



6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 50**

### **EPA-HQ-OAR-2016-0408; FRL-9958-29-OAR**

### **RIN 2060-AS89**

## **Technical Correction to the National Ambient Air Quality Standards for Particulate Matter**

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

**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is taking final action to make a technical correction to equation 2 in appendix N to part 50, section 4.4(b) of the National Ambient Air Quality Standards (NAAQS) for Particulate Matter. Equation 2 in appendix N describes an intermediate step in the calculation of the design value for the annual PM<sub>2.5</sub> (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) NAAQS. This action corrects Equation 2 to properly account for cases where a site has quarters without daily values and passes the minimum quarterly value data substitution test. This change accurately reflects the intended calculation of the annual PM<sub>2.5</sub> design value and is consistent with the text of section 4.1 in appendix N to part 50.

**DATES:** This final rule is effective on [**insert date 60 days after date of publication in the Federal Register**].

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2016-0408. All documents in the docket are listed on the <http://www.regulations.gov> website. Although listed in the index, some information is not publicly available, e.g., confidential business information or other information whose disclosure is restricted by statute.

Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Mr. Brett Gantt, Office of Air Quality Planning and Standards, Air Quality Assessment Division, Air Quality Analysis Group (Mail Code: C304-04), Environmental Protection Agency, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711; telephone number: (919) 541-5274; email address: [gantt.brett@epa.gov](mailto:gantt.brett@epa.gov).

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**I. General Information**

A. Background

On December 14, 2012, the EPA revised the NAAQS for Particulate Matter (78 FR 3086). As part of that action, the EPA also made corresponding revisions in appendix N to 40 CFR part 50, which describes the data handling conventions and computations necessary for determining when the NAAQS for PM<sub>2.5</sub> are met. Section 4.4 of appendix N describes the annual PM<sub>2.5</sub> design value calculations, with equations 1, 2, and 3 used to calculate the quarterly, annual, and 3-year average concentrations. Equation 2 erroneously describes the annual mean as the average of the four quarterly values despite the availability of a minimum quarterly value data substitution test that is applicable to cases with quarters that do not have any daily values.

The minimum quarterly value data substitution test described in section 4.1(c)(i) allows for a valid annual PM<sub>2.5</sub> design value to be calculated when a test design value is greater than the level of the standard. This test design value is calculated by substituting quarter-specific minimum values for quarters not meeting data completeness requirements. If the minimum quarterly value data substitution test is passed, the annual PM<sub>2.5</sub> design value is calculated from annual means of the quarters with at least one daily value, which can range in number from one to four quarters for a specific year.

As currently written, Equation 2 is not appropriate for use in cases where the data completeness requirements of section 4.1(b) of appendix N have not been met, and where the minimum quarterly value data substitution test has been used in lieu of meeting those requirements for quarters without any daily values. Specifically, Equation 2 assumes there are four quarters with data and does not accurately reflect the intended calculation of the annual mean PM<sub>2.5</sub> concentration using only quarters with at least one daily value.

On August 11, 2016, the EPA issued a direct final action (81 FR 53006), along with a parallel proposal (81 FR 53097), to correct Equation 2. We received an adverse comment to the

direct final rule suggesting a change in the definition of one of the parameters in the updated equation. Specifically, the commenter suggested that the variable  $n_{Q,y}$ , which represents the number of quarters used in the calculation of the annual mean, be changed from defining Q as a complete quarter to a quarter containing at least one valid 24-hour value. On September 29, 2016, we withdrew the direct final action and indicated our intent to address the comment in a final action based on the parallel proposal. We agree with the commenter and are incorporating the suggested definition in this final action.

B. What action is the agency taking?

This action generalizes Equation 2 to account for cases where a site has quarters without daily values, but passes the minimum quarterly value data substitution test. This technical correction to Equation 2 is currently used by the EPA in the calculation of the annual  $PM_{2.5}$  design value, is consistent with the text of section 4.1 within appendix N to part 50, and does not affect the EPA's calculation of annual mean  $PM_{2.5}$  concentrations when four complete quarters of data are available. The annual  $PM_{2.5}$  design values calculated by the EPA and available at <https://www.epa.gov/air-trends/air-quality-design-values> are, therefore, not affected by this revision.

C. Does this action apply to me?

This action applies to you if you are calculating the annual  $PM_{2.5}$  design value for a site which has quarters without daily values for a specific year and passes the minimum quarterly value data substitution test. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

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

### **A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review**

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

### **B. Paperwork Reduction Act (PRA)**

This action does not impose an information collection burden under the PRA. This action clarifies the calculation of the annual PM<sub>2.5</sub> NAAQS design values and does not impose additional regulatory requirements on organizations monitoring air quality.

### **C. Regulatory Flexibility Act (RFA)**

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This action corrects the calculation of annual mean PM<sub>2.5</sub> concentrations and does not impose additional regulatory requirements on sources.

### **D. Unfunded Mandates Reform Act (UMRA)**

This action does not contain any unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments, or the private sector.

### **E. Executive Order 13132: Federalism**

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175. This regulatory action corrects the calculation of annual mean PM<sub>2.5</sub> concentrations and imposes no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action is not subject to Executive Order 12898 (59 FR 7629, February 16, 1994) because it does not establish an environmental health or safety standard. This regulatory action is a technical correction to a previously promulgated regulatory action and does not have any impact on human health or the environment.

K. Congressional Review Act

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not “major rule” as defined by 5 U.S.C. 804(2).

**List of Subjects in 40 CFR Part 50**

Air pollution control, Carbon monoxide, Lead, Nitrogen dioxide, Ozone, Particulate matter,  
Sulfur oxides.

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Dated: March 14, 2017.

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E. Scott Pruitt,  
Administrator.

For the reasons stated in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

**PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS**

1. The authority citation for part 50 continues to read as follows:

**AUTHORITY:** 42 U.S.C. 7401 et seq.

2. In appendix N to part 50, in section 4.4, paragraph (b), Equation 2 is revised to read as follows:

**Appendix N to Part 50—INTERPRETATION OF THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR PM<sub>2.5</sub>**

\* \* \* \* \*

4.4 Equations for the Annual PM<sub>2.5</sub> NAAQS

\* \* \* \* \*

(b) \* \* \*

Equation 2

$$\bar{X}_y = \frac{1}{n_{Q,y}} \sum_{q=1}^{n_{Q,y}} \bar{X}_{q,y}$$

Where:

$\bar{X}_y$  = the annual mean concentration for year y (y = 1, 2, or 3);

$n_{Q,y}$  = the number of quarters Q in year y with at least one daily value; and

$\bar{X}_{q,y}$  = the mean for quarter q of year y (result of equation 1).

\* \* \* \* \*