



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[EPA-R04-OAR-2025-0305; FRL-13350-01-R4]

### **Air Plan Approval; NC; Removal of the State's Vehicle Inspection and Maintenance Program**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve a State Implementation Plan (SIP) revision submitted by the State of North Carolina, through the North Carolina Division of Air Quality (NCDAQ), on October 1, 2024. The revision seeks to remove North Carolina's vehicle inspection and maintenance (I/M) program from North Carolina's SIP which covers 19 counties. EPA is proposing to approve this change as it will not interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement of the Clean Air Act (CAA or Act).

**DATES:** Comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R04-OAR-2025-0305 at [regulations.gov](https://www.regulations.gov). Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from [Regulations.gov](https://www.regulations.gov). EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file

sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** Weston Freund, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. The telephone number is (404) 562-8773. Mr. Freund can also be reached via electronic mail at [freund.weston@epa.gov](mailto:freund.weston@epa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. What is Being Proposed?**

North Carolina submitted a SIP revision on October 1, 2024, seeking to remove its SIP-approved I/M program, which covers the following counties: Alamance, Buncombe, Cabarrus, Cumberland, Davidson, Durham, Forsyth, Franklin, Gaston, Guilford, Iredell, Johnston, Lincoln, Mecklenburg, New Hanover, Randolph, Rowan, Union, and Wake. The SIP-approved I/M program consists of the following rules under 15A NCAC 02D, Section .1000 Motor Vehicle Emission Control Standards: Rule .1001, *Purpose*; Rule .1002, *Applicability*; Rule .1003, *Definitions*; and Rule .1005, *On-Board Diagnostic Standards*. NCDAQ submitted this SIP revision in response to North Carolina Session Law (S.L.) 2023-134 (House Bill 259), which amended North Carolina General Statute (NCGS) section 143-215.107A(c).<sup>1</sup>

Sections 182(b)(4) and 187(a)(4) of the CAA require the implementation of an I/M program in certain areas classified as Moderate nonattainment or higher for the ozone or carbon monoxide (CO) National Ambient Air Quality Standards (NAAQS). In addition to the counties

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<sup>1</sup> Section 12.7(b) of S.L. 2023-134 amended NCGS section 143-215.107A(c) to remove 18 of the 19 counties from North Carolina's I/M program, and Section 12.7(a) amended NCGS section 20-183.2(b) to change the vehicle model year coverage for Mecklenburg County which is the only county that would be retained in the state-level program. Section 12.7(d) of S.L. 2023-134 requires that Sections 12.7(a) and (b) become effective on the first day of a month that is 60 days after the Secretary of the Division of Environmental Quality certifies to the Revisor of Statutes that EPA has approved an amendment to the North Carolina SIP submitted as required by Section 12.7(c) (i.e., the October 1, 2024 SIP revision) and applies to motor vehicles inspected, or due to be inspected, on or after that date.

that were required to implement I/M in North Carolina by the CAA, North Carolina opted to expand the I/M program to comply with a rule entitled “Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone” (also referred to as the NO<sub>x</sub> SIP Call).<sup>2</sup> The I/M program was expanded in 2002 to include 39 total counties, including those covered in this proposed action, to provide North Carolina with emissions credits to meet its NO<sub>x</sub> SIP Call obligations. *See* 67 FR 66056 (October 30, 2002). The NO<sub>x</sub> SIP Call, issued by EPA in 1998, required some states, including North Carolina, to meet statewide NO<sub>x</sub> emission requirements during the ozone season (May 1 through September 30 control period) to reduce the amount of ground level ozone that is transported across the eastern United States. *See* 84 FR 8422 (March 8, 2019). All counties in North Carolina are currently designated as attainment for all NAAQS.

As a part of the State’s October 1, 2024, submittal, North Carolina included a CAA section 110(l) non-interference demonstration. Under section 110(l) of the CAA, EPA cannot approve a SIP revision if it would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined by section 171 of the CAA), or any other applicable requirement of the CAA. Section III, below, provides EPA’s analysis of the non-interference demonstration.

EPA is proposing to find that removal of North Carolina’s I/M program from the SIP for the remaining 19 counties would not interfere with North Carolina’s obligations under the NO<sub>x</sub> SIP Call. This proposed finding is based on several federal rules and SIP-approved State provisions promulgated and implemented after EPA’s 2002 approval of North Carolina’s NO<sub>x</sub> SIP Call submission. These federal rules and SIP provisions have created significant NO<sub>x</sub> emission reductions in North Carolina such that the credits gained by the 19 counties’ participation in the I/M program are no longer needed for North Carolina to meet its NO<sub>x</sub> SIP

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<sup>2</sup> *See* 63 FR 57356 (October 27, 1998).

Call Statewide NOx emissions budget. North Carolina has provided an analysis which supports this proposed finding and is discussed in Sections II.B and III.A of this notice of proposed rulemaking (NPRM).

North Carolina's SIP revision also evaluates the impact that the removal of the I/M program would have on the State's ability to attain and maintain the NAAQS. The SIP revision contains a technical demonstration with revised emissions calculations showing that removing the I/M program from the SIP would not interfere with attainment or maintenance of any NAAQS or any other applicable requirement of the CAA. As discussed more fully in Section III of this NPRM, EPA is proposing to find that North Carolina's emissions calculations demonstrate that removing the I/M program from the SIP would not interfere with the State's ability to attain or maintain any NAAQS.

## **II. Background**

### *A. History of North Carolina's I/M Program*

North Carolina's I/M program began in 1982 in Mecklenburg County utilizing a "tailpipe" emissions test. In 1984, Wake County was first added to the program for CO NAAQS violations. From 1986 through 1991 the program expanded to include Cabarrus, Davidson, Durham, Forsyth, Gaston, Guilford, and Union Counties, to address violations of the ozone and/or CO NAAQS. The I/M program was also implemented in Orange County although it was not designated as nonattainment for the ozone or CO NAAQS.

In 1999, the North Carolina General Assembly passed legislation (Session law 1999-328) to expand the coverage area for the I/M program to gain additional emission reduction credits for its NOx SIP call obligations as well as to achieve the 1997 8-hour ozone NAAQS in the State. This legislation expanded the I/M program to add 38 counties between July 1, 2003, and July 1,

2006, for a total of 48 counties.<sup>3</sup> The I/M program in the expanded coverage area used on-board diagnostic (OBD) system checks rather than tailpipe testing.

On August 7, 2002, North Carolina submitted a SIP revision to amend the I/M regulations included in the SIP at that time to, among other things, expand the counties subject to the I/M program as discussed above, and to require OBD testing in the subject counties for all light duty gasoline vehicles with a model year (MY) of 1996 and newer. Additionally, the SIP revision proposed to terminate the tailpipe testing program on January 1, 2006, for the nine counties subject to continued tailpipe testing with a MY 1995 and older vehicles. EPA approved this SIP revision on October 30, 2002. *See* 67 FR 66056.

On January 31, 2008, May 24, 2010, October 11, 2013, and February 11, 2014, North Carolina submitted SIP revisions to change the I/M program to exempt the three newest MY vehicles with less than 70,000 miles among other changes. EPA approved these SIP revisions on February 5, 2015. *See* 80 FR 6455.

On November 17, 2017, North Carolina submitted a SIP revision to remove 26 counties from the I/M program. EPA approved this SIP revision on September 25, 2018. *See* 83 FR 48383.

