

Executive Summary
Revision of the Maximum Allowable Sulfur Content Limit
for No. 2 and Lighter Commercial Fuel Oil
25 Pa. Code Chapter 123

Purpose and Summary of the Final-Form Rulemaking

The Department of Environmental Protection (Department) finalized amendments to Chapter 123 (relating to standards for contaminants) for consideration by the Environmental Quality Board (Board). This final-form rulemaking amends § 123.22 (relating to combustion units) to address Federal Clean Air Act regional haze and visibility impairment requirements by reducing the maximum allowable sulfur content limit for No. 2 and lighter commercial fuel oil in this Commonwealth, generally sold for and used in residential and commercial furnaces and oil heat burners and furnaces for home or space heating, water heating, or both. This final-form-rulemaking:

- Lowers the maximum allowable sulfur content limit of No. 2 and lighter fuel oil from 500 parts per million (ppm) to 15 ppm in the subject air basins.
- Establishes a compliance date of September 1, 2020.
- Revises the “store by” provision to allow No. 2 and lighter commercial fuel oil stored on-site by the ultimate consumer before September 1, 2020, that was compliant with the prior applicable limit, to be used on and after September 1, 2020, by the ultimate consumer.
- Revises the recordkeeping and reporting requirements for affected owners and operators to specify identification of the sulfur content of the shipment as being at or below 15 ppm, whereas previously it was at or below 500 ppm.

These amendments are consistent with the recommendations of the Mid-Atlantic/Northeast Visibility Union (MANE-VU) Regional Planning Organization. The Commonwealth is a member of MANE-VU, which was established in 2001 to assist the Mid-Atlantic and Northeast States in planning and developing their regional haze State Implementation Plan (SIP) revisions to address the impact of regional haze and visibility impairment on mandatory Federal Class I areas (which includes National parks, forests, and wilderness areas) as well as urban and rural areas within the MANE-VU region. The sulfur dioxide (SO₂) emissions released by combustion of sulfur-containing No. 2 or lighter commercial fuel oil contribute to the formation of regional haze and fine particulate matter (PM_{2.5}), both of which are serious public health and welfare threats and affect visibility.

The MANE-VU member States agreed to pursue a coordinated course of action to reduce the maximum allowable sulfur content of No. 2 and lighter commercial fuel oil to 500 ppm by weight (0.05% sulfur by weight) by no later than 2012 and to 15 ppm by weight (0.0015% by weight) by 2016. On February 9, 2013, the Board amended its regulations at § 123.22 to reduce the maximum allowable sulfur content limit for No. 2 and lighter commercial fuel oil to 500 ppm beginning July 1, 2016, rather than to 15 ppm, due to concerns at the time regarding the available supply of low-sulfur content No. 2 and lighter commercial fuel oil with 15 ppm of sulfur or less within various regions of the Commonwealth. Since that time, the Department has determined

that the availability of No. 2 and lighter commercial fuel oil within various regions of the Commonwealth and Nationwide with 15 ppm of sulfur or less is no longer a concern. This final-form rulemaking will also provide Statewide consistency because the City of Philadelphia currently requires No. 2 and lighter commercial fuel oil to not exceed a sulfur content limit of 15 ppm.

Implementation of the 500 ppm maximum allowable sulfur content limit for No. 2 and lighter commercial fuel oil beginning July 1, 2016, was expected to achieve reductions of SO₂ emissions of at least 21,000 tons per year (tpy). The Department expects that the Commonwealth will realize an additional 4,000 tpy of SO₂ emission reductions from implementation of this final-form maximum allowable sulfur content limit of 15 ppm for No. 2 and lighter commercial fuel oil, for a total of 25,000 tpy of SO₂ emission reductions.

