Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES

CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions.

The definitions in section 3 of the act (35 P. S. § 4003) apply to this article. In addition, the following words and terms, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

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[ASTM - ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959 USA, or on the World Wide Web at www.astm.org.]

* * * * *

Carrier—A distributor who does not take title to or otherwise have ownership of the **commercial fuel oil or** gasoline, and does not alter either the quality or quantity of the **commercial fuel oil or** gasoline.

* * * *

Commercial fuel oil—[Commercial fuel oil and mixtures] A fuel oil specifically produced, manufactured for sale and intended for use in [fuel oil-burning equipment] A

COMBUSTION UNIT. A mixture of commercial fuel [oils] oil with [other fuels]

noncommercial fuel [where] WHEN greater than 50% of the heat content is derived from the commercial fuel oil portion is considered a commercial fuel oil.

* * * * *

Distributor—

(i) A person who transports, stores or causes the transportation or storage of [eommercial fuel oil or] gasoline at any point between a refinery, [an oxygenate] [a] blending facility or terminal and a retail outlet [or] [a] wholesale purchaser-consumer's facility [or ultimate eonsumer].

(ii) FOR PURPOSES OF § 123.22 (RELATING TO COMBUSTION UNITS), A
PERSON WHO TRANSPORTS, STORES OR CAUSES THE TRANSPORTATION OR
STORAGE OF COMMERCIAL FUEL OIL AT ANY POINT BETWEEN A REFINERY,
BLENDING FACILITY OR TERMINAL AND A RETAIL OUTLET, WHOLESALE
PURCHASER-CONSUMER'S FACILITY OR ULTIMATE CONSUMER.

(iii) The term includes a refinery, [an oxygenate] a blending facility or a terminal.

* * * * *

Noncommercial [fuels] <u>fuel</u>—A gaseous or liquid fuel generated as a byproduct or waste product which is not specifically produced and manufactured for sale. A mixture of <u>a</u> noncommercial <u>fuel</u> and a commercial fuel oil [where] <u>when</u> at least 50% of the heat content is derived from the noncommercial fuel portion is considered a noncommercial fuel.

* * * * *

Retail outlet—An establishment at which <u>commercial fuel oil or</u> gasoline is sold or offered for sale to the ultimate consumer for use in <u>a combustion unit or</u> motor [vehicles] <u>vehicle</u>, <u>respectively</u>.

* * * * *

Terminal—

(i) A facility which is capable of receiving <u>commercial fuel oil or</u> gasoline in bulk, that is, by pipeline, barge, ship or other transport, and at which <u>commercial fuel oil or</u> gasoline is sold or transferred into trucks for transportation to retail outlets [or], wholesale purchaser-consumer's facilities <u>or ultimate consumers</u>.

- (ii) The term includes bulk gasoline terminals and bulk gasoline plants. [The]
- (iii) For purposes of Chapter 126, Subchapter A (relating to oxygenate content), the terminal does not have to be physically located in the control area.

* * * * *

Transferee—

- (i) A person who is the recipient of a sale or transfer.
- (ii) [The] FOR PURPOSES OF § 123.22, THE term includes the following:
- (A) Terminal owner or operator.

(B) Carrier.
(C) Distributor.
(D) Retail outlet owner or operator.
(E) Ultimate consumer.

* * * * * *

Transferor—

(i) A person who initiates a sale or transfer.

(ii) [The] FOR PURPOSES OF § 123.22, THE term includes the following:

(A) Refinery owner or operator.
(B) Terminal owner or operator.
(C) Carrier.
(D) Distributor.
(E) Retail outlet owner or operator.

<u>Ultimate consumer</u>—With respect to a commercial fuel oil transfer or purchase, the last person, facility owner or operator or entity who in good faith receives the commercial fuel oil for the purpose of using it in a combustion unit or for purposes other than resale.

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CHAPTER 123. STANDARDS FOR CONTAMINANTS

SULFUR COMPOUND EMISSIONS

§ 123.22. Combustion units.

- (a) *Nonair basin areas*. Combustion units in nonair basin areas **[shall]** must conform with the following:
- (1) General provision. [No] $\underline{\mathbf{A}}$ person may $\underline{\mathbf{not}}$ permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO_2 , from a combustion unit in excess of the rate of 4

pounds per million Btu of heat input over [any] <u>a</u> 1-hour period, except as provided [for] in paragraph (4).

(2) Commercial fuel oil. [No]

(i) Except as specified in subparagraphs (ii) and (iii), a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in nonair basin areas [which] [on or after the applicable compliance date listed in this subparagraph,] if the commercial fuel oil contains sulfur in excess of the applicable [limit or] [percentage by weight] MAXIMUM ALLOWABLE SULFUR CONTENT set forth in the following [table] TABLES:

Grades Commercial Fuel Oil	MAXIMUM ALLOWABLE % Sulfur BY WEIGHT THROUGH JUNE 30, 2016
No. 2 and Lighter (viscosity less than or equal to 5.820cSt)	0.5
No. 4, No. 5, No. 6, and heavier (viscosity greater than 5.82cSt)	2.8]

MAXIMUM ALLOWABLE SULFUR CONTENT BEGINNING JULY 1, 2016, EXPRESSED AS PARTS PER MILLION (PPM) BY WEIGHT OR PERCENTAGE BY WEIGHT