On July 25, 2018, North Carolina submitted a SIP revision to revise the MY coverage for the then remaining 22 counties subject to the I/M program. EPA approved this SIP revision on September 11, 2019. *See* 84 FR 47889.

On December 14, 2020, North Carolina submitted a SIP revision to remove three additional counties from the I/M program (Lee, Onslow, and Rockingham Counties). EPA approved this SIP revision on August 11, 2022. *See* 87 FR 49524.

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<sup>3</sup> The 38 counties added during this time period were Alamance, Buncombe, Brunswick, Burke, Caldwell, Carteret, Catawba, Chatham, Cleveland, Craven, Cumberland, Edgecombe, Franklin, Granville, Harnett, Haywood, Henderson, Iredell, Lee, Lenoir, Lincoln, Johnston, Moore, Nash, New Hanover, Onslow, Pitt, Randolph, Robertson, Rockingham, Rowan, Rutherford, Stanly, Stokes, Surry, Wayne, Wilkes, and Wilson.

The remaining 19 counties in North Carolina's SIP-approved I/M program are Alamance, Buncombe, Cabarrus, Cumberland, Davidson, Durham, Franklin, Forsyth, Gaston, Guilford, Johnston, Iredell, Lincoln, Mecklenburg, New Hanover, Randolph, Rowan, Union, and Wake.

*B. NOx SIP Call*

On August 7, 2002, North Carolina submitted a SIP revision to EPA as a component of its response to the NOx SIP Call requirements. The NOx SIP Call required some states to meet statewide NOx emission requirements during the ozone season to reduce the amount of ground level ozone transported across the eastern United States. *See* 84 FR 8422 (March 8, 2019). As noted above, North Carolina's SIP revision expanded the I/M program from 10 counties to 48, pursuant to North Carolina Session Law 1999-328, Section 3.1(d), and incorporated the OBD test procedure.

The addition of 38 counties to the I/M program pursuant to Section 3.1(d) of the 1999 Session Law and the new OBD testing procedure were included in the SIP to support the establishment of emission credits for North Carolina's NOx budget and trading program. *See* 67 FR 66056 (October 30, 2002). EPA approved the I/M rule revision and North Carolina's use of the I/M program credits for the NOx SIP Call budget and trading program. *See* 67 FR 66056 (October 30, 2002).

After the NOx SIP Call, several federal rules, as well as North Carolina SIP provisions, have created significant NOx emission reductions in North Carolina, including ozone season reductions. Consequently, the State asserts that any emissions reduction credits derived from the 19 counties' participation in the expanded I/M program are no longer needed for North Carolina to meet its Statewide NOx emissions budget obligations under the NOx SIP Call.

Other large reductions in NOx emissions over time have occurred from federal rules such as the Tier 2 vehicle and fuel standards;<sup>4</sup> nonroad spark ignition engines and recreational engine

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<sup>4</sup> The Tier 2 standards, begun in 2004, continue to significantly reduce NOx emissions, and EPA expects that these standards will reduce NOx emissions from vehicles by approximately 74 percent by 2030 (or nearly 3 million tons

standards; heavy-duty gasoline and diesel highway vehicle standards;<sup>5</sup> and large nonroad diesel engine standards.<sup>6</sup> These mobile source measures, coupled with fleet turnover (i.e., the replacement over time of older vehicles that predate the standards with newer vehicles that meet the standards), have resulted in, and continue to result in, large reductions in NO<sub>x</sub> emissions over time.

In 2002, North Carolina also enacted and subsequently implemented its Clean Smokestacks Act (CSA), which created system-wide annual emissions caps on actual emissions of NO<sub>x</sub> and sulfur dioxide (SO<sub>2</sub>) from coal-fired power plants within the State, the first of which became effective in 2007. The CSA required certain coal-fired power plants in North Carolina to significantly reduce annual NO<sub>x</sub> emissions by 189,000 tons (or 77 percent) by 2009 (using a 1998 baseline year). This represented about a one-third reduction of the NO<sub>x</sub> emissions from all sources in North Carolina. *See* 76 FR 36468 (June 11, 2011). The CSA's requirement to meet annual emissions caps and disallow the purchase of NO<sub>x</sub> credits to meet the caps led to a reduction of NO<sub>x</sub> emissions beyond the requirements of the NO<sub>x</sub> SIP Call even though the CSA did not limit emissions only during the ozone season. EPA approved the CSA emissions caps into North Carolina's SIP on September 26, 2011. *See* 76 FR 59250.

North Carolina also has other SIP-approved provisions that have helped significantly reduce NO<sub>x</sub> emissions in North Carolina. Most of these rules are contained in 15A North Carolina Administrative Code (NCAC) Subchapter 02D, Section .1400, *Nitrogen Oxides*. These rules contain NO<sub>x</sub> SIP Call requirements and work in conjunction with the CSA to reduce NO<sub>x</sub> emissions in the State. Together, implementation of the federal rules discussed above and SIP-approved State provisions have created significant NO<sub>x</sub> emissions reductions since North Carolina's NO<sub>x</sub> SIP Call emissions budget was approved into the SIP in 2002. These federal

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annually by 2030). *See* 80 FR 44873 (July 28, 2015) (citing EPA, Regulatory Announcement, EPA 420-F-99-051 (December 1999)).

<sup>5</sup> Also begun in 2004, implementation of this rule is expected to achieve a 95 percent reduction in NO<sub>x</sub> emissions from diesel trucks and buses by 2030. *See* 80 FR 44873 (July 28, 2015).

<sup>6</sup> EPA estimated that compliance with this rule will cut NO<sub>x</sub> emissions from non-road diesel engines by up to 90 percent nationwide. *See* 80 FR 44873 (July 28, 2015).

rules and SIP-approved State provisions have significantly reduced ozone season NO<sub>x</sub> emissions, from Electric Generating Units (EGUs) in particular, resulting in overall emissions levels well below the original NO<sub>x</sub> SIP Call budget. North Carolina asserts in its October 1, 2024, SIP revision that the State can adequately implement the NO<sub>x</sub> SIP Call with the modeled increases in NO<sub>x</sub> emissions resulting from removal of the I/M program and that the resulting NO<sub>x</sub> emissions do not approach the applicable NO<sub>x</sub> budget in the State. See Section III.A of this NPRM for additional discussion.

*C. I/M in the North Carolina Portion of the Charlotte-Rock Hill, NC-SC 2008 Maintenance Area*

The North Carolina portion of the Charlotte-Rock Hill, NC-SC Area (bi-state Charlotte Area) for the 2008 Ozone NAAQS contains Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, and Union Counties. The I/M program is currently identified as a permanent and enforceable measure in the maintenance plan for the North Carolina portion of the Charlotte-Rock Hill, NC-SC Area for the 2008 8-hour ozone NAAQS. On February 28, 2025, North Carolina submitted a separate SIP revision containing the second 10-year maintenance plan to maintain the 2008 8-hour ozone NAAQS in the bi-state Charlotte Area. In that submittal, North Carolina seeks to move the vehicle I/M program to the contingency measures section.<sup>7</sup> EPA intends to finalize action on the second 10-year maintenance plan for the North Carolina portion of the 2008 8-Hour ozone maintenance area when it finalizes action on the I/M SIP revision.

