Pollution Control Agency

Air Quality Division

Adopted Rule Governing the Agency's Permit Program for Growth or Expansion of Industry in Nonattainment Areas

Rule as Adopted

6 MCAR S 4.0041 Offset rule.

A. Purpose. The purpose of this rule is to establish conditions to be included in permits which the agency issues, in accordance with the requirements of Minn. Stat. S 116.07, subd. 4a, to persons who propose to construct or modify certain emission facilities in nonattainment areas. This rule may be known as the "offset rule."

B. Applicability.

1. Except as provided in 2., this rule applies to persons who propose to construct or modify a subject emission facility, as defined in ~~6 MCAR S 4.0018~~ C.17.

2. This rule does not apply in nonattainment areas of the state for which a plan has been developed and approved by the agency and the United States Environmental Protection Agency as providing sufficient emission reductions to both:

a. Bring the area into attainment with the national primary ambient air quality standards by December 31, 1982; and

b. Allow for an increase in emissions in the nonattainment area during that period of time the area is designated nonattainment.

C. Definitions. The definitions in rule APC 2 of the Minnesota Pollution Control Agency apply to the terms used in this rule unless the terms are defined herein. For the purposes of this rule, the following words have the meanings defined below.

1. "Air quality control region" means any of the seven geographic areas specified by the agency for administrative purposes based on jurisdictional boundaries, urban and industrial concentrations, climate, meteorology, topography, and other factors affecting the interchange and diffusion of pollutants in the atmosphere. These are identified in 40 Code of Federal Regulations, Section 52.1221 (1980).

2. "Criteria pollutant" means any of the following: sulfur dioxide; particulate matter; nitrogen oxides; carbon monoxide; ozone; nonmethane hydrocarbons; and lead.

3. "Fugitive emissions" means those pollutant discharges which do not pass through a stack, chimney, vent, or other functionally equivalent opening and which discharges are quantifiable by methods in "Compilation of Air Pollutant Emission Factors" (OAQPS AP-42, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, 1980), or methods that the director determines are comparably reliable.

~~4. "Gross increase in emissions" means the gross number of new tons per year of a nonattainment criteria pollutant that could be legally discharged from a subject emission facility. In determining the gross increase in emissions, the director shall include all nonattainment criteria pollutant discharges that the~~

~~subject emission facility could emit but shall give a credit for all legally enforceable restrictions on or reductions of the nonattainment criteria pollutant discharges from the subject emission facility (such as a restriction in nonattainment criteria pollutant discharges that would result from installing required pollution control equipment). No credit shall be allowed for any other reductions of or restrictions on nonattainment criteria pollutant discharges.~~

~~5.~~ 4. "Lowest achievable emission rate" means, for any emission facility, the most stringent emission limitation or standard of performance that is achievable in practice by that class or category of emission facility. In no case shall the lowest achievable emission rate be construed to allow emissions in excess of any applicable standard. The emission limitation specified in any other state's plan shall be presumed to be achievable in practice unless a person demonstrates to the director that the emission limitation or standard of performance is not achievable for reasons other than economic costs.

~~6.~~ 5. "Modification" or "modified" means any physical change in, change in the method of operation of, or addition to an emission facility which would result in ~~an~~ a net increase in emissions. As used in this rule, the term modification or modified does not include:

a. Routine maintenance, repair or replacement;

b. Changes in method or hours of operation unless the changes are disallowed by an agency rule, stipulation agreement, permit or order, or by a court order;

c. Increases in production rates unless the increases

exceed the operating design capacity of any emission facility;

d. Use of a fuel generated from municipal solid waste in a steam generating unit;

e. A change in ownership; or

f. Use of a fuel or raw material in an emission facility that:

(1) Was designed to accommodate the use prior to December 21, 1976; or

(2) Is commencing or has commenced the fuel or raw material use pursuant to an order under sections 2(a) and (b) of the Energy Supply and ~~Environment~~ Environmental Coordination Act of 1974, 15 United States Code, Section 792 (1980), under a natural gas curtailment plan pursuant to the Federal Power Act, 16 United States Code, Section 791a et seq. (1980), or under section 125 of the Clean Air Act of 1977, 42 United States Code, Section 7425 (1980).

