

# "Infrastructure" State Implementation Plan

to Meet the Implementation, Maintenance and Enforcement Requirements of the Clean Air Act Sections 110(a)(2)(A) through (M) for the 2015 Ozone NAAQS

# July 2018

Submitted to the U.S. Environmental Protection Agency as a Revision to the District of Columbia's State Implementation Plan at 40 C.F.R. Part 52, Subpart J

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# ACRONYMS

AFS AQS	Air Facility System Air Quality System
CAA	Federal Clean Air Act
C.F.R.	Code of Federal Regulations
DCMR	District of Columbia Municipal Regulations
DOEE	District Department of the Environment
EPA	U.S. Environmental Protection Agency
FIP	Federal Implementation Plan
FOIA	District of Columbia Freedom of Information Act
MWAQC	Metropolitan Washington Air Quality Committee
MWCOG	Metropolitan Washington Council of Governments
NAAQS	National Ambient Air Quality Standards
NSR	New Source Review
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan

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# 1.0 Introduction

The District of Columbia's (District's) state implementation plan (SIP) is a complex, living document containing regulations, source-specific requirements, non-regulatory items such as plans and inventories and, in some cases, additional requirements promulgated by the U.S. Environmental Protection Agency (EPA). The initial SIPs for states were approved by EPA on May 31, 1972. SIPs can be revised with EPA approval as necessary. The federally enforceable SIP for the District is codified in 40 Code of Federal Regulations (C.F.R.) Part 52, Subpart J.

This SIP revision demonstrates the authority of the District to implement, maintain, and enforce the requirements of the 2015 8-hour ozone national ambient air quality standards (NAAQS). It is being submitted to EPA for approval to comply with sections 110(a)(1) and 110(a)(2) of the Clean Air Act (CAA), which direct each state to develop and submit a plan that provides for the implementation, maintenance, and enforcement of each NAAQS. This type of SIP submission is referred to as an "infrastructure SIP." Each state is required to submit an infrastructure SIP within three years after promulgation of a new or revised primary or secondary NAAQS to assure that the state's federally enforceable SIP meets all applicable requirements for the new or revised NAAQS.

# 1.1 The District's Infrastructure SIP for the 2015 8-hour ozone NAAQS

Section 110(a)(1) of the CAA generally directs states to submit infrastructure SIPs after reasonable notice and public hearing.

Section 110(a)(2) specifies the substantive elements and authorities that these submissions need to address, as applicable, for EPA's approval.

The District's Infrastructure SIP for the 2015 8-hour ozone NAAQS explains how the existing EPA-approved SIP or newly submitted SIP provisions satisfy the following requirements of Clean Air Act § 110(a)(2):

- Subpart A Air Emissions Reporting Requirements
- Subpart B Ambient Air Quality Monitoring and Data System
- Subpart C Programs for Enforcement of Control Measures (except regarding nonattainment new source review)
- Subpart D(i)(I) Interstate Transport Provisions
- Subpart D(i)(II) Interstate and International Transport Provisions
- Subpart E Adequate Personnel, Funding, and Legal Authority
- Subpart F Procedural Requirements
- Subpart G Control Strategy
- Subpart H Prevention of Air Pollution Emergency Episodes
- Subpart J Ambient Air Quality Surveillance
- Subpart K Source Surveillance
- Subpart L Legal Authority
- Subpart M Intergovernmental Consultation

Two elements of Section 110(a)(2) are considered by EPA to be outside the scope of infrastructure SIP actions:

- (1) Section 110(a)(2)(C) to the extent that it refers to permit programs (known as "nonattainment new source review") under part D of the CAA; and
- (2) Section 110(a)(2)(I) in its entirety, which addresses SIP revisions for nonattainment areas.

Both of these elements are considered by EPA to pertain to nonattainment SIPs or attainment plans, which are on separate schedules under the CAA.

Even though EPA infrastructure SIP guidance<sup>1</sup> does not address Section 110(a)(2)(D)(i)(I), which concerns interstate pollution transport affecting attainment and maintenance of the NAAQS, the District's SIPs submission also addresses the transport element.

<sup>&</sup>lt;sup>1</sup> Memorandum from Stephen D. Page to Regional Air Directors, "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)" (September 13, 2013).

# 2.0 Compliance with Clean Air Act § 110(a)(2)

Each of the following infrastructure SIP sections identifies a specific element of CAA § 110(a)(2), the CAA requirements pertaining to that element, where the District's program is implemented to comply with that requirement, and where the District's requirement is codified into the District's federally enforceable SIP.

# 2.1 CLEAN AIR ACT § 110(a)(2)(A) – Emission Limits and Other Control Measures

"Each plan shall [...] (A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Chapter."

#### The District's Provisions

For the purposes of the 2015 ozone NAAQS, the District relies on existing EPA-approved SIP provisions that include enforceable limits and other measures, means, or techniques to control emissions of ground-level ozone and several of its precursors: sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and volatile organic compounds (VOCs).

Explanation: Attachment A includes a list of the District's existing EPA-approved SIP control measures for ground-level ozone and its precursors. Emissions limitations and other control measures needed to attain the 2015 ozone NAAQS are due on a different schedule from the Section 110 infrastructure elements and will be reviewed and acted upon with regard to approvability for the specific purposes of an attainment plan under CAA Title I Part D through a separate process at a later time.

According to EPA's guidance on this infrastructure SIP submission, EPA does not interpret Section 110(a)(2) to require air agencies and EPA to address potentially deficient pre-existing SIP provisions in the context of acting on an infrastructure SIP submission, particularly regarding:

- (1) Previously approved emissions limitations that may treat startup, shutdown, and malfunction (SSM) events inconsistently with the CAA as interpreted by EPA's longstanding guidance on excess emissions and more recently by multiple courts; and
- (2) Previously approved SIP provisions for "director's variance" or "director's discretion" that purport to allow revisions to or exemptions from SIP emission limitations with limited public process or without requiring further approval by the EPA.

No "new" provisions involving SSM, director's variance, or director's discretion are being submitted with this SIP revision. There are alternative tools in the CAA to address existing SIP deficiencies.

#### Where the District's Provisions are Codified by EPA

All measures in Attachment A are codified by EPA into the District's SIP at 40 C.F.R. § 52.470(c) on the dates specified in Attachment A.

# 2.2 CLEAN AIR ACT § 110(a)(2)(B) – Ambient Air Quality Monitoring and Data System

"Each such plan shall [...] provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to:

- *(i) Monitor, compile, and analyze data on ambient air quality, and*
- (ii) Upon request, make such data available to the Administrator."

# The District's Provisions

The District provides for the establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, and analyze data on ambient air quality.

The District has the authority to conduct ambient air quality monitoring Explanation: under the District of Columbia Air Pollution Control Act of 1984 (APCA) (D.C. Official Code § 8-101.05(b)(1)(A)), which allows for the administration of a comprehensive program for the control and prevention of outdoor air pollution that includes, "conduct[ing] research, monitoring, modeling, investigations, experiments, training demonstrations, surveys, and studies, relating to the causes, effects, extent, prevention, and control of air pollution in the District." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006). The District's most relevant existing EPA-approved SIP provisions regarding public reporting of air pollution levels, which are determined based on the results of air quality monitoring activities, are found in 20 DCMR § 400 (Ambient Monitoring and **Emergency Procedures**).

> DOEE monitors air quality for NAAQS pollutants at appropriate locations, in accordance with the EPA's ambient air quality monitoring network requirements at EPA's Ambient Monitoring Technology Information Center (AMTIC) website; 40 C.F.R. Part 53 ("Ambient Air Monitoring Reference and Equivalent Methods"); 40 C.F.R. Part 58 ("Ambient Air Quality Surveillance"), and 40 C.F.R. § 51.190.

Monitoring activities are described in detail in the District's ambient air monitoring network plans (Network Plans), which are submitted to EPA Region 3 annually. Each Annual Network Plan confirms that the District's air monitoring program continues to meet federally established monitoring and data assessment criteria.