Decreased emissions of SO₂ will also improve public health and the environment by contributing to the attainment or maintenance, or both, of the 2012 annual PM_{2.5} National Ambient Air Quality Standards (NAAQS) within this Commonwealth. On April 7, 2015, the EPA designated the Allegheny, Delaware, and Lebanon County areas as nonattainment with the 2012 annual PM_{2.5} NAAQS. The EPA subsequently determined that the Delaware and Lebanon County areas attained that NAAQS on December 13, 2016, and March 6, 2018. On January 23, 2019, and February 11, 2019, the Department submitted requests to the EPA to redesignate the Delaware County and Lebanon County nonattainment areas to attainment of the 2012 annual PM_{2.5} NAAQS. The maintenance plans for these areas identified lowering the fuel oil standard to 15 ppm as a contingency measure to ensure that these areas will continue to be classified as attainment for the 2012 annual PM_{2.5} NAAQS. On September 30, 2019, the EPA approved the redesignation requests and maintenance plans for the Delaware County and Lebanon County 2012 PM_{2.5} areas as revisions to the Pennsylvania SIP, effective October 30, 2019.

This final-form rulemaking will be submitted to the EPA for approval as a revision to the Commonwealth's SIP following publication of the final-form rulemaking in the *Pennsylvania Bulletin*.

Affected Parties

This final-form rulemaking applies to the owner and operator of a refinery, pipeline, terminal, distributor, carrier, or retail outlet fuel storage facility that produces, conveys, stores, or sells No. 2 and lighter commercial fuel oil, as well as the ultimate consumer that uses No. 2 and lighter commercial fuel oil in the Commonwealth. There are four refineries in the Commonwealth, owned by four different companies, that currently produce or are capable of producing No. 2 and lighter commercial fuel oil with a sulfur content of 15 ppm or less. The Department estimates that there are 128 fuel oil terminal operations and 684 distributors of petroleum products in this Commonwealth; not all operations handle No. 2 and lighter commercial fuel oil. Members of the petroleum refining and distribution industry have been regulated for many years. Maximum allowable sulfur content limits have been established in highway transportation fuels for 30 years, so the industry has the technical capacity to implement the new requirements.

The ultimate consumers or end-users of No. 2 and lighter commercial fuel oil are generally homeowners and those living in rental units. The U.S. Energy Information Administration's State Energy Profile estimates that 18% of households in this Commonwealth use No. 2 and lighter commercial fuel oil for home or space heating, water heating, or both.

Advisory Groups

The Department presented the draft final-form Annex A to the Air Quality Technical Advisory Committee (AQTAC) on October 17, 2019, and to the Small Business Compliance Advisory Committee (SBCAC) on October 23, 2019, and briefed the committees on the comments received on the proposed rulemaking. Both committees voted unanimously to concur with the Department's recommendation to present this final-form rulemaking to the Board for consideration. The Department presented the draft final-form Annex A to the Citizens Advisory Council's (CAC) Policy and Regulatory Oversight Committee on October 28, 2019. On the recommendation of the Policy and Regulatory Oversight Committee, on November 19, 2019, the CAC concurred with the Department's recommendation to present this final-form rulemaking to the Board for consideration. Advisory committee meetings are advertised and open to the public.

Public Comments and Board Hearings

The proposed rulemaking was adopted by the Board at its meeting on April 16, 2019, and published in the *Pennsylvania Bulletin* on July 6, 2019, with a 66-day public comment period (49 Pa.B. 3482) that closed on September 9, 2019. Three public hearings were held on August 6, 7, and 8, 2019, in Pittsburgh, Norristown, and Harrisburg, respectively. Five individuals presented testimony at the public hearings. The Department received comments from 23 commenters, with 22 supporting the proposed regulatory amendments. One commenter noted opposition to the proposed rulemaking, stating concern that it would place an onerous financial burden on a small transmix facility. Also, two commenters expressed concern regarding the proposed compliance date being a date "60 days after the effective date of adoption." The Independent Regulatory Review Commission (IRRC) incorporated the commenters' concerns as they relate to IRRC's criteria for evaluating proposed regulations. All comments have been addressed.

Recommendation

The Department is recommending the adoption of this final-form rulemaking.