### **III. EPA's Analysis of North Carolina's Submittal**

*A. North Carolina's NO<sub>x</sub> SIP Call Non-Interference Analysis*

North Carolina's October 1, 2024, SIP revision includes a non-interference demonstration to support the removal of the I/M program, as required by section 110(l) of the CAA. EPA evaluates section 110(l) non-interference demonstrations on a case-by-case basis considering the

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<sup>7</sup> CAA section 175A(d) requires that a maintenance plan include such contingency measures, as necessary, to promptly correct any violation of the NAAQS that occurs after redesignation of an area, including the implementation of all measures with respect to control of the air pollutant concerned that were contained in the SIP prior to redesignation.

circumstances of each SIP revision. Removal of the I/M program would remove reliance on the I/M reduction credits gained from the 19 counties' participation in the I/M program in meeting the State's NOx emissions budget. North Carolina has demonstrated that it no longer needs these reduction credits to meet its obligation under the NOx SIP Call.

As noted above, the federal and SIP-approved provisions that have been implemented since the I/M program was initially added to the SIP have resulted in adequate emission reductions such that the State remains far below the NOx SIP Call budget. Specifically, Table 1 compares the EGU NOx SIP Call budget to actual emissions in 2007, 2021, 2022, and 2023.

**Table 1. Comparison of Ozone Season NOx SIP Call Budget to Actual Emissions for EGUs**

	<b>2007</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
NOx SIP Call Budget (tons)*	31,451	31,451	31,451	31,451
Actual Emissions (tons)	24,177	12,291	11,525	11,957
Below Budget (tons)	7,274	19,160	19,926	19,494
Below Budget (percent)	23%	61%	63%	62%

\*From EPA's notice of proposed rulemaking for North Carolina's NOx SIP Call submission. See 67 FR 42519 (June 24, 2002).

Further, the State provided mobile source modeling results showing that NOx emissions will remain below the NOx SIP Call budgets after removal of the I/M program from the remaining 19 counties. Specifically, NCDAQ utilized EPA's MOVES4.0.1 to model mobile source emissions increases. Table 2 shows the impact of the estimated ozone season NOx emissions changes due to removal of the I/M program. EGU emissions in 2023 were 11,957 tons, which is 19,494 tons below the NOx SIP Call budget for EGUs. The proposed removal of the I/M program would increase NOx mobile emissions by 1,190 tons across all 48 counties, collectively. NCDAQ estimates an increase of 240 tons of NOx in removing I/M from the 19 counties covered by the SIP-approved I/M program. As noted above, EPA previously approved removal of the other counties from the SIP-approved program and revised MY coverage for certain counties. Including the 2023 NOx EGU emissions of 11,957 tons, the removal of the remaining 19 counties in the I/M program would increase NOx emissions by 240 tons per ozone

season. This would still leave a margin of 18,304 tons of NO<sub>x</sub> between the projected emissions and the NO<sub>x</sub> budget.

**Table 2. Impact of NO<sub>x</sub> Emissions Increases Due to Removal of the I/M Program on NO<sub>x</sub> SIP Call I/M Credits**

<b>I/M Emissions Increases from I/M Program Removal</b>	<b>Impact in Tons/Ozone Season</b>
Removal of 26 counties from program (previous action)	611
Revised MY coverage for 22 counties (previous action)	311
Removal of three counties (previous action)	28
Removal of 19 counties (this proposed action)*	240
<b>Total NO<sub>x</sub> Emission Increase</b>	<b>1,190</b>

\*This NPRM only proposes to remove the I/M program from the remaining 19 counties.

Therefore, EPA is proposing to find that removing the I/M program from the SIP would not interfere with the State's obligations under the NO<sub>x</sub> SIP Call to meet its Statewide NO<sub>x</sub> emissions budget. After the NO<sub>x</sub> SIP Call, the promulgation and implementation of several federal rules and SIP-approved State provisions, particularly those impacting EGUs, have created significant NO<sub>x</sub> emissions reductions in the State that are more than sufficient to meet its Statewide NO<sub>x</sub> emissions budget even with the projected increase in NO<sub>x</sub> emissions from the removal of the I/M program from the SIP.

*B. North Carolina's NAAQS Non-Interference Analysis*

North Carolina's non-interference demonstration includes an analysis of how the removal of the I/M program will affect each relevant NAAQS. The degree of analysis focused on any particular NAAQS in a non-interference demonstration varies depending on the nature of the emissions associated with the proposed SIP revision.

There are six NAAQS established to protect human health and the environment. These NAAQS are CO, lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone, particulate matter (PM) – including PM<sub>2.5</sub> (fine PM) and PM<sub>10</sub> (coarse PM), and SO<sub>2</sub>. This demonstration addresses all NAAQS with a focus on ozone (through its precursors NO<sub>x</sub> and volatile organic compounds (VOCs)) and CO, the criteria pollutants targeted by I/M programs. The demonstration also focuses on PM<sub>2.5</sub> as VOCs and NO<sub>x</sub> emissions are precursors that react in the atmosphere to form secondary fine

PM. I/M programs are not designed to address Pb and SO<sub>2</sub><sup>8</sup> emissions, and NO<sub>2</sub> is captured generally through the same measures that target NO<sub>x</sub> impacts. Therefore, this section focuses on NO<sub>2</sub>, ozone, CO, and PM<sub>2.5</sub>. As previously mentioned, North Carolina is designated as attainment for all NAAQS.

EPA reviews the ozone monitoring network annually that North Carolina, Mecklenburg County Air Quality (MCAQ), Forsyth County Office of Environmental Assistance and Protection (FCEAP), and Asheville-Buncombe Air Quality Agency (ABAQA) operate and maintain in accordance with 40 CFR part 58. North Carolina and the local agencies submit an annual ambient air monitoring network plan as required by 40 CFR 58.10. EPA reviews the network plan to ensure that it meets the air monitoring network design requirements in 40 CFR part 58 and approves the plan if it meets the minimum requirements. The network plan includes the ozone monitoring network and the monitoring networks for PM, including PM<sub>10</sub> and PM<sub>2.5</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO, and Pb. The annual network plans developed by NCDAQ, MCAQ, FCEAP, and ABAQA are posted for public inspection and comment for at least 30 days prior to submission to EPA, as required by 40 CFR 58.10(a)(1). North Carolina submits a combined network plan for the State and the local agencies. On October 29, 2025, EPA submitted a letter to North Carolina stating that the air monitoring network plan meets the requirements of 40 CFR part 58.<sup>9</sup>

*i. Non-Interference Analysis for the Ozone NAAQS*

EPA promulgated a revised 8-hour primary and secondary ozone standard of 0.080 parts per million (ppm) on July 18, 1997. Subsequently, on March 12, 2008, EPA published a final rule revising both the primary and secondary NAAQS for ozone to a level of 0.075 ppm. *See* 73 FR 16435 (March 27, 2008). On October 26, 2015, EPA published a final rule lowering the

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<sup>8</sup> The current design values in the counties affected by this proposed action are attainment for the Pb and SO<sub>2</sub> NAAQS. No reductions or emissions benefits are expected for the I/M program for Pb or SO<sub>2</sub> as I/M programs are not designed to reduce Pb or SO<sub>2</sub>. Emissions of both Pb and SO<sub>2</sub> are addressed primarily through fuel standards for Pb and sulfur, which have been greatly reduced over time in gasoline that powers on-road motor vehicles.