DOEE submits data to EPA's Air Quality System (AQS) in a timely manner.

Explanation: DOEE operates and maintains air quality monitoring stations and equipment in the District and sends collected air samples to an EPAapproved lab for analysis. DOEE performs quality assurance checks and submits the data to EPA's AQS, in accordance with data reporting and ambient air data certification requirements at 40 C.F.R. Part 58, such as § 58.16 on "data submittal and archiving requirements" related to the monitoring network.

DOEE provides information to EPA Region 3 regarding air quality monitoring activities, including a description of how the air agency has complied with monitoring requirements and an explanation of any proposed changes to the network.

Explanation: The District submits a Network Plan to EPA every year and a periodic network assessment every five years, consistent with EPA's ambient air monitoring regulations under 40 C.F.R. Part 58, Subpart B, specifically § 58.10.

Each Network Plan also serves as prior notification to EPA of any proposed changes to the monitoring sites or measurement methods. It provides descriptions of any proposed changes to the District's ambient air monitoring network, the reason for each change (such as whether a change is in response to changes in monitoring requirements related to a new or revised NAAQS), and any other information relevant to the change.

DOEE obtains EPA's approval of any planned changes to monitoring sites or to the network.

Explanation: EPA Region 3 Administrator sends a letter annually to the District indicating whether the Network Plan and any proposed changed to the network meet all applicable monitoring requirements. The most recent Annual Network Plan was submitted to EPA on June 22, 2018.

As necessary, the District will make any changes to the network to meet monitoring requirements related to the 2015 ozone NAAQS and indicate these changes in a subsequent Network Plan to EPA, consistent with applicable requirements in 40 C.F.R. § 58.14 on "system modification."

- D.C. Official Code § 8-101.05 and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision
- 20 DCMR Chapter 4, Sections 400 and 499: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 8/28/1995 (60 Fed. Reg. 44431)

# 2.3 CLEAN AIR ACT § 110(a)(2)(C) – Programs for Enforcement of Control Measures

"Each plan shall [...] include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this subchapter."

#### The District's Provisions

The District has provisions that provide for enforcement of the emission limits and control measures identified in Section 2.1 of this document.

Explanation: Enforcement – The District has the authority to enforce control measures as necessary under the District of Columbia Air Pollution Control Act of 1984 (APCA) (D.C. Official Code § 8-101.05a through § 8-101.05g), which address: inspection and right of entry, violations, civil penalties, criminal penalties, false statements, other sanctions, orders, and administrative appeals. Elements of the District's enforcement program, including monitoring, recordkeeping, and reporting requirements, are approved the SIP, and found in parts of 20 DCMR Chapters 1 and 5 (*e.g.*, Section 500 includes requirements for records and reports, and § 501 includes requirements for monitoring devices). These provisions provide for enforcement of the emission limits and control measures identified in this document under Element A (Section 2.1, Attachment A).

The District has provisions approved in the SIP that implement a minor source preconstruction program (for new minor sources and minor modifications to existing major sources) for all NAAQS pollutants.

Explanation: Minor New Source Review (NSR) – The District has the authority to regulate sources under the District of Columbia Air Pollution Control Act of 1984 (APCA) (D.C. Official Code § 8-101.05(b)(1)(D)), where the Mayor may, "adopt air pollution control standards, require and issue permits, and establish any other program necessary to regulate sources of air pollution emissions in the District." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006).

Title 20 DCMR Chapter 2 contains the District's preconstruction permit program for new minor sources, modifications of minor sources, and minor modifications at major stationary sources for all pollutants regulated under the CAA regardless of the District's nonattainment designation, as addressed at 40 C.F.R. §§ 51.160 through 51.164. The District relies on EPA's comprehensive Prevention of Significant (PSD) permitting program, addressing CAA Title I Part C, for all major sources of any regulated pollutant under the CAA for which the District is designated attainment or unclassifiable.

Explanation: Major Source PSD – The District relies on a Federal Implementation Plan (FIP) containing the Federal PSD permitting requirements in 40 C.F.R. § 52.21. The Federal PSD program governs preconstruction review and permitting of any new or modified major stationary source of air pollutants regulated under the CAA (including precursors) in areas designated as attainment or unclassifiable, as required at 40 C.F.R. §§ 51.166 (general provisions for PSD programs approved in SIPs) and 51.307 (specific provisions pertaining to new source review (NSR) for potential impacts on air quality related values in Class I areas).

The FIP is administered by EPA. DOEE has not been delegated the authority to implement the PSD FIP program and will continue to rely on EPA's PSD FIP to have major source permits issued pursuant to the FIP.<sup>2</sup>

According to EPA's infrastructure SIP guidance (see footnote 1), EPA interprets the portion of CAA Section 110(a)(2)(C) that pertains to a permit program known as "nonattainment NSR" within nonattainment areas to be outside the scope of this infrastructure SIP.

- D.C. Official Code § 8-101.05 and § 8-101.05a through § 8-101.05g and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision
- 20 DCMR Chapter 1, Sections 100 and 199: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 4/29/2013 (78 Fed. Reg. 24992) and 5/1/2017 (82 Fed. Reg. 20270), respectively.
- 20 DCMR Chapter 1, Sections 101, 102, 104, 105, 106, 107: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 8/28/1995 (60 Fed. Reg. 44431)
- 20 DCMR Chapter 5, Sections 500.1 to 500.3, 501, and 502.1 through 502.15: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 8/28/1995 (60 Fed. Reg. 44431) and 5/1/2017 (82 Fed. Reg. 20270).
- 20 DCMR Chapter 5, Sections 500.4 and 500.5: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 1/26/1995 (60 Fed. Reg. 5134)
- 20 DCMR Chapter 5, Sections 500.6, 502.17, and 599: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 10/27/1999 (64 Fed. Reg. 57777)

<sup>&</sup>lt;sup>2</sup> According to EPA's infrastructure SIP guidance (see footnote 1), EPA stated it cannot fully approve the infrastructure SIP submission with respect to Element C; however, EPA stated that it anticipates that there will be no adverse consequences to DDOE or to sources from this lack of full approval of the infrastructure SIP.

- 20 DCMR Chapter 5, Sections 500.7: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 5/26/1995 (60 Fed. Reg. 27944)
- 20 DCMR Chapter 5, Section 502.18: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 5/9/2001 (66 Fed. Reg. 23614)
- 20 DCMR Chapter 2, Sections 200, 201, 202, 299: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 7/31/1997 (62 Fed. Reg. 40937) and 3/19/2015 (80 Fed. Reg. 14310).
- 20 DCMR Chapter 2, Section 204: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 3/19/2015 (80 Fed. Reg. 14310)
- Federal PSD program requirements of 40 C.F.R. § 52.21: Referenced in the District's SIP at 40 C.F.R. § 52.499, approved at 68 Fed. Reg. 74488, December 24, 2003

# 2.4 CLEAN AIR ACT § 110(a)(2)(D)(i) – Interstate Transport Provisions

"Each such plan shall [...] contain adequate provisions

- (i) Prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will:
  - (I) Contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or
  - (II) Interfere with measures required to be included in the applicable implementation plan for any other State under part C of this subchapter to prevent significant deterioration of air quality or to protect visibility."

# The District's Provisions

Section 110(a)(2)(D)(i)(I) addresses any emissions activity in one state that contributes significantly to nonattainment, or interferes with maintenance, of the NAAQS in another state. These requirements are sometimes referenced as prong 1 (significant contribution to nonattainment) and prong 2 (interference with maintenance).

Explanation: The District does not significantly contribute to nonattainment in, or interference with maintenance by, any other state with respect to the 2015 ozone NAAQS. Emissions of ozone from sources in the District are small relative to those from other states, and SIP-approved regulations are in place to reduce emissions from sources that emit ozone and its precursors. See Attachment B for additional discussion on transport.