~~7.~~ 6. "National ambient air quality standards" means the primary (health related) and secondary (welfare related) pollutant concentrations established by the Administrator of the United States Environmental Protection Agency, pursuant to section 109 of the Clean Air Act of 1977, 42 United States Code, Section 7409 (1980).

~~8.~~ 7. "Net air quality benefit" means that, in the area that would be affected by the subject emission facility, offsets proposed to be obtained by a person pursuant to D.1. are sufficient to result in a net reduction, on both a pounds per hour and tons per year basis, in both the rate of emissions and the concentration of nonattainment criteria pollutants.

a. The area that would be affected by the subject emission facility is defined as follows:

(1) For subject emission facilities proposed to be located in carbon monoxide, nitrogen oxide, nonmethane hydrocarbon, or ozone nonattainment areas, the area that would be affected by the subject emission facility is the air quality control region in which the subject emission facility is proposed to be located; and

(2) For subject emission facilities proposed to be located in sulfur dioxide, particulate matter, or lead nonattainment areas, the area that would be affected by the subject emission facility is the area that the modeling analysis, performed in accordance with D.2., demonstrates to be affected by the subject emission facility.

b. The director shall find that there is a net reduction in both the rate of emissions and the concentration of nonattainment criteria pollutants if Y divided by X is equal to or greater than 1.1, where:

(1) X = the restricted emissions to which the subject emission facility will be limited and

(2) Y = the offsets to be provided by the person proposing the subject emission facility.

~~9.~~ 8. "Net increase in emissions" means the net number of new tons per year of a nonattainment criteria pollutant that could be legally discharged from a subject emission facility. In determining the net increase in emissions, the director

a. Shall include all nonattainment criteria pollutant discharges that the subject emission facility could emit but

b. Shall give a credit for

(1) All legally enforceable restrictions on or reductions of the nonattainment criteria pollutant discharges from the subject emission facility (such as a restriction on nonattainment criteria pollutant discharges that would result from installing required pollution control equipment); and

(2) Any other restrictions on or reductions of the nonattainment criteria pollutant discharges that the person proposing the subject emission facility both obtains within the same plant and agrees to include within the terms of any permit issued for the subject emission facility.

~~10.~~ 9. "Nonattainment area" means any geographic region that has been designated by the agency as violating a state or national ambient air quality standard or by the United States Environmental Protection Agency as violating a national ambient air quality standard.

~~11.~~ 10. "Nonattainment criteria pollutants" means as follows:

a. For all nonattainment areas except ozone nonattainment areas, nonattainment criteria pollutant means the criteria pollutant for which an area is designated nonattainment; and

b. For ozone nonattainment areas, nonattainment criteria pollutant means nonmethane hydrocarbons.

~~12.~~ 11. "Offsets" means any documented reductions in restricted emissions of nonattainment criteria pollutants that:

a. Are legally enforceable and

b. Are achieved after August 7, 1977, or after the

date of completion of the emission inventory used by the agency in developing the most recent revision to the plan, whichever is later.

~~13.~~ 12. "Plan" or "state implementation plan" means any state air quality control laws, rules, permits, stipulation agreements, and procedures, developed to insure compliance with state and national ambient air quality standards.

~~14.~~ 13. "Plant" means any assemblage of buildings, structures or emission facilities, on one or more adjacent or contiguous properties that are under common ownership or control and that are identified by the same two digit Standard Industrial Code as specified in the Standard Industrial Classification Manual, 1972, as prepared by the Executive Office of the President, Office of Management and Budget and as amended by the 1977 Supplement.

~~15.~~ 14. "Resource recovery facility" means any emission facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. An energy conversion facility must utilize solid waste to provide more than 50 percent of the heat input to be considered a resource recovery facility under this rule. In calculating whether solid waste is used to provide more than 50 percent of the heat input, a 30-day rolling average shall be used.

