

September 25, 2006

Office of Air Quality Planning & Standards  
U.S. Environmental Protection Agency  
U.S. EPA Mailroom  
Mail Code: D243-01  
Research Triangle Park, NC 27711

**Attn:** Peter Tsirigotis

**RE:** Promulgation of MACT/GACT Standards for Gasoline Distribution

Dear Mr. Tsirigotis,

It is our understanding, pursuant to the authority in CAA Section 112(d), EPA intends to propose MACT/GACT standards for the gasoline distribution source category in October 2006 with final promulgation to occur in October 2007. Based on discussions with Mr. Steve Shedd of your staff, the following summarizes our understanding of EPA's current thinking on the major provisions of the MACT/GACT standards for this source category:

- The standards will apply to activities at bulk terminals and service stations.
- The MACT standard as it pertains to bulk terminals will require tank rim seals, vapor processing units that meet an 80 mg/liter emission rate limit, and periodic leak checks.
- The MACT standard as it pertains to service stations will require submerged fill, vapor balance systems, and tank fitting controls.
- An alternative GACT standard as it pertains to bulk terminals will require rim seals only.
- An alternative GACT standard as it pertains to service stations will require submerged fill only.
- A decision to apply the MACT standard versus the GACT standard to a given locality will be based on urban population, using the boundaries of the consolidated metropolitan statistical area.

By this letter, we are urging EPA to apply Stage I vapor recovery requirements (i.e., submerged fill, vapor balance, tank fitting controls) as MACT nationally to gasoline service stations and we offer the following compelling reasons.

**Stage I vapor recovery systems are a proven technology**

Stage I vapor recovery systems are not a new technology. In fact, in November 1975, EPA issued its *Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations* as one of its Group I Control Techniques Guidelines (CTG) documents.

As you know, CTGs establish Reasonably Available Control Technology (RACT) in accordance with the provisions of CAA Section 182(b)(2). The CTG document states that “efficiencies greater than 90 percent are effected with simple balance systems if certain common design elements are employed and if the equipment is properly maintained.”

Over the past 30 years, tens of thousands of Stage I systems have been installed at service stations all over the U.S. With ample time and field testing, the systems have been improved and they are universally recognized to be a reliable and effective means of controlling gasoline vapors during tank filling. Surely such a relatively simple RACT technology with more than a 30 year track record of success could readily be applied universally to effectively control emissions from this source category.

### **Gasoline distribution is a significant source of hazardous air pollutant emissions**

Gasoline distribution activities cause significant emissions of hazardous air pollutants. Among these are the known carcinogen benzene, as well as ethyl benzene, toluene, and xylenes. For 2007, EPA projects more than 25,000 tons of emissions of these four pollutants from gasoline distribution alone.<sup>1</sup> In addition, there is evidence that these aromatic compounds contribute to ambient PM2.5 levels as secondary organic aerosols.<sup>2</sup> Thus, the universal application of Stage I vapor recovery systems will serve the dual purpose of reducing both hazardous air pollutants and PM2.5.

### **Gasoline distribution sources increase exposure to hazardous air pollutants**

According to the U.S. Energy Information Administration as of the year 2000, there were about 176,000 gasoline service stations in operation nationally. There has been a significant downward trend in the number of individual service stations in the U.S. over the past 20 years while at the same time gasoline consumption has increased by about 34%. The construction trend has been toward more very high volume service stations to keep up with the demand for fuel. These stations typically are located in residential areas in order to be conveniently close to customers. According to EPA, benzene, ethyl benzene, toluene, and xylene “concentrations around homes within 200 meters of...gas stations are 1.5 to 4 times higher than urban background levels.”<sup>3</sup> Regardless of whether such residential areas are considered to be urban or rural, individuals living in close proximity to service stations are subjected to these elevated exposures to hazardous air pollutants and given the trend of building very high volume throughput service stations, the level of exposure is likely to remain high and even increase for large numbers of people.

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<sup>1</sup> U.S. Environmental Protection Agency, *Draft Regulatory Impact Analysis: Control of Hazardous Air Pollutants from Mobile Sources*, EPA420-D-06-004, February 2006.

<sup>2-3</sup> Federal Register / Vol. 71, No. 60 / p. 15864 / Wednesday, March 29, 2006 / Proposed Rules – *Control of Hazardous Air Pollutants From Mobile Sources*.

**MACT rather than GACT is more appropriate for gasoline distribution sources**

Based on our review of the guidance for EPA's Integrated Urban Strategy for air toxics, it is more appropriate to establish a universal MACT rather than an alternate GACT standard for retail gasoline distribution. According to EPA, MACT standards are appropriate "for those area sources whose emissions pose the greatest threat to human health and the environment and for which the technology to achieve maximum reductions in HAP emissions is appropriate. Section 112(d)(3) requires the standards to reduce HAP emissions as much as is achievable, considering the cost of these reductions, effects on health or the environment (other than air), and energy requirements."<sup>4</sup> In addition, CAA Section 202(l) calls for "reasonable requirement to control hazardous air pollutants from motor vehicles and motor vehicle fuels [that] reflect the greatest degree of emission reduction achievable through the application of technology which will be available, taking into consideration...the availability and costs of the technology, and noise, energy, and safety factors, and lead time" [bold text added?]. As already addressed above, emissions from gasoline distribution poses a risk to human health that can readily be addressed by technology that has been available for more than 30 years. A per-facility annual cost, as indicated by Mr. Shedd, of about \$1400 does not appear to be exorbitant, given the benefits to be achieved for a large segment of the population. Again, we urge EPA to apply Stage I vapor recovery requirements (i.e., submerged fill, vapor balance, tank fitting controls) nationally as a universal MACT for gasoline service stations.

If you have any questions, please feel free to contact myself at 617-259-2017 or Lisa Rector at 802-899-5306.

Sincerely,



Arthur Marin, Executive Director  
NESCAUM

cc: Steve Shedd, EPA OAQPS  
Anne Arnold, EPA Region 1  
Kirk Wieber, EPA Region 2  
NESCAUM Directors

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<sup>4</sup> Federal Register /Vol. 64, No. 137 / p.38723 / Monday, July 19, 1999 / Notices – *National Air Toxics Program: The Integrated Urban Strategy.*