Philadelphia Code
Title 3 Section 3-207 Amendments
and
Proposed Amendments to AMR III

City of Philadelphia
Department of Public Health
Air Management Services
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Background

- City Council Bill No. 140510: Passed by City Council on June 19, 2014; signed by the Mayor on July 15, 2014.

- The Bill amended City Code §3-207 to reduce the Sulfur content in fuel oil; Echo actions taken by the Commonwealth and neighboring jurisdictions , to reduce sulfur dioxide (SO_2) emissions generated as an air contaminant from burning of fuel oil.

- Lower Sulfur content of No. 2 Fuel Oil from 0.2% (2000 ppm) to 0.0015% (15 ppm) by weight, and lower Sulfur content of No.4 Fuel Oil from 0.3% (3000 ppm) to 0.25% (2500 ppm) by weight. Effective on July 1, 2015.

Proposed Amendments to Air Management Regulation III

- Proposed amendment in AMR III Section I would echo the newly amended §3-207
  - Lower the No. 2 and No. 4 oil sulfur content limits - to be the same as those in §3-207 (as mentioned in previous slide)
  - For No. 4 oil, Permissible Emissions by Pounds of SO_2 per Million BTU (British Thermal Units) Fuel Gross Heat Input: change from 0.30 lbs to 0.26 lbs – another way of expressing the sulfur limit

Proposed Amendments to Air Management Regulation III

- Proposed amendment in Section II

  Conform with latest EPA NAAQS (75 ppb, 1-hour average) – Sulfur dioxide ground level (outdoor air) concentration limit to be set at 0.4 parts per million for a 5-minute averaging period

- Proposed amendment in Section III

  Remove obsolete coal sulfur content standards that no longer apply today – standards used in 1970s and early 80s

- AMS and Law are continuing to work out details and language in proposed amendments

Benefits

- Emission Benefits

  AMS expects emission reductions of 369 – 831 tons for SO_2, 12 – 42 tons for $PM_{2.5}$, and 90 – 119 tons for NO_x on an annual basis if switching to 15 ppm sulfur Fuel Oil.

- Health Benefits from Improved Air Quality

  Switching to 15 ppm will save 11 lives annually in Philadelphia.

  Estimated avoided adverse health costs (e.g. hospital admissions and medical treatments) are about $18,000 per ton of sulfur removed.

  Reduced incidence and aggravation of diseases such as asthma, bronchitis, and heart attacks.

- Economic Benefits

  Reduced operational costs for fuel oil users, including homeowners who utilize fuel oil for heat, because Sulfur contamination fouls / reduces efficiency of boilers, heaters, and engines.