	[<u>Compliance Date</u>]	
<u>GRADES Commercial Fuel Oil</u> (CONSISTENT WITH ASTM D396)	[<u>May 1,</u> 2012]	[<u>May 1,</u> 2012]
No. 2 and lighter OIL [(viscosity less than or equal to 5.820cSt)]	[<u>15 ppm</u>]	$\frac{2012}{(0.05\%)}$
No. 4 oil [(viscosity greater than 5.820eSt)]	500 PPM 2500 PPM	(0.25%)
No. 5, No. 6 and heavier oil [(viscosity greater than 5.820eSt)]	5000 PPM	[<u>sulfur</u>] (0.5%)
1.100 o una nearzor on [1.12000H] greater than 0.020000[]	200011111	[sulfur]

(ii) Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to [the applicable compliance date in subparagraph (i)] JULY 1, 2016, which met the applicable maximum ALLOWABLE sulfur content FOR THE COMMERCIAL FUEL OIL THROUGH JUNE 30, 2016, SET FORTH IN SUBPARAGRAPH (i) at the time it was stored, may be used BY THE ULTIMATE CONSUMER in this Commonwealth ON AND after [the applicable compliance date in subparagraph (i)] JULY 1, 2016.

(iii) [The] BEGINNING JULY 1, 2016, THE Department[, with the written concurrence of the Administrator of the EPA,]-may temporarily suspend or increase the applicable

[limit or percentage by weight of] MAXIMUM ALLOWABLE sulfur content [of] FOR a commercial fuel oil set forth [in the table] in subparagraph (i) if [both of] the following occur:

- [(A) The Department determines that an insufficient quantity of compliant commercial fuel oil is reasonably available in a nonair basin area.
- (B) [A) The Department receives a written request AT THE ADDRESS SPECIFIED IN SUBSECTION (h) for a suspension or increase on the basis that compliant commercial fuel oil is not reasonably available IN A NONAIR BASIN AREA. The request must include [both of] the following:
- (I) THE NONAIR BASIN COUNTY OR COUNTIES FOR WHICH THE SUSPENSION OR INCREASE IS REQUESTED.
 - (II) The reason compliant commercial fuel oil is not reasonably available.
- [<u>H</u>] <u>(III) The duration of time for which the suspension or increase is requested and the justification for the requested duration.</u>
- (B) THE DEPARTMENT DETERMINES THAT AN INSUFFICIENT QUANTITY OF COMPLIANT COMMERCIAL FUEL OIL IS REASONABLY AVAILABLE IN THE NONAIR BASIN AREA AND THAT THE CIRCUMSTANCES LEADING TO THE INSUFFICIENCY ARE DUE TO EVENTS THAT COULD NOT HAVE BEEN REASONABLY FORESEEN OR PREVENTED AND ARE NOT DUE TO LACK OF PRUDENT PLANNING ON THE PART OF THE TRANSFEROR OF THE COMMERCIAL FUEL OIL INTO OR WITHIN THE SPECIFIED NONAIR BASIN AREA.
- (C) THE DEPARTMENT APPROVES THE REQUEST, IN WRITING, PRIOR TO THE TRANSFEROR DISTRIBUTING THE NONCOMPLIANT COMMERCIAL FUEL OIL INTO OR WITHIN THE SPECIFIED NONAIR BASIN AREA.
- (iv) The Department will limit a suspension or increase in the applicable [limit] MAXIMUM ALLOWABLE SULFUR CONTENT granted under subparagraph (iii) to the shortest duration in which adequate supplies of compliant commercial fuel oil can be made reasonably available, BUT IN NO CASE LONGER THAN 60 DAYS FROM THE DATE THE DEPARTMENT GRANTS THE SUSPENSION OR INCREASE.
- [(v) The sulfur content limit for No. 2 and lighter commercial fuel oil may not exceed 500 ppm if a temporary increase in the applicable limit of sulfur content is granted under subparagraph (iii).]
- (3) Equivalency provision. Paragraph (2) [may] does not apply to [those persons] a person who uses equipment or a process, or [installations] to the owner or operator of an installation where equipment or [processes are] a process is used, to reduce the sulfur

emissions from the burning of **[fuels]** <u>a fuel</u> with a higher sulfur content than that specified in paragraph (2). The emissions may not exceed those which would result from the use of **[the fuels]** <u>commercial fuel oil that meets the applicable [limit or percentage by weight]</u> <u>MAXIMUM ALLOWABLE SULFUR CONTENT</u> specified in paragraph (2).