<sup>9</sup> EPA also noted that the 2025 annual network plan needs an addendum to provide additional information for two proposed ozone sites and possibly for a proposed PM<sub>2.5</sub> site. EPA is working with the State on this effort. The letter approving the network plan is in the docket for this proposed rulemaking.

level of the 8-hour primary and secondary ozone NAAQS to 0.070 ppm. *See* 80 FR 65292. The 2015 ozone NAAQS retains the same general form and averaging time as the 1997 ozone NAAQS and 2008 ozone NAAQS but is set at a lower level.

Under EPA’s regulations at 40 CFR 50.19 and 40 CFR Part 50, Appendix U, the 2015 8-hour ozone NAAQS is attained when the 3-year average of the annual fourth highest daily maximum 8-hour average ambient ozone concentration is less than or equal to 0.070 ppm. In 2017, the entirety of North Carolina (including all the 19 counties covered by this proposed rule) was designated attainment/unclassifiable for the 2015 ozone NAAQS. *See* 82 FR 54232 (November 16, 2017).

Table 3 below shows the 2014-2016 through 2023-2025 ozone design values for all ozone monitors in the 19 counties covered by this proposed rule, demonstrating that these counties have maintained compliance with all of the 8-hour ozone NAAQS mentioned above during this time period.

**Table 3. Ozone Design Values (DVs), ppm**

Site Name (County)	AQS ID	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023	2022-2024	2023-2025**
<b>Bent Creek (Buncombe)</b>	37-021-0030	0.063	0.062	0.061	0.061	0.059	0.058	0.058	0.061	0.060	0.060
<b>Wade (Cumberland)</b>	37-051-0008	0.061	0.062	0.063	0.062	0.060	0.059	ND*	ND*	ND*	ND*
<b>Honeycutt School (Cumberland)</b>	37-051-0010	0.064	0.063	0.063	0.062	0.059	0.060	0.063	0.067	0.065	0.061
<b>Wade School (Cumberland)</b>	37-051-0011	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	0.064	0.062
<b>Durham Armory (Durham)</b>	37-063-0015	0.062	0.061	0.062	0.061	0.059	0.058	0.058	0.062	0.063	0.062
<b>Hattie Avenue (Forsyth)</b>	37-067-0022	0.067	0.067	0.066	0.065	0.064	0.064	0.063	0.065	0.065	0.066
<b>Clemmons Middle (Forsyth)</b>	37-067-0030	0.068	0.067	0.067	0.064	0.061	0.059	0.059	0.064	0.065	0.066
<b>Union Cross (Forsyth)</b>	37-067-1008	0.067	0.066	0.066	0.064	0.061	0.060	0.059	0.061	0.062	0.064

<b>Mendenhall School (Guilford)</b>	37-081-0013	0.065	0.065	0.066	0.065	0.062	0.062	0.062	0.065	0.065	0.065
<b>West Johnston (Johnston)</b>	37-101-0002	0.065	0.063	0.063	0.061	0.059	0.060	0.061	0.064	0.063	0.062
<b>Crouse (Lincoln)</b>	37-109-0004	0.067	0.067	0.065	0.064	0.060	0.061	0.061	0.065	0.064	0.063
<b>Garinger High School (Mecklenburg)</b>	37-119-0041	0.069	0.069	0.068	0.070	0.067	0.066	0.064	0.069	0.069	0.068 <sup>***</sup>
<b>University Meadows (Mecklenburg)</b>	37-119-0046	0.070	0.070	0.070	0.069	0.067	0.066	0.064	0.068	0.069	0.068 <sup>3</sup>
<b>Castle Hayne (New Hanover)</b>	37-129-0002	0.060	0.058	0.059	0.059	0.058	0.058	0.058	0.062	0.061	0.060
<b>Rockwell (Rowan)</b>	37-159-0021	0.065	0.064	0.062	0.062	0.061	0.062	0.061	0.065	0.065	0.063
<b>Monroe School (Union)</b>	37-179-0003	0.068	0.067	0.068	0.068	0.063	0.062	0.061	0.067	0.066	0.064
<b>Millbrook School (Wake)</b>	37-183-0014	0.065	0.066	0.066	0.064	0.060	0.060	0.060	0.063	0.064	0.061

\* No data. Indicates that a monitor does not have a valid design value for the three-year period because the monitor was not in operation or because the monitoring data is incomplete.

\*\* The 2023-2025 ozone design values are currently preliminary. The 2025 air monitoring data will be certified by May 1, 2026.

\*\*\* The critical 2026 4<sup>th</sup> maximum daily maximum 8-hour ozone concentrations that would result in a violating 2024-2026 design value for the 2015 8-hour ozone NAAQS at the Garinger High School and University Meadows monitors are 0.082 ppm and 0.079 ppm, respectively. If the area would not violate the 2015 8-hour ozone NAAQS, it would also not violate the 1997 or the 2008 8-hour ozone NAAQS.

The Charlotte-Rock Hill, NC-SC Areas were designated nonattainment for both the 1997 and 2008 8-hour ozone NAAQS. *See* 69 FR 23858 and 77 FR 30088. The North Carolina portion of the 1997 Charlotte Area was redesignated to attainment and had its first 10-year maintenance plan approved for the 1997 8-hour ozone NAAQS in a December 2, 2013, final rule. *See* 78 FR 72036. The North Carolina portion of this area had its second 10-year maintenance plan approved on January 13, 2023, and the maintenance period ends in 2034. *See* 88 FR 2245. The design values used to assess compliance with the 8-hour ozone NAAQS are calculated according to the applicable procedures in 40 CFR part 50. Table 4 below shows the ozone design values for the 1997 8-hour ozone Charlotte Area, which encompasses the 2008 8-hour ozone Charlotte Area.

**Table 4. DVs for the Entirety of the Counties in the 8-hour Ozone Charlotte Area, ppm**

Site Name (County)	AQS ID	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020	2019-2021	2020-2022	2021-2023	2022-2024	2023-2025**
Crouse (Lincoln)	37-109-0004	0.067	0.067	0.065	0.064	0.060	0.061	0.061	0.065	0.064	0.063
Garinger High School (Mecklenburg)	37-119-0041	0.069	0.069	0.068	0.070	0.067	0.066	0.064	0.069	0.069	0.068***
University Meadows (Mecklenburg)	37-119-0046	0.070	0.070	0.070	0.069	0.067	0.066	0.064	0.068	0.069	0.068***
Rockwell (Rowan)	37-159-0021	0.065	0.064	0.062	0.062	0.061	0.062	0.061	0.065	0.065	0.063
Monroe School (Union)	37-179-0003	0.068	0.067	0.068	ND*	0.063	0.062	0.061	0.067	0.066	0.064
Catawba Longhouse (York, SC)	45-091-8801	ND*	ND*	0.063	0.064	0.062	0.062	0.060	0.064	0.065	ND*

\* No data. Indicates that a monitor does not have a valid design value for the three-year period because the monitor was not in operation or because the monitoring data is incomplete.

\*\* The 2023-2025 ozone design values are currently preliminary. They are expected to be validated by May 1, 2026.

\*\*\* The critical 2026 4<sup>th</sup> maximum daily maximum 8-hour ozone concentrations that would result in a violating 2024-2026 design value for the 2015 8-hour ozone NAAQS at the Garinger High School and University Meadows monitors are 0.082 and 0.079, respectively.

