (i.e., New Source Review). This rule chapter is referenced in the discussion below regarding the requirements in section 110(a)(2)(D)(i) of the CAA.
- **Chapter 62-296, F.A.C., Stationary Sources – Emission Standards.** This rule chapter establishes emission limiting standards and compliance requirements for stationary sources of air pollutant emissions. It establishes emission limitations for specific

categories of facilities and emissions units, including reasonably available control technology (RACT) requirements.

- **Chapter 62-297, F.A.C., Stationary Sources – Emissions Monitoring.** This rule chapter establishes test procedures for determining the compliance of air pollutant emissions units with emission limiting standards.

As mentioned above, the Department has adopted many of the current SIP-approved rules under the authority of section 403.061(35), Florida Statutes. Beyond this broad authority to implement the CAA, the Department relies on other Florida Statutes for authority to conduct various air program activities such as permitting, monitoring, fee collection, compliance assurance, enforcement, and emergency response. These statutes are essential to Florida’s implementation of the NO<sub>2</sub> NAAQS and are referenced in the discussion below regarding the requirements of CAA section 110(a)(2)(D)(i)(I). For the most part, these Florida Statutes are referenced only to confirm the Department’s legal authority to implement the SIP. Certain statutes have, however, been approved and incorporated into Florida’s SIP and are noted as such. The complete Florida Statutes are available online at <http://www.leg.state.fl.us/Statutes>.

### **Section 110(a)(2)(D)(i)(I) – Interstate Transport – Implementing Rules and Statutes**

**110(a)(2)(D)(i)(I) – Interstate transport:** SIPs must include provisions prohibiting any source or other type of emissions activity within the state emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such primary or secondary NAAQS.

- **Rules:** SIP-approved sections of Chapters 62-204, 62-210, and 62-212, F.A.C., require any new major source or major modification to undergo PSD or NNSR permitting and thereby demonstrate that it will not cause or contribute to a violation of any NAAQS or PSD increment in Florida or any other state and require that the owner or operator provide an analysis of additional impacts of the source or modification, including impacts on visibility. All new or modified major sources of NO<sub>x</sub> emissions will apply the Best Available Control Technology (BACT) to reduce NO<sub>x</sub> emissions in accordance with the CAA and EPA PSD permitting requirements.
- **Statutes:** Section 403.061(14), Florida Statutes, authorizes the Department to “[e]stablish a permit system whereby a permit may be required for the operation, construction or expansion of any installation that may be a source of air pollution...” (with the definition of “pollution” provided in Section 403.031(7), Florida Statutes), and Section 403.087, Florida Statutes, provides specific requirements for implementation of a permit system for operation of reasonably expected sources of air pollution.
- **Note 1:** EPA designated all areas in the United States as unclassifiable/attainment for the 2010 NO<sub>2</sub> standard (77 FR 9532). Further, maximum 1-hour NO<sub>2</sub> concentrations in states near Florida (Alabama, Georgia, Louisiana, Mississippi, and South Carolina) are approximately one-half of the 2010 standard. It follows that any Florida-based emissions of NO<sub>2</sub> would necessarily not be interfering with the maintenance of the 2010 NO<sub>2</sub> standard in another state, and that Florida neither contributes significantly to nonattainment in, nor interferes with maintenance by, any other state with respect to the 2010 NO<sub>2</sub> standard. Florida has an EPA-approved New Source Review (NSR) program

that continues to evaluate new major sources, and new major modifications to major sources, to minimize emissions of nitrogen oxides (NO<sub>x</sub>). This program, together with federal programs that regulate NO<sub>x</sub> emissions, such as the Federal Motor Vehicle Control Program, limit any future state-to-state contributions to potential nonattainment or maintenance areas. Florida NO<sub>x</sub> emissions from industrial sources have declined by 68% since year 2000, and emissions from motor vehicles have declined by 57% since 2000. (See Appendix 1 to this submittal.) These emissions are expected to continue to decrease in the coming years.

