

COVER SHEET FOR FINAL PROPOSAL

Notice Number **2022-5**

Rule Number **Env-A 300**

1. Agency Name & Address:

Department of Environmental Services
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095

2. RSA Authority: **RSA 125-C:4, I(b)**

42 U.S.C. §7409;

3. Federal Authority: **40 CFR 50; 40 CFR 53**

4. Type of Action:

- ☐ Adoption
☐ Repeal
☐ Readoption
☒ Readoption w/amendment

5. Short Title: **Ambient Air Quality Standards**

6. Contact person for copies and questions:

Name: Karla McManus

Title: ARD Planning and Rules Manager

Address: Department of Environmental Services
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095

Phone #: (603) 271-6854

7. Yes ☐ No ☒ Agency requests review by Committee legal staff in the Office of Legislative Services and delayed Committee review pursuant to RSA 541-A:12, I-a

8. The rulemaking notice appeared in the Rulemaking Register on **January 27, 2022**.

SEE THE INSTRUCTIONS--PLEASE SUBMIT 2 COPIES OF THIS COVER SHEET

AND 2 COPIES OF THE FOLLOWING:

(and numbered correspondingly)

9. The "Final Proposal-Fixed Text", including the cross-reference table required by RSA 541-A:3-a, II as an appendix.

10. Yes ☐ N/A ☒ Incorporation by Reference Statement(s) because this rule incorporates a document or Internet content by reference for which an Incorporation by Reference Statement is required pursuant to RSA 541-A:12, III.

11. Yes ☐ N/A ☒ The "Final Proposal-Annotated Text" indicating how the proposed rule was changed because the text of the rule changed from the Initial Proposal pursuant to RSA 541-A:12, II(e).

12. Yes ☐ N/A ☒ The amended fiscal impact statement because the change to the text of the Initial Proposal affects the original fiscal impact statement (FIS) pursuant to RSA 541-A:5, VI.

Notice Number 2022-5Rule Number Env-A 300

1. Agency Name & Address: Department of Environmental Services 29 Hazen Drive P.O. Box 95 Concord, NH 03302-0095	2. RSA Authority: RSA 125-C:4, I(b) 3. Federal Authority: 42 U.S.C. §7409; 40 CFR 50; 40 CFR 53 4. Type of Action: Adoption _____ Repeal _____ Readoption _____ Readoption w/amendment X
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5. Short Title: **Ambient Air Quality Standards**

6. (a) Summary of what the rule says and of any proposed amendments:

The Department is proposing to readopt and amend Env-A 300, *Ambient Air Quality Standards*. The purpose of this rule is to establish state ambient air quality standards for various types of pollutants emitted in or transported into New Hampshire, in accordance with RSA 125-C:1 and Section 110 of the federal Clean Air Act (CAA). In this rulemaking, changes to the standards for particulate matter and ozone are proposed to make them consistent with recently revised national ambient air quality standards, as required by the CAA.

Specifically, the Department is proposing the following substantive changes:

- **Env-A 303, *Ambient Air Quality Standards for Particulate Matter (PM)***

The annual primary ambient air quality standard for PM_{2.5} strengthened from 15.0 to 12.0 micrograms per cubic meter (µ/m³); and

- **Env-A 307, *Ambient Air Quality Standards for Ozone***

The 8-hour primary and secondary standards are strengthened from 0.075 to 0.070 parts per million (ppm).

The Department has made additional minor word changes for clarity and consistency.

6. (b) Brief description of the groups affected:

The proposed rule benefits the citizens of New Hampshire by strengthening the Ambient Air Quality Standards to better protect public health, public welfare, quality of life, and the environment. Sources that emit any of the 2 pollutants mentioned above could be affected by the changes to their standards.