The North Carolina portion of the 2008 8-hour ozone NAAQS Charlotte Area was redesignated to attainment and had its first 10-year maintenance plan approved for the 2008 8-hour ozone NAAQS in a July 28, 2015, final rule. *See* 80 FR 44873. North Carolina submitted its second 10-year maintenance plan for its portion of this area on February 28, 2025. As mentioned above, EPA intends to finalize action on the second 10-year maintenance plan for the North Carolina portion of this area when it finalizes action on the I/M SIP revision. Design values used to assess compliance with the 2008 8-hour ozone NAAQS are calculated according to the applicable procedures in 40 CFR Part 50. *See* Table 4 above.

In 2017, the entire state of North Carolina was designated as “Attainment/Unclassifiable” for the 2015 ozone NAAQS based on the ozone season design values from 2014-2016. *See* 82 FR 54232. The Garinger High School and University Meadows monitors are at

0.069 ppm for the most recent certified design value (2022-2024) and 0.068 ppm for the preliminary design values for 2023-2025. The 2026 critical 4th maximum daily maximum 8-hour ozone concentration for the Charlotte-Concord-Gastonia, NC-SC Metropolitan Statistical Area (i.e., Charlotte MSA) is 0.079 ppm, based on the 2024 and 2025 monitored 4th maximum 8-hour values of 0.068 ppm and 0.063 ppm, respectively. Even with the emission increases projected from the removal of I/M, EPA believes that it is unlikely that the Charlotte MSA’s 4th maximum 8-hour value will exceed 0.079 ppm in 2026 given the emissions analysis below, the fact that the Charlotte MSA monitors have not recorded a 4th maximum above 0.079 ppm in the past 13 years (i.e., since 2012), and the improvement in ozone air quality across the Southeast during this time period. As a result, EPA is proposing to determine that North Carolina has demonstrated that the removal of the I/M program will not interfere with attainment of the 2015 ozone NAAQS.

In North Carolina’s submittal, the State showed that NOx and VOC emissions would decrease over time in comparison to the 2014 base year emissions.<sup>10</sup> The 2014 base year is an appropriate year for comparison because it is one of the three years (i.e., 2014, 2015, and 2016) that was used to base the attainment/unclassifiable designations in North Carolina for the 2015 8-hour ozone NAAQS. As older vehicles are replaced with newer vehicles that emit less pollutants, NCDAQ estimated a decline of 53 percent in NOx emissions in the Charlotte Area counties from 2025 to 2035. Table 5 below shows the projected increase in NOx and VOC emissions in 2025 associated with the removal of the I/M program and compares 2014 base year emissions for the counties in the Charlotte MSA.

**Table 5. County Level Anthropogenic Emissions for Charlotte MSA (tons per day (tpd))**

Sector	2014 Emissions		Projected 2025 Emissions with I/M		Projected 2025 Emissions without I/M	
	NOx	VOC	NOx	VOC	NOx	VOC

<sup>10</sup> See Figures 1 and 2 in the Public Notice Report (i.e., Appendix E of North Carolina’s submission) as well as Table 20 in North Carolina’s submittal.

Onroad	60.15	34.32	31.62	22.60	32.25	23.56
Nonroad	26.26	18.89	13.26	17.11	13.26	17.11
Point	32.37	12.03	16.96	17.63	16.96	17.63
Nonpoint	11.40	47.88	3.00	56.85	3.00	56.85
Total	130.18	113.12	64.84	114.19	65.47	115.14
% Reduction from 2014 Emissions			50.19%	-0.95%	49.71%	-1.76%

Tables 6 and 7 below show the NO<sub>x</sub> and VOC emissions changes from the proposed removal of the I/M program in the 19 counties covered by the SIP-approved I/M program. This change in I/M implementation was modeled with EPA’s MOVES4.0.1 mobile emissions model. The only changes to emissions occurred in the onroad sector. These tables consider anthropogenic emissions only, meaning biogenic emissions are excluded from the analysis.

Tables 5 and 6 show that the NO<sub>x</sub> emissions increase across the Charlotte MSA would be 0.62 tpd, representing a 1.0 percent increase in 2025 total area emissions. EPA is proposing that it is not reasonable to conclude that an increase of 0.62 tpd would cause the Charlotte Area MSA, whose critical value in 2026 is 0.079 ppm, to violate the 2015 8-hour ozone NAAQS – the most stringent 8-hour ozone NAAQS.

**Table 6. Total County-Level Anthropogenic NO<sub>x</sub> Emissions for 2025 in the 19 Covered Counties (tpd)**

County	Onroad			Nonroad	Point	Nonpoint (Area)	Totals			
	With I/M	Without I/M	Emissions Change				With I/M	Without I/M	Emissions Change	Percent Change
<b>Charlotte-Gastonia-Salisbury Maintenance Area Counties for the 1997 and 2008 8-hour Ozone NAAQS</b>										
Cabarrus	3.09	3.15	0.06	1.19	1.64	0.24	6.16	6.22	0.06	1.0%
Gaston	3.56	3.62	0.06	1.13	0.60	0.32	5.62	5.68	0.06	1.1%
Iredell	3.98	4.04	0.06	0.97	2.06	0.29	7.30	7.36	0.06	0.8%
Lincoln	1.60	1.63	0.03	0.37	0.79	0.11	2.87	2.90	0.03	1.0%
Mecklenburg	13.44	13.75	0.31	6.49	7.70	1.51	29.14	29.45	0.31	1.1%
Rowan	2.92	2.96	0.04	1.28	3.43	0.22	7.85	7.89	0.04	0.5%
Union	3.03	3.09	0.06	1.82	0.73	0.31	5.90	5.96	0.06	1.0%
Subtotals	31.62	32.25	0.63	13.26	16.96	3.00	64.84	65.46	0.62	1.0%
<b>Triangle 1997 Ozone NAAQS Maintenance Area Counties (Raleigh/Durham/Chapel Hill)</b>										
Durham	3.92	4.01	0.09	1.70	1.20	0.51	7.33	7.42	0.09	1.2%

Franklin	0.98	1.00	0.02	0.27	0.57	0.08	1.89	1.91	0.02	1.1%
Johnston	4.07	4.14	0.07	1.47	0.67	0.24	6.45	6.52	0.07	1.1%
Wake	11.01	11.29	0.28	4.80	3.29	1.21	20.31	20.59	0.28	1.4%
Subtotals	19.98	20.43	0.45	8.24	5.73	2.04	35.67	36.12	0.45	1.3%
<b>Triad 1997 Ozone NAAQS Attainment Area Counties (Greensboro/Winston-Salem/High Point)</b>										
Davidson	2.85	2.90	0.05	1.55	2.56	0.24	7.20	7.25	0.05	0.7%
Forsyth	5.19	5.30	0.11	1.50	1.77	0.52	8.98	9.09	0.11	1.2%
Guilford	6.87	7.01	0.14	3.95	1.96	0.86	13.64	13.78	0.14	1.0%
Subtotals	14.91	15.21	0.30	7.00	6.29	1.61	29.81	30.11	0.30	1.0%
<b>Other Counties (Not Subject to an Ozone Maintenance Plan)</b>										
Alamance	2.57	2.62	0.04	0.95	0.48	0.25	4.25	4.30	0.05	1.2%
Buncombe	3.83	3.90	0.07	1.31	0.72	0.45	6.31	6.38	0.07	1.1%
Cumberland	3.81	3.88	0.07	1.58	3.36	0.29	9.03	9.10	0.07	0.8%
New Hanover	1.84	1.89	0.05	2.13	1.96	0.28	6.20	6.25	0.05	0.8%
Randolph	2.88	2.92	0.04	0.78	0.26	0.24	4.16	4.20	0.04	0.9%
Subtotals	14.93	15.21	0.28	6.74	6.77	1.51	29.96	30.24	0.28	0.9%
<b>Totals</b>	<b>81.44</b>	<b>83.09</b>	<b>1.66</b>	<b>35.24</b>	<b>35.75</b>	<b>8.16</b>	<b>160.59</b>	<b>162.25</b>	<b>1.66</b>	<b>1.0%</b>

