

Executive Summary

Amendments to 25 Pa. Code Chapters 121, 123 and 139

Sulfur in Commercial Fuel Oil

Purpose and Background of the Proposed Rulemaking

The Department of Environmental Protection recommends proposed amendments to Chapters 121, 123 and 139 (relating to general provisions; standards for contaminants; and sampling and testing) for consideration by the Environmental Quality Board (Board). The purpose of this proposed rulemaking is to amend § 123.22 (relating to combustion units) to lower the allowable sulfur content limits of commercial fuel oils used in oil-burning combustion units in this Commonwealth and to replace the existing area-specific sulfur content limits for commercial fuel oils with a statewide sulfur limit. Combustion of sulfur-containing commercial fuel oils releases sulfur dioxide (SO₂) emissions, which contribute to the formation of regional haze and fine particulate matter (PM_{2.5}), both of which are serious public welfare and human health threats. Emissions of nitrogen oxides, which contribute to unhealthy levels of PM_{2.5} and ground-level ozone, and carbon dioxide, a greenhouse gas, should also decrease due to furnace and boiler combustion efficiency improvements. This proposed control measure is an important part of the Commonwealth's efforts to meet the 2018 reasonable progress goals for reducing regional haze established by the Commonwealth in consultation with the member states of the Mid-Atlantic/Northeast Visibility Union (MANE-VU) and is also reasonably necessary to attain and maintain the PM_{2.5} National Ambient Air Quality Standards (NAAQS) in this Commonwealth. The Northeast States for Coordinated Air Use Management estimates the annual SO₂ emission reduction benefits in this Commonwealth would be approximately 29,000 tons. If adopted as a final-form rulemaking, the regulation will be submitted to the U.S. Environmental Protection Agency (EPA) as a revision to the State Implementation Plan.

Summary of Proposal

The proposed rulemaking would amend § 123.22 to lower the allowable sulfur content limits of commercial fuel oils and replace the existing area-specific sulfur content limits for commercial fuel oils with a statewide sulfur content limit; add provisions for sampling and testing, and recordkeeping and reporting, under § 123.22; revise the sampling and testing requirements in Chapter 139; and add definitions to § 121.1 (relating to definitions) for two new terms, and amend the definitions of eight existing terms to provide clarity and support the amendments to Chapter 123.

Proposed amendments to § 123.22(a)-(e) would reduce the commercial fuel oil sulfur limit in each area to 15 ppm sulfur for Number (No.) 2 and lighter commercial fuel oils and to less than 0.25% sulfur for No. 4 commercial fuel oil and less than 0.5% sulfur for Nos. 5, 6 and heavier commercial fuel oils on and after May 1, 2012. The proposed rulemaking includes authority for the Department to temporarily suspend or modify the proposed requirements, with concurrence by the Administrator of the EPA, if supply in an air basin (or air basins) or a particular geographic area (for nonair basins) is reasonably unavailable. The proposed rulemaking would also specify that 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.

Proposed new § 123.22(f) establishes sampling and testing requirements for the refinery and terminal owner or operator to ensure the allowable sulfur content limits of the commercial fuel oil are being met.

Proposed new § 123.22(g) establishes recordkeeping and reporting provisions applicable to all parties in the manufacture and distribution chain for commercial fuel oil from the refinery owner or operator to the ultimate consumer.

Proposed new § 123.22(g)(1) specifically lists the information to be shown on the record that is transferred with each shipment of commercial fuel oil, beginning with the owner or operator of the refinery.

Proposed new § 123.22(g)(5) specifically exempts the ultimate consumer who is a private resident from the requirement to maintain records.

Proposed amendments to § 139.4 (relating to references) update six of the applicable sulfur method references and add two new methods.

Affected Parties

The provisions would apply to the owner or operator of an affected refinery, pipeline, terminal, carrier, distributor or retail outlet that produces, conveys or stores the affected commercial fuel oil in this Commonwealth on or after the applicable compliance date. There are five refineries, 120 terminals and 737 distributors of petroleum products in this Commonwealth. Not all of these operations may handle commercial fuel oil. The ultimate consumer of commercial fuel oil would be required to buy compliant fuel after the applicable compliance date. The proposed sampling and testing requirements for refineries and terminals, and recordkeeping and reporting requirements, were made consistent with current industry practices, and should not create a burden on the regulated community.

Advisory Groups

The concepts of the proposed rulemaking were discussed with the Air Quality Technical Advisory Committee (AQTAC, Committee) at its February 12, 2009, meeting. The proposed rulemaking was discussed with the AQTAC on February 18, 2010. The Committee voted 12-0 to concur with the Department's recommendation to present the proposed amendments, with suggested revisions, to the Environmental Quality Board for consideration for publication as a proposed rulemaking. In addition, the proposed rulemaking was discussed with the Citizens Advisory Council (CAC) air committee at its February 16, 2010, meeting. The CAC air committee had no objections and the full CAC concurred on March 16, 2010. The proposed amendments were discussed with the Agricultural Advisory Board on April 21, 2010, and the Small Business Compliance Advisory Committee on April 28, 2010.

Public Comments and Board Hearings

The Department recommends a 60-day public comment period on the proposed rulemaking and three public hearings.