* * * * *

- (b) *Erie; Harrisburg; York; Lancaster; and Scranton, Wilkes-Barre air basins*. Combustion units in these subject air basins **[shall]** <u>must</u> conform with the following:
- (1) General provision. [No] <u>A</u> person may <u>not</u> permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period₂ except as provided [for] in paragraph (4).
 - (2) Commercial fuel oil. [No]
- (i) Except as specified in subparagraphs (ii) and (iii), a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in the subject air basins [which contain] [on or after the applicable compliance date listed in this subparagraph,] if the commercial fuel oil contains sulfur in excess of the applicable [limit or] [percentage by weight] MAXIMUM ALLOWABLE SULFUR CONTENT set forth in the following [table] TABLES:

[Effective August 1, 19/9]
MAXIMUM ALLOWABLE
% Sulfur <u>BY WEIGHT</u>
THROUGH JUNE 30, 2016
0.3
2.8]

MAXIMUM ALLOWABLE SULFUR CONTENT BEGINNING JULY 1, 2016, EXPRESSED AS PARTS PER MILLION (PPM) BY WEIGHT OR PERCENTAGE BY WEIGHT

	[<u>Compliance Date</u>]	
GRADES Commercial Fuel Oil	[<u>May 1,</u>	[<u>May 1,</u>
(CONSISTENT WITH ASTM D396)	<u>2012</u>]	2012
No. 2 and lighter OIL [(viscosity less than or equal to 5.820eSt)]	[15 ppm] 500 PPM	(0.05%)
No. 4 oil [(viscosity greater than 5.820eSt)]	<u>2500 PPM</u>	(0.25%) [<u>sulfur</u>]
No. 5, No. 6 and heavier oil [(viscosity greater than 5.820cSt)]	<u>5000 PPM</u>	<u>(0.5%)</u> [sulfur]

- (ii) Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to [the applicable compliance date in subparagraph (i)] JULY 1, 2016, which met the applicable maximum ALLOWABLE sulfur content FOR THE COMMERCIAL FUEL OIL THROUGH JUNE 30, 2016, SET FORTH IN SUBPARAGRAPH (i) at the time it was stored, may be used BY THE ULTIMATE CONSUMER in this Commonwealth ON AND after [the applicable compliance date in subparagraph (i)] JULY 1, 2016.
- (iii) [The] BEGINNING JULY 1, 2016, THE Department[, with the written concurrence of the Administrator of the EPA,] may temporarily suspend or increase the applicable [limit or percentage by weight of] MAXIMUM ALLOWABLE sulfur content [of] FOR a commercial fuel oil set forth [in the table] in subparagraph (i) if [both of] the following occur:
- [(A) The Department determines that an insufficient quantity of compliant commercial fuel oil is reasonably available in the subject air basins.
- (B) (A) The Department receives a written request AT THE ADDRESS SPECIFIED IN SUBSECTION (h) for a suspension or increase on the basis that compliant commercial fuel oil is not reasonably available IN A SUBJECT AIR BASIN. The request must include [both of] the following:
- (I) THE SUBJECT AIR BASIN FOR WHICH THE SUSPENSION OR INCREASE IS REQUESTED.
 - (II) The reason compliant commercial fuel oil is not reasonably available.
- [(H)] (III) The duration of time for which the suspension or increase is requested and the justification for the requested duration.
- (B) THE DEPARTMENT DETERMINES THAT AN INSUFFICIENT QUANTITY OF COMPLIANT COMMERCIAL FUEL OIL IS REASONABLY AVAILABLE IN THE AIR BASIN AND THAT THE CIRCUMSTANCES LEADING TO THE INSUFFICIENCY ARE DUE TO EVENTS THAT COULD NOT HAVE BEEN REASONABLY FORESEEN OR PREVENTED AND ARE NOT DUE TO LACK OF PRUDENT PLANNING ON THE PART OF THE TRANSFEROR OF THE COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (C) THE DEPARTMENT APPROVES THE REQUEST, IN WRITING, PRIOR TO THE TRANSFEROR DISTRIBUTING THE NONCOMPLIANT COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (iv) The Department will limit a suspension or increase in the applicable [limit]

 MAXIMUM ALLOWABLE SULFUR CONTENT granted under subparagraph (iii) to the shortest duration in which adequate supplies of compliant commercial fuel oil can be made

reasonably available, BUT IN NO CASE LONGER THAN 60 DAYS FROM THE DATE THE DEPARTMENT GRANTS THE SUSPENSION OR INCREASE.

- [(v) The sulfur content limit for No. 2 and lighter commercial fuel oil may not exceed 500 ppm if a temporary increase in the applicable limit of sulfur content is granted under subparagraph (iii).]
- (3) Equivalency provision. Paragraph (2) does not apply to [those persons] a person who uses equipment or a process, or [installations] to the owner or operator of an installation where equipment or [processes are] a process is used, to reduce the sulfur emissions from the burning of [fuels] a fuel with a higher sulfur content than that specified in paragraph (2). The emissions may not exceed those which would result from the use of [the fuels] commercial fuel oil that meets the applicable [limit or percentage by weight] MAXIMUM ALLOWABLE SULFUR CONTENT specified in paragraph (2).

* * * * *

- (c) Allentown, Bethlehem, Easton[-]: Reading[-]: Upper Beaver Valley: and Johnstown air basins. Combustion units in these subject air basins [shall] must conform with the following:
- (1) General provision. [No] <u>A</u> person may <u>not</u> permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from [any] <u>a</u> combustion unit [, at any time,] in excess of the rate of 3 pounds per million Btu of heat input over [any] <u>a</u> 1-hour period, except as provided [for] in paragraph (4).
 - (2) Commercial fuel oil. [No]
- (i) Except as specified in subparagraphs (ii) and (iii), a person may [, at any time,] not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in the subject air basins [on or after the] [effective dates] [applicable compliance date] [listed in this] [paragraph which] [subparagraph,] if the commercial fuel oil contains sulfur in excess of the applicable [limit or] [percentage by weight] MAXIMUM ALLOWABLE SULFUR CONTENT set forth in the following [table] TABLES:

