

06- DEPARTMENT OF ENVIRONMENTAL PROTECTION
096 BUREAU OF AIR QUALITY CONTROL

CHAPTER 113: GROWTH OFFSET REGULATION

SUMMARY: This regulation defines how ambient air quality standards will be maintained and how additional sources of emissions will be licensed in areas where standards are violated. In the Ozone Transport Region (OTR) and nonattainment areas, new sources of emissions are required to obtain offsets. Generally, this is done by finding other emissions within the area that will offset the emissions or reduce the impact from the new source to the previous level.

1. **Applicability**

This regulation shall apply to the following stationary sources which seek to locate or expand within the geographical bounds of or significant impact a nonattainment area or the OTR:

- A. Any new source whose allowable emissions of the nonattainment pollutant results in a significant emission increase that exceeds the significant emission rates after application of Lowest Achievable Emission Rate (LAER);
- B. Any modification which results in a significant emissions increase of the nonattainment pollutant after application of LAER; and
- C. Any source for which a significant emissions increase of the nonattainment pollutant occurs by virtue of a relaxation after August 7, 1977, of any enforceable limitation or license condition.

LAER and offsets for NO_x shall not apply in those areas which have received a waiver from the Environmental Protection Agency (EPA) under Section 182(f) of the Clean Air Act (CAA).

2. **Offsets**

A. **General**

The applicant for a new source or modification subject to this Chapter shall demonstrate that emission reductions of the nonattainment pollutant were obtained. By the time the source or modification subject to this Chapter is to commence operation,

sufficient offsetting emissions reduction of any applicable pollutant(s) shall be in effect such that the total emissions from existing sources in the area, from new sources or modifications which are not major stationary sources, and from the source or modification subject to this Chapter, will be sufficiently less than total emissions from existing sources prior to the application for such air emission license to construct or modify, so as to represent (when considered together with the plan provisions required under §172 of the CAA) reasonable further progress. Before the operation of the source or modification commences, emission reductions of the nonattainment pollutant must have occurred.

When quantifying the amount of emission reduction credits generated by reducing actual emissions from existing sources that are out of compliance, only those emission reductions below the allowable emissions for the existing source are creditable as emission reduction credits. The determination of total emissions at the time prior to submittal of an application for an air emission license and prior to operation commencement, shall be made in a manner consistent with the assumptions in the applicable State Implementation Plan approved by the EPA. These assumptions pertain to baseline emissions for the demonstration of reasonable further progress and attainment of the national ambient air quality standards for the particular nonattainment pollutant subject to review under this Chapter.

The emission reduction credit must provide a greater than 1 to 1 emission reduction, including minor growth and secondary emissions (except where superseded by higher ratios in Section 2(C) below), and shall provide a positive net air quality benefit.

B. SO₂, PM₁₀, NO₂, CO Lead or Chromium Nonattainment Areas

1. Demonstration of a net air quality benefit. When the new source or modification subject to this Chapter is located in an SO₂, NO₂, PM₁₀, CO, Lead or Chromium nonattainment area or attainment area, if the emission offsets are not obtained from an existing stationary source on the same premises or in the immediate vicinity (i.e., within 250 meters) and the pollutants are not emitted from substantially the same effective stack height of the new source or modification, the demonstration of a net air quality benefit shall be on the basis of atmospheric dispersion modeling.

NOTE: Except as provided in Subsection 2(C) below, atmospheric dispersion modeling shall not be required to demonstrate that VOC and NO_x reduction will result in a reduction of ozone (photochemical oxidants).

2. Location of offsets. Offsets for SO₂, PM₁₀, NO₂, CO, Lead and Chromium shall be obtained from sources in the SO₂, PM₁₀, NO₂, CO, Lead or Chromium nonattainment area.

C. Ozone Nonattainment Areas

1. **Volatile Organic Compounds (VOC).** For a new source or modification subject to this Chapter, the offset ratio for VOC is a function of the nonattainment area classification or other designation for the area in which the new source or modification will locate, as specified below. If the location of a new source or modification is subject to more than one classification, the more restrictive offset ratio shall apply.