~~16.~~ 15. "Restricted emissions" means the maximum nonattainment criteria pollutant discharges, including fugitive emissions, which may be emitted from an emission facility based on the most stringent of the following:

a. Any emission standard or performance standard established in an applicable rule;

b. Any emission standard or performance standard established in an applicable installation or operating permit or stipulation agreement;

c. Any emission rate resulting from operation at design efficiency of air pollution control equipment for an emission facility;

d. Any emission rate used as the basis for a revision to this state's plan unless such a rate is shown to be in error within 90 days of the effective date of this rule in which case the corrected rate shall be used; or

e. The emission rate to which the subject emission facility is physically limited.

~~17.~~ 16. "State ambient air quality standards" means the pollutant concentrations in rule APC 1 of the Minnesota Pollution Control Agency.

~~18.~~ 17. "Subject emission facility" means:

a. An emission facility that is proposed to be constructed or modified

(1) In any area designated a nonattainment area on the date the agency receives the completed permit application for the proposed construction or modification and

(2) The construction or modification of which will result in a ~~gross~~ net increase in emissions of at least 100 tons per year of a nonattainment criteria pollutant; or

b. An emission facility that is proposed to be modified

(1) In any area designated a nonattainment area on the date the agency receives the completed permit application for the proposed modification;

(2) Has existing restricted emissions of at least 100 tons per year of the nonattainment criteria pollutant; and

(3) The modification of which will result in a significant net increase in emissions of the nonattainment criteria pollutant. A net increase in emissions is significant if the rate of the increase is at least the rate specified below:

(a) carbon monoxide: 100 tons per year;

(b) sulfur dioxide: 40 tons per year;

(c) nitrogen oxides: 40 tons per year;

(d) nonmethane hydrocarbons: 40 tons per year;

(e) particulate matter: 25 tons per year;

(f) lead: 0.6 tons per year; or

c. A plant that is proposed to be modified

(1) In any area designated a nonattainment area on the date the agency receives the completed permit application for the proposed modification and

(2) Which proposed modification, when considered in aggregate with X, will result in a significant net increase in emissions of the nonattainment criteria pollutant, where:

(a) X = the ~~gross~~ net increase in nonattainment criteria pollutant discharges resulting from any construction or modification of the plant which was permitted by the agency during the following time period: any time both within the 18 months immediately prior to the date the agency receives the completed permit application for the proposed modification and

during which the area within which the plant is located was designated a nonattainment area.

(b) A net increase in emissions is significant if the rate of the increase is at least the rate specified in b.(3).

~~19.~~ 18. "Thirty-day rolling average" means the arithmetic mean of daily values calculated with each new day as the last of a 30-day period; provided however, that the arithmetic mean of daily values obtained during times of breakdown shall be excluded from the calculation.

D. Conditions for permit. Except as provided in 5., the agency shall not issue permits for any subject emission facility unless the permit applicant has satisfied the conditions in 1.-3. All permits issued for subject emission facilities shall contain the conditions set forth in 4.

1. Requirement to get offsets. Prior to constructing or modifying a subject emission facility, except an emission facility that is intended to be located in a nonattainment area for less than two years, the owner or operator of that facility shall obtain offsets for all emissions of nonattainment criteria pollutants that will result from the construction or modification. An emission facility that was intended to be located in the nonattainment area for less than two years but that remains for two years or more shall be subject to all the applicable requirements of this rule.

