

BNYONK - 225 Fuel Composition and Use

Part 225 - 1

Fuel Composition and Use - *Bill. Limitations*

Sec.

- 225.1 Prohibitions
- 225.2 Special limitations contingent upon air quality
- 225.3 Exceptions contingent upon fuel shortage
- 225.4 Public hearings
- 225.5 General exceptions
- 225.6 Emission and fuel monitoring
- 225.7 Reports, sampling and analysis

225.1 Prohibitions. (a) Except as provided in subdivision (b) of this section, no person shall sell, offer for sale, purchase or use any fuel which contains sulfur in a quantity exceeding the following limitations:

(1) oil with 0.75 percent sulfur by weight or coal with 0.60 pounds of sulfur per million BTU gross heat content, where such oil or coal is for use in any stationary combustion installation with a total heat input in excess of 250 million BTU per hour, for which installation an application for a permit to construct was received by the department or an application for a certificate of environmental compatibility and public need was received by the Public Service Commission after March 15, 1973, and which installation is not located in New York City, Nassau, Rockland, or Westchester County. If two or more furnaces are connected to a common air cleaning device and/or common stack, the total heat input for such stationary combustion installation shall be the sum of the total heat input of all furnaces which are operated simultaneously and connected to the common air cleaning device and/or common stack.

(2) gaseous fuel with 50 grains of sulfur compounds (expressed as hydrogen sulfide) per 100 dry standard cubic feet of gas.

(3) as otherwise specified in Table 1.

**FUEL SULFUR LIMITATIONS EXPRESSED IN PERCENT BY WEIGHT FOR OIL
AND POUNDS PER MILLION BTU GROSS HEAT CONTENT FOR SOLID FUEL**

Effective Date	New York City		Hudson, Dutchess & Westchester Counties		Suffolk County Towns of Babylon, Brookhaven, Huntington, Islip & Smithtown		EMIL & HUCAMA COUNTRIES				Rest of State	
	Oil	Solid Fuel	Oil	Solid Fuel	Oil	Solid Fuel	City of Lockport and South Buffalo		Remainder of Areas		Oil	Solid Fuel
							Oil	Solid Fuel	Oil	Solid Fuel		
September 26, 1974	0.20	0.20	0.37	0.20	1.0	0.6	Oil	Solid Fuel	2.2	2.0 Minimum 2.0 Average	2.0	2.5 Maximum 1.9 Average
October 1, 1976	0.20 Distillate						1.1			1.7 Minimum 1.4 Average		
December 17, 1976									2.0 Minimum 1.7 Average			

• South Buffalo is defined as all that area located in the City of Buffalo which is south of the line commencing at the intersection of E190 and St. 3 and proceeding east along E190 to the city line.

• Averages shall be computed for each stationary air contamination source or emission source by dividing the total sulfur content by the total gross heat content of all solid fuel received during any consecutive three-month period.

• Averages shall be computed for each stationary air contamination source or emission source by dividing the sum of the sulfur content times the amount of each shipment of oil received by the total amount of all oil received during any consecutive three-month period.

Note: Certain installations with a heat input exceeding 250 million BTU per hour are restricted to use of 0.75 percent oil and 0.60 pound per million BTU coal. See Section 225.1(a)(1).

(b) No person who changes from the use of fuel oil or gas to coal in his air contamination source shall purchase for or use in such source, coal with a sulfur content (in pounds per million BTU) which exceeds the fuel sulfur limitations in Table 1. If such air contamination source is located in an area of the state where any applicable ambient air quality standard for sulfur dioxide is being contravened or where an air quality impact evaluation indicates that application of the sulfur in fuel limitations in Table 1 could result in the contravention of any such sulfur dioxide standard, the sulfur content of the coal shall not exceed the product of 0.55 times the maximum sulfur content for oil (in percent by weight) permitted by this Part for such source. If such air contamination source has been granted a special limitation pursuant to section 225.2 to use oil with a higher sulfur content than permitted by this Part, the sulfur content of the coal shall not exceed the product of 0.55 times the maximum sulfur content for oil (in percent by weight) permitted by the special limitation, in which case any terms or conditions of the special limitation in effect at the time of the conversion shall continue to apply, or the fuel sulfur limitations in Table 1, whichever is greater.

225.2 Special limitations contingent upon air quality. (a) Special limitations promulgated pursuant to this section shall not apply to fossil fuel-fired steam generators which are subject to Title 40, Part 60, Subpart D of the Federal Regulations (Standards of Performance for New Stationary Sources).

(b) The Commissioner may promulgate special limitations that permit the sale, offering for sale, purchase and use of:

(1) oil with a sulfur content not to exceed 3.0 percent by weight for air contamination sources which do not have a total heat input in excess of 250 million BTU per hour, or

(2) solid fuel with a sulfur content not to exceed 2.8 pounds per million BTU gross heat content for air contamination sources which do not have a total heat input in excess of 100 million BTU per hour

In an area where all applicable ambient air quality standards for sulfur dioxide are being met and where the commissioner has determined that the use of such fuel in all air contamination sources in such area would not contribute to the contravention of such standards nor significantly degrade air quality. Such promulgation shall be filed with the Secretary of State. (See Part 250 of this Title).

