

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
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DALLAS, TX 75202-2733

JUN 25 2012

Mr. Rex Prosser
Senior Director, EH&S Corporate
Copano Processing, LP
Two Allen Center
1200 Smith Street, Suite 2300
Houston, TX 77002

RE: Completeness Determination for Copano Processing, LP – Houston Central Gas Plant
Application for Greenhouse Gas Prevention of Significant Deterioration Permit for the
Cryogenic Plant

Dear Mr. Prosser:

This letter is in response to your June 5, 2012, application to the Environmental Protection Agency (EPA) for a Greenhouse Gas Prevention of Significant Deterioration permit. EPA received this application on June 6, 2012. After our initial review of your application and all supporting information, we have determined that this application is incomplete (40 CFR 124) and additional information is required to consider it complete. Enclosed is a list of additional information required.

Upon receipt of the additional information, we will review it for completeness. If complete, we will issue a completeness determination on the technical information of your application. The information requested is necessary for EPA to develop a Statement of Basis and rationale for the terms and conditions for a draft permits. As we develop our preliminary determination, it may be necessary for EPA to request additional clarifying or supporting information. If the supporting information substantially changes the original scope of the permit applications, an amendment or new application may be required.

Although not required as a part of our completeness determination, the EPA may not issue a final permit without determining its action will have no effect on threatened or endangered species and their designated critical habitat or until it has completed consultation under Section 7 of the Endangered Species Act (16 USC 1536). In addition, the EPA must undergo consultation pursuant to Section 106 of the National Historic Preservation Act (16 USC 470f). To expedite these consultations, the EPA requests that permit applicants provide a Biological Assessment and a cultural resources report covering the project and action area to the EPA.



If you have any questions concerning the review of your application, please contact Aimee Wilson of my staff at (214) 665-7596.

Sincerely yours,

Carl E. Edlund, P.E.
Director
Multimedia Planning and
Permitting Division

cc: Mr. Mike Wilson, P.E., Director
Air Permits Division
Texas Commission on Environmental Quality

ENCLOSURE

EPA Comments on Copano Processing Greenhouse Gas Prevention of Significant Deterioration Permit Application for Houston Central Gas Plant Dated June 5, 2012

General

- 1) The permit application does not propose any compliance monitoring for the combustion turbines, heaters, regenerative thermal oxidizer, and flare. EPA requests that Copano propose its preferred monitoring, recordkeeping, and reporting strategy to ensure enforceability of the BACT requirements pursuant to 40 CFR Section 52.21(n). For the two combustion turbines, heaters and the regenerative thermal oxidizer, we are currently assuming that Continuous Emission Monitoring System (CEMS) is the preferred method followed by parametric fuel monitoring with emission factors, etc.

BACT Analysis

- 2) BACT limits for GHG emission units should be output based limits preferably associated with the efficiency of individual emission units. Please propose short-term emission limitations or efficiency based limits for emission sources in the application. For the emission sources where this is not feasible, please propose an operating work practice standard. Please provide detailed information that substantiates any reasons for infeasibility of an output based limit.
- 3) Copano provides a five-step BACT analysis for the turbines and heaters. Copano selected the use of high efficiency turbines and heaters as BACT. The application does not give the efficiency of the models of turbines and heaters selected. Please provide comparative benchmark data for the combustion turbines and heaters evaluated. In order to support the selection of the proposed combustion turbine and heater models, please supplement this comparative analysis with additional data that includes production output, gross heat rate, and percent efficiency of each existing or similarly designed combustion turbines evaluated as part of the BACT analysis.
- 4) Does the waste gas going to the regenerative thermal oxidizer (RTO) contain methane? If yes, what is the destruction removal efficiency (DRE) of the RTO for methane? Will the waste gases have a gas composition analyzer? Also, the applicant should provide comparative benchmark data to indicate other similar industry operating or designed units and compare the DRE of this process to other similar or equivalent processes to supplement the BACT analysis.
- 5) Please provide efficiency or output based benchmarking information related to the flare. Does the LL Treater flash gas combusted by the flare contain methane? If yes, what is the DRE of the flare for methane? Is the flare air assisted, steam assisted, or unassisted?

- 6) For the process fugitives BACT, on page 6-15, it is stated that the applicant will implement the TCEQ 28M Leak Detection and Repair (LDAR) program. Will an enhanced 28M program which would include instrumented monitoring for methane (CH₄) be utilized? Also, it does not appear that Copano considered the TCEQ 28LAER program as an available control option for reducing fugitive emissions and leaks as part of its BACT analysis. Did the BACT analysis consider 28LAER as the highest available control option? If not, why? Please further refine the BACT analysis for fugitive emissions.

Emission Calculations

- 7) In Appendix A, the table A-2 titled “Regenerative Thermal Oxidizer Emissions,” please provide an explanation of the calculations used to determine the annual GHG emissions. Were equations W-39a, W-39b, and W-40 from 40 CFR Part 98 Subpart W used? If not, please provide detailed emission calculations and justification. Are metered fuel flow measurements available for these units?
- 8) In Appendix A, the table A-3 titled “LL Treater Flash Gas Flaring,” please provide an explanation of the calculations used to determine the annual GHG emissions. Were emissions calculated using 40 CFR Part 98 Subpart W §98.233(n), using equations W-19, W-20, W-21, and W-40? If not, please provide detailed emission calculations and justification. Are metered fuel flow measurements available for this unit?

Additional Impacts Analysis

- 9) 40 C.F.R. Part 52.21(o), Additional Impact Analyses, requires an applicant to provide an analysis of the impairment to the soils and vegetation that would occur as a result of the modification that include all regulated pollutants and not just GHG. Please provide an assessment to support this requirement.