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November 29, 2010

Environmental Quality Board  
P.O. Box 8477  
Harrisburg, PA 17105-8477

Subject: Commercial Fuel Oil Sulfur Limits for Combustion Units

To Whom It May Concern:

NPRA, the National Petrochemical and Refiners Association, is pleased to provide comments on the Environmental Quality Board's proposed changes to rules at 25 PA Code Chapters 121, 123 and 139 to reduce the maximum sulfur content standard for commercial fuel oil. NPRA's members comprise more than 450 companies, including virtually all U.S. refiners and petrochemical manufacturers. Our members supply consumers with a wide variety of products and services that are used daily in homes and businesses. These products include gasoline, diesel fuel, home heating oil, jet fuel, asphalt products, and the chemicals that serve as "building blocks" in making plastics, clothing, medicine and computers.

NPRA's members are dedicated to working cooperatively with all levels of government to ensure an adequate supply of clean, reliable, and affordable petroleum fuels.

**NPRA opposes the proposed cap of 15 ppm sulfur content for No. 2 fuel oil in 2012.**

The proposed rule would reduce the allowable sulfur limits of commercial fuel oil to 15 ppm for No. 2 and lighter commercial fuel oils, 0.25% sulfur by weight for No. 4 commercial fuel oil, and 0.5% sulfur by weight for No. 5 and 6 and heavier commercial fuel oils beginning May 1, 2012.

The proposed sulfur cap for No. 2 fuel oil, 15 ppm, is unreasonably stringent and 2012 does not provide adequate leadtime for some fuel suppliers. For the proposed significant reductions in No. 2 fuel oil sulfur content, adequate time is necessary for the refineries to plan and execute expansions of their sulfur reduction technology capacities (i.e., distillate hydrotreaters). Industry typically requires at least four years between the promulgation of rules and the effective compliance dates. If this proposal is promulgated in 2011, then refiners would have only about 12 months notice.



The NESCAUM estimate is that the proposed fuel oil sulfur regulations for PA would achieve a reduction of 29,000 tons SO<sub>2</sub>/year. This reduction would not be significant considering that SO<sub>2</sub> emissions from electric utility powerplants in PA were 780,000 metric tons in 2008.<sup>1</sup> It would be better to await SO<sub>2</sub> emissions reductions in coal-fired electric generating units before requiring a 15 ppm sulfur content cap for No. 2 fuel oil.

The proposed ultra-low (15 ppm) sulfur standard for No. 2 fuel oil in 2012, identical to highway diesel fuel, would impose unnecessary costs on heating oil users. The federal standard of 15 ppm sulfur content for highway diesel was selected to enable the use of NO<sub>x</sub> and particulate matter aftertreatment on vehicles. There is no standard established that requires such aftertreatment on residential, commercial and industrial No. 2 fuel oil furnaces/boilers. Hence, there is no reason to require existing No. 2 fuel oil users to incur these additional costs.

For those applications where newer, higher efficiency heaters/boilers are desired, existing 15 ppm sulfur content highway diesel fuel can provide an enabling fuel without requiring that all existing customers incur the needless cost of 15 ppm sulfur heating oil.

**NPRA recommends that Pennsylvania evaluates the energy and economic impacts of this proposal.**

It is not sufficient to assume that harmonizing the sulfur content of No. 2 fuel oil and diesel fuel means that there will not be any supply impacts. As mentioned earlier, refiners make project investment decisions several years ahead of compliance. It is important that scenarios of potentially inadequate product volume supplies as well as price sensitivities be addressed, especially in this economic environment.

**NPRA supports a cap of 500 ppm sulfur content for No. 2 fuel oil beginning in 2014, consistent with the New Jersey regulation.**

NPRA supports a reduction to 500 ppm sulfur content for No. 2 fuel oil beginning in 2014. This would allow appropriate leadtime for the petroleum industry. A 500 ppm sulfur content limit in 2014 would still provide substantial reductions in SO<sub>2</sub> emissions from the current standard of 0.3-0.5% sulfur content by weight. Furthermore, a 500 ppm sulfur content cap for No. 2 fuel oil in 2014 would be consistent with the recent regulation in New Jersey and would facilitate easier and more cost-effective product supply and distribution.