6. (c) Specific section or sections of state statute or federal statute or regulation which the rule is intended to implement:

Rule Section(s)	State Statutes Implemented	Federal Statutes/Regulations Implemented
Env-A 300 (see parts listed below for additional info)	RSA 125-C:1; RSA 125-C:6	42 U.S.C. §7409; 40 CFR 50; 40 CFR 53
Env-A 302		40 CFR §50.1
Env-A 303		40 CFR §50.6, §50.7; 40 CFR 50 Appendix J, K, L & N
Env-A 304		40 CFR §50.4, §50.5; 40 CFR 50 Appendix A-1 & A-2
Env-A 305		40 CFR §50.8; 40 CFR 50 Appendix C
Env-A 306		40 CFR §50.11; 40 CFR 50 Appendix F & S
Env-A 307		40 CFR §50.9, §50.10; 40 CFR 50 Appendix H & I
Env-A 308		40 CFR §50.12; 40 CFR 50 Appendix G & R

7. Contact person for copies and questions including requests to accommodate persons with disabilities:

Name:	Karla McManus	Title:	DES-ARD Planning and Rules Manager
Address:	Department of Environmental Services 29 Hazen Drive P.O. Box 95 Concord, NH 03302-0095	Phone #:	(603) 271-6854
		Fax#:	(603) 271-1381
		E-mail:	Karla.S.McManus@des.nh.gov

The rules also can be viewed in PDF in the Public Comment Opportunities section of the NHDES website at <https://www.des.nh.gov/public-comment-opportunities> and selecting "Rulemaking"

TTY/TDD Access: Relay NH 1-800-735-2964 or dial 711 (in NH)

8. Deadline for submission of materials in writing or, if practicable for the agency, in the electronic format specified: **4:00 p.m. on Friday, March 4, 2022**

☒ Fax

☒ E-mail

☐ Other format (specify):

9. Public hearing scheduled for:

Date and Time: **Tuesday, February 22, 2022 at 10:00 AM**

Place: **Room 208C, DES Offices, 29 Hazen Drive, Concord, NH**
NOTE: NHDES security procedures require all visitors to sign in and present photo identification (such as a driver's license). If you plan to attend the public hearing in person, please bring photo identification with you.

You also may attend the hearing via WebEx, which can be accessed through the following link:

Join from the meeting link

<https://nhgov.webex.com/nhgov/j.php?MTID=mdc438c2a7a05cebc4ae8ca06868c4a5d>

Meeting number (access code): 2303 008 4307

Meeting password: 2tGBxJmcS74

You also may join the meeting by phone: +1-415-655-0001 US Toll

Access Code: 2303 008 4307

Contact Meg King at Margaret.M.King@des.nh.gov or (603) 271-6893 if you have any questions or technical issues connecting to the hearing.

10. Fiscal Impact Statement (Prepared by Legislative Budget Assistant):

FIS # 21:136, dated 12/20/2021

1. Comparison of the costs of the proposed rule(s) to the existing rule(s):

There is no difference in cost when comparing the proposed rules to the existing rules.

2. Cite the Federal mandate. Identify the impact on state funds:

No federal mandate, no impact on state funds.

3. Cost and benefits of the proposed rule(s):

There are no costs attributable to the proposed rules. Any costs or benefits are attributable to RSA 125-C and not the rules.

A. To State general or State special funds:

None.

B. To State citizens and political subdivisions:

None.

C. To independently owned businesses:

None.

11. Statement Relative to Part I, Article 28-a of the N.H. Constitution:

The rules do not mandate or assign any new, expanded, or modified programs or responsibilities to any political subdivision in such a way as to necessitate additional local expenditures and so do not violate Part I, Article 28-a of the N.H. Constitution.