Element D(i)(II) requires SIPs to include provisions prohibiting any source from interfering with measures required of any other state to prevent significant deterioration of air quality or from interfering with measures required of any other state to protect visibility in Class I areas. Interference with PSD is sometimes referred to as prong 3, and interference with visibility protection is prong 4.

Prong 3 – The District prohibits interference with any other air agency's SIP provisions designed to prevent significant deterioration of air quality.

Explanation: New major sources and major modifications at minor and major sources in the District, when the area is designated attainment or unclassifiable for a NAAQS, are subject to a PSD FIP, which contains the comprehensive Federal PSD permitting program in 40 C.F.R. § 52.21. The Federal PSD Program, which applies to all regulated NSR pollutants, is implemented by EPA to meet the PSD requirements under Element C. The PSD FIP fully considers source impacts on air quality in other states.

Major sources for one or more of the pollutants subject to regulation under the CAA that are located in an area designated as nonattainment within the District, not subject to the PSD program, may also have the potential to interfere with PSD in a nearby attainment or unclassifiable area of another state. These sources are covered under the District's nonattainment NSR program, which has been approved by EPA into the District's SIP and is therefore considered adequate for the purpose of meeting the requirement of prong 3 for sources and pollutants subject to this program.

Prong 4 – The District has adequately addressed any contribution of District sources to impacts on visibility program requirements in other states.

Explanation: The District's Regional Haze Program to address visibility impairment in Class I areas was approved by EPA into the District SIP on February 2, 2012 (77 Fed. Reg. 5191). It fully meets the requirements of 40 C.F.R. §§ 51.308 and 51.309, which require that a state participating in a regional planning process (such as the Mid-Atlantic/Northeast Visibility Union, or MANE-VU) include all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process. In addition, EPA approved the District's Five-Year Progress Report for the first planning period on 8/10/2017 (82 Fed. Reg. 37305).

Visibility issues related to ozone and its precursors have been addressed in the District's SIP-approved Regional Haze Program.

- Federal PSD program requirements of 40 C.F.R. § 52.21: Referenced in the District's SIP at 40 C.F.R. § 52.499, approved at 68 Fed. Reg. 74488, December 24, 2003
- 20 DCMR § 204: At 40 C.F.R. § 52.21, approved into the District's SIP on 3/19/2015 (80 Fed. Reg. 14310).
- Regional Haze SIP: At § 52.470(e), approved into the District's SIP on 2/2/2012 (77 Fed. Reg. 5191)

# 2.5 CLEAN AIR ACT § 110(a)(2)(D)(ii) – Interstate and International Transport Provisions

"Each such plan shall [...] contain adequate provisions:

(ii) Insuring compliance with the applicable requirements of sections 115 and 126(b) that involve [NAAQS pollutant] emissions (relating to interstate and international pollution abatement)."

Interstate Pollution Abatement:

Section 126(a): Each applicable implementation plan shall –

- (1) Require each major proposed new (or modified) source
  - (A) Subject to part C (relating to significant deterioration of air quality), or
  - (B) Which may significantly contribute to levels of air pollution in excess of the national ambient air quality standards in any air quality control region outside the State in which such source intends to locate (or make such modification), to provide written notice to all nearby States the air pollution levels of which may be affected by such source at least sixty days prior to the date on which commencement of construction is to be permitted by the State providing notice, and
- (2) Identify all major existing stationary sources which may have the impact described in paragraph (1) with respect to new or modified sources and provide notice to all nearby States of the identity of such sources not later than three months after the date of enactment of the Clean Air Act Amendments of 1977.

# Section 126.

- (b) Any State or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of section  $110(A)(2)(D)(ii)^3$  or this section. Within 60 days after receipt of any petition under this subsection and after public hearing, the Administrator shall make such a finding or deny the petition.
- (c) Notwithstanding any permit which may have been granted by the State in which the source is located (or intends to locate), it shall be a violation of [this section and] the applicable implementation plan in such State
  - (1) For any major proposed new (or modified) source with respect to which a finding has been made under subsection (b) to be constructed or to operate in violation of [this section and] the prohibition of section 110(a)(2)(D)(ii) or this section, or
  - (2) For any major existing source to operate more than three months after such finding has been made with respect to it.

<sup>&</sup>lt;sup>3</sup> According to EPA guidance, the cross-reference is a scrivener's error. Congress intended to refer to section 110(a)(2)(D)(i). See *Appalachian Power Co. v. EPA*, 249 F.3d-1032, 1040-44 (D.C. Cir. 2001).

The Administrator may permit the continued operation of a source referred to in paragraph (2) beyond the expiration of such three-month period if such source complies with such emission limitations and compliance schedules (containing increments of progress) as may be provided by the Administrator to bring about compliance with the requirements contained in section 110(a)(2)(D)(ii) as expeditiously as practicable, but in no case later than three years after the date of such finding. Nothing in the preceding sentence shall be construed to preclude any such source from being eligible for an enforcement order under section 113(d) after the expiration of such period during which the Administrator has permitted continuous operation.

#### International Pollution Abatement:

- Sec. 115.
  - (a) Whenever the Administrator, upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.
  - (b) The notice of the Administrator shall be deemed to be a finding under section 110(a)(2)(H)(ii) which requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to in subsection (a). Any foreign country so affected by such emission of pollutant or pollutants shall be invited to appear at any public hearing associated with any revision of the appropriate portion of the applicable implementation plan.

#### The District's Provisions

§ 126(a) – The District relies on a Federal Implementation Plan (FIP) containing the Federal PSD permitting requirements of 40 C.F.R. § 52.21 for all regulated pollutants for which the District is meeting the NAAQS or considered unclassifiable. Federal PSD rules fully address the notification issue of § 126(a)(1) through the requirements of 40 C.F.R. § 52.21(q) and 40 C.F.R. § 124.10(c)(vii).

According to EPA's infrastructure SIP guidance, the requirements stated in CAA Section 126(a)(2) were a one-time obligation on states that does not apply to EPA's review of infrastructure SIP submissions.

§ 126(b) and (c) – No source or sources within the District have ever been the subject of an active finding under Section 126 of the CAA, and no substantive SIP requirements have been imposed by the EPA Administrator for the 2015 ozone NAAQS.

§ 115 – There have never been final findings under Section 115 of the CAA against the District with respect to the 2015 ozone NAAQS.

Where the District's Provisions are Codified by EPA

• Federal PSD program requirements of 40 C.F.R. § 52.21: Referenced in the District's SIP at 40 C.F.R. § 52.499, approved at 68 Fed. Reg. 74488, December 24, 2003

# 2.6 CLEAN AIR ACT § 110(a)(2)(E) – Adequate Personnel, Funding, and Legal Authority

#### "Each such plan shall [...] provide

- (i) Necessary assurances that the state (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the state or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under state (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of federal or state law from carrying out such implementation plan or portion thereof);
- *(ii) Requirements that the state comply with the requirements respecting state boards under section 128, and*
- (iii) Necessary assurances that, where the state has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the state has responsibility for ensuring adequate implementation of such plan provision."

#### The District's Provisions

The District has adequate authority to carry out its SIP obligations within the District with respect the 2015 ozone NAAQS.

Explanation: The District has the authority under the District of Columbia Air Pollution Control Act of 1984 (APCA) (D.C. Official Code § 8-101.05(b)(1)(C)) to, "(i) establish cooperative effort and mutual assistance agreements or programs for the prevention and control of air pollution and the enforcement of their respective air pollution laws; and (ii) establish or participate in any organization as may be necessary to carry out these agreements." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006). DOEE is not prohibited by any District of Columbia law from revising the SIP as necessary or carrying out any part of the implementation plan.

The District also the authority to, "receive and administer grants or donations made to carry out..." its air pollution control program (D.C. Official Code 8-101.05(c)(3)).

DOEE has adequate personnel and funding to implement the SIP with respect the 2015 ozone NAAQS.

