R-39 REV. 1/77

4648

**ORIGINAL**

IMPORTANT: Read Instructions on bottom of Certification Page before completing this form. Failure to comply with instructions may cause disapproval of proposed Regulations.



STATE OF CONNECTICUT

**REGULATION**

OF

NAME OF AGENCY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

concerning

SUBJECT MATTER OF REGULATION

ABATEMENT OF AIR POLLUTION - NEW SOURCE REVIEW

Section 1

Subsection 22a-174-3(k) of the Regulations of Connecticut State Agencies is amended as follows:

(k) Requirements for the Prevention of Significant Deterioration of Air Quality (PSD) Program.

(k)(1) Applicability.

(A) Except as provided in subdivision 22a-174-3(k)(3), the requirements of subsection 22a-174-3(k) apply to the owner or operator of a major stationary source which is a new major stationary source or major modification due to emissions of a particular criteria air pollutant other than a criteria air pollutant for which the air quality control region or portion thereof, in which the new major stationary source or major modification is located is classified as a non-attainment area.

(B) Notwithstanding the provisions of subparagraph (k)(1)(A), the commissioner shall not apply the provisions of subsection 22a-174-3(k) to the owner or operator of a major modification for which:

(i) the increase in allowable emissions of the particular air pollutant is reduced with internal offsets at a ratio of at least 1 to 1;

(ii) such internal offsets have approximately the same qualitative significance for public health and welfare as that attributed from the allowable emissions increase, and

(iii) such internal offsets meet the provisions of subparagraphs (A),(B),(D),(E),(F),(G),(H),(I) and (K) of subdivision 22a-174-3(l)(5).

(k)(2) Netting and Internal Offsets.

In determining the applicability of subdivision 22a-174-3(k)(1) the Commissioner shall not allow the netting of emissions except internal offsets are allowed, in accordance with the provisions of subparagraph (k)(1)(B).

(k)(3) Exemptions.

(A) Notwithstanding the provisions of subdivision 22a-174-3(k)(1), the commissioner shall not apply the provisions of subdivisions (k)(4) through (k)(6) of section 22a-174-3, inclusive, to the owner or operator of a new major stationary source or a major modification which:

(i) received a prevention of significant deterioration permit under federal regulations prior to february 1, 1989; or

(ii) is a major modification solely because of the use of gaseous fuel which the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit to construct which was issued after January 6, 1975.

(B) notwithstanding the provisions of subparagraph 22a-174-3(k)(1)(A), the commissioner shall not apply the provisions of subsection 22a-174-3(k) to the owner or operator of a new major stationary source or major modification of nitrogen oxides for which the permitted allowable emissions increase of nitrogen oxides will be less than forty (40) tons per year.

(k)(4) Best Available Control Technology.

In addition to the requirements of subsections (a) through (j) inclusive, of section 22a-174-3 the owner or operator of a new major stationary source or major modification subject to this subsection shall install Best Available Control Technology as determined by the Commissioner for each particular air pollutant for which the new major stationary source or major modification has potential emissions equal to or greater than the amount listed in Table 3(k)-1 below. The owner or operator of any new major stationary source or major modification shall make and submit to the Commissioner, for approval, a BACT determination for each air pollutant, as required by the Commissioner, including cost estimates of all control options as may be specified by the Commissioner. For phased construction projects the Commissioner shall review the determination and make modifications as appropriate, at the latest time up to eighteen months prior to the commencement of construction of each independent phase of the project. At that time, the owner or operator may be required to demonstrate the adequacy of any previous determination.

(k)(5) Baseline Concentration and Dates.

The following definitions apply for the purposes of subdivision k(6).

(A) "Baseline concentration" means the ambient concentration of sulfur dioxide, nitrogen dioxide or particulate matter which existed at the time of the applicable minor source baseline date for such pollutant. in determining such ambient concentration, the Commissioner shall include the effects of actual emissions representative of stationary sources in existence on the applicable minor source baseline date and the effects of allowable emissions of major stationary sources which commenced construction before the major stationary source baseline date but were not in operation by the applicable minor source baseline date

(B) "Major source baseline date" means January 6, 1975 for particulate matter and sulfur dioxide, and February 8, 1988 for nitrogen dioxide.

(C) "Minor source baseline date" means June 7, 1988 for particulate matter, December 17, 1984 for sulfur dioxide and June 7, 1988 for nitrogen dioxide.

(k)(6) Source Impact Analysis.

(A) The owner or operator of a major stationary source or major modification, subject to the requirements of subparagraph (k)(1)(A) and with allowable emissions which will have a significant impact on air quality, shall not exceed or contribute to an exceedance of the maximum allowable increase established in table 3(k)-2. for the purposes of this subsection, the allowable emissions of an air pollutant will not have a significant impact on air quality if such impact is less than the amount listed in table 3(c)-1.

