December 17, 2014

By electronic transmission

Via email: refineryfactor@epa.gov

Emission Factor and Emission Estimation Tools
U.S. Environmental Protection Agency

Re: GPA's Comments on Proposed RevisionsAP-42 Chapter 13: Miscellaneous Sources Section 13.5 Industrial Flares

To Whom It May Concern:

The Gas Processors Association (GPA) respectfully recommends that the U.S. Environmental Protection Agency (EPA) withdraw the proposed AP-42 Section 13.5 emission factors for industrial flares. GPA asserts that the emission factors were developed using a limited data set and questionable methodology. The proposed emission factors for industrial flares would increase the oxides of nitrogen (NO_x) factor forty two (42) times above the current value and introduce a volatile organic compound (VOC) factor that is approximately four (4) times above the existing factor for total hydrocarbons (THC). Finalizing the proposed emission factors will cause uncertainty to both regulators and the regulated community alike due to the permit concerns outlined below. In addition, the midstream sector of the natural gas industry across the United States will be substantially harmed if other compliance methodology, such as performance testing, must be employed as an alternative to the current published emission factor for industrial flares.

In addition to GPA's comments below, we support the comments on this issue submitted by the American Petroleum Institute.

GPA has served the U.S. energy industry since 1921 as an incorporated non-profit trade association. GPA is composed of 130 corporate members that are engaged in the gathering and processing of natural gas into merchantable pipeline gas, commonly referred to in the industry as "midstream activities." Such processing includes the removal of impurities from the raw gas stream produced at the wellhead, as well as the extraction for sale of natural gas liquid products (NGLs) such as ethane, propane, butane, and natural gasoline. GPA members account for more than 90 percent of the NGLs produced in the United States from natural gas processing. GPA members own facilities that currently utilize the AP-42 emission factors for traditional and

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enclosed flares. GPA companies would be subject to increased regulatory burdens under the proposed revisions and submits the following comments.

General Comments on the Studies Used in the Emission Factor Development

GPA is concerned with the sample size used to develop the new emission factors. Specifically, the new NO_x emission factor was based on only five new data points with one value from the Flint Hills facility (16) that was orders of magnitude higher than the average of the other four data points (0.297). EPA's review document states that the higher emission number from Flint Hills was not a statistical outlier; however, due to the small data set further analysis is needed to estimate the uncertainty of its value.

Of the six (6) new studies evaluated to develop the revised emission factors, three (3) were requested as part of a Section 114 request and one (1) was required by a consent decree. These tests were performed to satisfy specific test requirements of those requests, and not in a manner appropriate for the data to be broadly applicable for the calculation of emission factors. Also, as requested by the Section 114 letters and consent orders, the operating conditions of the flares were modified during testing, including various levels of steam or air assistance, and did not represent typical flare operation. These modifications to flare operating conditions may have resulted in higher emissions as combustion efficiency was lowered.

GPA is also concerned the flare data on which the new factors were based was from one type of flare (steam-assisted) and only one type of facility in one industry sector (petroleum refineries) plus a test facility. The emission factors apply to many different facility types within oil and gas operations as well as other industry sectors; therefore, the studies used to develop the factor should be from diverse flare types and facilities.

Finally, the emissions data used by EPA appears to be unreliable for use in determining emission factors due to the analytical methods employed to collect and process the data. Specifically, the purpose of the study was to determine combustion efficiency, not quantify emissions. Additionally, the Passive Fourier Transform Infrared Spectroscopy (PFTIR) instrument was not calibrated for nitrogen oxide (NO) or nitrogen dioxide (NO_2), interference tests were not run, response times were not included, and there were no drift tests conducted. For these reasons, this data should not be used in an empirical analysis for the new emission factors.

Impact to Existing Minor Source Permits Nationwide

Performance testing for flares is not a simple or inexpensive task; therefore, most of the regulated community and flare manufacturers rely on the existing AP-42 emission factor to permit and demonstrate compliance with emission limits. As discussed above, the new

emission factors were derived using results from questionable methods at petroleum refineries that were part of a revision to other refinery factors. Refineries are large sources of air emissions and typically fall into major source categories for Title V and PSD programs. The change in the flare emission factors may have little effect on their permitting activities. However, the majority of midstream facilities with flares are minor sources and utilize flares as control devices to stay below major source thresholds. Increasing the NO_x emission factor by a factor of forty two (42) could result in hundreds of facilities becoming major sources. The increase in permit applications alone could result in a significant regulatory burden on both the regulatory authorities and the regulated community. If facilities chose to conduct performance tests to show lower NO_x or VOC emission rates for flares at their facilities rather than use the emission factors, the expertise and number of companies available to conduct these tests does not exist and the costs associated with these tests may be prohibitive. Additionally, performance testing is not an option for a new or modified flare that must be permitted prior to construction.

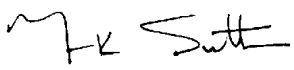
Summary and Suggested Path Forward

Due to the uncertainty in the data used to derive the new emission factors and the potential impact to the natural gas midstream sector described above, GPA respectfully recommends EPA to withdraw all proposed changes to AP-42 Section 13.5 for industrial flares, keep the existing factors and take the following actions:

- Determine new industrial flare emission factors using performance test data developed from properly designed studies in multiple industry segments.
- Consider determining separate factors for different flare types (steam assisted, air assisted, pressure assisted and non-assisted; enclosed and unenclosed), feed composition, and industrial applications.

Thank you for the opportunity to comment on the proposed emission factors. GPA is willing to further engage on this issue with EPA. Please contact me at (918) 493-3872 or msutton@GPAglobal.org if GPA can be of assistance.

Respectfully Submitted,



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