

US EPA ARCHIVE DOCUMENT

Targa Gas Processing LLC, Longhorn Gas Plant
Prevention of Significant Deterioration Permit for Greenhouse Gas Emissions
PSD-TX-106793-GHG

Summary of Revisions in Final Permit

U.S. Environmental Protection Agency
June 2013

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I. Summary of the Formal Public Participation Process

The U.S. Environmental Protection Agency, Region 6 (EPA) proposed to issue a Prevention of Significant Deterioration (PSD) permit to Targa Gas Processing LLC (Targa), Longhorn Gas Processing Plant (LGP) on April 3, 2013. The public comment period on the draft permit began April 3, 2013 and closed on May 3, 2013. EPA announced the public comment period through a public notice published in the *Wise County Messenger* on April 3, 2013 and on Region 6's website. EPA also notified agencies and municipalities on April 3, 2013 in accordance with 40 CFR Part 124.

The Administrative Record for the draft permit was made available at EPA Region 6's office. EPA also made the draft permit, Statement of Basis and other supporting documentation available on Region 6's website and at the Decatur Public Library in Decatur, TX.

EPA's public notice for the draft permit also provided the public with notice of the public hearing. The public notice stated that "Any request for a public hearing must be received by the EPA either by email or mail by April 26, 2013, and must state the nature of the issues proposed to be raised in the hearing...*EPA maintains the right to cancel a public hearing if no request for a public hearing is received by April 26, 2013 or the EPA determines that there is not a significant interest. If the public hearing is cancelled, notification of the cancellation will be posted by May 6, 2013 on the EPA's Website <http://yosemite.epa.gov/r6/Apermit.nsf/AirP>. Individuals may also call the EPA at the contact number listed above to determine if the public hearing has been cancelled.*" EPA received one set of written comments during the draft comment period, and did not receive any written requests for a public hearing. EPA posted its announcement that there would not be a hearing on May 3, 2013.

II. EPA's Responses to Public Comments

This section summarizes the public comments received by EPA and provides our responses to the comments.

Comments Submitted by Targa Gas Processing LLC

1. **Comment:** Targa requests that EPN FUG-2, Truck Loading, be noted in Table 1 of the draft permit and be labeled as having negligible emissions. EPN FUG-2 had appeared in older working draft versions of the draft permit. The commenter states it is an emission point authorized in the TCEQ Standard Permit and represented in the GHG PSD permit application.

The commenter also states that the “the total GHG emission rates at the end of the table do not match the summation of the values in the table.”

Response: Although the TCEQ Standard Permit may include truck loading emissions in that authorization, the GHG PSD application did not provide, and we did not otherwise receive, numerical emissions data or calculations to support the listing of truck loading fugitive emissions in the permit. Accordingly, we do not think it is appropriate to list “EPN FUG-2” as an emission point or to characterize whether the emissions, if any, are negligible.

With regard to the totals provided for informational purposes at the end of Table 1, we verified that the totaled value of 229,173 tpy is accurate, and we note that it may be calculated by summing the numerical values in the table with the referenced limits in the footnotes.

2. **Comment:** Targa requests that the calculations of the heaters' BACT emission limit be changed from a 365-day rolling average to a 12-month rolling average. Condition IV.A. clearly states that records are required to be kept on a calendar month basis. Therefore, to make it clear that these are monthly calculations and to reduce the amount of data that must be recorded, Targa requests that the limit be calculated on a 12-month rolling average rather than a 365-day rolling average.

Response: While the annual tons per year limits in the permit are calculated on a 12-month rolling average, we are finalizing the permit with the 1783.23 CO₂ lb/MMscf- BACT limit for the three heaters (EPN 1, EPN 3, and EPN 4) through at 365-day rolling average. The commenter did not provide a technical basis for why this output-based limit for the heaters was technically inappropriate. The 365- day rolling allows for short term enforceability of a production-or operation-based limit while allowing for long-term data to be considered where production variation may occur. The 365-day rolling average will also ensure ongoing efficiency of the process. As further explained in the summary of revisions, we have revised the recordkeeping provisions in IV.E. of the final permit to reflect that the 12-month rolling average is for the facility emission limits with the exception of the 365-day rolling average BACT limit established for the reboilers/heaters (EPN 1, EPN 3, and EPN 4).

3. **Comment:** Targa requests that the condition on low-NO_x staged/quenching (flue gas recirculating, FGR) burners with burner management systems be changed to keep the burner management systems requirement, but to remove the requirement for low-NO_x staged/quenching (FGR) burners, which was not proposed as a technology to reduce GHG emissions in the application. The commenter further adds that this technology was not broached by EPA during the permit review process as a technology that should be included in the BACT analysis. The burner technology does not reduce GHG emissions for small heaters.

Targa has worked with Valerus, the engineering design company that designed the Longhorn Gas Plant, to evaluate the cost and energy efficiency improvements such a burner would have at the Longhorn Gas Plant. While all the heaters have burner management systems, the TEG Reboiler (EPN 1) and Regen Heater (EPN 3) are currently not designed with this burner technology. The Hot Oil Heater (EPN 4), however, meets this burner description.

Valerus has provided information regarding energy efficiency options for direct fired heaters (Regen Gas Heater) and fire tube heaters (TEG Reboiler) taken from the Gas Processors Association Engineering Data Book, 13th addition. There is no mention of low-NO_x staged/quenching (FGR) burners as an option for efficiency. Also, the manufacturer quotes on the heater modifications necessary to meet this requirement stated that there would be reduction in GHG emission rates for the heater. The maximum fired heat duty would remain the same.

Response: We agree that equipment that has not been demonstrated to reduce emissions (NO_x or GHGs) can be eliminated. The provision originally applied to all three heaters at the facility, the glycol reboiler (EPN 1), the molecular sieve regeneration heater (EPN 3), and the hot oil heater (EPN 4). However, the reboiler and regeneration heater are both very small (2 MMBtu/hr and 12 MMBtu/hr, respectively), and the proposed flue gas recirculation controls have not been demonstrated to be as effectively efficient on small combustion units.¹ Eliminating this provision for EPN 1 and EPN 3 will not cause an increase in GHGs or other pollutants. We have kept the requirement for EPN 4, however, because Targa has indicated that the hot oil heater will meet the descriptive requirement.

¹ Based on information provided by Targa and reviewed by EPA in the Gas Processors Association Engineering Data Book, 12th and 13th editions.

III. Revisions in Final Permit

The following is a list of administrative, technical and clarifying changes for *Targa LGP (PSD-TX-106793-GHG) Prevention of Significant Deterioration Permit, Final Permit Conditions*.

1. Cover Sheet

The cover sheet titled “Prevention of Significant Deterioration Permit for Greenhouse Gas Emissions Issued Pursuant to the Requirements at 40 CFR §52.21” has been modified as follows: the signature line has been changed from David F. Garcia, Acting Director to Wren Stenger, Director.

This administrative change is made as a result of a personnel change.

2. Heater Work Practice and Operational Requirements

Permit condition III.B.1.j. has been modified as follows: “The hot oil heaters (EPN 4) will be equipped with low-NO_x staged/quenching (flue gas recirculating) burners with burner management systems.”

This technical change is made as a result of public comments and additional analysis.

3. Recordkeeping Requirements

Permit condition IV.E. has been modified as follows: “For each calendar month, the Permittee will calculate the 12-month rolling GHG facility emission rates limits for comparison with the facility emissions found in Table 1, except a 365-day rolling average is required for the BACT- emission limit for EPN 1, EPN 3, and EPN 4.”

This clarifying change is made as a result of public comments.