

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

DEC 20 2012

Ms. Patricia Outtrim
Vice President, Government and Regulatory Affairs
Cheniere Energy - Cheniere Corpus Christi Pipeline, L.P.
Sinton Compressor Station
700 Milam Street, Suite 800
Houston, TX 77002

RE: Application Completeness Determination for Cheniere Corpus Christi Pipeline, L.P.
Greenhouse Gas Prevention of Significant Deterioration Permit
Sinton Compressor Station

Dear Ms. Outtrim:

The EPA has reviewed your Greenhouse Gas (GHG) Prevention of Significant Deterioration (PSD) permit application for Cheniere Corpus Christi Pipeline, L.P. which was received by the EPA on September 4, 2012, including supporting documentation. EPA has determined that your application is incomplete at this time. A list of the information needed from you so that the EPA can continue its completeness review is enclosed (see Enclosure). Please notify us if a complete response is not possible by January 14, 2013.

The requested information as stated in the Enclosure is necessary for EPA to develop a Statement of Basis and Rationale for the terms and conditions for the requisite permit. 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 application, an amendment or new application may be required.

The EPA may not issue a final permit without determining that: 1) there will be no effects on threatened or endangered species or their designated critical habitat, or 2) until it has completed consultation under Section 7(a)(2) of the Endangered Species Act (ESA) (16 USC § 1536). In addition, the EPA must undergo consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) (16 USC § 470f) and Section 305 of the Magnuson-Stevens Fisheries Conservation and Management Act (16 USC § 1855 (b)(2)). In accordance with the Energy Policy Act of 2005, the Federal Energy Regulatory Commission (FERC) is the lead agency for federal authorization for Cheniere's proposed Corpus Christi LNG and Pipeline Project. FERC is undergoing National Environmental Policy Act (NEPA) review and will prepare an Environmental Impact Statement (EIS) for the project. EPA is a Cooperating Agency to that review and will coordinate with FERC as required. EPA intends to rely on the ESA, NHPA, and Magnuson Stevens Act reviews and consultations conducted as a part of that EIS to fulfill EPA's responsibilities under those statutes for issuance of the GHG PSD permit.

If you have any questions concerning the review of your application, please contact Melanie Magee of my staff at (214) 665-7161 or magee.melanie@epa.gov.

Sincerely yours,



David F. Garcia
Acting Director
Multimedia Planning and
Permitting Division

ENCLOSURE
EPA Completeness Comments
Cheniere Energy – Cheniere Corpus Christi Pipeline, L.P.
Application for Greenhouse Gas Prevention of Significant Deterioration Permit
Sinton Compressor Station

1. On page 2 of the permit application, it is stated that “The proposed Sinton project has the potential to emit greater than 100,000 tons per year (tpy) CO₂e. As such, a concurrent GHG permit is being submitted to EPA Region 6. As the facility is a new major source for PSD purposes, all proposed criteria pollutants emitted in amounts greater than or equal to the PSD significance emission rate (SER) are subject to PSD review...As a result of the required PSD permitting due to the levels of GHG emissions, the following pollutants are also subject to PSD review: NO_x, CO, PM, PM₁₀ and PM_{2.5}.” Concurrent with the filing of this application, Corpus Christi Pipeline (CCPL) is filing a PSD and state NSR application with the TCEQ, proposing that the TCEQ perform PSD review for NO_x, CO, PM, PM₁₀, and PM_{2.5}.”

Since EPA is the permitting agency for GHG PSD permits in Texas, we are of the opinion that EPA is also the permitting authority for those criteria pollutants above the significant level once PSD is triggered solely to GHG emissions. We are in discussions regarding this matter with Texas. However, until the State makes a decision and we reach an alternative approach, EPA expects you to submit the applicability calculations with a five-step top down BACT analyses for the significant criteria pollutant(s) to EPA and you to consult with us on preparation and submission of air quality analyses to satisfy the requirements of 52.21(k), (m), (o) and (p), as may be applicable. We are sending this comment now before our discussions are completed with the State to avoid delay in the processing of your application.