[Effective August 1, 1979]

MAXIMUM ALLOWABLE

* Sulfur BY WEIGHT

THROUGH JUNE 30, 2016

No. 2 and Lighter (viscosity less than or equal to 5.82cSt)

No. 4, No. 5, No. 6 and heavier (viscosity greater than 5.82cSt)

0.3 2.0]

MAXIMUM ALLOWABLE SULFUR CONTENT BEGINNING JULY 1, 2016, EXPRESSED AS PARTS PER MILLION (PPM) BY WEIGHT OR PERCENTAGE BY WEIGHT

	[<u>Compliance Date</u>]	
<u>GRADES Commercial Fuel Oil</u> (CONSISTENT WITH ASTM D396)	[<u>May 1,</u> <u>2012</u>]	[<u>May 1,</u> 2012]
No. 2 and lighter OIL [(viscosity less than or equal to 5.820eSt)]	[15 ppm] 500 PPM	(0.05%)
No. 4 oil [(viscosity greater than 5.820cSt)]	<u>2500 PPM</u>	(0.25%) [sulfur]
No. 5, No. 6 and heavier oil [(viscosity greater than 5.820eSt)]	<u>5000 PPM</u>	(0.5%) [sulfur]

- (ii) Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to [the applicable compliance date in subparagraph (i)] JULY 1, 2016, which met the applicable maximum ALLOWABLE sulfur content FOR THE COMMERCIAL FUEL OIL THROUGH JUNE 30, 2016, SET FORTH IN SUBPARAGRAPH (i) at the time it was stored, may be used BY THE ULTIMATE CONSUMER in this Commonwealth ON AND after [the applicable compliance date in subparagraph (i)] JULY 1, 2016.
- (iii) [The] BEGINNING JULY 1, 2016, THE Department[, with the written concurrence of the Administrator of the EPA,] may temporarily suspend or increase the applicable [limit or percentage by weight of] MAXIMUM ALLOWABLE sulfur content [of] FOR a commercial fuel oil set forth [in the table] in subparagraph (i) if [both of] the following occur:
- [(A) The Department determines that an insufficient quantity of compliant commercial fuel oil is reasonably available in the subject air basins.
- (B) (A) The Department receives a written request AT THE ADDRESS SPECIFIED IN SUBSECTION (h) for a suspension or increase on the basis that compliant commercial fuel oil is not reasonably available IN A SUBJECT AIR BASIN. The request must include [both-of] the following:
- (I) THE SUBJECT AIR BASIN FOR WHICH THE SUSPENSION OR INCREASE IS REQUESTED.
 - (II) The reason compliant commercial fuel oil is not reasonably available.
- [<u>(III)</u>] (III) The duration of time for which the suspension or increase is requested and the justification for the requested duration.

- (B) THE DEPARTMENT DETERMINES THAT AN INSUFFICIENT QUANTITY OF COMPLIANT COMMERCIAL FUEL OIL IS REASONABLY AVAILABLE IN THE AIR BASIN AND THAT THE CIRCUMSTANCES LEADING TO THE INSUFFICIENCY ARE DUE TO EVENTS THAT COULD NOT HAVE BEEN REASONABLY FORESEEN OR PREVENTED AND ARE NOT DUE TO LACK OF PRUDENT PLANNING ON THE PART OF THE TRANSFEROR OF THE COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (C) THE DEPARTMENT APPROVES THE REQUEST, IN WRITING, PRIOR TO THE TRANSFEROR DISTRIBUTING THE NONCOMPLIANT COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (iv) The Department will limit a suspension or increase in the applicable [limit] MAXIMUM ALLOWABLE SULFUR CONTENT granted under subparagraph (iii) to the shortest duration in which adequate supplies of compliant commercial fuel oil can be made reasonably available, BUT IN NO CASE LONGER THAN 60 DAYS FROM THE DATE THE DEPARTMENT GRANTS THE SUSPENSION OR INCREASE.
- [(v) The sulfur content limit for No. 2 and lighter commercial fuel oil may not exceed 500 ppm if a temporary increase in the applicable limit of sulfur content is granted under subparagraph (iii).]
- (3) Equivalency provision. Paragraph (2) does not apply to [those persons] a person who uses equipment or a process, or [installations] to the owner or operator of an installation where equipment or [processes are] a process is used, to reduce the sulfur emissions from the burning of [fuels] a fuel with a higher sulfur content than that specified in paragraph (2) [; however, the]. The emissions may not exceed those which would result from the use of [the fuels] commercial fuel oil that meets the applicable [limit or percentage by weight] MAXIMUM ALLOWABLE SULFUR CONTENT specified in paragraph (2).

* * * * *

- (d) Allegheny County[-]: Lower Beaver Valley[,]: and Monongahela Valley air basins. [No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from any combustion unit in excess of any of] Combustion units in these subject air basins must conform with the following:
- (1) <u>General provision</u>. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO_2 , from a combustion unit in excess of one or more of the following:
- (i) The rate of [one] 1 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

- [(2)] (ii) The rate determined by the following formula: $A = 1.7E^{-0.14}$, where: A = Allowable emissions in pounds per million Btu of heat input, and E = Heat input to the combustion unit in millions of Btus per hours when E is equal to or greater than 50 but less than 2,000.
- [(3)] (iii) The rate of 0.6 pounds per million Btu of heat input when the heat input to the combustion unit in millions of Btus per hour is equal to or greater than 2,000.