(c)(1) The commissioner may promulgate special limitations that permit the sale, offering for sale, purchase and use of:

(i) oil with a sulfur content not to exceed 3.0 percent by weight in air contamination sources located at one or more adjacent properties owned or operated by a single party where the total heat input of all such sources at the site is in excess of 250 million BTU per hour, or

(ii) solid fuel with a sulfur content not to exceed 2.8 pounds per million BTU gross heat content in air contamination sources located at one or more adjacent properties owned or operated by a single party where the total heat input of all such sources at the site is in excess of 100 million BTU per hour

where the owner of such source shows to the commissioner's satisfaction, by acceptable diffusion analysis, that such use would not contribute to the contravention

of any applicable Federal ambient air quality standard nor significantly degrade air quality. Such promulgation shall be filed with the Secretary of State (see Part 250 of this Title).

(2) The commissioner may require further conditions on such special limitations, including but not limited to the following:

(i) Maintenance of a continuous monitoring network for sulfur compounds (expressed as sulfur dioxide) surrounding the source, which network is acceptable to the commissioner.

(ii) Employment of a system for prompt switching to fuel with a sulfur content specified by the commissioner when continuous monitoring indicates that State ambient air quality standards may, in the opinion of the commissioner, otherwise be exceeded.

225.3 Exceptions contingent upon fuel shortage. (a) Upon application by an air contamination source owner or a fuel supplier, or upon his own initiative, the commissioner may, by order, except persons from the provisions of this Part, for periods not exceeding one year, where it is shown to the Commissioner's satisfaction that there is an insufficient supply of conforming fuel

(1) of the proper type required for use in a particular air contamination source, or

(2) generally throughout an area of the State.

Insufficiency of the supply of fuel must be certified by the commissioner of the State Energy Office.

(b) The commissioner may, prior to certification of shortage by the commissioner of the State Energy Office and prior to the public hearing provided by section 225.4 of this Part, by order, except from the provisions of this Part, for a period not exceeding 45 days

(1) a person who submits an affidavit stating that there is an insufficient supply of conforming fuel of the proper type required for use in such person's air contamination source, or

(2) persons in a specified area of the State where the commissioner has evidence that there is an insufficient supply of fuel generally throughout such area, when the commissioner determines that a delay in issuing such exception would be detrimental to the public health or welfare. Where such exception is granted, the notice of public hearing provided by section 225.4 of this Part shall be published within three days of the issuance of such exception, and such hearing shall be held in accordance with the provisions of applicable Federal regulations.*

(c) The commissioner recognizes that, pursuant to section 117 of Article 5 of the Energy Law, the provisions of sections 225.1 and 225.3 of this Part may be pre-empted when the Governor declares that an energy or fuel supply emergency exists or is impending.

*Section 51.4 of Title 40 of the Code of Federal Regulations

225.4 Public hearings. (a) The commissioner will hold a public hearing in accordance with the provisions of section 51.4 of title 40 of the Code of Federal Regulations, for each special limitation and exception pursuant to sections 225.2 and 225.3 of this Part.

(b) For hearings on exceptions, the applicant shall publish notice of such hearing, in such form as the commissioner shall determine, in a newspaper of general circulation in the affected area for which such exception is sought and shall bear the cost of publication. The cost of the transcript of such hearing and the rental of space in which such hearing is conducted shall be paid for by the applicant.

225.5 General exceptions. (a) Fuel mixtures. Fuels with a sulfur content in excess of that permitted by this Part may be used when it can be demonstrated, to the commissioner's satisfaction, that the sulfur content of the resulting fuel mixture does not exceed the applicable maximum permitted sulfur content or that the resulting maximum and three-month average emission of sulfur compounds (expressed as sulfur dioxide) to the outdoor atmosphere will not exceed the product of the total heat input multiplied by the allowable rate of sulfur dioxide emission(s) calculated according to the following equation:

$$S = \frac{2XA + 2YB + 2ZC + 2MB}{X + Y + Z + M}$$

where:

S = Allowable sulfur dioxide emission (in pounds per million BTU)

X = Percent of total heat input from oil

Y = Percent of total heat input from coal

Z = Percent of total heat input from gaseous fuel

M = Percent of total heat input from refuse derived fuel

A = Sulfur content of oil in percent by weight permitted by this Part multiplied by 0.55

B = Sulfur content of coal in pounds of sulfur per million BTU permitted by this Part

C = Sulfur content of gaseous fuel in grains per 100 dscf (expressed as hydrogen sulfide) permitted by this Part, multiplied by the ratio of 1.34/heating value of gaseous fuel (in BTU per cubic foot)

This general exception for fuel mixtures shall apply only to a process or stationary combustion installation.