Explanation: As required in 40 C.F.R. Part 51, Subpart O ("Miscellaneous Plan Content Requirements"), the following funding resources are available to DOEE to help carry out the SIP obligations: Title V permit fees (20 DCMR § 305), CAA Section 105 federal grant funds, CAA Section 103 federal grant funds, and the District's local match. Funding from the District Department of Transportation (DDOT) is used to fund Transportation Related Air Pollution Program (TRAPP) efforts. DDOT receives federal allocations from the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) to fund TRAPP. Funding from fees for motor vehicle inspections is collected by the District of Columbia Department of Motor Vehicles to implement the vehicle inspection and maintenance program.

These funding resources are available as of the date of this infrastructure SIP submission and are expected during the five years following the submission. DOEE does not anticipate any serious challenges to the continued acquisition of these funds. DOEE anticipates both adequate personnel and funding to meet any changes in resources for implementation of the 2015 ozone NAAQS.

The following organizations typically participate in planning and developing SIP provisions for the District, in accordance with 40 C.F.R. Part 51, Subpart M ("Intergovernmental Consultation"), and require resources from DOEE to do so:

- The Metropolitan Washington Air Quality Committee (MWAQC), an organization that has been certified by the Governors of Maryland and Virginia and the Mayor of the District of Columbia under Section 174 of the CAA and includes representatives of local governments and agencies. MWACQ members are elected officials of the Metropolitan Washington Council of Governments (MWCOG) member jurisdictions plus members from Charles (Maryland), Calvert (Maryland), and Stafford (Virginia) counties; the air and transportation directors of the District, Maryland, and Virginia; members of the Maryland and Virginia General Assemblies; and the chair of the Transportation Planning Board (TPB). MWAQC coordinates air quality planning activities among MWCOG, other external committees, and the TPB; resolves policy differences; and adopts air quality plans for transmittal to the District, Maryland and Virginia.
- The Interstate Air Quality Council (IAQC) is a cabinet-level collaboration between the District of Columbia, the State of Maryland, and the Commonwealth of Virginia, comprised of the secretaries of the environment and transportation. IAQC resolves difficult issues if needed to ensure the mutual goals of improved air quality and efficient transportation are met.

A copy of the agreement between MWAQC and DOEE was submitted with the 2008 Lead NAAQS Infrastructure SIP, which was approved by EPA on October 22, 2013 (78 Fed. Reg. 62455). In accordance with 40 C.F.R. § 51.240 ("general plan requirements"), each NAAQS-specific SIP revision identifies the responsibilities of any participating organizations and refers to official agreements among the organizations.

The District has SIP-approved provisions that comply with the requirements of CAA Section 128 pertaining to boards, bodies, and personnel involved in approving permits or enforcement orders. The District also has substantive provisions that require the disclosure of potential conflicts of interest.

Explanation: The District does not have a "board or body" to approve permits or enforcement orders, therefore the requirements under paragraph (a)(1) of CAA Section 128 are not applicable. The requirements of § 128(a)(2) and 110(a)(2)(E)(ii) have been met by the District's SIP-approved conflict of interest provisions in §§ 1-1161.01, 1-1162.23, 1162.24, and 1162.25 of the D.C. Official Code (also called the "CAA section 128 requirements in relation to State Boards"), which require a high level of ethical conduct for all employees and public officials of the District government and the disclosure of potential conflicts of interest.

The District retains responsibility for ensuring adequate implementation of any SIP obligations with respect the 2015 ozone NAAQS.

Explanation: As a single jurisdiction, the District of Columbia does not rely on local or regional entities for carrying out any SIP obligations, so it maintains complete responsibility for ensuring adequate implementation of plan provisions with respect the 2015 ozone NAAQS or any NAAQS. The District is a member of interstate organizations that usually participate in planning and developing SIP provisions for the District as well as participating states, in accordance with 40 C.F.R. Part 51, Subpart M, as described above.

- D.C. Official Code § 8-101.05, § 8-101.06, and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision
- D.C. Official Code §§ 1-1161.01, 1-1162.23, 1162.24, and 1162.25: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 10/22/2013 (78 Fed. Reg. 62455).

### 2.7 CLEAN AIR ACT § 110(a)(2)(F) – Stationary Source Monitoring and Reporting

"Each such plan shall [...] require, as may be prescribed by the Administrator

- (i) The installation, maintenance, and replacement of equipment, and the implementation of other necessary steps by owners or operators of stationary sources to monitor emissions from such sources,
- *(ii) Periodic reports on the nature and amounts of emissions and emissions-related data from such sources,*
- (iii) Correlation of such reports by the state agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection."

#### The District's Provisions

DOEE's air quality program has provisions for source monitoring, including periodic testing and inspection of stationary sources, to provide for the identification of allowable test methods. The air quality program does not contain any provisions that prevent the use of credible evidence of noncompliance.

Explanation: As required by 40 C.F.R § 51.212 ("Testing, inspection, enforcement, and compliance"), DOEE's program for source monitoring, including testing and inspection, is described in the SIP-approved provisions of 20 DCMR Chapter 1 (General Rules), Chapter 2 (General and Non-Attainment Area Permits), Chapter 3 (Operating Permits and Acid Rain Programs) § 307 ("Enforcement for Severe Ozone Nonattainment Areas"), and Chapter 5 ("Source Monitoring and Testing") § 502 ("Sampling, Tests and Measurements").

The District has the authority to conduct stationary source monitoring under the APCA (D.C. Official Code § 8-101.05(b)(1)(A)), which allows for a comprehensive air pollution control program that includes conducting, "research, monitoring, modeling, investigations, experiments, training demonstrations, surveys, and studies, relating to the causes, effects, extent, prevention, and control of air pollution in the District." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006).

DOEE also requires periodic reporting of emissions and emissions-related data by stationary sources to DOEE.

Explanation: As required by Title 40 C.F.R. § 51.211 ("Emissions reports and recordkeeping"); Title 40 C.F.R. §§ 51.321 to 51.323 ("Source emissions and state action reporting"); and Title 40 C.F.R. Part 51, Subpart A ("Air Emissions Reporting Requirements"), emissions-related data from sources is submitted to DOEE on an annual basis in compliance with the District's permitting requirements at 20 DCMR Chapter 2 (General and Non-Attainment Area Permits).

Emissions reports from DOEE to EPA do not go through the EPA Regional Office, since that requirement has been superseded in practice by electronic reporting procedures of 40 C.F.R. § 51.45(b). DOEE submits emissions inventory data to EPA's Emissions Inventory System as currently required. The District will meet changes in reporting and inventory requirements associated with the 2015 ozone NAAQS.

The District has the authority to require periodic reporting under the APCA (D.C. Official Code § 8-101.05(b)(1)(D)), which allows the Mayor to, "adopt air pollution control standards, require and issue permits, and establish any other program necessary to regulate sources of air pollution emissions in the District. The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006).

DOEE's requirements also provide for: (1) correlation by DOEE of emissions reports by sources with applicable emission limitations and standards, as required under 40 C.F.R. § 51.116 ("Data availability"); and (2) the public availability of emission reports by sources.

Explanation: The District has the authority to review emissions reports submitted by stationary sources under the APCA § 8-101.05(b)(1)(A). DOEE air quality inspectors correlate the emissions data with any applicable emissions limitations or standards. Data in the reports reflect the test method(s) and averaging period(s) specified in the applicable emissions limitations and standards, as required in a stationary source's specific permits. The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006).

All emissions reports are available for public inspection through the District's normal administrative procedures, such as under the District of Columbia's Freedom of Information Act (FOIA) (D.C. Official Code § 2-531 *et seq.*).

