

ATTACHMENT B:

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

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

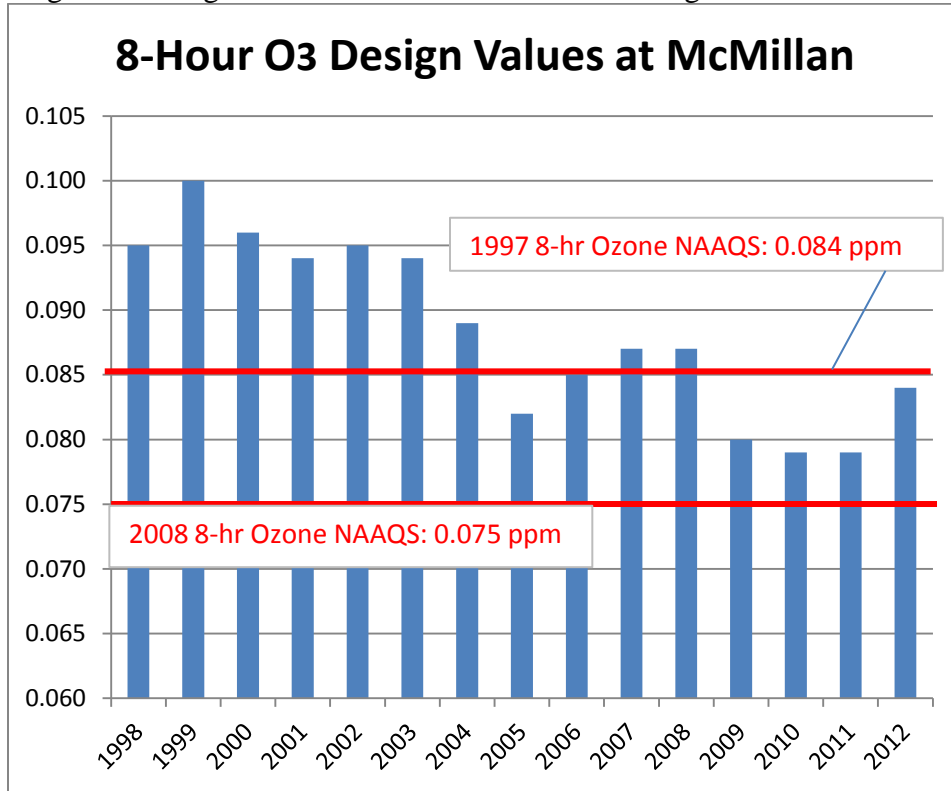
- (i) Prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will:
 - (I) Contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect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

The District of Columbia (District) does not contribute to nonattainment in, or interference with maintenance by, any other state with respect to the 2008 8-hour ozone national ambient air quality standards (NAAQS). As explained below, emissions of oxides of nitrogen (NO_x) from sources in the District are small relative to those from other states. State Implementation Plan (SIP)-approved regulations to reduce emissions from sources that emit NO_x 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

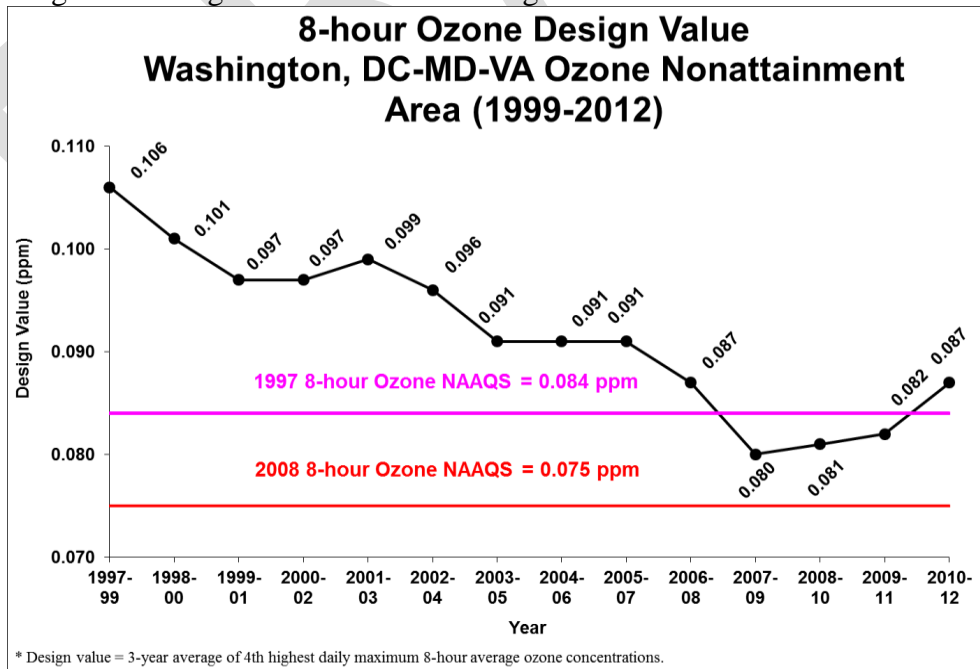
Ambient measurements for ground-level ozone (O₃) are conducted at three air monitoring sites in the District. The 8-hour O₃ concentrations have generally dropped over time at the District’s monitors. The chart in Figure 1 below shows the 8-hour O₃ design concentrations from the District’s lead monitor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