(2) Commercial fuel oil.

(i) Except as specified in subparagraphs (ii) and (iii), a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in the subject air basins on or after [the applicable compliance date listed in this subparagraph] JULY 1, 2016, if the commercial fuel oil contains sulfur in excess of the applicable [limit or percentage by weight] MAXIMUM ALLOWABLE SULFUR CONTENT set forth in the following table:

MAXIMUM ALLOWABLE SULFUR CONTENT BEGINNING JULY 1, 2016, EXPRESSED AS PARTS PER MILLION (PPM) BY WEIGHT OR PERCENTAGE BY WEIGHT

	[Compliance L	<u>Pate]</u>
GRADES Commercial Fuel Oil	[<u>May 1, 2012</u>]	[<u>May 1, 2012</u>]
(CONSISTENT WITH ASTM D396)		
No. 2 and lighter OIL [(viscosity less than or equal to 5.820cSt)]	[15 ppm]	<u>(0.05%)</u>
	<u>500 PPM</u>	
No. 4 oil [(viscosity greater than 5.820cSt)]	<u>2500 PPM</u>	(0.25%)
		[sulfur]
No. 5, No. 6 and heavier oil [(viscosity greater than 5.820cSt)]	<u>5000 PPM</u>	(0.5%)
		[sulfur]

- (ii) Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to [the applicable compliance date in subparagraph (i)] JULY 1, 2016, which met the applicable maximum ALLOWABLE sulfur content at the time it was stored, may be used BY THE ULTIMATE CONSUMER in this Commonwealth ON AND after [the applicable compliance date in subparagraph (i)] JULY 1, 2016.
- (iii) [The] BEGINNING JULY 1, 2016, THE Department[, with the written concurrence of the Administrator of the EPA,] may temporarily suspend or increase the applicable [limit or percentage by weight of] MAXIMUM ALLOWABLE sulfur content [of] FOR a commercial fuel oil set forth [in the table] in subparagraph (i) if [both of] the following occur:
- [(A) The Department determines that an insufficient quantity of compliant commercial fuel oil is reasonably available in the subject air basins.

- (B) (A) The Department receives a written request AT THE ADDRESS SPECIFIED IN SUBSECTION (h) for a suspension or increase on the basis that compliant commercial fuel oil is not reasonably available IN A SUBJECT AIR BASIN. The request must include [both of] the following:
- (I) THE SUBJECT AIR BASIN FOR WHICH THE SUSPENSION OR INCREASE IS REQUESTED.
 - (II) The reason compliant commercial fuel oil is not reasonably available.
- [<u>(III)</u>] (III) The duration of time for which the suspension or increase is requested and the justification for the requested duration.
- (B) THE DEPARTMENT DETERMINES THAT AN INSUFFICIENT QUANTITY OF COMPLIANT COMMERCIAL FUEL OIL IS REASONABLY AVAILABLE IN THE AIR BASIN AND THAT THE CIRCUMSTANCES LEADING TO THE INSUFFICIENCY ARE DUE TO EVENTS THAT COULD NOT HAVE BEEN REASONABLY FORESEEN OR PREVENTED AND ARE NOT DUE TO LACK OF PRUDENT PLANNING ON THE PART OF THE TRANSFEROR OF THE COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (C) THE DEPARTMENT APPROVES THE REQUEST, IN WRITING, PRIOR TO THE TRANSFEROR DISTRIBUTING THE NONCOMPLIANT COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (iv) The Department will limit a suspension or increase in the applicable [limit] MAXIMUM ALLOWABLE SULFUR CONTENT granted under subparagraph (iii) to the shortest duration in which adequate supplies of compliant commercial fuel oil can be made reasonably available, BUT IN NO CASE LONGER THAN 60 DAYS FROM THE DATE THE DEPARTMENT GRANTS THE SUSPENSION OR INCREASE.
- [(v) The sulfur content limit for No. 2 and lighter commercial fuel oil may not exceed 500 ppm if a temporary increase in the applicable limit of sulfur content is granted under subparagraph (iii).]
- (3) Equivalency provision. Paragraph (2) does not apply to a person who uses equipment or a process, or to the owner or operator of an installation where equipment or a process is used, to reduce the sulfur emissions from the burning of a fuel with a higher sulfur content than that specified in paragraph (2). The emissions may not exceed those which would result from the use of commercial fuel oil that meets the applicable [limit or percentage by weight] MAXIMUM ALLOWABLE SULFUR CONTENT specified in paragraph (2).
- (e) *Southeast Pennsylvania air basin*. Combustion units in the Southeast Pennsylvania air basin **[shall]** must conform with the following:

(1) General provision. [No] <u>A</u> person may <u>not</u> permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from [any] <u>a</u> combustion unit except as provided [for] in paragraph (3) or (5), in excess of the applicable rate in pounds per million Btu of heat input specified in the following table:

Rated Capacity of Units in 10 ⁶ Btus per hour	Inner Zone	Outer Zone
less than 250	1.0	1.2
greater than or equal to 250	0.6	1.2

(2) Commercial fuel oil. [No]