(b) Equivalent emission rate. In the following cases, the commissioner may, by order, except from the fuel sulfur content restrictions imposed by this Part a person establishing to the commissioner's satisfaction that the fuel use thus permitted would not result in the emission of sulfur compounds (expressed as sulfur dioxide) to the outdoor atmosphere at a rate greater than would result through the use of fuels otherwise mandated:

- (1) where fuel would be used as a process constituent, or
- (2) where approved control equipment is installed, or
- (3) where a sufficient portion of the sulfur in the fuel would be retained in the ash.

(c) Experiments. Upon application, the commissioner may, by order, permit the sale, offering for sale, purchase and use of fuel having a sulfur content in excess of the limits imposed by this Part, where such fuel would be used to demonstrate the performance of experimental equipment and/or process(es) for removal of sulfur compounds from stack emissions.

(d) Coal and coke. (1) Until October 1, 1977, the City of New York and the Counties of Nassau, Rockland, Suffolk and Westchester, for those installations where coal or coke has been the regular fuel continuously since December 31, 1967, the commissioner will permit the sale and the continued, but not increased, purchase and use of such fuel, irrespective of the sulfur content of such fuel.

(2) After October 1, 1977, in the City of New York and the Counties of Nassau, Rockland, Suffolk and Westchester, the commissioner will permit the sale and the continued, but not increased, purchase and use of coal and coke for installations with a total rated heat input equal to or less than one million BTU/hr, provided that such fuel has been the regular fuel continuously since December 31, 1967, and the maximum sulfur content does not exceed 0.75 percent by weight.

(3) After October 1, 1977, in the City of New York and in the Counties of Nassau, Rockland, Suffolk and Westchester, for all coal or coke installations greater than one million BTU/hr total rated heat input where such fuel has been the regular fuel continuously since December 31, 1967, the commissioner, upon application no later than April 1, 1977, may permit the sale and the continued, but not increased, use of such fuel, provided that use of such fuel is in compliance with a Federally approved implementation plan.

225.6 Emission and fuel monitoring. (a) The provisions of this section shall apply to the owners of stationary combustion installations with a total heat input in excess of 250 million BTU per hour. If two or more furnaces are connected to a common air cleaning device and/or common stack, the total heat input for such stationary combustion installation shall be either the sum of the maximum operating heat inputs of all furnaces which are operated simultaneously and connected to the common air cleaning device and/or stack, or the maximum operating heat input of any individual furnace operated independently and connected to the common air cleaning device and/or common stack, whichever is greater.

(b) Except where gaseous fuel is the only fuel burned in such installation or where representative sampling and sulfur analysis of fuel used in any stationary combustion installation not equipped with control equipment for sulfur dioxide are conducted in a manner approved by the commissioner, such source owner shall install at each stack, and operate in accordance with manufacturer's instructions, instruments approved by the commissioner and satisfying the criteria in Appendix B of Title 40, Part 60 of the Code of Federal Regulations for continuously monitoring and recording sulfur compound emissions (expressed as sulfur dioxide) from such installation at all times that the combustion installation is in service.

(c) Such owner shall measure the rate of each fuel burned daily and shall determine, at least once per week, the gross heat content and ash content of each fuel burned. In the case of combustion installations producing electricity for sale, the average electrical output and the minimum and maximum hourly generator rate shall also be measured.

(d) Such owner shall record and maintain a file of such measurements and operating data as may be required by the Commissioner, and shall tabulate and summarize such measurements and operating data in a format acceptable to the commissioner. At the request of the commissioner, such person shall submit a written report of the fuel sulfur content exceeding the applicable sulfur in fuel limitation or of the measured emissions exceeding the applicable equivalent emission rate for each calendar quarter and the nature and cause of such excesses, if known. Such persons shall retain records and summaries for at least three years and, upon request of the commissioner, shall furnish such records and summaries.

225.7 Reports, sampling and analysis. (a) The commissioner may require an owner of an air contamination source to retain for up to three years, and to submit to him, fuel analyses, information on the quantity of fuel received, burned or sold, and results of stack sampling, stack monitoring and other procedures to ensure compliance with the provisions of this Part.

(b) (1) No person selling oil or coal shall fail to maintain and retain for three calendar years, records containing the following information:

(i) fuel analyses and data on the quantities of all oil and coal received, and

(ii) the name of all purchasers, fuel analyses and data on the quantities of all oil and coal sold.

(2) Such analyses shall contain, at a minimum, for:

(i) Residual oil data on the sulfur content, ash content, specific gravity, and heating value.

(ii) Distillate oil data on the sulfur content, specific gravity, and heating value.

(iii) Coal data on the sulfur content, ash content, and heating value.

(c) No person required to maintain and retain records pursuant to subdivision (b) of this section shall fail to make such records available for inspection during normal business hours by the commissioner or his representative, and no such person shall fail to furnish copies of such records to the commissioner or his representative upon request.

(d) Sampling, compositing and analysis of fuel samples shall be carried out in accordance with the most recent applicable ASTM standard methods or other methods acceptable to the commissioner.