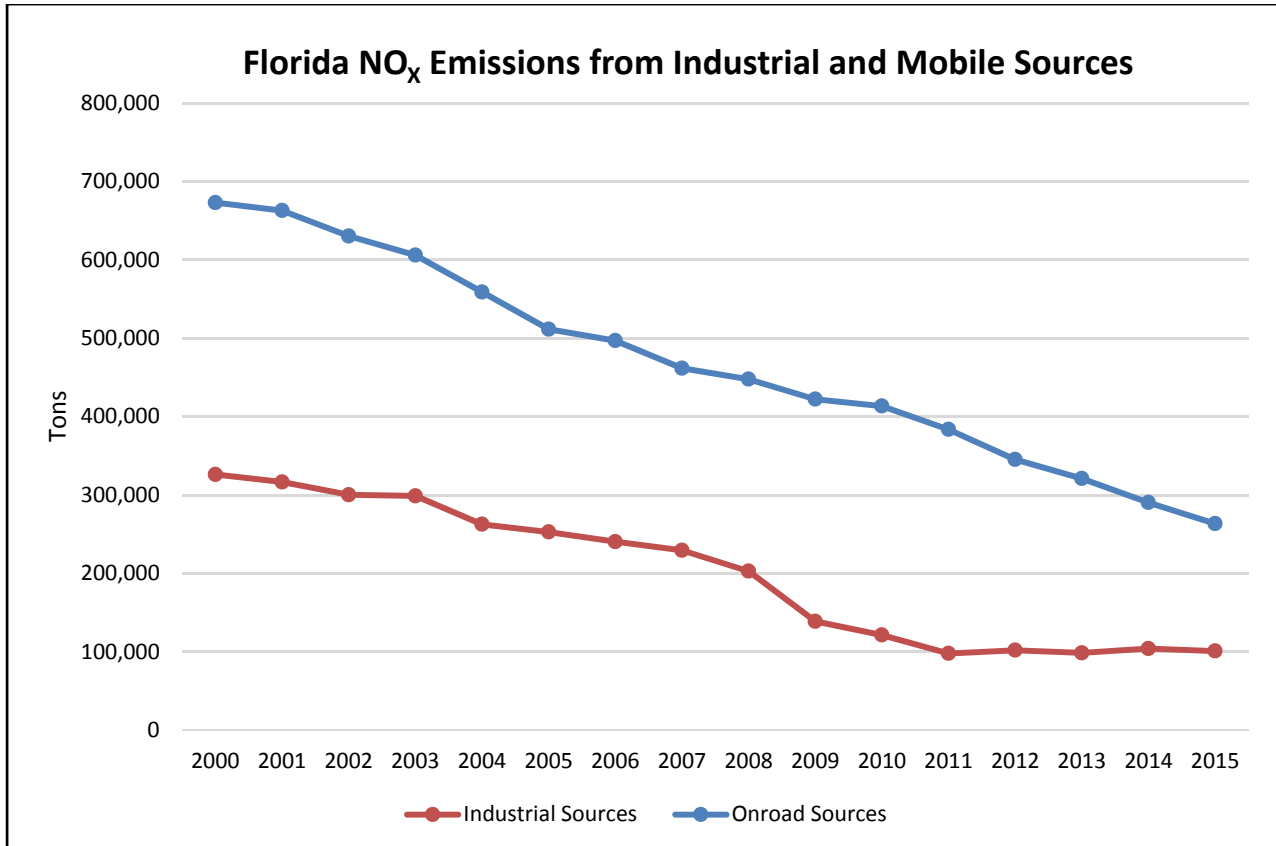
- Note 2: Monitored design value trends for NO<sub>2</sub> throughout the state reflect the decline in NO<sub>x</sub> emissions referenced under Note 2. (See Appendix 2 to this submittal.)
- Note 3: Florida's SIP has adequate provisions to prohibit sources or other emissions activities within the state from emitting NO<sub>2</sub> in amounts that will contribute significantly to nonattainment in, or interference with maintenance by, any other state with respect to the 2010 NO<sub>2</sub> NAAQS.

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## Appendix 1

### Florida Statewide NO<sub>x</sub> Emissions from Industrial and Mobile On-road Sources

The figure below shows Florida statewide emissions of NO<sub>x</sub> from stationary industrial and mobile on-road sources from 2000 to 2015. Emissions of NO<sub>x</sub> from stationary industrial sources have decreased 69% since 2000. Emissions of NO<sub>x</sub> from mobile on-road sources have decreased by 61% since 2000.