Tables 5 and 7 show the VOC emissions increase across the Charlotte Area MSA would be 0.95 tpd, representing a 0.83 percent increase in total area emissions.<sup>11</sup> EPA is proposing that it is not reasonable to conclude that an increase of 0.95 tpd would cause the Charlotte Area MSA, whose critical value in 2026 is 0.079 ppm, to violate the 2015 8-hour ozone NAAQS – the most stringent of the 8-hour ozone NAAQS. As mentioned above, even with the emission increases projected from the removal of I/M, EPA believes that it is unlikely that the Charlotte MSA’s 4th maximum 8-hour value will exceed 0.079 ppm in 2026 given the emissions analysis below, the fact that the Charlotte MSA monitors have not recorded a 4th maximum above 0.079 ppm in the past 13 years (i.e., since 2012), and the improvement in ozone air quality across the Southeast during this time period.

**Table 7. Total County-Level Anthropogenic VOC Emissions for 2025 (tpd)**

<sup>11</sup> North Carolina rounds to two decimal places for emissions totals and one decimal place for the summary percentages in its submittal, as reproduced in Tables 4 and 5.

County	Onroad			Nonroad	Point	Nonpoint (Area)	Totals			
	With I/M	Without I/M	Emissions Change				With I/M	Without I/M	Emissions Change	Percent Change
<b>Charlotte-Gastonia-Salisbury Maintenance Area Counties for the 1997 and 2008 8-hour Ozone NAAQS</b>										
Cabarrus	2.34	2.43	0.10	1.19	1.17	4.84	9.55	9.64	0.09	0.9%
Gaston	2.55	2.65	0.09	1.13	1.51	5.52	10.72	10.82	0.10	0.9%
Iredell	2.70	2.79	0.09	0.84	1.54	4.94	10.03	10.12	0.09	0.9%
Lincoln	1.26	1.30	0.04	0.46	2.69	2.15	6.56	6.60	0.04	0.6%
Mecklenburg	9.09	9.55	0.46	10.56	3.07	28.43	51.14	51.60	0.46	0.9%
Rowan	2.21	2.28	0.07	0.80	5.46	4.06	12.52	12.59	0.07	0.6%
Union	2.45	2.55	0.11	2.12	2.19	6.91	13.68	13.78	0.10	0.7%
Subtotals	22.60	23.56	0.96	17.11	17.63	56.85	114.19	115.14	0.95	0.8%
<b>Triangle 1997 Ozone NAAQS Maintenance Area Counties (Raleigh/Durham/Chapel Hill)</b>										
Durham	2.83	2.96	0.13	1.82	0.64	6.83	12.12	12.25	0.13	1.1%
Franklin	0.83	0.86	0.03	0.36	5.36	1.71	8.26	8.29	0.03	0.4%
Johnston	2.59	2.70	0.11	1.06	2.24	6.38	12.28	12.39	0.11	0.9%
Wake	8.77	9.24	0.48	7.99	2.63	24.47	43.86	44.33	0.47	1.1%
Subtotals	15.03	15.77	0.75	11.23	10.88	39.38	76.51	77.25	0.74	1.0%
<b>Triad 1997 Ozone NAAQS Attainment Area Counties (Greensboro/Winston-Salem/High Point)</b>										
Davidson	2.31	2.39	0.08	0.89	2.09	3.48	8.77	8.85	0.08	0.9%
Forsyth	4.00	4.16	0.16	2.05	3.63	7.22	16.91	17.07	0.16	0.9%
Guilford	5.02	5.24	0.21	4.54	8.66	11.42	29.64	29.86	0.22	0.7%
Subtotals	11.33	11.78	0.45	7.48	14.38	22.12	55.31	55.77	0.46	0.8%
<b>Other Counties (Not Subject to an Ozone Maintenance Plan)</b>										
Alamance	1.99	2.06	0.07	1.50	2.11	4.54	10.13	10.20	0.07	0.7%
Buncombe	2.83	2.94	0.11	1.86	2.87	6.39	13.95	14.06	0.11	0.8%
Cumberland	2.74	2.86	0.12	1.83	6.60	7.13	18.30	18.42	0.12	0.7%
New Hanover	1.79	1.88	0.09	1.97	2.53	4.82	11.11	11.20	0.09	0.8%
Randolph	2.06	2.13	0.06	0.90	2.54	5.36	10.87	10.94	0.07	0.6%
Subtotals	11.42	11.87	0.46	8.05	16.64	28.25	64.35	64.81	0.46	0.7%
<b>Totals</b>	<b>60.37</b>	<b>62.99</b>	<b>2.61</b>	<b>43.87</b>	<b>59.53</b>	<b>146.61</b>	<b>310.36</b>	<b>312.97</b>	<b>2.61</b>	<b>0.8%</b>

Regarding maintenance of the 2008 8-hour ozone Charlotte Area, Table 8<sup>12</sup> shows that the 2025 projected emissions without I/M are 54 percent below 2014 baseline NO<sub>x</sub> emissions and 7.8 percent below 2014 baseline VOC emissions. Thus, the Charlotte Area is projected to maintain the NAAQS even with removal of the I/M program. As mentioned above, EPA intends to finalize action on the second 10-year maintenance plan for the North Carolina portion of this area when it finalizes action on the I/M SIP revision.

**Table 8. Demonstration of Maintenance for NO<sub>x</sub> and VOC Anthropogenic Emissions for the 2008 Ozone Charlotte Area with I/M Removal**

<sup>12</sup> The emissions reflect activity that occurs in the portion of each of the six counties included in the 2008 8-hour ozone maintenance area plus all of Mecklenburg County. Therefore, for the six partial counties, the increase in emissions attributable to the maintenance area is lower than the increases presented in Table 5, which reflects the values for the 1997 8-hour ozone maintenance area and includes the entirety of the six counties in the 2008 8-hour ozone maintenance area in addition to all of Mecklenburg County.

Pollutant	Maintenance Plan 2014 Attainment Year Emissions (tons/day)*	2025 Projected Emissions without I/M (tons/day)	% below 2014 Emissions)
NOx	130.18	59.27	-54%
VOC	113.12	104.32	-7.8%

\*For more information on the 2014 attainment year inventory and initial projected 2026 maintenance year inventory, see the May 21, 2015, NPRM (80 FR 29250), as approved in the July 28, 2015, NFRM (80 FR 44873).