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

**FP 2022-5, Env-A 300 Ambient Air Quality Standards
Summary of Comments on Initial Proposal with DES Responses
April 14, 2022**

Introduction

The Department is proposing to readopt and amend Env-A 300, *Ambient Air Quality Standards*. The purpose of this rule is to establish state ambient air quality standards for various types of pollutants emitted in or transported into New Hampshire, in accordance with RSA 125-C:1 and Section 110 of the federal Clean Air Act (CAA). In this rulemaking, changes to the standards for particulate matter and ozone are proposed to make them consistent with recently revised national ambient air quality standards, as required by the CAA. Specifically, the Department is proposing the following substantive changes: Env-A 303, *Ambient Air Quality Standards for Particulate Matter (PM)*- The annual primary ambient air quality standard for PM_{2.5} strengthened from 15.0 to 12.0 micrograms per cubic meter (μm^3); and Env-A 307, *Ambient Air Quality Standards for Ozone* - The 8-hour primary and secondary standards are strengthened from 0.075 to 0.070 parts per million (ppm). The Department has made additional minor word changes for clarity and consistency.

The Department conducted a hybrid public hearing on these rules via WebEx and in person on February 22, 2022. No one from the public attended the hearing. (This is not unusual; the Department's experience with in-person hearings for prior rulemaking proceedings for subtitle Env-A was that no one attended those hearings either.) Had anyone attended, the Department would have enabled the microphone of each individual one at a time in order to ensure that each person had an opportunity to comment. The Department did not hear from anyone during the hearing or subsequent to the hearing about any technical difficulties with access to the WebEx forum. Written comments were received from the Office of Legislative Services, Administrative Rules (OLS); those comments and the Department's responses thereto are summarized below.

Env-A 305.01, Env-A 306.01 and Env-A 306.02 general edits

Comment: OLS provided two editorial comments. The first comment is relative to the abbreviation for Carbon Monoxide being parenthetical in the heading and in the body of the rule.

The second comment is relative to the term "1-hour primary ambient air quality standard" which OLS notes should be "one-hour primary ambient air quality standard."

Response to the first comment: Under the OLS *Drafting and Procedure Manual for Administrative Rules*, Chapter 4, page 102, "the heading is not part of the text of the rule but merely helps locate the subject, just like a table of contents. Draft a rule so that its meaning is clear independent of its heading." Therefore, DES will keep the parenthetical annotation in the header and in the body of the rule.

Response to the second comment: The term "1-hour primary ambient air quality standard" is the term used in 40 CFR 50.8 and by the EPA in general. Therefore, DES will keep that language as originally drafted.

Appendix A generally

Comment: Edit from OLS relative to annotation not required for changes to the content in the Appendix.

Response: The Department agrees and has fixed appendix as requested.

CONSENT

Readopt with amendment Env-A 300, eff. 9-1-12 (Document #10173), to read as follows:

CHAPTER Env-A 300 AMBIENT AIR QUALITY STANDARDS

Statutory Authority: RSA 125-C:4, I(b)

PART Env-A 301 PURPOSE, SCOPE AND DEFINITIONS

Env-A 301.01 Purpose. The purpose of this chapter is to establish ambient air quality standards to:

(a) Support the policy and purpose articulated in RSA 125-C:1 and as required by §109 of the Clean Air Act (Act), 40 CFR 50, and 40 CFR 53 for various types of pollutants emitted in or transported into the State of New Hampshire; and

(b) Be at least as stringent as the federal primary and secondary ambient air quality standards, respectively.

Env-A 301.02 Applicability. This chapter shall apply to ambient air statewide. The department shall not construe these standards in any manner that would allow the significant deterioration of existing air quality in any portion of the state.

PART Env-A 302 REFERENCES; DEFINITIONS

Env-A 302.01 References. For the purpose of this chapter, unless otherwise specified all references to 40 CFR 50 and 40 CFR 53, including appendices, shall be to the July 1, 2021 edition.

Env-A 302.02 Definitions. For the purposes of this chapter, the following definitions shall apply:

(a) “Attainment” means that the primary or secondary ambient air quality standard, as applicable for that pollutant, is met;

(b) “Equivalent method” means “equivalent method” as defined by 40 CFR 50.1(g), as reprinted in Appendix B;

(c) “Primary ambient air quality standard” means the level of air quality designated by the administrator of the U.S. Environmental Protection Agency (EPA) that is judged to be necessary to protect public health. For purposes of this definition, “public health” means the overall health and safety of the human population at large;

(d) “Reference method” means “reference method” as defined by 40 CFR 50.1(f), reprinted in Appendix B; and

(e) “Secondary ambient air quality standard” means the level of air quality designated by the EPA administrator that is judged to be necessary to protect public welfare from any known or anticipated adverse effects of a pollutant. For purposes of this definition, “public welfare” means the well-being of animals and vegetation and the maintenance of property.

