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NORTH CAROLINA
Environmental Quality

February 6, 2025

Jeaneanne Gettle, Acting Regional Administrator
USEPA Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8960

Subject: Exceptional Events Demonstration to Support Attainment Designation Recommendations for the 2024 Annual $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) for Mecklenburg and Davidson Counties, North Carolina (June – July 2023 Canadian Wildfire Smoke Impacts)

Dear Ms. Gettle:

I am pleased to submit North Carolina's final *Exceptional Events Demonstration to Support Attainment Designation Recommendations for the 2024 Annual $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) for Mecklenburg and Davidson Counties, North Carolina (June – July 2023 Canadian Wildfire Smoke Impacts)*. Enclosed is the complete package uploaded into the United States Environmental Protection Agency's (EPA) State Planning Electronic Collaboration System (SPeCS) for your staff to review.

Based on certified monitoring data for 2021-2023, the Remount Road monitor (371190045) in Mecklenburg County and Lexington Water Tower monitor (370570002) in Davidson County have a rounded design value of 9.2 micrograms per cubic meter. The North Carolina Division of Air Quality (DAQ) reviewed the monitoring data and determined that Canadian wildfire smoke-laden air masses significantly increased $PM_{2.5}$ concentrations measured by these two monitors during four multi-day events in June and July of 2023. These events were significant enough to increase the three-year average design value for each of the two $PM_{2.5}$ monitors to slightly above the revised standard.

In accordance with EPA's Exceptional Events Rule (40 CFR 50.14(c)(3)), the DAQ prepared this Exceptional Events demonstration to show that Canadian wildfire smoke significantly increased $PM_{2.5}$ concentrations during four events.¹ If it were not for these exceptional events, the design value for each monitor would be below the revised standard. Based on the technical analyses presented in the Exceptional Events demonstration, the DAQ is requesting that EPA exclude days highly impacted by Canadian wildfire smoke from the design value for each monitor to show attainment of the revised primary annual $PM_{2.5}$ standard. This document has been prepared to support the State of North Carolina's designation recommendations for the 2024 revised primary annual $PM_{2.5}$ NAAQS submitted to EPA on

¹ Note that on September 11, 2024, the DAQ submitted an "Initial Notification of Potential Exceptional Event Submission for the Revised Primary Annual $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS)" to EPA in accordance with Section (40 CFR 50.14(c)(2)) of the Exceptional Events Rule. On November 1, 2024, EPA Region IV sent DAQ an email confirming that DAQ's Initial Notification met the requirements of 40 CFR 50.14(c)(2)(i). This correspondence is provided in Appendix L of this Exceptional Events demonstration.



December 26, 2024.² Note that the Canadian wildfire smoke contributed to elevated design values for many other monitors in North Carolina; however, the design values are below the revised NAAQS and therefore not eligible for inclusion in an Exceptional Events demonstration at this time.

The DAQ issued a public notice announcement, in accordance with 40 CFR 51.102, indicating that the pre-hearing draft of the *Exceptional Events Demonstration to Support Attainment Designation Recommendations for the 2024 Annual PM_{2.5} National Ambient Air Quality Standard (NAAQS) for Mecklenburg and Davidson Counties, North Carolina (June – July 2023 Canadian Wildfire Smoke Impacts)* was available for public comment and posted on the DAQ website for review. The public comment period was open from Wednesday, November 20, 2024, through Friday, December 20, 2024. The public notice announcement indicated that anyone may request a public hearing by December 13, 2024, and, if requested by this date, the public hearing would be held on December 20, 2024. The public notice included the hearing date, time, location, and methods to access the hearing. The DAQ did not receive a request for a public hearing; therefore, the public hearing was cancelled.

In addition to posting on the website, the public notice announcement was sent to a number of email distribution lists managed by the DAQ, which include numerous stakeholders from industry and environmental groups. The DAQ has found that sending the public notice announcements to these groups is more effective than publishing the notices in a few local newspapers and is consistent with the requirements described in the April 6, 2011, memorandum, “*Regional Consistency for the Administrative Requirements of the State Implementation Plan Submittals and the Use of Letter Notices*”

The DAQ also issued a press release on November 21st, 2024, announcing the public comment period; a second release on December 6th, 2024, extending the date for requesting a public hearing from December 4th to December 13th; and subsequently a third release on December 17th, 2024, to remind the public that the comment period was to close on December 20th, 2024, and that the public hearing was cancelled because the DAQ did not receive a request for a public hearing. Each of these press releases were available in English and Spanish languages. These press releases were distributed to local and state news media and all public subscribers of the North Carolina Department of Environmental Quality’s (NCDEQ) press release distribution list. The press releases were also posted to NCDEQ’s website and social media channels.

The DAQ received comments during the comment period which are summarized in Appendix M (Public Notice Summary, Comments Received, and Responses) to this Exceptional Events demonstration. Two organizations provided comments supporting the Exceptional Events demonstration, one organization submitted comments requesting changes to the Exceptional Events demonstration, and one private citizen submitted comments that were outside the scope of the Exceptional Events demonstration. Appendix M provides DAQ’s responses to the comments requesting changes to and outside the scope of the Exceptional Events demonstration. The comments submitted are included as attachments to Appendix M.

² *North Carolina’s Recommendations for Air Quality Designations for the 2024 Revised Primary Annual Fine Particle Standard*, submitted to EPA, December 26, 2024, <https://www.deq.nc.gov/about/divisions/air-quality/air-quality-planning/attainment/designation-history-pollutant/particle-pollution-pm25-designation-history>.

Jeaneanne Gettle
February 6, 2025
Page 3

If you should have any questions, please contact Tammy Manning of my staff at (919) 707-8717 or tammy.manning@deq.nc.gov.

Sincerely,



Michael A. Abraczinskas, Director
Division of Air Quality, NCDEQ

MAA/rps

Enclosures

cc: Denisse Diaz, USEPA
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