As mentioned above, the entire state of North Carolina was designated as attainment/unclassifiable for the 2015 8-hour ozone NAAQS, so there is no analogous table to Table 8 for the 2015 8-hour ozone NAAQS; however, EPA believes it is reasonable to conclude that a 54 percent reduction in NOx emissions and a 7.8 percent reduction in VOC emissions from the 2014 baseline emissions is still consistent with attainment of the 2015 8-hour ozone NAAQS. 2014 was one of the three years used to calculate the design value that supported the attainment/unclassifiable designation for the 2015 8-hour ozone NAAQS in North Carolina.

ii. *Non-Interference Analysis for the Fine Particulate Matter (PM<sub>2.5</sub>) NAAQS*

Over the years, EPA has reviewed and revised the PM<sub>2.5</sub> NAAQS several times. On July 18, 1997, EPA established an annual PM<sub>2.5</sub> NAAQS of 15.0 micrograms per cubic meter (µg/m<sup>3</sup>), based on a 3-year average of annual mean PM<sub>2.5</sub> concentrations, and a 24-hour PM<sub>2.5</sub> NAAQS of 65 µg/m<sup>3</sup>, based on a 3-year average of the 98th percentile of 24-hour concentrations. See 62 FR 36852. On September 21, 2006, EPA retained the 1997 annual PM<sub>2.5</sub> NAAQS of 15.0 µg/m<sup>3</sup> but revised the 24-hour PM<sub>2.5</sub> NAAQS to 35 µg/m<sup>3</sup>, based again on a 3-year average of the 98th percentile of 24-hour concentrations. See 71 FR 61144. On December 14, 2012, EPA retained the 2006 24-hour PM<sub>2.5</sub> NAAQS of 35 µg/m<sup>3</sup> but revised the annual primary PM<sub>2.5</sub> NAAQS to 12.0 µg/m<sup>3</sup>, based again on a 3-year average of annual mean PM<sub>2.5</sub> concentrations. See 78 FR 3086. On March 6, 2024, EPA revised the annual primary PM<sub>2.5</sub> NAAQS to 9.0 µg/m<sup>3</sup>, based again on a 3-year average of annual mean PM<sub>2.5</sub> concentrations. See 89 FR 16202.

EPA promulgated designations for the 1997 Annual PM<sub>2.5</sub> NAAQS on January 5, 2005. See 70 FR 944. The Greensboro-Winston Salem-High Point, NC Area, which contains Davidson and Guilford County, and the Hickory-Morganton-Lenoir, NC Area, which contains Catawba

County, were designated as nonattainment on that date. On November 18, 2011, EPA redesignated the Greensboro-Winston Salem-High Point, NC Area and the Hickory-Morganton-Lenoir Area to attainment. *See* 76 FR 71455 and 76 FR 71452. On November 13, 2009, and on January 15, 2015, EPA published notices determining that the entire state of North Carolina was unclassifiable/attainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS and the 2012 annual PM<sub>2.5</sub> NAAQS, respectively. *See* 74 FR 58688 and 80 FR 2206, respectively.

As stated earlier, in 2024 the annual primary PM<sub>2.5</sub> NAAQS was revised to 9.0 µg/m<sup>3</sup>, based again on a 3-year average of annual mean PM<sub>2.5</sub> concentrations. Currently, all monitors in North Carolina are attaining the 2024 annual PM<sub>2.5</sub> NAAQS.<sup>13, 14</sup>

North Carolina's October 1, 2024, SIP revision concludes that the removal of the I/M program would not interfere with attainment or maintenance of the PM<sub>2.5</sub> NAAQS. As noted above in the "Totals" row from Tables 6 and 7, the modeled increase in precursor emissions of NO<sub>x</sub> and VOCs is projected to be 1.66 tpd (1.0 percent) and 2.61 tpd (0.8 percent), respectively, across all 19 covered counties. For these reasons, EPA proposes to find that removal of the I/M program would not interfere with maintenance of the PM<sub>2.5</sub> NAAQS.

*iii. Non-Interference Analysis for the 2010 NO<sub>2</sub> NAAQS*

The 2010 NO<sub>2</sub> 1-hour standard is set at 100 ppb, based on the 3-year average of the 98<sup>th</sup> percentile of the yearly distribution of 1-hour daily maximum concentrations. The 1971 annual NO<sub>2</sub> standard of 53 ppb is based on the annual mean concentration. On February 17, 2012, EPA designated all counties in North Carolina as unclassifiable/attainment for the 2010 NO<sub>2</sub> NAAQS. *See* 77 FR 9532.

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<sup>13</sup> Air quality design values are available on the EPA website at: <https://www.epa.gov/air-trends/air-quality-design-values>

<sup>14</sup> On February 6, 2025, the State of North Carolina submitted an exceptional events (EEs) demonstration for 13 days at the Remount Road monitor (AQS ID 37-119-0045) in Mecklenburg County in the June – July 2023 period to address impacts from the 2023 Canadian wildfires. On September 2, 2025, EPA issued a letter concurring on six of the 13 days and deferring action on the remaining seven days. With the six excluded days, the Remount Road monitor showed an attaining 2022-2024 design value for the 2024 annual PM<sub>2.5</sub> NAAQS of 9.0 µg/m<sup>3</sup>. A copy of the September 2, 2025, letter is included in the docket for this NPRM.

Based on the technical analysis in North Carolina's October 1, 2024, SIP revision, the projected increase in total anthropogenic NO<sub>x</sub> emissions (of which NO<sub>2</sub> is a component) associated with the removal of the I/M program ranges from a 0.02 tpd increase in total NO<sub>x</sub> emissions (1.1 percent) for Franklin County to a 0.31 tpd increase in total NO<sub>x</sub> emissions (1.1 percent) for Mecklenburg County in 2025. The DVs<sup>15</sup> from all NO<sub>2</sub> monitors in the State are attaining the 2010 1-hour NO<sub>2</sub> standard and the 1971 annual NO<sub>2</sub> standard. The highest-reading monitor in the State, the Equipment Drive monitor in Mecklenburg County (AQS ID: 37-119-0050), has a DV of 13 ppb for the annual NAAQS. The form of the annual NAAQS is a single year arithmetic mean. The form of the 2010 1-hour NAAQS requires three complete years of data. The Equipment Drive monitor does not yet have a complete three-year DV for the 1-hour NAAQS because it began operation in January 2024. The highest valid DV for the 1-hour NO<sub>2</sub> NAAQS in the State is the Remount Road Monitor (37-119-0045) at 36 ppb.

Given the margin between the NAAQS and the DVs for the annual and 1-hour NAAQS and the size of the projected increases in NO<sub>x</sub> emissions due to the removal of I/M, EPA proposes to find that removal of the I/M program would not interfere with maintenance of the NO<sub>2</sub> NAAQS.

*iv. Non-Interference Analysis for the CO NAAQS*

EPA promulgated the CO NAAQS in 1971 and has retained the primary standard since its last review of the standard in 2011. The primary NAAQS for CO include: (1) an 8-hour standard of 9.0 ppm, measured using the annual second highest 8-hour concentration for two consecutive years as the design value; and (2) a 1-hour average of 35 ppm, using the second highest 1-hour average within a given year. In 1995, Mecklenburg, Durham, and Wake County were redesignated from nonattainment to unclassifiable/attainment, and Forsyth County was

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<sup>15</sup> Air quality design values are available on EPA's website at: <https://www.epa.gov/air-trends/air-quality-design-values>.

redesignated to unclassifiable/attainment in 1994. See 59 FR 48399 (September 21, 1994) and 60 FR 39258 (August 2, 1995).

