



**Michelle Lujan Grisham**  
Governor

**Howie C. Morales**  
Lt. Governor

## NEW MEXICO ENVIRONMENT DEPARTMENT

525 Camino de los Marquez, Suite 1  
Santa Fe, New Mexico 87505  
Phone (505) 476-4300 Fax (505) 476-4375  
[www.env.nm.gov](http://www.env.nm.gov)



**James C. Kenney**  
Cabinet Secretary

**Jennifer J. Pruett**  
Deputy Secretary

December 23, 2019

Ms. Carolyn Blackaller  
ETC Texas Pipeline LTD  
8111 Westchester Drive Suite 600  
Dallas TX 75225

Sent by electronic mail to: [Carolyn.blackaller@energytransfer.com](mailto:Carolyn.blackaller@energytransfer.com)

Subject: Request for Additional Information on Four-Factor Submittal Report under the Regional Haze Program

Dear Ms. Blackaller:

This letter is to request additional information and analysis that is required for the Jal No. 3 Gas Plant four-factor Analysis report dated October 30, 2019 and Supplemental Sections for flares dated December 4, 2019. Pursuant to [NMED's Regional Haze Guiding Principles](#), the four-factor analysis must consider new ideas that potentially offer better solutions to problems and must evaluate the newest engineering methods and technology advances in potential control measures.

Based on our initial review, the NMED requires additional information, analyses and clarifications on the Jal No. 3 Gas Plant four-factor analysis as follows:

1. Please provide the electronic spreadsheets used to determine the costs of control technologies for all sources subject to the four-factor analysis.
2. **Two Sour Gas Amine Sweetening Units, Existing and New**
  - a. Consider and discuss if there are more efficient sulfur recovery units (SRUs) that can replace the existing SRU at the facility, such as LO-CAT sulfur recovery technology. If technically feasible, complete and submit a four-factor analysis.
  - b. Include a discussion on the technical feasibility for redundant compression for the acid gas injection (AGI) system to reduce emissions from the two amine units' alternative controls, flare 9F and SRU/thermal oxidizer unit 9S. If technically feasible, include a four-factor analysis.
3. **Flaring:** Please provide the following information for the flare Units at the Jal No. 3 Gas Plant, 9F Startup, Shutdown & Maintenance (SSM) (SO<sub>2</sub>) and 10F Inlet SSM (NO<sub>x</sub> and SO<sub>2</sub>).
  - a. Provide a description of each flare and the design and type.
  - b. List and describe the reasons that trigger each type of flaring event. This is to identify and clarify the causes to help find potential solutions to reduce flaring emissions.

- c. Complete a review and include an analysis about how the entire facility and/or source specific operations can be improved to reduce the frequency of SSM flaring events. If it is not possible to make any improvements to the facility or its processes to reduce SSM flaring events, then please explain why.
  - d. Provide a description of the inlet scrubbers used to remove H<sub>2</sub>S in the inlet gas. What happens to the H<sub>2</sub>S that is removed at the inlet? Is this a similar technology to sulfur absorbent technology used to remove sulfur from pipelines and auxiliary equipment or a different technology?
  - e. Include a discussion of any potential alternative control options or operational changes that could reduce flaring NO<sub>x</sub> and/or SO<sub>2</sub> emissions, including but not limited to:
    - i. infrastructure that allows re-routing or recirculating the gas within the facility or outside of the facility until an SSM event is over;
    - ii. sulfur absorbent technology used to remove sulfur from pipelines and other auxiliary equipment to reduce inlet or plant flaring SO<sub>2</sub> emissions;
    - iii. Gas Capture Plans with facilities located downstream and upstream similar to those required for producers to better synchronize upstream and downstream services with Jal No. 3 Gas Plant;
    - iv. use of remote capture equipment; and
    - v. better infrastructure planning and changes to existing infrastructure that connects the downstream and upstream operations to ensure that there is adequate processing capacity to move produced gas to market.
  - f. For any technically feasible solutions, complete and submit a four-factor analysis. For additional information regarding potential alternative controls to flaring see the [New Mexico Methane Strategy](#) website.
4. **Engines:** Please provide the following information for engine unit numbers 4A and 5A that were evaluated in the factor-factor analysis for NO<sub>x</sub>.
- a. Please verify and provide documentation that control systems have not yet been developed for selective catalytic reduction (SCR) controls that can handle variable load engines. This appears to be one main reason that SCR has not been implemented on two-stroke lean burn (2SLB) internal combustion engines in oil and gas midstream operations.
  - b. The 2007 vendor quote provided for a previous installation of the low emissions controls (LEC), specifically CleanBurn™ technology designed for Cooper Bessemer engines, specifies a NO<sub>x</sub> emission level of 2 grams NO<sub>x</sub> per brake horsepower-hour (g/bhp-hr.). The four-factor analysis proposes 1 g/bhp-hr. NO<sub>x</sub> emission rate. What is the basis of the 1 g/bhp-hr. rate and how would the LEC specifications change to achieve it?
  - c. Please consider and include a discussion on the feasibility of replacing natural gas fueled engines with commercial electric powered compressors.
  - d. Consider Good Combustion Practices (GCP) and the routine maintenance as controls and provide the details how both would be achieved, including a maintenance schedule and procedures.

Please note that per EPA's Guidance on Regional Haze State Implementation Plans for the Second Implementation Period (August 20, 2019), "as part of meeting the requirement of the Regional Haze Rule for the state to document the cost and engineering information on which the State is relying every source-specific cost estimate used to support an analysis of control measure must be documented in the SIP". If you feel that your supplemental information should be classified as confidential business information (CBI), it will need to be reviewed and approved as such by NMED and EPA. Submit CBI with the word 'confidential' included in the electronic file name and on each page of the document. Do not combine non-confidential business information and CBI in the same files. Also, the claimant must satisfy the

conditions in 20.2.1.115.B(3)(a)-(d) NMAC when the CBI is submitted. Until NMED and EPA determines if the information qualifies as CBI, the information will not be disclosed to anyone other than those listed in 20.2.1.115 NMAC.

NMED respectfully requests that your company submit the additional information on four-factor analysis electronically as soon as possible to Mark Jones at [mark.jones@state.nm.us](mailto:mark.jones@state.nm.us) and myself at [kerwin.singleton@state.nm.us](mailto:kerwin.singleton@state.nm.us). Please contact NMED if you have questions about the additional information request. We encourage your questions in order to help expedite the technical analysis required under the Regional Haze Program. Staff would be happy to meet with you in person to discuss these requirements in more detail. Likewise, staff may further contact you with questions or require additional information during its review of your submittals.

Thank you for your assistance in this matter. If you have questions or need clarification, please contact me at (505) 476-4350, or Mark Jones at (505) 566-9746.

Sincerely,

Kerwin C. Singleton  
Planning Section Chief

xc: Sergio Guerra, GHD Services, [sergio.guerra@ghd.com](mailto:sergio.guerra@ghd.com)