(i) Except as specified in subparagraphs (ii) and (iii), a person may [, at any time,] not offer for sale, deliver [or] for use, exchange in trade or permit the use of commercial fuel oil [for use] in a combustion [units] unit in the Southeast Pennsylvania air basin [which] [on or after the applicable compliance date listed in this subparagraph,] if the commercial fuel oil contains sulfur in excess of the applicable [percentages] [limit or percentage] [by weight] MAXIMUM ALLOWABLE SULFUR CONTENT set forth in the following [table] TABLES:

	MAXIMUM A	<u>ALLOWABLE</u>
	% SULFUR	BY WEIGHT
	THROUGH J	UNE 30, 2016
[Grades of Commercial Fuel Oil	Inner Zone	Outer Zone
No. 2 and lighter (viscosity less than or equal to 5.82cSt)	$0.2[\frac{9}{6}]$	0.3[%]
No. 4, No. 5, No. 6 and Heavier (viscosity greater than 5.82cSt)	0.5[%]	1.0[%]

MAXIMUM ALLOWABLE SULFUR CONTENT BEGINNING JULY 1, 2016, EXPRESSED AS PARTS PER MILLION (PPM) BY WEIGHT OR PERCENTAGE BY WEIGHT

	 Compliance L)ate
GRADES Commercial Fuel Oil	[<i>May 1, 2012</i>]	[<u>May 1, 2012</u>]
(CONSISTENT WITH ASTM D396)		
No. 2 and lighter OIL [(viscosity less than or equal to 5.820eSt)]	[15 ppm]	(0.05%)
	<u>500 PPM</u>	
No. 4 oil [(viscosity greater than 5.820cSt)]	2500 PPM	(0.25%)
		[sulfur]
No. 5, No. 6 and heavier oil [(viscosity greater than 5.820cSt)]	5000 PPM	<u>(0.5%)</u>
		[sulfur]

(ii) Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to [the applicable compliance date in subparagraph (i)] JULY 1, 2016, which met the applicable maximum ALLOWABLE sulfur content FOR COMMERCIAL

- FUEL OIL THROUGH JUNE 30, 2016, SET FORTH IN SUBPARAGRAPH (i) at the time it was stored, may be used BY THE ULTIMATE CONSUMER in this Commonwealth ON AND after [the applicable compliance date in subparagraph (i)] JULY 1, 2016.
- (iii) [The] BEGINNING JULY 1, 2016, THE Department[, with the written concurrence of the Administrator of the EPA,] may temporarily suspend or increase the applicable [limit or percentage by weight of] MAXIMUM ALLOWABLE sulfur content [of] FOR a commercial fuel oil set forth [in the table] in subparagraph (i) if [both of] the following occur:
- [<u>(A) The Department determines that an insufficient quantity of compliant commercial fuel oil is reasonably available in the subject air basin.</u>
- (B) (A) The Department receives a written request AT THE ADDRESS SPECIFIED IN SUBSECTION (h) for a suspension or increase on the basis that compliant commercial fuel oil is not reasonably available IN THE SUBJECT AIR BASIN. The request must include both of the following:
 - (I) The reason compliant commercial fuel oil is not reasonably available.
- (II) The duration of time for which the suspension or increase is requested and the justification for the requested duration.
- (B) THE DEPARTMENT DETERMINES THAT AN INSUFFICIENT QUANTITY OF COMPLIANT COMMERCIAL FUEL OIL IS REASONABLY AVAILABLE IN THE AIR BASIN AND THAT THE CIRCUMSTANCES LEADING TO THE INSUFFICIENCY ARE DUE TO EVENTS THAT COULD NOT HAVE BEEN REASONABLY FORESEEN OR PREVENTED AND ARE NOT DUE TO LACK OF PRUDENT PLANNING ON THE PART OF THE TRANSFEROR OF THE COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (C) THE DEPARTMENT APPROVES THE REQUEST, IN WRITING, PRIOR TO THE TRANSFEROR DISTRIBUTING THE NONCOMPLIANT COMMERCIAL FUEL OIL INTO OR WITHIN THE AIR BASIN.
- (iv) The Department will limit a suspension or increase in the applicable [limit] MAXIMUM ALLOWABLE SULFUR CONTENT granted under subparagraph (iii) to the shortest duration in which adequate supplies of compliant commercial fuel oil can be made reasonably available, BUT IN NO CASE LONGER THAN 60 DAYS FROM THE DATE THE DEPARTMENT GRANTS THE SUSPENSION OR INCREASE.
- [(v) The sulfur content limit for No. 2 and lighter commercial fuel oil may not exceed 500 ppm if a temporary increase in the applicable limit of sulfur content is granted under subparagraph (iii).]

- (3) Noncommercial fuels. [No] $\underline{\mathbf{A}}$ person may $\underline{\mathbf{not}}$ permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO_2 , from $[\mathbf{any}]$ $\underline{\mathbf{a}}$ combustion unit using $\underline{\mathbf{a}}$ noncommercial fuel $[\mathbf{at}$ \mathbf{any} $\mathbf{time}]_{\underline{\mathbf{a}}}$ in excess of the rate of 0.6 pounds per million Btu of heat input in the inner zone or 1.2 pounds per million Btu of heat input in the outer zone.
- (4) Equivalency provision. Paragraph (2) does <u>not</u> apply to [those persons] <u>a person who</u> <u>uses equipment or a process</u>, or [installations] <u>to the owner or operator of an installation</u> where equipment or [processes are] <u>a process is</u> used, to reduce the <u>sulfur</u> emissions from the burning of [fuels] <u>a fuel</u> with a higher sulfur content than that specified in paragraph (2)[; however, the]. <u>The</u> emissions may not exceed those which would result from the use of [the fuels] <u>commercial fuel oil that meets the applicable [limit or percentage by weight]</u> <u>MAXIMUM ALLOWABLE SULFUR CONTENT</u> specified in paragraph (2).