North Carolina inventoried the emissions of CO from all anthropogenic sources for 2025, with and without the I/M program from the remaining 19 counties, showing an overall 6.4 percent projected increase in CO emissions. See Table 9 below. The highest 2023-2024 CO DVs<sup>16</sup> in the Charlotte (Mecklenburg County) metropolitan area are 1.6 ppm for the 8-hour CO DV and 2.0 ppm for the 1-hour DV at the Remount Road site (AQS ID: 37-119-0045). The highest 2022-2024 CO DVs in the Raleigh (Wake County) metropolitan area are 1.3 ppm for the 8-hour CO design value and 1.7 ppm for the 1-hour design value at the Millbrook School site (AQS ID: 37-183-0014). Given the margin between the NAAQS and the DVs for the 8-hour and 1-hour CO NAAQS and the size of the CO increases, EPA proposes to find that removal of the I/M program would not interfere with maintenance of the CO NAAQS.

**Table 9. Total County-level Anthropogenic CO Emissions for 2025 (tpd)**

County	Onroad			Nonroad		Point		Nonpoint (Area)		Totals			
	With I/M	Without I/M	Emissions Increase	With I/M	Without I/M	With I/M	Without I/M	With I/M	Without I/M	With I/M	Without I/M	Emissions Increase	Percent Increase
Charlotte-Gastonia-Salisbury Maintenance Area Counties for the 1997 and 2008 8-hour Ozone NAAQS													
Cabarrus	39.38	44.07	4.69	22.33	22.33	1.45	1.45	2.52	2.52	65.69	70.38	4.69	7.1%
Gaston	43.02	47.78	4.76	20.87	20.87	1.14	1.14	2.70	2.70	67.72	72.48	4.76	7.0%
Iredell	43.99	48.64	4.65	14.07	14.07	2.23	2.23	2.51	2.51	62.79	67.44	4.65	7.4%
Lincoln	18.32	20.15	1.83	7.60	7.60	2.10	2.10	1.27	1.27	29.29	31.12	1.83	6.2%
Mecklenburg	194.21	220.33	26.12	200.48	200.48	22.16	22.16	7.55	7.55	424.40	450.52	26.12	6.2%
Rowan	35.52	39.05	3.53	12.24	12.24	3.61	3.61	1.79	1.79	53.17	56.70	3.53	6.6%
Union	39.01	43.61	4.60	39.19	39.19	4.46	4.46	3.03	3.03	85.69	90.29	4.60	5.4%
Subtotals	413.45	463.63	50.18	316.79	316.79	37.15	37.15	21.36	21.36	788.75	838.93	50.18	6.4%
Triangle 1997 Ozone NAAQS Maintenance Area Counties (Raleigh/Durham/Chapel Hill)													
Durham	58.60	66.24	7.64	32.41	32.41	1.04	1.04	3.86	3.86	95.91	103.55	7.64	8.0%
Franklin	11.67	12.92	1.25	6.42	6.42	20.93	20.93	1.02	1.02	40.03	41.28	1.25	3.1%
Johnston	44.11	49.24	5.13	17.71	17.71	2.65	2.65	2.70	2.70	67.17	72.30	5.13	7.6%
Wake	164.05	186.03	21.98	149.29	149.29	7.89	7.89	8.03	8.03	329.26	351.24	21.98	6.7%
Subtotals	278.43	314.43	36.00	205.83	205.83	32.50	32.50	15.61	15.61	532.37	568.37	36.00	6.8%
Triad 1997 Ozone NAAQS Attainment Area Counties (Greensboro/Winston-Salem/High Point)													
Davidson	33.13	36.37	3.25	15.49	15.49	1.20	1.20	2.21	2.21	52.03	55.27	3.24	6.2%
Forsyth	69.28	77.28	8.00	40.82	40.82	2.26	2.26	3.07	3.07	115.44	123.44	8.00	6.9%
Guilford	89.99	100.83	10.85	90.05	90.05	3.09	3.09	5.21	5.21	188.35	199.19	10.84	5.8%
Subtotals	192.39	214.49	22.10	146.37	146.37	6.55	6.55	10.49	10.49	355.81	377.89	22.08	6.2%
Other Counties (Not Subject to an Ozone Maintenance Plan)													
Alamance	28.91	31.99	3.08	28.60	28.60	3.93	3.93	2.01	2.01	63.44	66.52	3.08	4.9%
Buncombe	42.99	47.66	4.66	26.69	26.69	1.48	1.48	4.37	4.37	75.52	80.19	4.67	6.2%
Cumberland	50.44	56.61	6.17	31.77	31.77	5.28	5.28	2.67	2.67	90.17	96.34	6.17	6.8%
New Hanover	29.98	33.80	3.82	32.98	32.98	1.45	1.45	2.33	2.33	66.74	70.56	3.82	5.7%
Randolph	28.45	31.12	2.67	17.22	17.22	0.48	0.48	1.78	1.78	47.93	50.60	2.67	5.6%
Subtotals	180.77	201.18	20.40	137.26	137.26	12.63	12.63	13.15	13.15	343.81	364.22	20.41	5.9%
<b>Totals</b>	<b>1065.04</b>	<b>1193.71</b>	<b>128.68</b>	<b>806.25</b>	<b>806.25</b>	<b>88.84</b>	<b>88.84</b>	<b>60.61</b>	<b>60.61</b>	<b>2020.74</b>	<b>2149.41</b>	<b>128.67</b>	<b>6.4%</b>

<sup>16</sup> Air quality design values are available on EPA's website at: <https://www.epa.gov/air-trends/air-quality-design-values>.

#### **IV. Incorporation by Reference**

In this document, EPA is proposing to include in a final EPA rule amended regulatory text that includes incorporation by reference. EPA is proposing to remove Rules 15A NCAC 02D.1001, *Purpose*; Rule .1002, *Applicability*; Rule .1003, *Definitions*; and Rule .1005, *On-Board Diagnostic Standards* from the North Carolina SIP, which were incorporated by reference in accordance with the requirements of 1 CFR part 51, as discussed in Sections I through III of this preamble. EPA has made and will continue to make the SIP generally available at the EPA Region 4 Office (please contact the person identified in the “**For Further Information Contact**” section of this preamble for more information).

#### **V. Proposed Action**

EPA is proposing to find that removal of the I/M program from the North Carolina SIP would not interfere with any applicable requirement concerning attainment and RFP or any other applicable requirement of the CAA. Consequently, EPA is proposing to approve North Carolina’s October 1, 2024, SIP revision and remove the I/M program from North Carolina’s SIP.

#### **VI. Statutory and Executive Order Reviews**

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA’s role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Is not an Executive Order 14192 (90 FR 9065, February 6, 2025) regulatory action because this action is not significant under Executive Order 12866;

- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a state program;
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian Tribe has demonstrated that a Tribe has jurisdiction. In those areas of Indian country, the rule does not have Tribal implications and will not impose substantial direct costs on Tribal governments or preempt Tribal law as specified by Executive Order 13175. *See* 65 FR 67249, November 9, 2000.

## **List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Sulfur oxides, Volatile organic compounds.

(Authority: 42 U.S.C. 7401 et seq.)

Dated: May 5, 2026.

**Kristy Eubanks,**

*Deputy Regional Administrator performing the functions and duties of the Regional Administrator,  
Region 4.*

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