CHAPTER Env-A 2400  FERROUS AND NON-FERROUS FOUNDRIES, SMELTERS, AND INVESTMENT CASTING OPERATIONS

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

PART Env-A 2401  PURPOSE AND APPLICABILITY

Env-A 2401.01  Purpose.  The purpose of this chapter is to establish emissions standards for particulate matter and visible emissions from ferrous and non-ferrous foundries, smelters, and investment casting operations.

Source.  #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04; ss by #10315, eff 4-23-13

Env-A 2401.02  Applicability.  This chapter shall apply to each ferrous or non-ferrous foundry, smelter, or investment casting operation in New Hampshire.

Source.  #10315, eff 4-23-13

PART Env-A 2402  FERROUS FOUNDRIES INSTALLED PRIOR TO OR ON MAY 12, 1971

Env-A 2402.01  Emission Standards for Ferrous Foundries Installed Prior to or On May 12, 1971.  For any ferrous foundry installed prior to or on May 12, 1971, no person shall cause or allow the emission of particulate matter, including fumes, to exceed the emission standards specified for “Existing Devices” in Table 2102-1.

Source.  #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04; ss by #10315, eff 4-23-13 (from Env-A 2403.01)

Env-A 2402.02  Visible Emissions Standards for Ferrous Foundries Installed Prior to or On May 12, 1971.

(a)  Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any ferrous foundry installed prior to or on May 12, 1971 to exceed an average of 20 percent opacity for any continuous 6-minute period.

(b)  Opacity shall be determined in accordance with Env-A 807.

Source.  #10315, eff 4-23-13m (from Env-A 2403.02)

PART Env-A 2403  FERROUS FOUNDRIES INSTALLED AFTER MAY 12, 1971

Env-A 2403.01  Emission Standards for Ferrous Foundries Installed After May 12, 1971.

(a)  For any ferrous foundry installed after May 12, 1971, no person shall cause or allow the emission of particulate matter, including fumes, to exceed those emission standards specified for “New Devices” in Table 2102-1.

(b)  For any ferrous foundry installed or modified after June 15, 1974, in addition to those requirements stated in (a), above, no person shall cause or allow such a foundry to discharge into the ambient air any gas which contains particulate matter in excess of 50 milligrams per dry standard cubic meter, or 0.022 grains per dry standard cubic foot.

Source.  #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04; ss by #10315, eff 4-23-13 (from Env-A 2404.01)
Env-A 2403.02 Visible Emission Standards for Ferrous Foundries Installed After May 12, 1971.

(a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any ferrous foundry installed after May 12, 1971 to exceed an average of 20 percent opacity for any continuous 6-minute period.

(b) Opacity shall be determined in accordance with Env-A 807.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04; ss by #10315, eff 4-23-13 (from Env-A 2404.02)

PART Env-A 2404 NON-FERROUS FOUNDRIES, SMELTERS, OR INVESTMENT CASTINGS

Env-A 2404.01 Non-Sulfur Emission Standards For Non-Ferrous Foundries, Smelters, and Investment Casting Operations Installed Prior to or On February 18, 1972. Subject to Env-A 2404.03, below, for any non-ferrous foundry, smelter or investment casting source installed prior to or on February 18, 1972, no person shall cause or allow the emission of particulate matter, including fumes, to exceed the emission standards specified for “Existing Devices” in Table 2102-1.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04; ss by #10315, eff 4-23-13 (from Env-A 2405.01)

Env-A 2404.02 Non-Sulfur Emission Standards For Non-Ferrous Foundries, Smelters, and Investment Casting Operations Installed After February 18, 1972. Subject to Env-A 2405.03, below, for any non-ferrous foundry, smelter, or investment casting operation installed after February 18, 1972, no person shall cause or allow the emission of particulate matter, including fumes, to exceed the emission standards specified for “New Devices” in Table 2102-1.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04; ss by #10315, eff 4-23-13 (from Env-A 2406.01)

Env-A 2404.03 Calculations of Sulfur Dioxide Emission Standards for Non-Ferrous Foundries, Smelters, or Investment Casting Operations.

(a) For sulfur dioxides, the maximum allowable particulate matter emission rate from non-ferrous foundries, smelters, or investment casting operations shall be calculated by the applicable equation in (b) through (d), below, where:

(1) “X” means the total sulfur, CAS number 7704-34-9, burned in the smelter in pounds per hour; and

(2) “Y” means the emission of sulfur dioxide, CAS number 7446-09-5, in pounds per hour;

(b) For copper from smelters, CAS number 7440-50-8, multiply X by 0.2, as shown in the formula below:

\[ Y = 0.2X \]

(c) For zinc from smelters, CAS number 7440-66-6, raise X to the 0.85 power and multiply the result by 0.564, as shown in the formula below:

\[ Y = 0.564X^{0.85} \]
(d) For lead from smelters, CAS number 7439-92-1, raise $X$ to the 0.77 power, and multiply the result by 0.98, as shown in the formula below:

$$Y = 0.98 \times X^{0.77}$$

Source. #10315, eff 4-23-13 (from Env-A 2405.02)

Env-A 2404.04 Visible Emission Standards for Non-Ferrous Foundries, Smelters, or Investment Casting Operations.

(a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any non-ferrous foundry, smelter, or investment casting to exceed an average of 20 percent opacity for any continuous 6-minute period.

(b) Opacity shall be determined in accordance with Env-A 807.

Source. #10315, eff 4-23-13 (from Env-A 2405.03)

PART Env-A 2405 AFFIRMATIVE DEFENSES FOR VIOLATIONS OF VISIBLE EMISSION STANDARDS

Env-A 2405.01 Affirmative Defenses. An owner or operator against whom a malfunction-based violation of Env-A 2402.02(a), Env-A 2403.02(a), or Env-A 2404.04(a) is alleged in a penalty action may raise an affirmative defense as provided in Env-A 2103.03.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04; ss by #10315, eff 4-23-13

Appendix

<table>
<thead>
<tr>
<th>Rule Section(s)</th>
<th>State Statute Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Env-A 2401</td>
<td>RSA 125-C:6, II</td>
</tr>
<tr>
<td>Env-A 2402</td>
<td>RSA 125-C:6, II</td>
</tr>
<tr>
<td>Env-A 2403</td>
<td>RSA 125-C:6, II</td>
</tr>
<tr>
<td>Env-A 2404</td>
<td>RSA 125-C:6, II</td>
</tr>
<tr>
<td>Env-A 2405</td>
<td>RSA 125-C:6, II</td>
</tr>
</tbody>
</table>

Env-A 2400