

## NOTE

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**Section 22a-174-19a. Control of sulfur dioxide emissions from power plants and other large stationary sources of air pollution.**

(a) **Definitions.** For purposes of this section:

- (1) “Affected state” means “affected states” as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.
- (2) “Affected unit” means a fossil-fuel fired:
  - (A) Stationary source that serves a generator with a nameplate capacity of 15 MW or more; or
  - (B) Boiler or indirect heat exchanger with a maximum heat input capacity of 250 MMBtu/hr or more.
- (3) “Average emissions rate” means a determination of the rate of SO<sub>2</sub> emissions, measured in pounds of SO<sub>2</sub> per MMBtu, in any calendar quarter from either a single affected unit or from two or more affected units. Average emissions rate for a single unit is calculated by dividing the total quarterly SO<sub>2</sub> emissions, in pounds, from such unit by the total quarterly heat input, in MMBtu, for such unit. Average emissions rate for two or more units is calculated by dividing the total quarterly SO<sub>2</sub> emissions, in pounds, from all such units by the total quarterly heat input, in MMBtu, for all such units.
- (4) “Boiler” means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam or other medium.
- (5) “Calendar quarter” means the period of January 1 to March 31, inclusive, April 1 to June 30, inclusive, July 1 to September 30, inclusive or October 1 to December 31, inclusive.
- (6) “Connecticut State SO<sub>2</sub> Retirement Account” means a general allowance tracking system account established by the commissioner under 40 CFR 73.31 for the purpose of permanently holding SO<sub>2</sub> allowances retired by the owners or operators of affected units in accordance with the provisions of subsection (d) of this section.
- (7) “Continuous emissions monitoring system” or “CEMS” means any equipment used to sample, analyze and measure SO<sub>2</sub> emissions to provide a permanent record of such emissions expressed in pounds per MMBtu.
- (8) “Emissions unit” means “emission unit” as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.
- (9) “Indirect heat exchanger” means combustion equipment in which the flame or products of combustion are separated from any contact with the principal material in the process by metallic or refractory walls, and that emits exhaust gases only through a stack. “Indirect heat exchangers” include, but are not limited to, steam boilers, vaporizers, melting pots, heat

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exchangers, column reboilers, fractioning column feed preheaters, reactor feed preheaters, pyrolysis heaters and fuel-fired reactors.

(10) “MMBtu” means million BTU of heat input.

(11) “Retire” or “retirement” when referring to SO<sub>2</sub> allowances, means the permanent withdrawal of SO<sub>2</sub> allowances by the Administrator from any allowance tracking system account to the Connecticut SO<sub>2</sub> Allowance Retirement Account in an amount equal to the number of tons of SO<sub>2</sub> emitted by each affected unit.

(12) “Sulfur dioxide” or “SO<sub>2</sub>” means a gas that at standard conditions has the molecular form SO<sub>2</sub>.

(13) “Title IV SO<sub>2</sub> allowance” or “SO<sub>2</sub> allowance” means an authorization allocated to a Title IV source by the Administrator, pursuant to Title IV of the federal Clean Air Act (42 USC 7651d, et seq.) and 40 CFR Parts 72 and 73, to emit up to one ton of SO<sub>2</sub> during or after a specified calendar year.

(14) “Title IV source” means an affected unit that is also subject to Phase II of the acid rain control requirements set forth in Title IV of the federal Clean Air Act (42 USC 7651d, et seq.).

(b) **Applicability.** This section shall apply to the owner or operator of any affected unit.

(c) **Sulfur dioxide emission standards and fuel sulfur limits effective on and after January 1, 2002.** On and after January 1, 2002 and except as provided in subsection (f) of this section, the owner or operator of an affected unit or units shall:

(1) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.5 % sulfur, by weight (dry basis);

(2) Meet an average emission rate of equal to or less than 0.55 pounds SO<sub>2</sub> per MMBtu for each calendar quarter for an affected unit at the premises; or

(3) Meet an average emission rate of equal to or less than 0.5 pounds SO<sub>2</sub> per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at the premises.

(d) **Additional Emission Reduction Requirements.**

(1) No later than the following March 1, for each calendar year commencing January 1, 2002, the owner or operator of each affected unit that is also a Title IV source shall retire one SO<sub>2</sub> allowance, rounded up to the next whole ton, for each ton of SO<sub>2</sub> emitted in the state of Connecticut. This requirement is in addition to any other requirements imposed on the owner or operator of a Title IV source by the Administrator under 40 CFR Parts 72 and 73.

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(2) The owner or operator of an affected unit shall retire the necessary amount of SO<sub>2</sub> allowances by requesting that the Administrator transfer such allowances to the Connecticut State SO<sub>2</sub> Retirement Account established by the commissioner pursuant to 40 CFR 73.31 and administered by the federal Environmental Protection Agency under the provisions of 40 CFR Parts 72 and 73. The transfer of SO<sub>2</sub> allowances in accordance with the provisions of this subdivision shall occur by March 1 for emissions occurring in the previous calendar year.

(3) Any SO<sub>2</sub> allowance retired in accordance with the provisions of this subsection shall be an allowance originally issued by the Administrator to a Title IV source located in the state of Connecticut or in any affected state.