Classification Type	Offset Ratio
Serious ozone nonattainment area	1.2 to 1
Moderate nonattainment area	1.15 to 1
Marginal nonattainment area	1.1 to 1
Nonclassified nonattainment area	>1 to 1
OTR	1.15 to 1

In the case of emission offset involving VOC, negligibly photochemically reactive VOC shall not be used as offsets for VOC of higher photochemically reactivity, nor shall an offset be required for negligibly photochemically reactive VOC.

2. **NO_x.** For a new source or modification subject to this Chapter, the offset ratio for NO_x is a function of the nonattainment area classification or other designation for the area in which the new source or modification will locate, as specified below. If the location of a new source or modification is subject to more than one classification, the more restrictive offset ratio shall apply.

NOTE: For the purpose of this section, any NO_x reductions must result in the control of ozone.

Classification Type	Offset Ratio
Serious ozone nonattainment area	1.2 to 1
Moderate nonattainment area	1.15 to 1
Marginal nonattainment area	1.1 to 1
Nonclassified nonattainment area	>1 to 1
OTR	1.15 to 1

3. **Location of offsets.** Offsets for VOC and NO_x shall be obtained from sources in the same ozone nonattainment area or attainment area, except that such offsets

may be obtained from a source in another ozone nonattainment area or attainment area if the following conditions of either (a) or (b), whichever is relevant, are met:

a. For a new source or modification subject to this Chapter located in an ozone nonattainment area:

i. The other ozone nonattainment area has an equal or higher nonattainment classification than the ozone nonattainment area in which the new source or modification subject to this Chapter is located;

ii. Emissions from the ozone nonattainment area contribute to a violation of a national ambient air quality standard in the ozone nonattainment area in which the new source or modification subject to this Chapter would construct; and

iii. The source from which the offset is being obtained is located within the OTR; or

b. For a new source or modification subject to this Chapter located in an attainment area, the source from which the offset is obtained is located within another attainment area or within an ozone nonattainment area, either of which are located in the OTR.

4. Demonstration of emission reductions. For new sources or modifications subject to this Chapter and located in ozone nonattainment areas, the demonstration needed to verify Section 2(C) of this Chapter may be made on the basis of Urban Airshed Model (UAM) in addition to Regional Oxidant Model (ROM) modeling results; any other EPA-approved photochemical grid modeling results; or on the basis of an independent showing on a case-by-case basis.

D. All Areas

All emission reduction credits must be quantifiable and calculated according to the same method and averaging time for the base case and future case. The base case from which to measure emission reduction credits shall be the actual emissions for the 24-month period prior to submittal of the application for an air emission license.

1. In no case shall the base case emission be greater than Reasonable Available Control Technology (RACT), New Source Performance Standards (NSPS), or any emission limitation previously required by the Department, or the allowable emissions of the emissions unit, whichever is less.

2. In no case shall emission reduction credit be allowed for reductions in emissions prior to December 31, 1990.

3. In no case shall emission reduction credit be allowed for reductions in emissions which were required by any federally enforceable license conditions developed pursuant to 40 CFR Parts 51, 52, 70, and 71, or other requirements of the CAA, particularly in demonstrating attainment or reasonable further progress. If incidental emission reductions not required under the CAA meet the applicable requirements for emission offsets, such emission reductions may be creditable as emission reduction credits.

E. Other Limitations on Emission Reduction Credits

1. Emission reduction credits for reductions in fugitive emissions shall be creditable only against increases in fugitive emissions.

2. Emission reduction credit used to offset an emission increase at a new source or modification subject to this Chapter and generated as a result of an emission reduction at another facility must be contemporaneous with the emission increase from the new source or modification. To be contemporaneous, the emission reduction that generates the emission reduction credit must take place within five (5) years before or after the date upon which the new source or modification is licensed, and in no case later than the date which the new source or modification commences operation.

3. Emission reduction credits must be federally enforceable by the time the air emission license is issued, and result in real reductions in actual emissions (i.e. not paper credits) by the time the new source or modification subject to this Chapter commences operation. The emission reduction credit must be used by the new source or modification within five (5) years of the time that the emission reduction credit was created by an emission reduction at another facility.