Figure 1: Design Values at the McMillan Monitoring Station Over Time



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: Design Values in the Washington DC-MD-VA Area Over Time



The District's Contribution and SIP-Approved Emissions Reduction Efforts

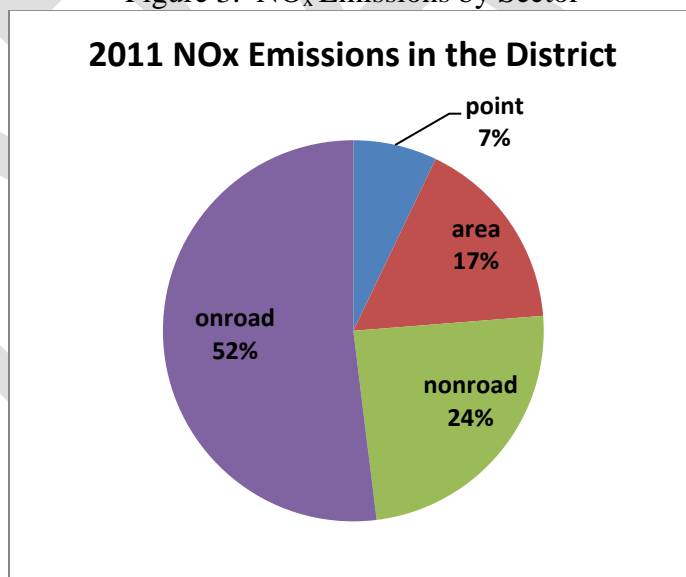
Emissions of NO_x and efforts to control NO_x are generally the primary focus of interstate transport related to O₃ precursor pollution. Of all NO_x emissions generated in the Washington DC-MD-VA nonattainment area, the District contributes a nominal portion – about nine percent (2011 NEI Version 1).

EGUs: Electric generating units (EGU) are a significant source of NO_x and this sector is a major contributor to interstate transport of O₃ precursor pollution. Currently, there are no EGUs or other large industrial sources of NO_x emissions 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 of NO_x compared to other sectors, as illustrated in Figure 3.

Figure 3. NO_x Emissions by Sector



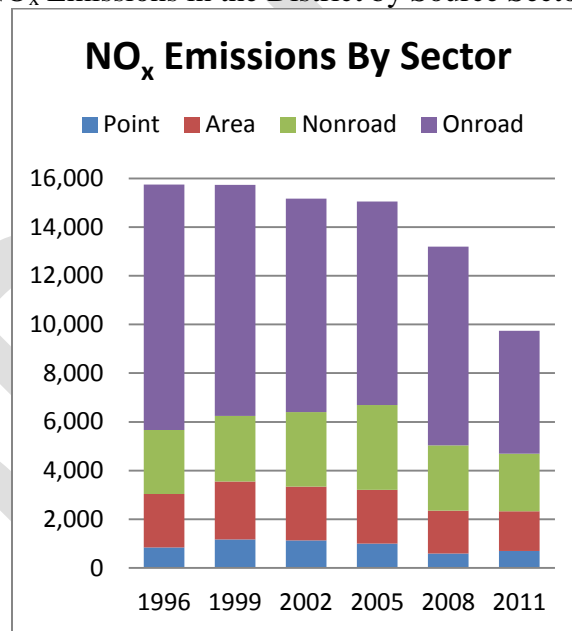
In the District, the primary source of point and area source NO_x emissions is fuel combustion, mainly from smaller boilers. Most fuel burning equipment in the District requires a permit; only fuel burning equipment with a capacity of five million British thermal units or less per hour of heat input 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 new 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_x emissions from onroad and nonroad engines.