2. Requirement to demonstrate a net air quality benefit. Prior to constructing or modifying a subject emission facility, the permit applicant shall demonstrate that the offsets to be provided are sufficient to result in a net air quality benefit,

as defined in ~~6.~~ 8 C.7.

a. For subject emission facilities located or proposed to be located in carbon monoxide, nitrogen oxide, nonmethane hydrocarbon or ozone nonattainment areas, a permit applicant shall not be required to perform a modeling analysis to demonstrate net air quality benefit but shall submit to the agency a detailed statement of all information that the director needs in order to be able to determine whether a net air quality benefit will result from the construction or modification.

b. For subject emission facilities located or proposed to be located in sulfur dioxide or particulate matter or lead nonattainment areas, a permit applicant shall perform a modeling analysis to determine whether the offsets to be provided are sufficient to result in a net air quality benefit, shall analyze the data obtained and shall submit to the agency the modeling data, the modeling analyses, a detailed description of the system of continuous emission reduction planned, and emission estimates made, together with any other information that the director needs in order to be able to determine whether a ~~new~~ net air quality benefit will result from the construction or modification. All modeling shall be performed in accordance with "Guidelines on Air Quality Models" (OAQPS No. 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, 1978) or methods that the director finds to be comparably reliable.

3. Requirement to certify compliance. Prior to constructing or modifying a subject emission facility, the permit applicant shall certify that all emission facilities in

Minnesota which are either owned or operated in whole or in part by the same person for whom the application is made or which are operated under the common control of the same person for whom the application is made are in compliance or are on a compliance schedule.

4. Permit conditions. Any permit issued for a subject emission facility shall include a provision that

a. Limits emissions from the facility as follows:

(1) The owner or operator of a subject emission facility shall install technology that restricts emissions from the facility to the lowest achievable emission rate of the nonattainment criteria pollutants for which the facility is subject to this rule. The permit shall expressly describe the lowest achievable emission rate for the class or category of emission facility into which the subject emission facility falls.

(2) The director shall waive the requirement of (1) if the director determines that a performance standard based on design, equipment, work practice, operation or other alternative standard is more practicable than an emission rate.

b. States that the offsets that the subject emission facility has obtained in order to be issued a permit under this rule are legally enforceable by the agency and by the United States Environmental Protection Agency.

5. Exception from requirement to get offsets.

a. A permit applicant proposing to construct or modify a resource recovery facility burning municipal solid waste shall not be required to obtain sufficient offsets to demonstrate a net air quality benefit if the director determines that the

permit applicant

(1) Has made its best efforts to obtain sufficient offsets to comply with this rule and has demonstrated that such efforts were unsuccessful;

(2) Has obtained all available offsets; and

(3) Agrees to continue to seek the necessary offsets and apply them when they become available.

b. The director shall determine that the permit applicant has made its best efforts if the permit applicant demonstrates that the requirement to obtain sufficient offsets creates an undue economic hardship for the permit applicant or is technologically unachievable.

(1) If the permit applicant seeks to obtain an exception on the grounds of undue economic hardship, it shall submit to the director the information set out in rule MPCA 6(b)(5) of the Minnesota Pollution Control Agency.

(2) If the permit applicant seeks to obtain an exception on the grounds of technological unachievability, it shall submit to the director the information set out in rule MPCA 6(b)(6) of the Minnesota Pollution Control Agency.

E. Banking.

1. A person who has obtained a reduction in the amount of restricted emissions emitted from an emission facility shall be permitted to bank that reduction for future use as an offset (as allowed by this rule) under the following circumstances, limitations and conditions.

2. This rule authorizes a person to bank only those reductions in emissions that:

a. Were obtained after August 7, 1977, but prior to the effective date of this rule and that are reported to the agency within six months of the effective date of this rule; or

b. Are obtained after the effective date of this rule.

3. In order to be eligible for banking, the emission reductions shall be final and enforceable, either through the terms of a stipulation agreement, permit, or other legal instrument obtained by an owner of a facility or through a permanent, physical alteration of the facility.

4. In order to be able to bank reductions in emissions, the person obtaining those reductions shall report to the director the amount and location of the banked emissions and the time at which the banked emissions have become permanently and finally implemented. The report shall be made within six months after the reductions have become final and enforceable or within six months after this rule has been adopted, whichever is later.

F. Limitation on use of offsets. To the extent that this rule creates a program for the use of offsets or allows persons to purchase or obtain offsets, this rule shall not be construed to create a property right that requires compensation from the state should offsets later become unuseable due to a change in an applicable emission limitation or standard of the agency.