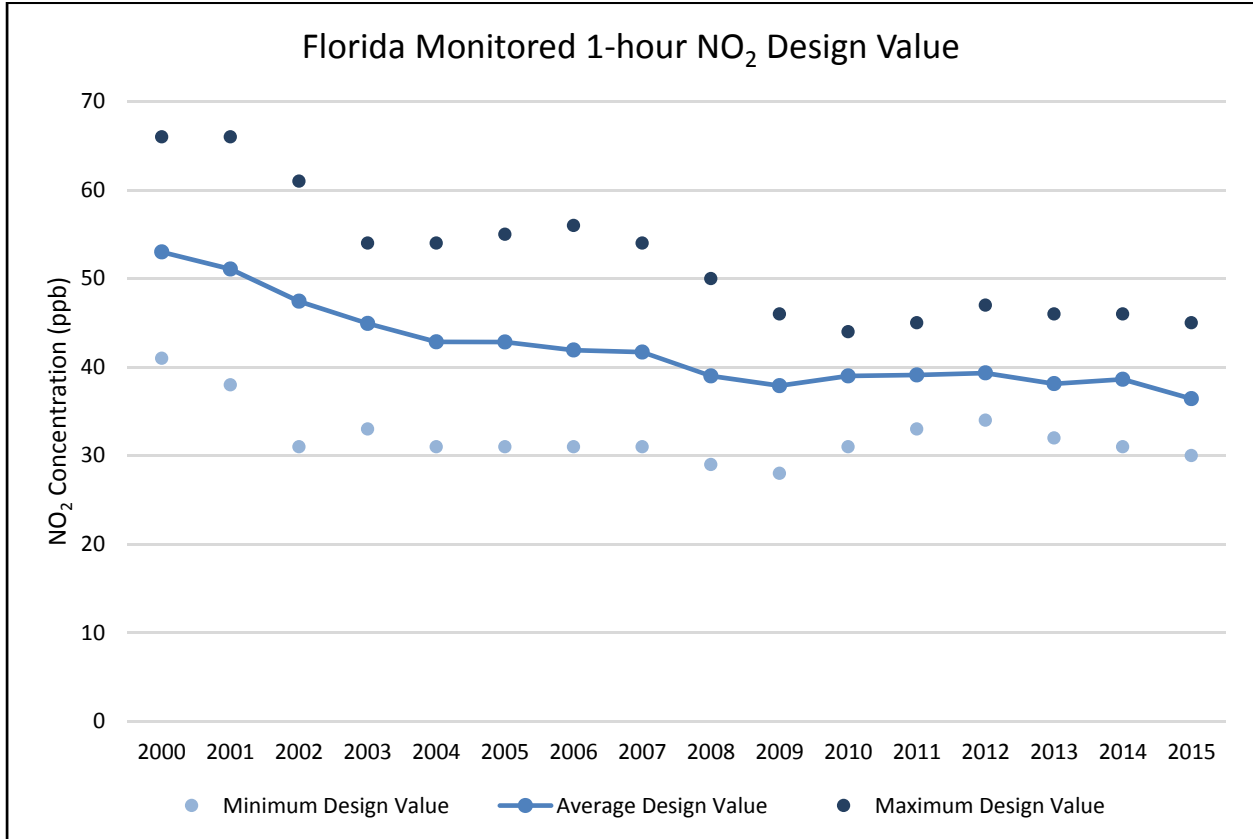


Emissions of NO<sub>x</sub> from industrial and on-road mobile sources. Industrial source emissions data are from Florida facility Annual Operating Report submissions. Mobile on-road source emissions are estimated from the Motor Vehicle Emission Simulator (MOVES2014a) model.

## Appendix 2

### Florida Statewide Monitored 1-hour NO<sub>2</sub> Design Values

The figure below shows Florida statewide monitored 1-hour NO<sub>2</sub> design values from 2000 to 2015. The average 1-hour NO<sub>2</sub> design value has decreased by 43% since 2000.



Monitored 1-hour NO<sub>2</sub> design values. Design values are calculated from Florida's ambient air quality monitoring network.