Presented in Figure 4 below are 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).

Figure 4. NO_x Emissions in the District by Source Sector Over Time.



The District’s emissions show a significant downward trend despite increases in population, employment, households, and VMT over time.

Contributions from Other States

EPA’s modeling analysis for the proposed Cross State Air Pollution Rule (CSAPR)¹ projected that in 2012, states outside of the Washington DC-MD-VA nonattainment area would account

¹ On August 21, 2012, the U.S. Court of Appeals for the District of Columbia Circuit vacated CSAPR. *EME Homer City Generation, L.P. v. EPA* (696 F. 3d 7 (D.C. Cir. 2012)). On June 24, 2013, the U.S. Supreme Court granted EPA’s petition for certiorari. The Supreme Court heard arguments on December 10, 2013.

for 74 percent of the region’s ozone pollution. Actual monitored design values in 2012 at the District’s three monitoring sites for ozone were higher than projected.

District of Columbia Monitor Site	2012 Base Case Average Values (ppb)	2012 Base Case Maximum Values (ppb)	Actual DVs, 2010 (ppb)	Actual DVs, 2011 (ppb)	Actual DVs, 2012 (ppb)
110010043 (McMillan)	76.9	79.0	79	79	84
110010041 (River Terrace)	72.9	77.2	77	76	80
110010025 (Takoma)	72.7	73.9	75	75*	N/A*

* There was a fire at the Takoma monitoring station in 2011, so measurements ceased at that location.

In the CSAPR preamble, EPA suggested that the District does not have sources of NO_x emissions within its boundaries that contribute to transported NO_x pollution in other states. Hence, EPA did not propose to establish a NO_x budget or finalize a FIP for the District upon conclusion that, “there are no emissions reductions available for EGUs...at the cost threshold deemed sufficient to eliminate significant contribution to nonattainment and interference with maintenance of the NAAQS...” (76 Fed. Reg. 48262; August 8, 2011). Since EPA’s analysis for the proposed CSPAR rule², the District’s stationary point sector NO_x emissions have actually reduced further because of the decommissioning of facilities.

In its analysis regarding the District’s designation recommendation for the 2008 8-hour ozone NAAQS, EPA noted that it “preliminarily agrees...that an appreciable part of the air quality problem within the District of Columbia is due to emissions outside its borders.” Reasons cited in EPA’s analysis include the fact that the District is surrounded by three of the “top five” counties for emissions in the Washington-Baltimore-Northern Virginia Combined Statistical Area (CSA) and the top three in the DC-MD-VA nonattainment area: Fairfax County (VA), Montgomery County (MD), and Prince George’s County (MD). At the time of EPA’s analysis, the District’s VMT was only one-twelfth that of the Washington DC-MD-VA nonattainment area. A large percentage of the time, adjacent and geographically close counties and cities in Virginia are upwind of the District.³

Conclusion

The District of Columbia is a small jurisdiction with no significant sources of NO_x and VOC emissions and little opportunity to reduce precursor emissions of ground-level ozone. A significant part of the air quality problem within the District is due to transported pollution from outside of its borders. While the District does what it can to adopt new control measures, it historically has and will likely continue to rely heavily on Federal measures particularly from the point and (on-road and nonroad) mobile sectors, and measures in other states.

² U.S. EPA, “Air Quality Modeling Final Rule TSD: Contributions of 8-hour ozone, annual PM2.5, and 24-hour PM2.5 from each state to each monitoring site,” found at: <http://www.epa.gov/crossstaterule/techinfo.html>

³ U.S. EPA, “EPA Response” letter for the District of Columbia (December 9, 2011), found at: <http://www.epa.gov/ozonedesignations/2008standards/rec/region3R.htm>