

US EPA ARCHIVE DOCUMENT



August 6, 2012

Ms. Aimee Wilson  
U.S. EPA Region 6, 6PD  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

RE: Revised Application for a Prevention of Significant Deterioration Air Quality Permit for Greenhouse Gas Emissions  
La Paloma Energy Center, LLC  
Harlingen, Cameron County, Texas

Ms. Wilson:

In response to your comments in emails dated July 18, 19, and 20, 2012, Zephyr Environmental hereby submits a revised application for a Prevention of Significant Deterioration (PSD) air quality permit for greenhouse gas emissions for the construction of a new natural gas fired combined cycle electric generating plant, La Paloma Energy Center, to be located in Harlingen, Cameron County, Texas.

Your comments are repeated below with a response:

1. Appears to be a typo on the CCS cost chart on page 47. Also, can you provide the cost of the pipeline that would be needed to transport the CO<sub>2</sub>? Where is the annualized cost of CCS?

I reviewed the CCS cost chart but did not find a typo. The estimated construction cost for a pipeline needed to transport the CO<sub>2</sub> for a distance of 15 miles is approximately \$12,400,000. The 15 mile length is a hypothetical length, assuming that the nearest enhanced oil recovery reservoir site has some potential for long term geologic storage of CO<sub>2</sub>. The annualized cost for the pipeline has been added to the CCS cost chart on page 48 of the attached revised application.

2. For the boiler efficiency - How will this be monitored? What measurements and calculations will be used to ensure the boiler maintains a thermal efficiency of 80%?

We provided the 80% efficiency estimate in response to your request for an estimated efficiency for benchmarking purposes but we did not propose it as a permit BACT limit. The efficiency of the boiler will be maintained by following manufacturer's recommendations for maintenance and operation of the boiler.

3. I'm going to need you to revise the BACT analysis to not eliminate CCS until step 4. It is easier for us to defend elimination of CCS on economic and environmental impacts

The economic discussion for CCS has been moved to Step 4 of the BACT analysis in the attached revised application.

4. How much water will the facility use of reclaimed water per day? What is the maximum capacity of reclaimed water that can be provided daily?

Discussion of the water usage of reclaimed water is addressed in Section 5.1.2.1 of the attached revised application.

Should you have any questions regarding this revised application, please contact me by email at [lmooon@zephyrenv.com](mailto:lmooon@zephyrenv.com) or by telephone at 512-879-6619 or Ms. Kathleen Smith at [ksmith@coronado-ventures.com](mailto:ksmith@coronado-ventures.com) or by telephone at 281-253-4385.

Sincerely,  
ZEPHYR ENVIRONMENTAL CORPORATION



Larry A. Moon, P.E.  
Principal

Enclosure

cc: Mr. Mike Wilson, P.E., Director, Air Permits Division, TCEQ  
Ms. Kathleen Smith, Coronado Ventures

The revised application was attached. It was replaced by a more recent revised application that is included in this public notice package.