



**Meeting with OMB OIRA Staff
March 27, 2012**

Re: EPA's Oil and Natural Gas Sector: NSPS and NESHAP Reviews

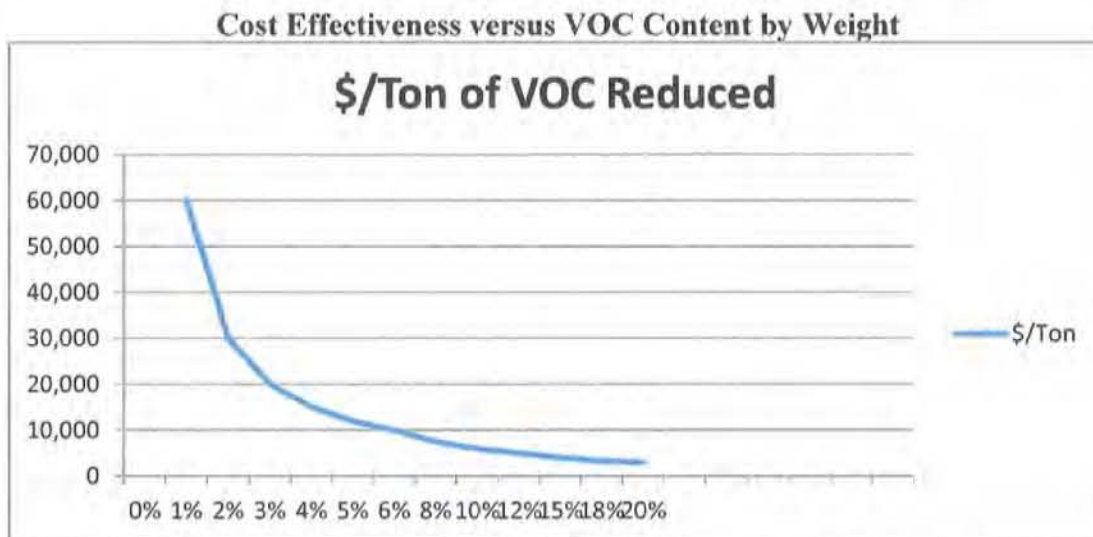
GPA is a non-profit trade organization made up of approximately 130 corporate members, all of whom are engaged in the processing of natural gas into a merchantable pipeline gas, or in the manufacture, transportation, or further processing of liquid products from natural gas. GPA's membership accounts for approximately 92% of all natural gas liquids produced by the midstream energy sector in the United States.

The GPA would like to highlight several critical issues concerning the final Subpart OOOO:

- 1. Need for applicability threshold of greater than 10 wt% VOC**
- 2. Cost and complexity of MACT standards and monitoring for storage vessels**
- 3. Compliance cost increases for LDAR monitoring**
- 4. Need to streamline compliance reporting**
- 5. Need to extend applicability and compliance dates for certain facilities**

1. In order to achieve a cost effective VOC BSER, Subpart OOOO should have an applicability threshold of greater than 10 wt% VOC content of vented gas for all affected facilities.

- EPA's emission reduction estimates and cost effectiveness numbers (\$/ton of VOC reduced) for pneumatic controllers, equipment leaks, and compressors were based on vented gas with a VOC content of 18.2 percent by weight. However, much of the gas produced in the U.S. contains **very little or no VOC**. Coal-bed methane, Haynesville Shale, eastern Barnett Shale, northern Marcellus shale are examples. The following table simply illustrates how "cost per ton of VOC reduced" increases by multiple factors as VOC content decreases and to infinity as VOC content approaches zero.



2. MACT storage vessel control standards, monitoring, recordkeeping and reporting requirements are very labor intensive and costly to comply with and are not justifiable for the minor emissions sources to which Subpart OOOO applies.

- **Strict MACT standards and monitoring** is not warranted or cost effective for VOC control from very small sources.
- The MACT regulatory language for **storage vessels is very complicated** even for seasoned environmental staff. This complexity adds confusion, consulting and legal costs just to understand what needs to be done.
- Continuous Parametric Monitoring System (**CPMS**) requirements should be reserved for major sources. In most instances, the General Duty clause and on-site records of compliance should be sufficient for these thousands of very small facilities, most of which are unmanned.