- 20 DCMR Chapter 1, Sections 100 and 199: At 40 C.F.R. § 52.470(c), approved on 4/29/2013 (78 Fed. Reg. 24992) and 5/1/2017 (82 Fed. Reg. 20270), respectively.
- 20 DCMR Chapter 1, Sections 101, 102, 104, 105, 106, 107: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 8/28/1995 (60 Fed. Reg. 44431)
- 20 DCMR Chapter 2, Sections 200, 201, 202, 299: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 7/31/1997 (62 Fed. Reg. 40937) and 3/19/2015 (80 Fed. Reg. 14310)
- 20 DCMR Chapter 2, Section 204: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 3/19/2015 (80 Fed. Reg. 14310)
- 20 DCMR § 307: At 40 C.F.R. §52.470(c), approved into the District's SIP on 12/28/2004 (69 Fed. Reg. 77639)
- 20 DCMR Chapter 5 Sections 502.1 through 502.15: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 5/1/2017 (82 Fed. Reg. 20270)
- 20 DCMR Chapter 5, Section 502.17: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 10/27/1999 (64 Fed. Reg. 57777)
- 20 DCMR Chapter 5, Section 502.18: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 5/9/2001 (66 Fed. Reg. 23614)
- D.C. Official Code § 8-101.05 and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision

## 2.8 CLEAN AIR ACT § 110(a)(2)(G) – Emergency Episodes

"Each such plan shall [...] provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority."

## The District's Provisions

The District has authority comparable to that of the EPA Administrator under Section 303 of the CAA to seek a court order to restrain any source from causing or contributing to emissions that present "an imminent and substantial endangerment to public health or welfare, or the environment."

Explanation: The District has the authority to implement SIP-approved provisions under the APCA (D.C. Official Code § 8-101.05(c)(4)), which allows the Mayor to, "take any other action necessary," in addition to those already listed, to execute the authorities under the comprehensive air pollution control program. In particular, under the APCA (D.C. Official Code § 8-101.05g), if the Mayor determines that a hazardous condition exists, "the Mayor may issue a cease and desist order..." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006).

> SIP-approved provisions to restrain sources as necessary are in 20 DCMR Chapter 4 (Ambient Monitoring, Emergency Procedures, Chemical Accident Prevention and Conformity), Section 401 (Emergency Procedures). Section 401 provides the Mayor with authority to restrain any source from causing or contributing to emissions that present an imminent and substantial endangerment to public health, welfare, or the environment or to take other action as may be necessary.

The District meets the applicable requirements of 40 C.F.R. Part 51, Subpart H (40 C.F.R. §§ 51.150 through 51.153, "prevention of air pollution emergency episodes") for the 2015 ozone NAAQS.

Explanation: EPA requires an Emergency Episode Plan (EEP), also known as a contingency plan, for Priority I areas. The District (as part of the "National Capital Interstate") is classified as a Priority I area for ozone (40 C.F.R. § 52.471, thus there is no requirement to revise the document at this time. The District certifies that it has appropriate general emergency powers to address any ozone-related episodes as needed and that no specific plan is necessary at this time, given the hourly ozone levels monitored in the District. Additionally, the District's existing EEP provides the public adequate communication regarding air quality data forecasts and health effects of air pollution, including ozone.

- D.C. Official Code § 8-101.05, § 8-101.05g, and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision
- 20 DCMR § 401: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 8/28/1985 (60 Fed. Reg. 44431)
- Emergency Air Pollution Plan: At 40 C.F.R. § 52.470(e), approved into the District's SIP on April 13, 2015 (80 Fed. Reg. 19538).

#### 2.9 CLEAN AIR ACT § 110(a)(2)(H) – Future SIP Revisions

"Each such plan shall [...] provide for revision of such plan:

- (i) From time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and
- (ii) Except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements, or to otherwise comply with any additional requirements established under this chapter (CAA)."

#### The District's Provisions

DOEE has the authority to revise its CAA Section 110 SIP from time to time as may be necessary to (1) take into account revisions of primary or secondary NAAQS or the availability of improved or more expeditious methods of attaining such standards; and (2) in the event that the EPA Administrator finds it to be substantially inadequate.

Explanation: The District has the authority to revise the SIP as necessary under the APCA (D.C. Official Code § 8-101.05(b)(1)(D)), which states that the Mayor may, "adopt ambient air quality standards," which allows the District to account for revisions of NAAQS. Also, § 8-101.06 states that, "the Mayor may issue or amend any rule needed to comply with the requirements of federal laws and regulations in implementing the District's comprehensive air pollution control program." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07 and Mayor's Order 2006-61 (June 14, 2006). SIP revisions are submitted to EPA for approval.

Actions will be taken as required under 40 C.F.R. Part 51, Subpart F ("Procedural Requirements"), specifically, 40 C.F.R. § 51.104 ("Revisions").

Where the District's Provisions are Codified by EPA

 D.C. Official Code § 8-101.05, § 8-101.06, and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision

## 2.10 CLEAN AIR ACT § 110(a)(2)(I) – Plan Revisions for Nonattainment Areas

"Each such plan shall [...]

(I) in the case of plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D of this subchapter (relating to nonattainment areas)."

According to EPA's infrastructure SIP guidance and its interpretation of the CAA, Element I does not need to be addressed in the context of an infrastructure SIP. The specific SIP submissions for designated nonattainment areas, as required under CAA Title I Part D, are subject to a different time schedule than those for Section 110 infrastructure elements and will be reviewed and acted upon through a separate process.

# 2.11 CLEAN AIR ACT § 110(a)(2)(J) – Consultation with Government Officials, Public Notification; PSD and Visibility Protection

"Each such plan shall [...] meet the applicable requirements of section 121 of this title (relating to consultation), section 127 of this title (relating to public notification), and part C of this subchapter (relating to prevention of significant deterioration of air quality and visibility protection)."

#### The District's Provisions

Consultation with identified officials on certain actions – Consistent with CAA Section 121, the District has established processes for consultation with general-purpose local governments, designated organizations of elected officials of local governments, and federal land managers (as appropriate).

Explanation: The District has the authority to consult with general purpose local governments, designated organizations of elected officials of local governments, and federal land managers (FLMs) under the APCA (D.C. Official Code § 8-101.05(b)(1)(C) (2013 Repl.)), which allows the Mayor to, "advise, consult, cooperate, and enter into agreements with the governments and agencies of any state or political subdivision and any interstate or other regional organization representing these states or political subdivisions..." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006). In most cases, the process takes place through MWAQC according to a set of bylaws that are reviewed and adopted annually. More about MWAQC can be found under Element E.

Through MWAQC, there are interagency and public consultation provisions specifically associated with the transportation conformity process, as included in 20 DCMR Chapter 15, specifically §§ 1506 and 1507.

Consultation with FLMs occurs through a separate process, as specified in the District's Regional Haze SIP, which was approved by EPA on February 2, 2012 (77 Fed. Reg. 5191).

Public notification – DOEE regularly notifies the public of instances or areas in which the new or revised primary NAAQS are exceeded; advises the public of the health hazards associated with such exceedances; and enhances public awareness of measures that can prevent such exceedances and of ways in which the public can participate in regulatory and other efforts to improve air quality.

Explanation: To meet the requirements of 40 C.F.R. § 51.285 ("Public notification") as stated in Section 127 of the CAA, Title 20 DCMR Chapter 4 (Ambient Monitoring, Emergency Procedures, Chemical Accident Prevention and Conformity) Section 400 (Air Pollution Reporting Index) requires District cooperation with MWCOG to ensure that air pollution levels are uniformly reported to the public throughout the region. EPA's colorcoded and numerical Air Quality Index (AQI) is used to communicate how clean or polluted the air is and what associated health effects may be of concern on a daily basis. The general public is regularly notified of and educated about NAAQS exceedances.

> The public is also educated on behalf of the District by Clean Air Partners, a nonprofit partnership chartered by the MWCOG and the Baltimore Metropolitan Council that works with businesses, organizations, and individuals throughout the region to raise awareness and reduce air pollution through voluntary actions. Clean Air Partners provides air quality forecasts and related information through AirAlerts to a network of participants, and distribute air quality curriculum to schools.

The District has the authority to enhance public awareness in general under the APCA (D.C. Official Code § 8-101.05(b)(1)(B)), which allows the Mayor to, "collect and distribute, through publication, educational and training programs, and other means, the results of, and other information pertaining to, the activities carried out under..." its comprehensive air pollution control program. The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006).

Prevention of significant deterioration – Please refer to the response to Element C.

