



Bureau of Air Quality

Proposed Rulemaking: Revision of Sulfur Limits in No. 2 and Lighter Commercial Fuel Oil (25 Pa. Code Chapter 123)

Environmental Quality Board Meeting

April 16, 2019

Tom Wolf, Governor

Patrick McDonnell, Secretary

Background: Regional Haze

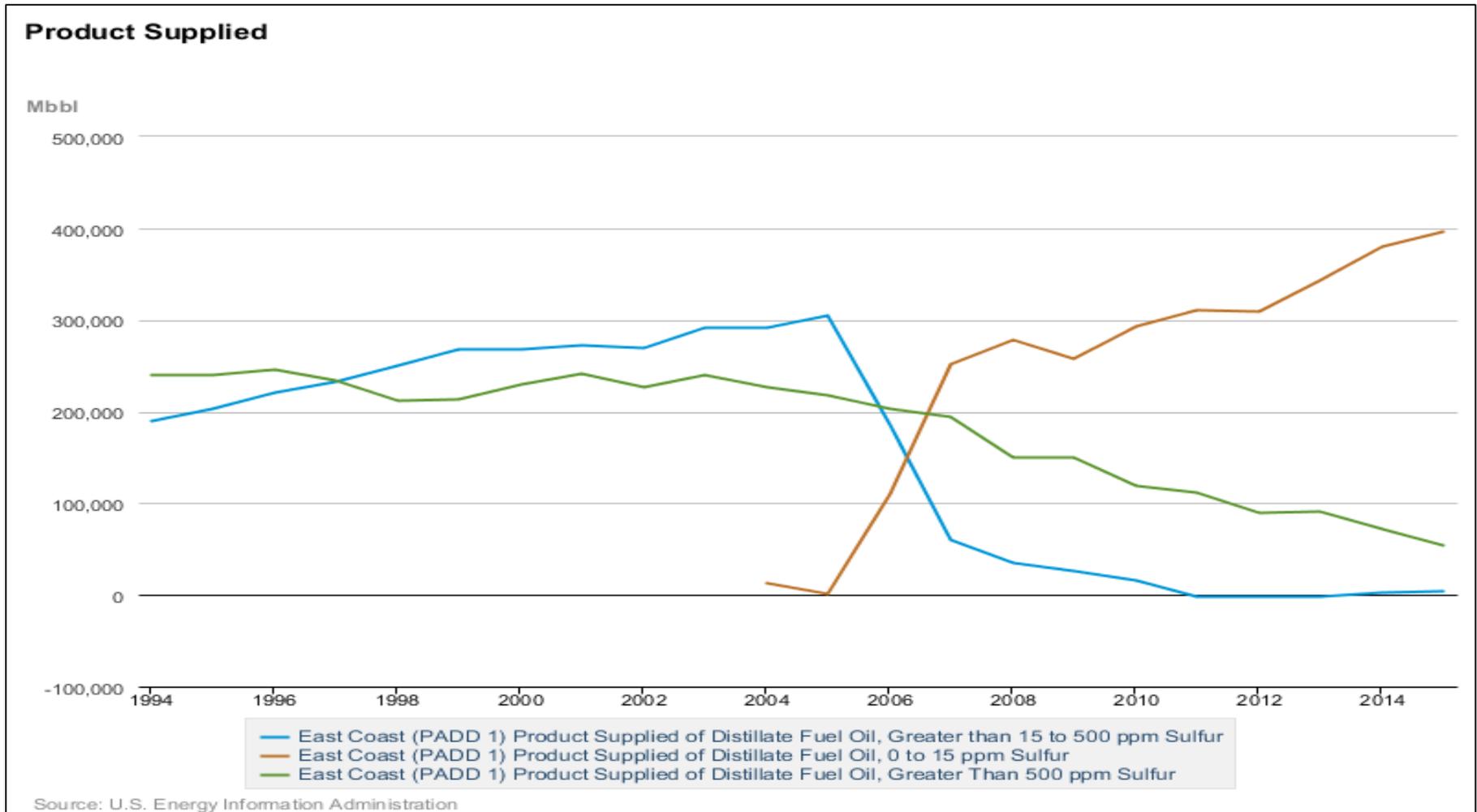
- 1977 Clean Air Act (CAA) Amendments declared a national goal to prevent future visibility impairment and remedy existing impairment in national parks, wilderness areas and wildlife refuges (“Class I areas”).
- The U.S. Environmental Protection Agency (EPA) promulgated its Regional Haze Rule in 1999, which called for states, tribes and federal agencies to work together to improve visibility in the 156 Class I areas.
- The Mid-Atlantic/Northeast Visibility Union (MANE-VU) was established in 2001 to help the Northeast states plan for meeting regional haze requirements.