PART Env-A 303 AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER

Env-A 303.01 Primary and Secondary Ambient Air Quality Standards for Particulate Matter (PM). The primary and secondary ambient air quality standards for particulate matter (PM) shall be as follows:

(a) For PM measured in the ambient air as particles having an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀), the primary and secondary ambient air quality standards each shall be 150 micrograms per cubic meter (µg/m³), 24-hour average concentration; and

(b) For PM measured in the ambient air as particles having an aerodynamic diameter less than or equal to a nominal 2.5 micrometers in diameter or smaller (PM_{2.5}):

- (1) The annual primary ambient air quality standards shall be 12.0 µg/m³, annual arithmetic mean concentration;
- (2) The annual secondary ambient air quality standards shall be 15.0 µg/m³, annual arithmetic mean concentration; and
- (3) The 24-hour primary and secondary ambient air quality standards each shall be 35 µg/m³, 24-hour average concentration.

Env-A 303.02 Determination of Attainment of PM Standards. The department shall determine the attainment of primary and secondary standards for PM specified in Env-A 303.01 as follows:

(a) For particulate matter measured in the ambient air as PM₁₀, the 24-hour primary and secondary ambient air quality standards shall be deemed to be attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³, as determined in accordance with 40 CFR 50 Appendix K, is equal to or less than one; and

(b) For particulate matter measured in the ambient air as PM_{2.5}:

- (1) The annual primary ambient air quality standard shall be deemed to be attained when the annual arithmetic mean concentration, as determined in accordance with 40 CFR 50 Appendix N, is less than or equal to 12.0 µg/m³;
- (2) The annual secondary ambient air quality standard shall be deemed to be attained when the annual arithmetic mean concentration, as determined in accordance with 40 CFR 50 Appendix N, is less than or equal to 15.0 µg/m³; and
- (3) The 24-hour primary and secondary ambient air quality standards shall be deemed to be attained when the 98th percentile 24-hour concentration, as determined in accordance with 40 CFR 50 Appendix N, is less than or equal to 35 µg/m³.

Env-A 303.03 Measurement for PM Attainment Determinations. For the purpose of determining attainment of the primary and secondary ambient air quality standards for PM specified in Env-A 303.01, the following shall apply:

(a) PM₁₀ in the ambient air shall be measured by either:

- (1) A reference method based on 40 CFR 50 Appendix J and designated in accordance with 40 CFR 53; or
- (2) An equivalent method designated in accordance with 40 CFR 53; and

(b) PM_{2.5} in the ambient air shall be measured by either:

- (1) A reference method based on 40 CFR 50 Appendix L and designated in accordance with 40 CFR 53; or
- (2) An equivalent method designated in accordance with 40 CFR 53.

PART Env-A 304 AMBIENT AIR QUALITY STANDARDS FOR SULFUR DIOXIDE

Env-A 304.01 Primary and Secondary Ambient Air Quality Standards for Sulfur Dioxide (SO₂). The primary and secondary ambient air quality standards for sulfur dioxide (SO₂), chemical abstracts service registry number (CAS #) 7446-09-5, shall be as follows:

(a) The primary ambient air quality standard for SO₂ shall be 75 parts per billion (ppb), 1-hour average concentration; and

(b) The secondary ambient air quality standard for SO₂ shall be 0.5 parts per million (ppm), 3-hour average concentration.