Visibility protection – According to EPA's infrastructure guidance and its interpretation of the CAA, the requirements of this part of Element J do not need to be addressed in an infrastructure SIP revision. The visibility requirements of CAA Title I, Part C, are implemented in 40 C.F.R. Part 41, Subpart P. When there is a new or revised NAAQS, the requirements of Part C do not change, so there are no newly applicable visibility protection obligations under Element J.<sup>4</sup>

Where the District's Provisions are Codified by EPA

• D.C. Official Code § 8-101.05 and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision

<sup>&</sup>lt;sup>4</sup> The District does not contain any federal Class I areas, so is not subject to RAVI (reasonably attributable visibility impairment) requirements. The District does participate in regional haze planning. The protection of visibility in federal Class I areas is addressed in the District's Regional Haze SIP, which was approved by EPA on February 2, 2012 (77 Fed. Reg. 5191), and codified in the District's SIP at § 52.470(e).

- 20 DCMR §§ 1506 and 1507: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 5/28/2010 (75 Fed. Reg. 29894)
- Regional Haze SIP: At § 52.470(e), approved into the District's SIP on 2/2/2012 (77 Fed. Reg. 5191)
- 20 DCMR § 400: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 8/28/1995 (60 Fed. Reg. 44431)

#### 2.12 CLEAN AIR ACT § 110(a)(2)(K) – Air Quality Modeling and Data

"Each such plan shall [...] provide for

- (i) The performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and
- (ii) The submission, upon request, of data related to such air quality modeling to the Administrator."

#### The District's Provisions

DOEE has the authority to: (1) conduct air quality modeling to predict the effect on ambient air quality of any emissions of any air pollutant for which a NAAQS has been promulgated; and (2) provide such modeling data to the EPA Administrator upon request.

Explanation: The District has the authority to perform air quality modeling under the APCA (D.C. Official Code § 8-101.05(b)(1)(A)), which allows the Mayor to "conduct research, monitoring, modeling, investigations, experiments, training demonstrations, surveys, and studies, relating to the causes, effects, extent, prevention, and control of air pollution in the District." The District can also, "secure necessary scientific, technical, administrative, and operational services…" under § 8-101.05(c)(2). Data can then be submitted to EPA as provided under § 8-101.05(c)(4), which allows the Mayor to "take any other action necessary" to execute the authorities under the comprehensive air pollution control program. The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006).

Upon request, the District of Columbia can and will submit relevant current and future data relating to air quality modeling to the Administrator as part of the permitting and NAAQS implementation processes, as outlined in 20 DCMR Chapter 3 (Operating Permits and Acid Rain Programs) Section 303 (Permit Issuances, Renewal, Reopenings, and Revisions).

- D.C. Official Code § 8-101.05 and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision
- o 20 DCMR § 303 (50 DCR 2343; March 21, 2003): Not in SIP

### 2.13 CLEAN AIR ACT § 110(a)(2)(L) – Permitting Fees

"Each such plan shall [...] require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this chapter, a fee sufficient to cover:

- *(i) The reasonable costs of reviewing and acting upon any application for such a permit, and*
- (ii) If the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action), until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under subchapter (title) V of this chapter."

#### The District's Provisions

DOEE has regulations providing for collection of permitting fees under the District's EPAapproved Title V permit program to meet 40 C.F.R. § 70.9 ("Fee determination and certification") and 40 C.F.R. Part 70, Appendix A ("Approval Status of State and Local Operating Permits Programs").

Explanation: EPA approved the District's Title V program on August 7, 1996 (60 Fed. Reg. 40101) and amendments to the program on April 16, 2003 (68 Fed. Reg. 18548). Title V permit fees are collected under 20 DCMR Chapter 3 (Operating Permits and Acid Rain Programs), Sections 305 (Permit Fees) and 307 (Enforcement for Severe Ozone Nonattainment Areas). Permitting fees related to the Title V program are not a part of the District's SIP. These fees are used to fund programs such as permitting of new and existing sources of air pollution and the compliance and enforcement of sources of air pollution.

- o 20 DCMR § 305 (48 DCR 4479; May 18, 2001): Not in SIP
- 20 DCMR § 307: At 40 C.F.R. §52.470(c), approved into the District's SIP on 12/28/2004 (69 Fed. Reg. 77639)
- District's Title V permit program: Not in the SIP, but approved by EPA on 8/7/1996 (60 Fed. Reg. 40101) and 4/16/2003 (68 Fed. Reg. 18548); as codified in Appendix A of 40 C.F.R. Part 70

# 2.14 CLEAN AIR ACT § 110(a)(2)(M) – Consultation and Participation by Affected Local Entities

"Each such plan shall [...] provide for consultation and participation by local political subdivisions affected by the plan."

#### The District's Provisions

DOEE policies and procedures allow and promote consultations with affected local political subdivisions.

Explanation: The District has the authority to consult with local entities under the APCA (D.C. Official Code § 8-101.05(b)(1)(C)), which allows the Mayor to, "advise, consult, cooperate, and enter into agreements with the governments and agencies of any state or political subdivision and any interstate or other regional organization representing these states or political subdivisions..." The District's authority under the APCA is delegated to DOEE under the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07) and Mayor's Order 2006-61 (June 14, 2006). As discussed under Element J, the process for consultation usually takes place through MWAQC according to a set of bylaws that are reviewed and adopted annually.

Through MWAQC, there are interagency and public consultation provisions specifically associated with the transportation conformity process, as included in 20 DCMR Chapter 15, specifically §§ 1506 and 1507.

In addition, prior to the adoption and submission of a SIP revision, each SIP revision goes through a public notice and hearing process, as specified by Section 6 of the D.C. Administrative Procedure Act (D.C. Official Code, § 2-505) and the District Department of the Environment Establishment Act of 2005 (D.C. Official Code § 8-151.07(3)). Leaders of political subdivisions have the opportunity to participate in that public process. There is also authority to hold hearings for the purposes of administering the comprehensive air pollution control program under § 8-101.05(c)(1).

- D.C. Official Code § 8-101.05 and D.C. Official Code § 8-151.07: Submitted as a copy with this SIP revision
- 20 DCMR §§ 1506 and 1507: At 40 C.F.R. § 52.470(c), approved into the District's SIP on 5/28/2010 (75 Fed. Reg. 29894)

# 3.0 Conclusion

This Infrastructure SIP submission demonstrates the authority of the District government to implement the 2015 8-hour ozone NAAQS. It identifies each CAA element being met and how each element is met.