(B) in addition to the requirements of subsection (c), the applicant for a permit subject to this subsection shall submit to the commissioner a calculation of the increase in ambient concentrations above the baseline concentration. such calculation shall include the following:

(i) allowable emissions from the proposed major stationary source or

major modification;

(ii) actual emissions from all major stationary sources which were required to obtain a permit to construct after the major source baseline date;

(iii) actual emissions from all modifications to a major stationary source, where such modification had actual emissions equal to or greater than fifteen

(15) tons per year and was required to obtain a permit to construct after the major source baseline date and before the minor source baseline date, the applicant shall use allowable emissions instead of actual emissions if such modification was located on the applicant's premise;

(iv) actual emissions from all stationary sources, other than major stationary sources, with actual emissions equal to or greater than fifteen (15) tons per year and which were required to obtain a permit to construct after the minor source baseline date. the applicant shall include in the calculations allowable emissions for any stationary source for which a permit to construct is pending and which the commissioner has determined is sufficient pursuant to subdivision (d)(3); and

(v) reductions in actual emissions and federally enforceable allowable emissions from sources located on the applicant's premise which occurred on or after the minor source baseline date.

(C) In determining the increase from the baseline concentration for the new major stationary source or major modification, the Commissioner shall take into consideration the information submitted pursuant to subparagraph (k)(6)(B). in addition, the Commissioner may consider any proposed reductions in actual emissions and allowable emissions which will occur prior to the operation of the proposed major stationary source or major modification.

(D) For the purpose of calculating allowable emissions of a stationary source for this subdivision, any physical or operational restriction on the capacity of the source to emit a pollutant, including air pollution control equipment, or restrictions on production rates, hours of operation, and types of materials processed, stored or combusted which limit the maximum rated capacity shall be treated as part of its design if the limitation or the effect of the limitation on emissions is federally enforceable.

(k)(7) Monitoring

(A) Any application for a permit under subsection (k) shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

(i) For the subject source, each pollutant that it has potential emission in excess of the amount listed in Table 3(k)-1 below.

(ii) For the modification, each pollutant for which it would result in an emissions increase in excess of the amount listed in Table 3(k)-1 below.

(iii) is listed in Section 22a-174-24 or is a National Ambient Air Quality Standard.

(B) For any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Commissioner determines is necessary to assess ambient air quality for that pollutant in any area

that the emissions for that pollutant would affect.

(C) For any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, that analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase listed in Table 3(k)-2 below.

(D) In general, the continuous air monitoring data that is required shall have been gathered over a period of one year and shall represent the year preceding receipt of the application, except that, if the Commissioner determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter that one year (but not to be less than four months), that data that is required shall have been gathered over at least that shorter period.

(E) The owner or operator of a major stationary source or major modification subject to this subsection shall after construction of the stationary source or modification, conduct such ambient monitoring as the Commissioner determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(F) The owner or operator shall meet the requirements of Title 40 Code of Federal Regulations Part 58, Appendix B during the operation of monitoring for purposes of satisfying this subsection.

(k)(8) Additional Impact Analyses.

The owner or operator of the new major stationary source or major modification shall, as part of the application, provide the Commissioner with:

(A) An analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the construction and operation of the new major stationary source or major modification and of the general commercial, residential, industrial and other associated growth. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or residential value; and

(B) An analysis, based upon methods approved by the Commissioner, of the ambient air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the new major stationary source or major modification.

(k)(9) Source Information.

The owner or operator of the new major stationary source or major modification shall submit all information necessary to perform any analysis or make any determination under this subsection. Such information shall include, but may not be limited to:

(A) A description of the nature, location, design capacity and typical operating schedule of the new major stationary source or major modification, including specifications and drawings showing its design and plant layout;

(B) A schedule for construction of the new major stationary source or major modification; and

(C) A detailed description as to what system of continuous emission reduction is planned for the new major stationary source or major modification, emission estimates, or any other information necessary to determine that the Best Available Control

Technology would be applied.

(k)(10) Additional Information.

Upon the request of the Commissioner, the owner or operator of the new major stationary source or major modification shall also provide information on:

(A) The ambient air quality impact of the new major stationary source or major modification, including meteorological and topographical data necessary to estimate such impact; and

(B) The ambient air quality impacts and the nature and extent of general commercial, residential, industrial and other growth which has occurred since August 7, 1977 in the area the new major stationary source or major modification would affect.

(k)(11) Additional Source Obligations.

(A) The granting of a permit under this subsection shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of these regulations and any other requirements under local, state or federal law.

(B) At such time that a particular stationary source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation if such enforceable limitation was established after August 7,1980, on the capacity of the stationary source or modification otherwise to emit a particular air pollutant, such as a restriction on the hours of operation, then the requirements of this subsection shall apply to the stationary source or modification as though construction had not yet commenced on the stationary source or modification.

(k)(12) Additional Public Participation Requirements.