Env-A 304.02 Determination of Attainment of SO₂ Standards. The department shall determine attainment of the primary and secondary standards for SO₂ specified in Env-A 304.01 as follows:

(a) The primary ambient air quality standard for SO₂ shall be deemed to be attained when the 3-year average of the annual 99th percentile of the daily maximum 1-hour average concentrations, as determined in accordance with 40 CFR 50 Appendix T, is less than or equal to 75 ppb; and

(b) The secondary ambient air quality standard for SO₂ shall be deemed to be attained when the 3-hour average concentration exceeds 0.5 ppm not more than once per calendar year.

Env-A 304.03 Measurement for SO₂ Attainment Determination. For the purpose of determining attainment of the primary and secondary ambient air quality standards for SO₂ specified in Env-A 304.01, sulfur dioxide in the ambient air shall be measured by either:

(a) The reference method described in 40 CFR 50 Appendix A-1 or A-2; or

(b) An equivalent method designated in accordance with 40 CFR 53.

PART Env-A 305 AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE

Env-A 305.01 Primary Ambient Air Quality Standards for Carbon Monoxide (CO). The primary ambient air quality standards for carbon monoxide (CO), CAS # 630-08-0, shall be as follows:

(a) The 8-hour primary ambient air quality standard for CO shall be 9 ppm, 8-hour average concentration; and

(b) The 1-hour primary ambient air quality standard for CO shall be 35 ppm, 1-hour average concentration.

Env-A 305.02 Determination of Attainment of CO Standards. The department shall determine attainment of the primary standards for CO specified in Env-A 305.01 as follows:

(a) The 8-hour primary ambient air quality standard for CO shall be deemed to be attained when the 8-hour average concentration exceeds 9 ppm not more than once per calendar year; and

(b) The 1-hour primary ambient air quality standard for CO shall be deemed to be attained when the 1-hour average concentration exceeds 35 ppm not more than once per calendar year.

Env-A 305.03 Measurement for CO Attainment Determination. For the purpose of determining attainment of the primary ambient air quality standards for CO specified in Env-A 305.01, carbon monoxide in the ambient air shall be measured by either:

(a) A reference method based on 40 CFR 50 Appendix C and designated in accordance with 40 CFR 53; or

(b) An equivalent method designated in accordance with 40 CFR 53.

PART Env-A 306 AMBIENT AIR QUALITY STANDARDS FOR NITROGEN DIOXIDE

Env-A 306.01 Primary and Secondary Ambient Air Quality Standards for Nitrogen Dioxide (NO₂). The primary and secondary ambient air quality standards for nitrogen dioxide (NO₂), CAS # 10102-44-0, shall be as follows:

- (a) The annual primary ambient air quality standard for NO₂ shall be 53 ppb, annual average concentration;
- (b) The 1-hour primary ambient air quality standard for NO₂ shall be 100 ppb, 1-hour average concentration; and
- (c) The secondary ambient air quality standard for NO₂ shall be 0.053 ppm, equivalent to 100 µg/m³, annual arithmetic mean concentration.

Env-A 306.02 Determination of Attainment of NO₂ Standard.

- (a) The annual primary standard for NO₂ specified in Env-A 306.01 shall be deemed to be attained when the annual average concentration in a calendar year, as determined in accordance with 40 CFR 50 Appendix S, is less than or equal to 53 ppb.
- (b) The 1-hour primary standard for NO₂ specified in Env-A 306.01 shall be deemed to be attained when the 3-year average of the annual 98th percentile of the daily maximum 1-hour average, as determined in accordance with 40 CFR 50 Appendix S, is less than or equal to 100 ppb.
- (c) The annual secondary standard specified in Env-A 306.01 shall be deemed to be attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to 3 decimal places, as further described in 40 CFR 50.11(g).

Env-A 306.03 Measurement for NO₂ Attainment Determination. For the purpose of determining attainment of the primary and secondary ambient air quality standards specified in Env-A 306.01, NO₂ in the ambient air shall be measured by either:

- (a) A reference method based on 40 CFR 50 Appendix F; or
- (b) An equivalent method designated in accordance with 40 CFR 53.