3. Lowering the present Subpart KKK leak standard for valves from 10,000 ppm to 500 ppm and adding “connectors” to the list of sources requiring Method 21 leak detection greatly increases compliance costs with little environmental benefit.

- GPA’s analysis suggests that the proposed Subpart OOOO LDAR requirements would be almost twice as costly as Subpart KKK. The table below shows the costs associated with LDAR at three natural gas processing plants, including actual annual LDAR contractor costs associated with current Subpart KKK monitoring and contractor estimates for LDAR monitoring at 500 ppm (including monitoring of connectors).

Plant	NSPS Subpart KKK - \$	NSPS Subpart OOOO - \$
A	\$46,737	\$83,639
B	\$35,994	\$63,570
C	\$29,047	\$42,009

- The justification for achieving 10,000 ppm in the original **1984 KKK preamble** is still valid today. In the January 20, 1984 Federal Register to the KKK program, the EPA stated on page 2643 “...EPA is unable to conclude that a leak definition lower than 10,000 ppm would provide additional emission reductions...”
- Although the Synthetic Organic Chemical Industry (SOCMI) applies a leak definition of 500 ppm, it is inappropriate to apply this leak definition to natural gas processing plants. Natural gas processing plants are distinct from SOCMI facilities in several key respects that EPA fails to acknowledge.
 - First, SOCMI facilities tend to be more geographically concentrated than natural gas processing plants, and SOCMI facilities have ready access to support contractors and facilities. **The gas processing industry, by contrast, is geographically dispersed and often located in remote areas, which adds very high mobilization costs to an LDAR program.**
 - Second, the components in a natural gas processing plant contain molecules that are small and under high pressure, which makes them much **harder to keep from leaking from valve packing glands.**
 - Third, most gas plants in the United States were built many years ago under the old 10,000 ppm standard or before Subpart KKK existed. A modification would trip these sites under a 500 ppm standard that they were not designed to meet.

- Fourth, the SOCOMI industry manufactures chemicals with a different hazard profile than VOC emissions from the natural gas processing industry, making a lower leak threshold more desirable for SOCOMI facilities.
- For **connectors**, EPA should keep the VV standard of “evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.” Adding connectors per VVa increases the number of components requiring leak detection by instrument check by a factor of 4.25 at an approximate cost of \$2.50 per connector (EPA estimate for refining sector). Adding connectors greatly increases the compliance burden from a documentation standpoint.
 - It would follow that connector monitoring at gas plants would be even higher (due to geographically remoteness), especially when considering costs to bring in manlifts or scaffolds required for monitoring. Therefore, higher monitoring costs for monitoring at gas plants versus refinery or SOCOMI facilities should be expected.
 - EPA has underestimated the amount of connectors by applying a lower than previously allowed monitoring fee. The costs of \$4,360 per ton of VOC is a miscalculation for **connector monitoring**. EPA believes the actual cost is double EPA’s estimate.
- A leak definition more stringent than 10,000 ppm should be determined by the States, as it is today. States currently exercise their authority to impose a more stringent leak definition based on conditions such as “non-attainment” or “settlement agreements.”

4. In general, the notification, monitoring, recordkeeping, performance testing and reporting requirements for the new affected facilities (pneumatic controllers, storage tanks and compressors) are too complex and not necessary to demonstrate compliance for these very small emissions sources.

- All notifications should be combined into the **initial annual report**. Only an initial annual report is necessary to notify EPA and state agencies that these affected facilities are now subject to Subpart OOOO and are in compliance with the standards. After the initial annual report, only maintaining compliance records should be sufficient.

5. The applicability and compliance dates for storage tanks and pneumatic controllers should be revised and extended to avoid unintended non-compliance issues.

- The compliance deadline for controlling affected **storage tanks** should be approximately 1 year after publication of the final rule in the Federal Register or 6 months after the date of startup, whichever is later.
- Thousands of new or replacement pneumatic controllers will have been installed between publication of the proposed rule and publication of the final rule which could result in thousands of issues of non-compliance. The applicability date for pneumatic devices should be extended to after the final rule is published. Also, EPA should **define the affected source as pneumatic controllers that are high bleed in the field and in gas service at gas processing plants**, which would vastly reduce the compliance costs for pneumatic controllers.