In addition to the public participation requirements of subsection 22a-174-3(j):

(A) The Commissioner shall include in the notice published pursuant to subparagraph 22a-174-3(j)(2)(A) any support material the Commissioner deems appropriate, the degree of Prevention of Significant Deterioration increment consumption that is expected from the new major stationary source or major modification, and the opportunity for comment at a public hearing, if one is requested, as well as written comment; and

(B) The applicant shall send a copy of the notice required under subparagraph 22a-174-3(k)(12)(A) to:

(i) the Administrator through the Boston regional office of the U.S. Environmental Protection Agency;

(ii) the chief executive of the municipality where the source or modification would be located;

(iii) the appropriate Connecticut Regional Planning Agency,

(iv) any Indian Governing Body whose lands may be affected by emissions from the new major stationary source or major modification; and

(v) the Director of the air pollution control program in adjoining states.

Table 3(k) - 1
EMISSION LEVELS

| Air Pollutant | TONS PER YEAR |
|---|---|
| Carbon monoxide | 100 |
| Nitrogen oxides | 25 |
| Sulfur dioxide | 40 |
| Particulate matter | 25 |
| PM-10 | 15 |
| Volatile organic compounds | 25 |
| Hydrogen sulfide ($H_2S$) | 10 |
| Total reduced sulfur (including $H_2S$) | 10 |
| Reduced sulfur compounds (including $H_2S$) | 10 |
| Sulfuric acid mist | 7 |
| Fluorides | 3 |
| Vinyl chloride | 1 |
| Lead | 0.6 |
| Mercury | 0.1 |
| Asbestos | 0.007 |
| Beryllium | 0.0004 |
| Municipal waste combustor organics (Measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans) | $3.5 \times 10^{-6}$ |
| Municipal waste combustor metals (measured as particulate matter) | 15 |
| Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride) | 40 |

Table 3(k) 2
MAXIMUM ALLOWABLE INCREASE ABOVE
BASELINE CONCENTRATION

| Air Pollutant | PSD Increment (ug/m$^3$) |
|---|---|
| [Total Suspended Particulate] PARTICULATE MATTER, AS PM10 | |
| Annual [Geometric] ARITHMETIC Mean | [19] 17 |
| 24-Hour Average | [37] 30 |
| Sulfur Dioxide | |
| Annual Arithmetic Mean | 20 |
| 24-Hour Average | 91 |
| 3-Hour Average | 512 |
| Nitrogen Dioxide | |
| Annual Arithmetic Mean | 25 |

Statement of Purpose:

To adopt the U.S. Environmental Protection Agency's standards for the prevention of significant deterioration of air quality for particulate matter.

CERTIFICATION
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Be it known that the foregoing:

[X] Regulations [ ] Emergency Regulations

[ ] Adopted [X] Amended as hereinabove stated [ ] Repealed

By the aforesaid agency pursuant to:

[X] Section 22a-174 of the General Statutes.

[ ] Section _____ of the General Statutes, as amended by Public Act No. _____ of the _____ Public Acts.

[ ] Public Act No. _____ of the Public Acts.

After publication in the Connecticut Law Journal on July 19, 1994, of the notice of the proposal to:

[ ] Adopt [X] Amend [ ] Repeal such regulations

*(If applicable):* [X] And the holding of an advertised public hearing on 23rd day of August 1994

WHEREFORE, the foregoing regulations are hereby:

[ ] Adopted [X] Amended as hereinabove stated [ ] Repealed

Effective:

[X] When filed with the Secretary of the State.

(OR)

[ ] The _____ day of _____ 19____.

| | | | |
|---|---|---|---|
| In Witness Whereof: | DATE September 28, 1994 | SIGNED *(Head of Board, Agency or Commission)* | OFFICIAL TITLE, DULY AUTHORIZED Deputy Commissioner |
| Approved by the Attorney General as to legal sufficiency in accordance with Sec. 4-169, as amended, C.G.S.: | | SIGNED | OFFICIAL TITLE, DULY AUTHORIZED Assoc Atty General |

11/4/94

[X] Approved

[ ] Disapproved

[ ] Disapproved in part, *(Indicate Section Numbers disapproved only)*

[ ] Rejected without prejudice.

| | | |
|---|---|---|
| By the Legislative Regulation Review Committee in accordance with Sec. 4-170, as amended, of the General Statutes. | DATE 11/15/94 | SIGNED *(Clerk of the Legislative Regulation Review Committee)* |

Two certified copies received and filed, and one such copy forwarded to the Commission on Official Legal Publications in accordance with Section 4-172, as amended, of the General Statutes.

| | | |
|---|---|---|
| DATE December 2, 1994 | SIGNED *(Secretary of the State.)* Pauline R. Kezer | BY Peter J. Bartnick |

INSTRUCTIONS

1. One copy of all regulations for adoption, amendment or repeal, except emergency regulations, must be presented to the Attorney General for his determination of legal sufficiency. Section 4-169 of the General Statutes.

2. Seventeen copies of all regulations for adoption, amendment or repeal, except emergency regulations, must be presented to the Legislative Regulation Review Committee for its approval. Section 4-170 of the General Statutes.

3. Each regulation must be in the form intended for publication and must include the appropriate regulation section number and section heading. Section 4-172 of the General Statutes.

4. Indicate by "(NEW)" in heading if new regulation. Amended regulations must contain new language in capital letters and deleted language in brackets. Section 4-170 of the General Statutes.

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