2. On page 2 of the permit application and other locations where the turbine is discussed, it is stated that the Sinton Compressor Station proposes “Two (2) 20,794 horsepower (15.5) MW) Solar Titan 134-20502S natural gas-fired turbines or its equivalent will be used to compress the natural gas for onward transport through the Corpus Christi Pipeline. One (1) 1,328 horsepower (0.99 MW) Waukesha VHP5904LTD natural gas-fired standby generator or its equivalent will also be located on-site for backup power supply.” Please explain what is meant by “or equivalent”. Is CCPL proposing a different Titan 134 and Waukesha or different manufacturer and model? If so, please supplement your BACT analysis with the additional turbine technical data that is being considered by Cheniere.
3. Two PSD permit applications for GHG emissions were submitted to the EPA for construction of new units at Cheniere Corpus Christi Liquefaction and Cheniere Corpus Christi Pipeline – Sinton Compressor Station. EPA is seeking supplemental information to assist in understanding your operations, evaluating the source determination for Cheniere’s applications, and developing a comprehensive GHG PSD permit for Cheniere Corpus Christi Pipeline, L.P. Sinton Compressor Station. It is also recommended that the information provided be in a form that can be released to the public, in the event we rely upon such information in our source determination. Please provide, at a minimum, the information requested below. However, feel free to provide other information beyond that requested below, if you deem it necessary to describe the stationary source. Please provide a more detailed description of operations at the Sinton Compressor Station facility. Where does the natural gas from the Sinton Compressor Station move to next in the natural gas pipeline? Is the Corpus Christi Liquefaction project solely reliant upon natural gas

received from the Sinton Compressor Station? Could the Sinton Compressor Station or Corpus Christi Liquefaction operate without the support of the other facility? Please provide any flow diagrams showing how the two facilities are interconnected and why the two projects should not be aggregated for PSD permitting.

4. Being mindful of EPA's PSD and Title V Permitting Guidance for GHG dated March, 2011, of page 17 which states the following:

"The CAA and corresponding implementing regulations require that a permitting authority conduct a BACT analysis on a case-by-case basis, and the permitting authority must evaluate the amount of emissions reductions that each available emissions-reducing technology or technique would achieve, as well as the energy, environmental, economic and other costs associated with each technology or technique. Based on this assessment, the permitting authority must establish a numeric emissions limitation that reflects the maximum degree of reduction achievable for each pollutant subject to BACT through the application of the selected technology or technique. However, if the permitting authority determines that technical or economic limitations on the application of a measurement methodology would make a numerical emissions standard infeasible for one or more pollutants, it may establish design, equipment, work practices or operational standards to satisfy the BACT requirement."

In addition to the proposed tons per year emission limit provided in the permit application, please propose output based or efficiency based limits for all GHG emission sources (e.g., lb or ton CO₂/MMBtu). Please provide an analysis that substantiates any reasons for infeasibility of a numerical emission limitation. For the emission sources where numerical emission limitations are infeasible, please propose an operating work practice standard that can be practically enforceable.

5. Will the proposed condensate storage tank (EPN: TK-0001) emit or have the potential to emit GHG emissions? Also, will there be GHG emissions associated with the truck loading operations (EPN: TRKLD)? If so, please supplement BACT analysis to include these storage tanks and emission calculations.
6. In Section B.4 of the permit application, it is stated in the GHG BACT that the equipment associated with the project will be outfitted with the best available engineering design and with the latest available technology to ensure energy efficiency. Please provide supplemental benchmark comparison data pertaining to energy efficiency and performance of the proposed turbine and generator to similar sources in similar industries. What operating parameters will be monitored to assure proper combustion? Please provide a monitoring, recordkeeping and compliance strategy for the proposed equipment.
7. In Appendix C "Turbine and Engine Specs", it appears as though incorrect "Predicted Emission Performance" and "Predicted Engine Performance" specification sheets were submitted for the proposed 20,794 horsepower Solar Titan 134-20502S gas turbine. Please check the application to determine whether the correct specification sheets were submitted or provide the correct specification sheets for the proposed Solar Titan turbine.

8. In the Emission Calculations section of the application, please provide supporting data that discusses the process simulation used and the assumptions and rationale used to calculate the emissions for each blowdown event.
9. In the Section B.4.2.3 and B.4.3.4 of the permit application, the CO₂ and CH₄ BACT Analysis states that “no additional controls are being proposed for the blowdown stacks.” Were any operating practices evaluated that could be utilized to reduce emissions when taking compressors off-line such as keeping compressor pressurized when off-line, connecting blowdown vent line to fuel gas system, etc.? Please provide supplemental data that discusses the feasibility of utilizing blowdown recovery for the proposed project.
10. Please provide the fugitive component count, service and emission calculations.