PART Env-A 307 AMBIENT AIR QUALITY STANDARDS FOR OZONE

Env-A 307.01 Primary and Secondary Ambient Air Quality Standards for Ozone. The primary and secondary ambient air quality standards for ozone, CAS # 10028-15-6, shall be as follows:

- (a) The primary ambient air quality standard for ozone shall be 0.070 ppm, daily maximum 8-hour average; and
- (b) The secondary ambient air quality standard for ozone shall be the same as the annual primary ambient air quality standard for ozone designated in (a), above.

Env-A 307.02 Determination of Attainment of Ozone Standards. The primary and secondary ambient air quality standards for ozone specified in Env-A 307.01 shall be deemed to be attained when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration, as determined in accordance with 40 CFR 50 Appendix P, is less than or equal to 0.070 ppm.

Env-A 307.03 Measurement for Ozone Attainment Determination. For the purpose of determining attainment of the primary and secondary ambient air quality standards for ozone specified in Env-A 307.01, ozone in the ambient air shall be measured by either of the following:

- (a) A reference method based on 40 CFR 50 Appendix D and designated in accordance with 40 CFR 53; or
- (b) An equivalent method designated in accordance with 40 CFR 53.

PART Env-A 308 AMBIENT AIR QUALITY STANDARDS FOR LEAD

Env-A 308.01 Primary and Secondary Ambient Air Quality Standards for Lead. The primary and secondary ambient air quality standards for lead and its compounds, CAS # 7439-92-1, shall be as follows:

- (a) The primary ambient air quality standard for lead shall be 0.15 µg/m³, 3-month arithmetic mean concentration; and
- (b) The secondary ambient air quality standard for lead shall be the same as the primary ambient air quality standard for lead designated in (a), above.

Env-A 308.02 Determination of Attainment of Lead Standards. The primary and secondary ambient air quality standards for lead specified in Env-A 308.01 shall be deemed to be attained when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with 40 CFR 50 Appendix R, is less than or equal to 0.15 µg/m³.

Env-A 308.03 Measurement for Lead Attainment Determination. For the purpose of determining attainment of the primary and secondary ambient air quality standards for lead specified in Env-A 308.01, lead in the ambient air shall be measured by either:

- (a) A reference method based on 40 CFR 50 Appendix G and designated in accordance with 40 CFR 53; or
- (b) An equivalent method designated in accordance with 40 CFR 53.

APPENDIX A: STATE STATUTE, FEDERAL STATUTE/REGULATIONS IMPLEMENTED

Rule Section(s)	State Statutes Implemented	Federal Statutes/Regulations Implemented
Env-A 300 (see parts listed below for additional info)	RSA 125-C:1; RSA 125-C:6	42 U.S.C. §7409; 40 CFR 50; 40 CFR 53
Env-A 302		40 CFR §50.1
Env-A 303		40 CFR §50.6, §50.7; 40 CFR 50 Appendix J, K, L & N
Env-A 304		40 CFR §50.4, §50.5; 40 CFR 50 Appendix A-1 & A-2
Env-A 305		40 CFR §50.8; 40 CFR 50 Appendix C
Env-A 306		40 CFR §50.11; 40 CFR 50 Appendix F & S
Env-A 307		40 CFR §50.9, §50.10; 40 CFR 50 Appendix H & I
Env-A 308		40 CFR §50.12; 40 CFR 50 Appendix G & R

APPENDIX B: FEDERAL DEFINITIONS FROM

40 CFR §50.1

(f) *Reference method* means a method of sampling and analyzing the ambient air for an air pollutant that is specified as a reference method in an appendix to this part, or a method that has been designated as a reference method in accordance with part 53 of this chapter; it does not include a method for which a reference method designation has been cancelled in accordance with §53.11 or §53.16 of this chapter.

(g) *Equivalent method* means a method of sampling and analyzing the ambient air for an air pollutant that has been designated as an equivalent method in accordance with part 53 of this chapter; it does not include a method for which an equivalent method designation has been cancelled in accordance with §53.11 or §53.16 of this chapter.