# ATTACHMENT A: Ozone Pollution Control Measures in the District of Columbia

Control Measures	District Regulation and Latest Effective Date		Latest EPA Approval into SIP
POINT SOURCE MEASURES			
NOx RACT	20 DCMR § 805	4/16/2004	12/28/2004, 69 FR 77645,
			69 FR 77647
Non-CTG VOC RACT	20 DCMR § 715	12/30/2011	4/29/2013, 78 FR 24992
NOx SIP Call	20 DCMR Ch. 10	12/8/2000	12/22/2000, 65 FR 80783
Opacity	20 DCMR § 606	3/15/1985	8/28/1995, 60 FR 44431
Point Nitrogen Oxide Emissions	20 DCMR § 804	3/15/1985	8/28/1995, 60 FR 44431
AREA SOURCE MEASURES			
Surface Cleaning/ Degreasing for Machinery/ Automobile	20 DCMR § 718	11/26/2004	12/23/2005, 69 FR 76855
Repair			
Mobile Equipment Repair and Refinishing Rule			
Graphic Arts Controls	20 DCMR §§ 710, 716	12/30/2011	4/29/2013, 78 FR 24992
Reformulated Consumer Products Rule, Phase I	20 DCMR §§ 719 to 737	12/30/2011	4/29/2013, 78 FR 24992
Reformulated Consumer Products Rule, Phase II*			
Industrial Adhesives and Sealants Rule*	20 DCMR §§ 743 to 749	12/30/2011	4/29/2013, 78 FR 24992
Portable Fuel Containers Rule, Phase I	20 DCMR §§ 751 to 758	12/30/2011	4/29/2013, 78 FR 24992
Portable Fuel Containers Rule, Phase II*			
Solvent Cleaning Operations Rule*	20 DCMR §§ 763 to 769	12/30/2011	4/29/2013, 78 FR 24992
Reformulated Industrial Cleaning Solvents	20 DCMR §§ 770 and 771	12/30/2011	4/29/2013, 78 FR 24992
Architectural and Industrial Maintenance Coatings Rule*	20 DCMR §§ 773 to 778	12/30/2011	4/29/2013, 78 FR 24992
Stage I & II Vapor Recovery Nozzle (since 1977)	20 DCMR § 704 (Stage I);	2/1/1985	10/27/1999, 64 FR 57777
	20 DCMR § 705 (Stage II)	(varies)	
Seasonal Open Burning Restrictions	20 DCMR § 604	2/1/1985	8/28/1995, 60 FR 44431
Miscellaneous VOCs	20 DCMR § 700	12/30/2011	4/29/2013, 78 FR 24992
Storage of Petroleum Products	20 DCMR §§ 701.1 to 701.13	3/15/1985	10/27/1999, 64 FR 57777
Control of VOC Leaks from Petroleum Refinery Equipment	20 DCMR § 702	3/15/1985	10/27/1999, 64 FR 57777
Terminal Vapor Recovery – Gasoline or VOC	20 DCMR §§ 703.2, 703.3	3/15/1985	10/27/1999, 64 FR 57777
	20 DCMR §§ 703.1, 703.4 to 703.7	9/30/1993	10/27/1999, 64 FR 57777

Control Measures	District Regulation and Latest Effective Date		Latest EPA Approval into SIP
Petroleum Dry Cleaners	20 DCMR § 706	3/15/1985	10/27/1999, 64 FR 57777
Asphalt Operations	20 DCMR § 709	3/15/1985	10/27/1999, 64 FR 57777
Pumps and Compressors	20 DCMR § 711	3/15/1985	10/27/1999, 64 FR 57777
Waste Gas Disposal from Ethylene Producing Plants	20 DCMR § 712	3/15/1985	10/27/1999, 64 FR 57777
Waste Gas Disposal from Vapor Blow-Down Systems	20 DCMR § 713	3/15/1985	10/27/1999, 64 FR 57777
Sulfur Content of Fuel Oil	20 DCMR § 801	08/16/15	10/11/2016, 81 FR 70020
ONROAD MEASURES			
High-Tech (Enhanced) Inspections and Maintenance	Parts of 18 DCMR §§ 4, 6, 7,	(varies)	6/11/1999, 64 FR 31498;
	11, 26, and 99		4/10/1986, 51 FR 12322
National Low Emissions Vehicle Program	20 DCMR § 915	2/11/2000	7/20/2000, 65 FR 44981
Onroad (TOTAL w/Federal measures: I/M, Tier 1, NLEV, Tier 2, HDDE Rule; RFG)	(varies)	(varies)	(varies)

# ATTACHMENT B: CLEAN AIR ACT § 110(a)(2)(D)(i)(I) – Interstate Transport Provisions

"Each such plan shall [...] contain adequate provisions

- (i) Prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will:
  - (I) Contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or

The District of Columbia (District) does not contribute to nonattainment in, or interfere with maintenance by, any other state with respect to the 2015 8-hour ozone  $(O_3)$  national ambient air quality standards (NAAQS). As explained below, emissions of oxides of nitrogen (NO<sub>X</sub>) from sources in the District are small relative to those from other states. Additionally, contribution assessments conducted by both the Ozone Transport Commission (OTC) and U.S. Environmental Protection Agency (EPA) show the District's contribution to downwind nonattainment and maintenance monitors. State Implementation Plan (SIP)-approved regulations to reduce emissions from sources that emit NO<sub>X</sub> and volatile organic compounds (VOCs) are in place as appropriate. The District's ozone air quality is significantly impacted by transported pollution from outside its boundaries and is heavily reliant on federal measures and reductions from other states.

# **Ozone Trends**

Ambient measurements for ground-level O3 are conducted at three air monitoring sites in the District. The 8-hour O3 concentrations have generally dropped over time at the District's monitors. Figure 1 shows the 8-hour O3 design concentrations from the District's lead monitor and demonstrates how, over time, O3 air quality has improved in the District.

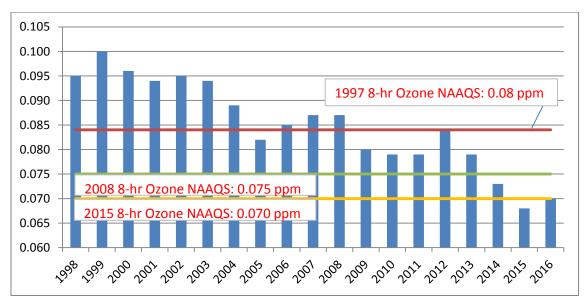


Figure 1: 8-Hour O<sub>3</sub> Design Values (ppm) at the McMillan Monitoring Station From 1998 - 2016

The trend is similar to design value trends in the Washington DC-MD-VA ozone nonattainment area as a whole (shown in Figure 2 below).

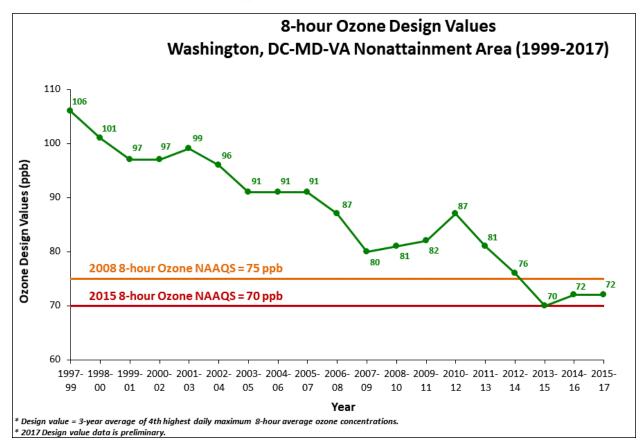


Figure 2: 8-Hour O<sub>3</sub> Design Values (ppm) in the Washington DC-MD-VA Area from 1999-2017

# **District's SIP-Approved Emissions Reduction Efforts**

Emissions of  $NO_X$  and efforts to control  $NO_X$  are generally the primary focus of interstate transport related to  $O_3$  precursor pollution. Of all  $NO_X$  emissions generated in the Washington DC-MD-VA nonattainment area, the District contributes a nominal portion – about nine percent (2014 NEI Version 2).

Figure 3 shows the emission inventories for the District by source category based on official National Emissions Inventory (NEI) estimates by the U.S. Environmental Protection Agency (EPA), with point sources being further refined by subtracting out emissions from sources that report to the Air Markets Program Division (AMPD) and providing those in a separate category. The District's emissions show a significant downward trend despite increases in population, employment, households, and VMT over time.

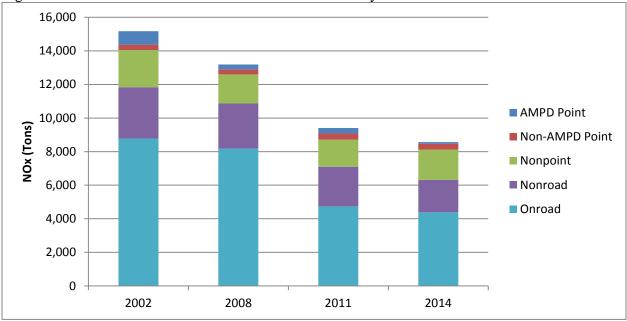
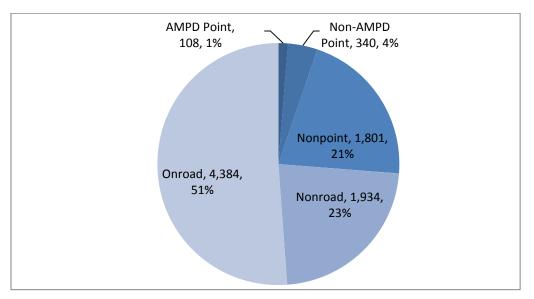


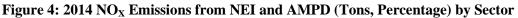
Figure 3: NEI & AMPD NOX Emissions in the District by Source Sector from 2002-2014

*EGUs:* Electric generating units (EGU) are a significant source of  $NO_X$  and this sector is a major contributor to interstate transport of  $O_3$  precursor pollution. Currently, there are no EGUs in the District. The District's last remaining EGUs were decommissioned in 2012, in part to meet permit requirements incorporated into the District's Regional Haze State Implementation Plan (SIP) (77 Fed. Reg. 5191; codified at 40 C.F.R. § 52.470(e)).

