



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 3, 2011

Re: HRVOC Flare Special Inventory Request

Dear:

Your company or an affiliated subsidiary has been identified as a potential owner or operator of a flare that emits or has the potential to emit highly-reactive volatile organic compounds (HRVOC), as defined in Title 30 Texas Administrative Code (TAC) §115.10, and is subject to 30 TAC §115.725(d). In accordance with 30 TAC §101.10(b)(3) and §115.726(i), the Texas Commission on Environmental Quality (TCEQ) is requiring companies, including any affiliated subsidiaries, to provide the following emissions-related data for gas streams routed to applicable HRVOC flares for the following two periods during Calendar Year 2006: May 29 through July 2; and August 15 through October 11, and all of Calendar Year 2009.

- The one-hour block average exit velocity in feet per second, as required in §115.726(d)(4), may be calculated by dividing the one-hour block average volumetric flow rate as measured by the flow meter required by §115.725 (corrected to standard conditions, defined in §115.725(d)(1)), by the unobstructed cross-sectional area of the flare tip.
- The one-hour block average net heating value in British thermal units per standard cubic foot of the gas stream routed to the flare, as required in §115.726(d)(4). If the analyzer used to determine the net heating value measures concentrations on a dry basis, the net heating values need to be corrected for moisture, as per 40 Code of Federal Regulations §60.18(f)(3).
- The chemical composition sufficient to determine the molecular weight, including HRVOC, VOC and any other monitored constituents (e.g., CH₄, C₂H₆, CO₂, N₂, H₂) of the gas stream routed to the flare in one-hour average periods in accordance with §115.725 and as required in §115.726(d)(2).
- The following flare parameters: Emissions Point Number (EPN), flare diameter, flare height, maximum mass loading design capacity in pounds per hour, and the unobstructed cross-sectional area equivalent of the flare tip. Flare parameter data and information previously submitted to the TCEQ is not required, provided that none of the unique source identification parameters (e.g., FIN, EPN) have changed since the data was originally submitted to the TCEQ.

Further, for air- or steam-assisted flares, any information regarding the assist rate and configuration that is applicable for the time periods specified is also requested. While responses to these questions are strictly voluntary, you are strongly urged to provide this information to assist the TCEQ in developing more accurate baseline emissions to use in future ozone attainment demonstration SIP revisions. This information should include, but is not limited to:

- assist type;
- flare tip make and model;

- a detailed description of the assist design (for example, steam injection locations: lower, center, upper or other; air-assist fan operating parameters);
- all manufacturers' recommendations for operating the assist including the minimum and maximum assist rates, assist-to-vent gas ratio, or assist rate based on specific vent gas scenarios;
- measured assist flow rate, if available. Please include information about the type of meter and its range, including upper and lower error bounds;
- estimated assist flow rate, if no measurements are available. Please describe the method used to derive the estimate, including upper and lower bounds of the estimate. If no reliable estimates are possible, specify the flare tip manufacturers' minimum recommended assist rate; and/or
- any company standard or specific procedures concerning assist operation;

Additionally, if you have responded to, or are in the process of responding to, a Federal Clean Air Act Section 114 requirement to provide flare information to the U.S. Environmental Protection Agency, the TCEQ is requesting, on a voluntary basis, any of this information that is applicable for the time periods specified, is not duplicative of the above requested information, and could be used to estimate missing flare operating data¹.

The requested emissions-related data is due to the TCEQ within 120 days of the receipt of this request. If you cannot meet this deadline for any reason, please contact the TCEQ liaison as soon as possible to work out an alternative submission date, not to exceed 30 days beyond the 120-day deadline. The TCEQ has provided instructions and an example format for submitting the data at the following Web page: <http://www.tceq.texas.gov/airquality/point-source-ei/psei.html>. If you have any questions or difficulties, please contact the TCEQ liaison, designated at the Web page referenced above as soon as possible. The TCEQ will conduct a quality-assurance review process of the submitted data, which may result in a subsequent request for corrected and/or clarifying information. Corrected and/or clarifying information will be due to the TCEQ within 10 business days of receipt of the request.

Because the modeled attainment test for ozone is based on the predicted change from a baseline year to a future year, it is extremely important that the baseline year emissions be as accurate as possible. Therefore, the purpose of this request is to provide TCEQ with information to more accurately estimate historical flare emissions used in photochemical modeling to support federally required state implementation plan revisions. The TCEQ will use the requested information in conjunction with the findings of the TCEQ 2010 Flare Study, conducted by the University of Texas at Austin Center for Energy and Environmental Resources to better characterize historical (HRVOC) emissions. This request is not intended for evaluations of compliance or enforcement purposes, or for any specifically identified rulemaking. However, please be advised that the TCEQ does not foreclose the possible use of any submitted information where circumstances specifically warrant. Your responses will provide an essential component for improving the modeling baseline inventory.

The TCEQ is issuing this request at this time to help ensure the availability of the information for the two periods in Calendar Year 2006. Per the provision in §115.726(i), owners or operators are to maintain the required information for at least five years. You are not required to provide information that is more than five years old upon receipt of this letter, but your cooperation in maintaining this data until it can be provided to the TCEQ is greatly appreciated.

¹ For example, if the air or steam assist flow rate to a flare was not directly measured or estimated during the applicable time periods, but in response to the section 114 request, the typical air or steam assist pressure was provided, this information would be useful in estimating the assist flow rate. Additionally, flare operating data for the June 2006 time period may no longer be available, but if in response to the section 114 request, information was or is being provided that could be used to estimate the flare operating data for the June 2006 period, such as the monthly maximum, minimum and average hourly flare vent gas flow rate, this information would be useful in estimating the vent gas flow rate.

Any information that is considered to be confidential business information (CBI) should be clearly identified as such. Information not identified as CBI may be made available to stakeholders interested in conducting their own modeling.

Thank you for participating in this emissions-related data request and for helping the TCEQ obtain better characterization of air quality in Southeast Texas. Any questions or concerns about this request may be directed to Jim Smith, Ph.D. at (512) 239-1941, or Dick Karp at (512) 239-1462.

Sincerely,

A handwritten signature in black ink that reads "Susana M. Hildebrand". The signature is written in a cursive, flowing style.

Susana M. Hildebrand, P.E.
Chief Engineer
Texas Commission on Environmental Quality

JS/RK/vs

cc: Regional Air Section Manager