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(f) Sampling and testing.

- (1) For the purpose of determining compliance with the requirements of this section, the ACTUAL sulfur content of commercial fuel oil shall be determined by one of the following:
- (i) In accordance with the sample collection, test methods and procedures specified under § 139.16 (relating to sulfur in fuel oil).
- (ii) Other methods developed or approved by the Department, the Administrator of the United States Environmental Protection Agency, or both.
- (2) [A] BEGINNING JULY 1, 2016, A refinery owner or operator who produces commercial fuel oil intended for use or used in this Commonwealth [on or after the applicable compliance date in subsections (a)(2), (b)(2), (c)(2), (d)(2) and (e)(2), [is required to sample, test and calculate the ACTUAL sulfur content of each batch of the commercial fuel oil as specified in paragraph (1).
- (3) [A terminal owner or operator shall develop and implement written procedures, including procedures for commercial fuel oil sampling and testing as specified in paragraph (1). These procedures shall be made available to the Department upon request.]
 BEGINNING JULY 1, 2016, AND PRIOR TO OFFERING FOR SALE, DELIVERING FOR USE, EXCHANGING IN TRADE OR PERMITTING THE USE OF COMMERCIAL FUEL OIL IN THIS COMMONWEALTH, A PERSON OTHER THAN THE ULTIMATE CONSUMER THAT ACCEPTS A SHIPMENT OF COMMERCIAL FUEL OIL FROM A REFINERY OR OTHER TRANSFEROR, SHALL SAMPLE, TEST AND CALCULATE THE ACTUAL SULFUR CONTENT OF THE COMMERCIAL FUEL OIL IN ACCORDANCE WITH PARAGRAPH (1) IF THE SHIPMENT LACKS THE RECORD REQUIRED BY SUBSECTION (g)(1) THAT ENABLES THE TRANSFEREE TO DETERMINE IF THE SULFUR CONTENT OF THE SHIPMENT

OF COMMERCIAL FUEL OIL MEETS THE APPLICABLE MAXIMUM ALLOWABLE SULFUR CONTENT.

- (g) Recordkeeping and reporting.
- (1) Beginning with the refinery owner or operator who sells or transfers commercial fuel oil [in] INTO OR WITHIN this Commonwealth FOR USE IN THIS COMMONWEALTH and ending with the ultimate consumer, [on or after the applicable compliance date specified in subsections (a)(2), (b)(2), (c)(2), (d)(2) and (e)(2), [each time the physical custody of, or title to, a shipment of commercial fuel oil changes hands ON OR AFTER JULY 1, 2016, the transferor shall provide to the transferee an electronic or paper record described in this paragraph. This record must legibly and conspicuously contain the following information:
 - (i) The date of the sale or transfer.
 - (ii) The name and address of the transferor.
 - (iii) The name and address of the transferee.
 - (iv) The volume of commercial fuel oil being sold or transferred.
- (v) The IDENTIFICATION OF THE sulfur content of the SHIPMENT OF commercial fuel oil [by limit or weight percent on a per-gallon basis], determined using the sampling and testing methods specified in subsection (f)[-](1), EXPRESSED AS ONE OF THE FOLLOWING STATEMENTS:
- (A) FOR A SHIPMENT OF NO. 2 AND LIGHTER COMMERCIAL FUEL OIL, "THE SULFUR CONTENT OF THIS SHIPMENT IS 500 PPM OR BELOW."
- (B) FOR A SHIPMENT OF NO. 4 COMMERCIAL FUEL OIL, "THE SULFUR CONTENT OF THIS SHIPMENT IS 2500 PPM OR BELOW."
- (C) FOR A SHIPMENT OF NO. 5, NO. 6 AND HEAVIER COMMERCIAL FUEL OIL, "THE SULFUR CONTENT OF THIS SHIPMENT IS 5000 PPM OR BELOW."
 - (vi) The location of the commercial fuel oil at the time of transfer.
- (vii) EXCEPT FOR A TRANSFER TO A TRUCK CARRIER, AN OWNER OR OPERATOR OF A RETAIL OUTLET OR AN ULTIMATE CONSUMER, THE TRANSFEROR MAY SUBSTITUTE THE REQUIRED INFORMATION IN SUBPARAGRAPHS (i)—(vi) WITH THE USE OF A PRODUCT CODE IF THE FOLLOWING ARE MET:
- (A) THE PRODUCT CODE INCLUDES THE INFORMATION REQUIRED BY SUBPARAGRAPHS (i)—(vi).

(B) THE PRODUCT CODE IS STANDARDIZED THROUGHOUT THE DISTRIBUTION SYSTEM IN WHICH IT IS USED.