4. Emission reduction credits must be permanent. If an existing source proposes to switch to a cleaner fuel in order to create an emission reduction credit, such emission reduction is not creditable unless:

a. The air emission license requires the use of a specified alternative control measure which would achieve the same degree of emission reduction if the source switches back to the dirtier fuel at some later date; and

b. Before the Department grants an emission reduction credit for the fuel switch, the owner or operator of a source demonstrates that adequate long

term supplies of the cleaner fuel are available.

F. Shutdowns and Curtailments

1. Emission reduction credits achieved by the shutdown or curtailment of an existing source may be credited under the following conditions:
 - a. The emission reduction credits are permanent, quantifiable, and enforceable; and
 - b. The area where the existing source is located has an EPA-approved attainment plan; and
 - c. The shutdown or curtailment occurred on or after the date of the most recent emission inventory used in the EPA-approved attainment plan.
2. When the EPA-approved attainment plan does not specify a cutoff date for emission reduction credits from shutdowns, the date of the most recent emissions inventory or attainment demonstration, as the case may be, shall apply. However, in no event may credit be given for shutdowns which occurred prior to August 7, 1977.
3. For the purpose of Subsection 2(F) of this Chapter, if the emissions inventory explicitly includes as current existing emissions, the emissions from such existing sources that were previously under shutdown or curtailment, the Department may choose to consider a prior shutdown or curtailment to have occurred after the date of its most recent emissions inventory.
4. Emission reduction credits may be credited in the absence of an EPA-approved attainment demonstration under the following conditions:
 - a. The shutdown or curtailment occurred on or after the date the application for an air emission license for the new source or modification subject to this Chapter is filed;
 - b. The applicant can establish that the new source or modification subject to this Chapter is a replacement for the new source or modification that is under shutdown or curtailment: and
 - c. The cutoff date provisions in Subsection 2(F)(1), 2(F)(2) and 2(F)(3) of this Chapter are observed.
5. If the owner or operator of the new source or modification subject to this

Chapter plans to trade emission credits, any shutdown or curtailment shall require an amendment to the air emission license.

3. Exemptions

Temporary emission sources, including, but not limited to, pilot plants and portable facilities which will be relocated outside of the nonattainment area and OTR after a period of time not to exceed six (6) months, and emissions resulting from the construction phase of a new source or modification subject to this Chapter are exempt from the requirement of this Chapter.

BASIS STATEMENT : The basis of this regulation is to control the additional air pollution in areas that are at or violating the allowed air pollution levels so that the ambient air quality standards are maintained and where those standards are violated there is orderly and timely progress toward attaining and maintaining the standard.

BASIS STATEMENT FOR AMENDMENT OF MAY 11, 1983 : This regulation was amended to reflect the redesignation of the municipality of Millinocket as attainment for sulfur dioxide and the municipalities of Bangor and Lewiston as attainment for carbon monoxide.

BASIS STATEMENT FOR AMENDMENT OF JULY 13, 1988 : This regulation addresses licensing requirements, in addition to those specified in Chapter 115, for sources which are located in or which significantly impact areas which are not achieving ambient air quality standards. The amendment no longer allows nitrogen oxides to be offset for volatile organic compounds.

BASIS STATEMENT FOR AMENDMENT OF SEPTEMBER 27, 1989 : A minor change was made for consistency with the statutes. No comments on the proposed changes were received by the Department.

BASIS STATEMENT FOR AMENDMENT OF JUNE 13, 1990 : This regulation was amended to implement a federally mandated nitrogen oxide (NO_x) increment program in the State of Maine. As part of the Prevention of Significant Deterioration Program, these amendments establish maximum increases in pollution concentration. NO_x increment standards are established and the NO_x baseline concentration represents air quality existing in an area on February 8, 1988. No comments were received on the proposed amendments.

BASIS STATEMENT FOR AMENDMENT OF JUNE 22, 1994 : This regulation was amended to reflect new source review requirements contained in the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.; In addition to this Basis Statement, the Department has filed with the Secretary of State the response to representative comments received during the comment period.

AUTHORITY: 38 MRSA § 585-A

EFFECTIVE DATE: May 7, 1979
Amended January 16, 1980
Amended June 27, 1983
Amended August 9, 1988
Amended October 25, 1989
Amended July 10, 1990
Amended July 11, 1994