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<sup>1</sup> Energy Information Administration, "State Electricity Profiles 2008," March 2010, DOE/EIA-0348(01)/2, p. 229.



After completion of assessments on improvements in regional haze and fuel oil supply impacts and reduction in SO<sub>2</sub> emissions from coal-fired electricity generation, further reduction from 500 to 15 ppm sulfur could be considered in the outward years.

**NPRA supports a cap of 0.7% sulfur for No. 5 and 6 and heavier fuel oils.**

The proposed rule would reduce the allowable sulfur limits of commercial fuel oil to be 15 ppm for No. 2 and lighter commercial fuel oils, 0.25% sulfur content by weight for No. 4 commercial fuel oil, and 0.5% sulfur content by weight for No. 5 and 6 and heavier commercial fuel oils beginning May 1, 2012.

The proposed cap, 0.5% sulfur, is too stringent for some producers of No. 5 and 6 and heavier commercial fuel oils. In areas that are not currently subject to a 0.5% sulfur cap state standard, the new standard should be 0.7% sulfur. A 0.5% sulfur standard will leave some refineries with no viable options for disposition of these fuels other than export for the following reasons:

1. Sulfur removal from residual fuels (heavy fuel oils) is technologically difficult, very costly and usually economically prohibitive. As a result, refiners would not invest only for the purpose of desulfurizing heavy fuel oils, but may assess the massive investments required to upgrade heavy fuel oils to lighter distillates such as highway diesel fuel or home heating oil.
2. There is a strong economic disincentive to downgrade high-valued heating oil or transportation diesel to a very low-valued residual fuel oil product (i.e. attempting to meet specification through dilution). Should such significant downgrading of high-valued products occur through blending to meet the proposed 5000 ppm sulfur standard for residual fuel oils, the result will be greater supply-demand tightness in the heating oil and transportation diesel markets.

**NPRA supports the proposed “sell-through” provision.**

NPRA appreciates that Pennsylvania recognizes the issue of tank turn-over and supports that any future regulatory language includes an exception to the compliance date as stated in this proposal: “The first exception in proposed subparagraph (ii) allows commercial fuel oil that is stored in this Commonwealth by the ultimate consumer prior to the applicable compliance date listed and met the applicable maximum sulfur content at the time it was stored to be used in this Commonwealth after the applicable compliance date.” NPRA supports this provision and recommends that it be extended to terminals in Pennsylvania that store fuel oil for resale. Otherwise, terminals will have to turn over tanks to comply with the new sulfur limits before the compliance date.



**NPRA does not support the proposed sampling and testing provisions.**

This proposal would also require extensive sampling and testing. Proposed section 123.22(f)(2) would require “a refinery owner or operator who produces fuel oil intended for use or used in the Commonwealth ... to sample, test and calculate the sulfur content of each batch of the commercial fuel oil.” This is common practice. However, Pennsylvania cannot require sampling and testing for out-of-state parties.

A requirement for extensive sampling and testing would be unnecessary for a terminal owner or operator. Terminals have extensive experience with maintaining product quality, proper product segregation and periodic quality control.

**NPRA is concerned with the proposed waiver regulatory provisions.**

Proposed section 123.22 includes several instances of waiver provisions. Waivers can be a problem that creates winners and losers. A party that attempts to distribute complying product during a shortage can be undercut by a waiver that allows noncomplying product. Another party may anticipate the issuance of a waiver and not attempt to find and distribute complying product. This focus on waivers introduces uncertainty.

NPRA appreciates this opportunity to provide input and perspective.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory M. Scott", is written over a light blue horizontal line.

Gregory M. Scott  
Executive Vice President and General Counsel