**(e) Sulfur dioxide emissions standards and fuel sulfur limits effective on and after January 1, 2003.** Notwithstanding the provisions of subsection (b) of this section, this subsection shall apply, on and after January 1, 2003, to the owner or operator of a Title IV source that is also an affected unit or units. On and after January 1, 2003, such owner or operator shall:

(1) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.3 % sulfur, by weight (dry basis);

(2) Meet an average emission rate of equal to or less than 0.33 pounds SO<sub>2</sub> per MMBtu for each calendar quarter for an affected unit at a premises; or

(3) Meet an average emission rate of equal to or less than 0.3 pounds SO<sub>2</sub> per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at a premises.

**(f) Reserved.**

**(g) Fuel emergencies.**

(1) The commissioner may suspend the requirements of subsection (c) or (e) of this section for the owner or operator of any affected unit using a low-sulfur fuel. For the purposes of this subsection, a low-sulfur fuel is any solid, liquid or gaseous fuel with a sulfur content equal to or less than 0.5% by weight, dry basis. Such suspension shall be made only when the commissioner finds that the availability of fuel that complies with such requirements is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency.

(2) The commissioner shall specify in writing the period of time for which the suspension described in subdivision (1) of this subsection shall be in effect.

(3) No later than thirty days after the termination of any suspension of fuel sulfur limits made pursuant to this subsection, the owner or operator of an affected unit or units shall report to the commissioner in writing the amount of SO<sub>2</sub> emissions in excess of those that would have occurred had the use of compliant fuel at the affected source not been interrupted. If such excess SO<sub>2</sub> emissions from any premises exceed fifty tons, the commissioner may require that the owner or operator of such affected unit or units offset such SO<sub>2</sub> emissions.

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**(h) Reserved.**

**(i) Record keeping.**

(1) The owner or operator of an affected unit who demonstrates compliance with this section by meeting the applicable fuel sulfur limits of subsections (c)(1) or (e)(1) of this section shall make and keep records in accordance with the following:

- (A) If fuel with sulfur content not exceeding an applicable fuel sulfur limit is the only fuel purchased and combusted by an affected unit, then the owner or operator shall make and keep records that demonstrate the fuel sulfur content of each shipment of fuel received; or
- (B) If fuel with sulfur content above any applicable limit is blended at the premises for combustion in an affected unit or units, the owner or operator shall make and keep daily records demonstrating that all fuel combusted at the affected unit or units meets the applicable fuel sulfur limits of subsection (c)(1) or (e)(1) of this section. Fuel sulfur analysis shall be conducted in accordance with the American Society for Testing and Material (ASTM) test method D4294 and automatic sampling equipment shall conform to ASTM test method D4177-82. (Copies of ASTM test methods D4294 and D4177-82 may be obtained from the Department of Environmental Protection, Bureau of Air Management, 79 Elm Street, 5th floor, Hartford, CT 06106-5127; (860) 424-3027).

(2) The owner or operator of an affected unit who demonstrates compliance with this section by meeting the average SO<sub>2</sub> emission rate limits of subsections (c)(2), (c)(3), (e)(2) or (e)(3) of this section shall make and keep records in accordance with the following:

- (A) For affected units that are also Title IV sources, hourly SO<sub>2</sub> emission rate values determined from data measured by a CEMS in accordance with the applicable provisions of 40 CFR 75;
- (B) For affected units that are not Title IV sources:
  - (i) hourly SO<sub>2</sub> emission rate values determined from data measured by a CEMS in accordance with the applicable provisions of either 40 CFR 60 or 75, or
  - (ii) if any affected unit does not have a CEMS in accordance with either 40 CFR 60 or 75, then hourly SO<sub>2</sub> emission rate values determined from data measured by a CEMS or other monitoring system; and
- (C) For all affected units, quarterly facility SO<sub>2</sub> emission rate averages, determined by dividing total quarterly SO<sub>2</sub> emissions by total quarterly heat input values for all affected units at the facility.

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(3) The owner or operator of an affected unit shall keep the records specified in subdivision (1) or (2) of this subsection at the premises for a period of five years. Such records need not be maintained for distillate oil, motor vehicle fuel, aircraft fuel, or gaseous fuel, provided such fuels have a sulfur content below 0.3% by weight (dry basis) and are the only fuels combusted at the affected unit. This exemption shall not apply when such fuels are combusted in combination with other fuels having sulfur contents above 0.3% by weight (dry basis).

**(j) Reporting requirements.**

(1) The owner or operator of an affected unit for which the commissioner has issued a final Title V permit shall, as part of any compliance certification pursuant to section 22a-174-33(q)(2) of the Regulations of Connecticut State Agencies, certify in writing to the commissioner compliance with the applicable provisions of this section. Such certification shall include actual quarterly SO<sub>2</sub> emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit.

(2) The owner or operator of an affected unit for which the commissioner has not issued a final Title V permit shall certify in writing to the commissioner that such owner or operator is in compliance with the applicable provisions of this section on or before March 1 of each year for the previous calendar year. Such certification shall include actual quarterly SO<sub>2</sub> emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit.

**(k) Duty to comply with the most stringent standards applicable to the affected units.**

(1) Notwithstanding any provision of this section to the contrary, if the owner or operator of an affected unit is subject to a more stringent emission standard or limitation imposed by order, permit or other applicable law, such owner or operator shall comply with the most stringent emission limitation or standard.

(2) Notwithstanding any provision of this section to the contrary, if the owner or operator of an affected unit is subject to additional monitoring or reporting requirements imposed by order, permit or other applicable law, such owner or operator shall comply with the additional monitoring or reporting requirements.