Background: Regional Haze

- Predominant cause of haze pollution in the MANE-VU region is sulfate particles, which are formed from sulfur dioxide (SO₂) emissions during fuel combustion.
- In 2007, the MANE-VU states adopted a formal statement which included an agreement to pursue a regional low-sulfur fuel oil strategy by 2018, as appropriate and necessary.
- In 2013, PA amended 25 Pa. Code § 123.22 to reduce sulfur content emissions to 500 ppm from home heating and commercial fuel oils, beginning July 1, 2016.

Distillate Fuel Oil Supply

- The supply of distillate fuel oil throughout Pennsylvania and nationwide with 15 ppm or less is no longer a concern.



Proposed Rulemaking

- In 2017, MANE-VU adopted a formal statement which noted that to meet reasonable progress goals, each state that has not fully adopted the 15 ppm limit for No. 2 and lighter fuel oil should pursue this standard as expeditiously as possible and before 2028.
- To address this, this rulemaking proposes to reduce the No. 2 and lighter commercial fuel oil sulfur limit for combustion units from 500 ppm to 15 ppm.
- The sulfur content level of 15 ppm is consistent with the level that is required in highway, nonroad, locomotive and marine transportation diesel fuels.

Proposed Rulemaking

- No federal sulfur standards for combustion units using No. 2 and lighter fuel oil; all MANE-VU states, except PA, have committed to 15 ppm.
- In July 2014, Philadelphia Air Management Services adopted the 15 ppm sulfur content limit.
- By lowering the sulfur content limit of No. 2 and lighter fuel oil, there would be statewide and regional consistency.

Applicability

- The proposed rulemaking would be applicable to anyone who offers for sale, delivers for use, exchanges in trade or permits the use of No. 2 and lighter commercial fuel oil in this Commonwealth, including:
 - Owners and operators of refineries;
 - Terminals and retail outlets that produce, convey, store or sell;
 - Distributors, carriers, boiler owners; and
 - Ultimate consumers.
- DEP estimates that up to 812 entities and 892,800 households could be affected by the proposed rulemaking.

Economic Impact

- Little to no economic impact on businesses involved in production of No. 2 and lighter commercial fuel oil. Refineries already produce or have the ability to achieve a sulfur content of 15 ppm.
- Although compliant No. 2 and lighter commercial fuel oil may cost a few cents per gallon more, savings on fuel purchase costs, as well as maintenance and cleaning costs, would help to defray that impact.
- Most costs and cost savings have likely already been realized as the majority of No. 2 and lighter commercial fuel oil produced and distributed in Pennsylvania has a sulfur content of 15 ppm or less.

Compliance Impact

- No new reporting, recordkeeping, or other administrative costs required for compliance with the proposed rulemaking.
- Owners and operators of refineries and retail outlets of commercial fuel oil could still manufacture and sell No. 2 fuel oil with a sulfur content above 15 ppm, if the ultimate consumer is located outside of this Commonwealth and the MANE-VU region and in a state that does not have a sulfur content limit of 15 ppm (i.e. Ohio, West Virginia, Virginia).

Environmental Impact

- The complete low sulfur fuel oil strategy estimated SO₂ emissions reductions to be 25,000 tpy.
 - The prior rulemaking stopped at 500 ppm for No. 2 and lighter commercial fuel oil. All reductions to that point were estimated to be at least 21,000 tpy of SO₂ emissions.
 - An additional 4,000 tpy of SO₂ emissions is expected to be realized by further reducing the sulfur content limit to 15 ppm.

Proposed Rulemaking

- Limited changes are proposed:
 - Sulfur content limit – No. 2 and lighter fuel oil limit reduced from 500 ppm (0.05%) to 15 ppm (0.0015%);
 - Compliance date – 60 days after the rulemaking is published in its final form; and
 - Sell-through provision – No. 2 and lighter fuel oil stored on-site by the ultimate consumer before the compliance date may be used by the ultimate consumer on and after the compliance date.

Advisory Committee Review

The following advisory committees concurred with the Department's recommendation to move the proposed rulemaking to the EQB for consideration:

- Small Business Compliance Advisory Committee (SBCAC) – January 24, 2018.
- Air Quality Technical Advisory Committee (AQTAC) – February 8, 2018.
- Citizens Advisory Council (CAC) Committee – February 20, 2018.

➤ Recommendation and Public Participation

- The Department recommends the adoption of this proposed rulemaking. The proposed rule will have a 60-day public comment period and three public hearings.
- If adopted as a final-form rulemaking, a revision to the State Implementation Plan (SIP) will be submitted to the EPA.



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DEPARTMENT OF ENVIRONMENTAL PROTECTION



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