STATE OF CONNECTICUT Regulation of Environmental Protection

Fuel Sulfur Content Limitations for Stationary Sources.

Section 1 The regulations of Connecticut State Agencies are amended by adding new section 22a-174-19b, as follows:

- (a) **Definitions.** For the purposes of this section:
 - (1) "Aviation fuel" means a refined petroleum distillate defined in ASTM D1655, Standard Specification for Aviation Turbine Fuels, or the current active version thereof. "Aviation fuel" includes Jet A and Jet A-1 but does not include Jet B.
 - (2) "Combustion" means the rapid chemical combination of oxygen with the combustible element of a fuel resulting in the production of heat.
 - (3) "Fuel" means distillate fuel oil, residual oil, blends of distillate fuel oil and biodiesel fuel, blends of residual oil and biodiesel fuel, aviation fuel or kerosene.
 - (4) "Kerosene" means a refined petroleum distillate defined in ASTM D3699-08, Standard Specification for Kerosine, or the current active version thereof.
 - (5) "Sulfur dioxide" or "SO2" means a gas that at standard conditions has the molecular form SO2.
- **(b) Applicability.** Except as provided in subsection (c) or (e) of this section, this section applies to any person who, on or after July 1, 2014, sells, supplies, offers for sale, stores, delivers or exchanges in trade in the state of Connecticut any fuel for combustion in a stationary source in the state of Connecticut and to any person who, on or after July 1, 2014, combusts any fuel in a stationary source within the state of Connecticut.
- **(c) Exemptions.** The persons and fuels identified in this subsection are exempt from regulation pursuant to this section.
 - (1) The requirements of this section shall not apply to the fuel combusted in a mobile source.
 - (2) This section shall not apply to any person storing fuel in the state of Connecticut for shipment, sale and use outside of the state of Connecticut.
 - (3) Fuel stored in the state of Connecticut that meets any applicable sulfur content limitation at the time it is stored in the state of Connecticut may be stored, offered for sale, sold, delivered or exchanged in trade for combustion in the state of Connecticut and combusted in the state of Connecticut even if the sulfur content limitation applicable at the time of storage has been changed subsequent to the date of storage.
 - (4) This section shall not apply to a person combusting fuel in fuel-burning equipment undergoing testing as part of a research and development operation.
 - (A) Any person combusting fuel in a stationary source for which the fuel is subject

- to limitation under section 22a-174-19a of the Regulations of Connecticut State Agencies; or
- (B) Any person selling or storing fuel for sale to a person identified in subparagraph (A) of this subdivision.
- (5) The requirements of this section shall not apply to any person who sells, supplies, offers for sale, stores for sale or combusts number two heating oil subject to the sulfur content limitations of section 16a-21a of the Connecticut General Statutes.
- (6) Any fuel in equipment that is leased or rented outside of the state of Connecticut for use in Connecticut may be combusted in the state of Connecticut regardless of the sulfur content, provided that all refueling of such leased or rented equipment performed while in Connecticut complies with the fuel sulfur content limits of Table 19b-1 of this section.

(d) Fuel oil sulfur content limitations.

- (1) No person shall store, offer for sale, sell, deliver or exchange in trade, for combustion in a stationary source in the state of Connecticut, fuel that contains sulfur in excess of the applicable limitation set forth in Table 19b-1 of this section, except as provided in subsection (c) or (e) of this section.
- (2) No person shall combust fuel in a stationary source that contains sulfur in excess of the applicable limitation set forth in Table 19b-1 of this section, except as provided in subsection (c) or (e) of this section.
- (3) Notwithstanding compliance with subdivision (1) or (2) of this subsection, the commissioner may, by permit or order, impose additional restrictions on any owner or operator to limit the emission of sulfur compounds, expressed as sulfur dioxide, from any stationary source combusting fuel if the commissioner determines that operation of such equipment interferes with the attainment or maintenance of any applicable ambient air quality standard.

Table 19b-1		
	Maximum Fuel Sulfur Content	
Fuel Type	Effective July 1, 2014 through June 30, 2018	Effective on and after July 1, 2018
Distillate fuel oil or distillate fuel oil blended with biodiesel fuel	500 ppm (0.05%) by weight	15 ppm (0.0015%) by weight
Residual oil or residual oil blended with biodiesel fuel	10,000 ppm (1.0 %) by weight	3000 ppm (0.3%) by weight
Aviation fuel combusted in a stationary source	3000 ppm (0.3%) by weight	3000 ppm (0.3%) by weight
Kerosene	400 ppm (0.04%) by weight	15 ppm (0.0015%) by weight

(e) ***1

(f) Compliance determinations.

- (1) Any person selling fuel subject to a sulfur content limitation set forth in Table 19b-1 shall determine the sulfur content and quantity of each type of fuel sold.
- (2) Any person selling fuel subject to a sulfur content limitation set forth in Table 19b-1 shall provide certification of the sulfur content of the fuel to each purchaser of fuel.
- (3) Sulfur content shall be analyzed in accordance with American Society for Testing and Material (ASTM) test method D4294-10, *Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry*, or D7039-07, *Standard Test Method for Sulfur in Gasoline and Diesel Fuel by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry*, or the current active version thereof, and automatic sampling equipment shall conform to ASTM test method D4177-95(2010), *Standard Practice for Automatic Sampling of Petroleum and Petroleum Products*, or the current active version thereof.
- (4) Any person may request the use of a method to analyze the sulfur content of fuel other than the method identified in subdivision (3) of this subsection, if the method is approved by a voluntary standards body such as ASTM or the International Standards Organization. Such a request shall name and describe the alternative method for which approval is sought, the approving organization, and shall be submitted to the commissioner and Administrator for review and approval. Such alternative method may not be the sole method used to determine the sulfur content of fuel until approved by the commissioner and the Administrator.

(g) Record keeping and reporting for fuel users and merchants.

- (1) Persons selling and combusting fuels in Connecticut subject to the requirements of this section shall maintain records of information necessary for the commissioner to determine compliance with the requirements of this section.
- (2) Any person who sells fuel subject to the requirements of this section shall maintain records of the sulfur content of fuels sold, the heating value of such fuels and the quantities of fuels sold.
- (3) Any person combusting fuel subject to the requirements of this section shall maintain records of the sulfur content of the fuel combusted and the quantity purchased for combustion. A written certification or a written contract with a fuel supplier is sufficient to satisfy the requirements of this subdivision if the certification or contract identifies:
 - (A) The name of the fuel seller;
 - (B) The type of fuel purchased;
 - (C) The sulfur content of the fuel purchased; and

¹ NOTE: EPA did not approve Section 22a-174-19b(e)into the Connecticut State Implementation Plan. The State did not submit Section 22a-174-19b(e) as part of the SIP revision.

- (D) The method used to determine the sulfur content of the fuel purchased.
- (4) All records made to demonstrate compliance with the requirements of this section shall be:
 - (A) Made available to the commissioner to inspect and copy upon request; and
 - (B) Maintained for five (5) years from the date such record is created.