(C) EACH DOWNSTREAM PARTY IS GIVEN SUFFICIENT INFORMATION TO KNOW THE FULL MEANING OF THE PRODUCT CODE.

- (2) The refinery owner or operator shall do both of the following:
- (i) Maintain in electronic or paper format, the records developed under subsection (f)(2) to determine the ACTUAL sulfur content of each batch of the commercial fuel oil.
- (ii) Provide electronic or written copies of the records developed under subsection (f)(2) of the ACTUAL sulfur content of each batch of the commercial fuel oil to the Department upon request.
 - (3) The terminal owner or operator shall do both of the following:
- (i) Maintain, in electronic or paper format, the APPLICABLE records developed under subsection (f)(3) OR (g)(1), OR BOTH, to [determine] ESTABLISH the MAXIMUM sulfur content of the SHIPMENT OF commercial fuel oil.
- (ii) Provide electronic or written copies of the records [of] ESTABLISHING the MAXIMUM sulfur content of the SHIPMENT OF commercial fuel oil to the Department upon request.
 - (4) A person subject to this section shall do both of the following:
- (i) Maintain the applicable records required under paragraphs (1)—(3) in electronic or paper format for 2 years UNLESS A LONGER PERIOD IS REQUIRED UNDER § 127.511(b)(2) (RELATING TO MONITORING AND RELATED RECORDKEEPING AND REPORTING REQUIREMENTS).
- (ii) Provide an electronic or written copy of the applicable record to the Department upon request.
- (5) The ultimate consumer shall maintain in electronic or paper format the record containing the information listed in paragraph (1), except in either of the following situations:
 - (i) The transfer or use of the commercial fuel oil occurs at a private residence.
- (ii) The ultimate consumer is an owner of an apartment or condominium building housing private residents and the transfer or use of the commercial fuel oil occurs for use at the building.

(h) THE WRITTEN REQUEST FOR SUSPENSION OF OR INCREASE IN THE SULFUR CONTENT LIMIT ON THE BASIS THAT COMPLIANT COMMERCIAL FUEL OIL IS NOT REASONABLY AVAILABLE SHALL BE ADDRESSED TO THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF AIR QUALITY, CHIEF OF THE DIVISION OF COMPLIANCE AND ENFORCEMENT, P. O. BOX 8468, HARRISBURG, PA 17105-8468.

CHAPTER 139. SAMPLING AND TESTING

Subchapter A. SAMPLING AND TESTING METHODS AND PROCEDURES GENERAL

§ 139.4. References.

(a) The references referred to in this chapter are as follows:

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- (10) [Standard Method of Sampling Petroleum and Petroleum Products, American Society for Testing Materials, D 270-80, 1916 Race Street, Philadelphia, Pennsylvania 19103] ASTM D 4057, Practice for Manual Sampling of Petroleum and Petroleum Products, including updates and revisions.
- (11) [Standard Method of Test for Kinematic Viscosity of Transparent and Opaque Liquids (and the calculation of Dynamic Viscosity), American Society for Testing Materials, D 445-79, 1916 Race Street, Philadelphia, Pennsylvania 19103] <u>ASTM D 445, Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)</u>, including updates and revisions.
- (12) [Standard Method of Test for Sulfur in Petroleum Products (Lamp Method), American Society for Testing Materials, D 1266-80, 1916 Race Street, Philadelphia, Pennsylvania 19103] <u>ASTM D 1266, Test Methods for Sulfur in Petroleum Products: Lamp Method, including updates and revisions.</u>
- (13) [Standard Method of Test for Sulfur in Petroleum Products by the Bomb Method, American Society for Testing Materials, D 129-78, 1916 Race Street, Philadelphia, Pennsylvania 19103] <u>ASTM D 129, Test Methods for Sulfur in Petroleum Products: General Bomb Method, including updates and revisions.</u>
- (14) [Standard Method of Test for Sulfur in Petroleum Products (High Temperature Method), American Society for Testing Materials, D 1552-79, 1916 Race Street, Philadelphia, Pennsylvania 19103] <u>ASTM D 1552, Test Methods for Sulfur in Petroleum Products: High-Temperature Method, including updates and revisions.</u>

(15) [Standard Method of Test for Sulfur in Petroleum Products (X-Ray Spectrographic Method), American Society for Testing Materials, D 2622-77, 1916 Race Street, Philadelphia, Pennsylvania 19103] <u>ASTM D 2622, Test Methods for Sulfur in Petroleum Products by X-Ray Spectrometry, including updates and revisions.</u>

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- (20) ASTM D 4294, Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry, including updates and revisions.
- (21) ASTM D 4177, Practice for Automatic Sampling of Petroleum and Petroleum Products, including updates and revisions.
- (b) REFERENCES TO ASTM IN THIS CHAPTER PERTAIN TO TEST METHODS DEVELOPED BY ASTM INTERNATIONAL, 100 BARR HARBOR DRIVE, P.O. BOX C700, WEST CONSHOHOCKEN, PA 19428-2959, USA, OR ON THE WORLD WIDE WEB AT WWW.ASTM.ORG.

STATIONARY SOURCES

§ 139.16. Sulfur in fuel oil.

The following [are applicable] apply to tests for the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in § 139.4(10) or (21) (relating to references).

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(3) Tests methods and procedures for the determination of sulfur shall be those specified in § 139.4(12)—(15) **and (20)**.

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