*Non-EGUs:* The District has only one "non-EGU" facility with an ozone season cap applicable under EPA's  $NO_X$  SIP Call: the United States General Services Administration (GSA). GSA's three regulated units are required to meet a combined stringent  $NO_X$  emissions limit of 25 tons per ozone season. None of the other stationary point sources regulated under the Clean Air Act Title V program in the District have units large enough (over 250 mmBTU/hr in size) to require  $NO_X$  controls specifically to address interstate transport.

In general, point sources in the District contribute a small amount, approximately 5%, of NOX compared to other sectors, as illustrated in Figure 4.





*Nonpoint Sources:* In the District, the primary source of area source  $NO_X$  emissions is fuel combustion, mainly from smaller boilers. Most fuel burning equipment in the District requires a permit; only fuel burning equipment with a capacity of five million British thermal units or less per hour of heat input is exempt from general permitting requirements at 20 DCMR Chapter 2 (see § 200.12). Lowest Achievable Emission Rate (LAER) controls and emission offsets are required on sources that trigger the District's revised nonattainment NSR requirements (§ 204). Revised Chapter 2 regulations were proposed to EPA as a SIP revision on April 5, 2013. Under minor NSR requirements (§ 209), new or modified stationary sources with potential emissions exceeding certain thresholds must meet a minimal level of control consistent with state-of-the-art technology for that type of equipment.

*Mobile Sources:* The District implements an Enhanced Vehicle Inspection and Maintenance (I/M) program to control emissions from onroad vehicles. The District also does extensive outreach to educate tour bus drivers and others who may be impacted by the District's strict engine idling time limits at 20 DCMR § 900.1. Otherwise, the District relies heavily on federal measures to reduce NO<sub>x</sub> emissions from onroad and nonroad engines.

# The District's Contribution to Upwind States

Two sources of projected 2023 ozone levels are available, one developed by the Ozone Transport Commission (OTC)<sup>1</sup> and the other developed by EPA and supplied through the issuance of a March 2018 memorandum from Peter Tsirigotis that concerned projected contributions to the nonattainment and maintenance of the 2015 Ozone NAAQS (2015 Ozone NAAQS Transport

<sup>&</sup>lt;sup>1</sup> Jeff Underhill, "Modeling Committee Update" (OTC 2018 Spring Meeting, June 8, 2018).

Memo)<sup>2</sup>. Both modeling exercises demonstrate that the District does not "contribute significantly to nonattainment" or "interfere with maintenance" at any monitor according to EPA's four-step process.

The remainder of the section will walk through the four-step process.

#### Step 1: Identify Downwind Air Quality Problems

The OTC modeling identified the following monitors in the Eastern U.S. as being projected to be in nonattainment (an average design value greater than or equal to 71 ppb) or maintenance (a maximum design value greater than or equal to 71 ppb) of the 2015 Ozone NAAQS in 2023:

Site	State	County	2023 Avg. DV	2023 Max DV	2023 Status
90010017	Connecticut	Fairfield	69.5	71.8	Maintenance
90013007	Connecticut	Fairfield	70.6	74.5	Maintenance
90019003	Connecticut	Fairfield	71.9	74.7	Nonattainment
90099002	Connecticut	New Haven	69.9	72.6	Maintenance
240251001	Maryland	Harford	71.1	74.2	Nonattainment
360810124	New York	Queens	69.4	71.2	Maintenance
360850067	New York	Richmond	71.1	72.6	Nonattainment
361030002	New York	Suffolk	72.0	73.5	Nonattainment

Likewise, EPA modeling identified the following monitors in the Eastern U.S. as projected to be in nonattainment or maintenance of the 2015 Ozone NAAQS in 2023:

Site	State	County	2023 Avg. DV	2023 Max DV	2023 Status
90010017	Connecticut	Fairfield	68.9	71.2	Maintenance
90013007	Connecticut	Fairfield	71.0	75.0	Nonattainment
90019003	Connecticut	Fairfield	73.0	75.9	Nonattainment
90099002	Connecticut	New Haven	69.9	72.6	Maintenance
240251001	Maryland	Harford	70.9	73.3	Maintenance
360810124	New York	Queens	70.2	72.0	Maintenance
361030002	New York	Suffolk	74.0	75.5	Nonattainment

# Step 2: Identify Upwind States

When examining the receptors identified in the OTC modeling as projected to be in nonattainment or maintenance of the 2015 Ozone NAAQS, the District used the threshold of 1% of the NAAQS (0.7 ppb) to gauge if emissions from the District were projected to contribute significantly to nonattainment or interfere with maintenance. The following table shows that the District is projected to contribute at levels less than the threshold EPA uses to represent a significant contribution.

<sup>&</sup>lt;sup>2</sup> Peter Tsirigotis, "Information on the Interstate Transport Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)," Memorandum, (March 27, 2018).

Site	State	County	2023 Status	2023 DC Contribution
90010017	Connecticut	Fairfield	Maintenance	0.04
90013007	Connecticut	Fairfield	Maintenance	0.06
90019003	Connecticut	Fairfield	Nonattainment	0.07
90099002	Connecticut	New Haven	Maintenance	0.04
240251001	Maryland	Harford	Nonattainment	0.55
360810124	New York	Queens	Maintenance	0.05
360850067	New York	Richmond	Nonattainment	0.06
361030002	New York	Suffolk	Nonattainment	0.03

Similarly, when reviewing the receptors projected to be in nonattainment or maintenance in 2023 by EPA, the District used the threshold of 1% of the NAAQS (0.7 ppb) to gauge if emissions from the District were projected to contribute significantly to nonattainment or interfere with maintenance. The following table shows that the District is projected to contribute at levels less than the threshold EPA uses to represent a significant contribution.

Site	State	County	2023 Status	2023 DC Contribution
90010017	Connecticut	Fairfield	Maintenance	0.04
90013007	Connecticut	Fairfield	Nonattainment	0.06
90019003	Connecticut	Fairfield	Nonattainment	0.08
90099002	Connecticut	New Haven	Maintenance	0.04
240251001	Maryland	Harford	Maintenance	0.65
360810124	New York	Queens	Maintenance	0.05
361030002	New York	Suffolk	Nonattainment	0.04

# Step 3: Identify Necessary Emission Reductions

Given that in Step 2 the District was not found to significantly contribute to nonattainment or maintenance at any upwind receptors and in the previous section there are minimally available point source emission reductions in the District, no emission reductions are necessary from the District to fulfill obligations under 110(a)(2)(D)(i)(I).

#### Step 4: Adopt Permanent and Enforceable Emission Reductions

Step 3 found that the District does not need to reduce emissions of ozone precursors to satisfy the requirements under 110(a)(2)(D)(i)(I). This indicates that it is not necessary for the District to adopt any permanent and enforceable emission reductions in order to remedy a significant contribution to nonattainment or interfere with maintenance of any downwind monitor.

# **Conclusion**

The District of Columbia is a small jurisdiction with no significant sources of  $NO_X$  emissions that contribute to downwind nonattainment or maintenance issues and little opportunity to reduce precursor emissions of ground-level ozone. Analysis of contribution assessments following the four-step process using projected data from both EPA and OTC confirm this assertion.