

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

NOV 27 2013

Mr. Jim Welniak
Vice President Engineering
Tenaska Brownsville Partners, Tenaska Brownsville Generating Station
1044 N. 115 Street, Suite 400
Omaha, Nebraska 68154-4446

RE: Application Completeness Determination for Tenaska Brownsville Generating Station
Greenhouse Gas (GHG) Prevention of Significant Deterioration Permit
Brownsville, Cameron County, Texas

Dear Mr. Welniak:

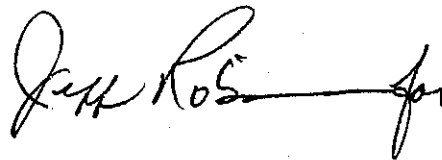
The EPA has reviewed your Greenhouse Gas (GHG) Prevention of Significant Deterioration (PSD) permit application, including supporting documentation, for the Tenaska Brownsville Partners LLC, Brownsville Generating Station that was received by the EPA on February 15, 2013, and determined that your application 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 December 16, 2013.

The requested information is necessary for EPA to develop a Statement of Basis and Rationale for the terms and conditions for any proposed 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 (16 USC § 1536). In addition, the EPA must undergo consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) (16 USC § 470f). As a reminder, NHPA implementing regulations require that EPA provide information to the public with an opportunity for participation in the Section 106 process. 36 CFR § 800.2(d). If you have not already submitted the Biological Assessment and Cultural Resources Reports that you have agreed to prepare for EPA, we look forward to receiving these reports and continuing to work with you to comply with these statutes.

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

Sincerely yours,

A handwritten signature in black ink, appearing to read "Tom Diggs" with a stylized flourish at the end.

Thomas H. Diggs
Associate Director
Air Programs Branch

Enclosure

Enclosure
EPA Completeness Comments for Tenaska Brownsville Partners LLC
Application for Greenhouse Gas Prevention of Significant Deterioration Permit
Tenaska Brownsville Generating Station

1. On page 11 of the permit application, Tenaska proposes the installation of a fuel gas heater. Please provide supplemental data that discusses the rationale, including any plant efficiency gains, for utilizing the proposed natural gas fuel heater. What are the upstream and downstream emission effects associated with the use of fuel gas heater?
2. On page 30 of the permit application in Table 10.1, Tenaska has proposed annual tons per year GHG BACT emission limits for the fuel gas heater and the auxiliary boiler. Please provide an output-based BACT emission limit, or a combination of an output- and input-based limit, or an equipment efficiency-based limit of transferring heat. If a numerical emission limit or an efficiency-based limit is not feasible, please provide a rationale to support this determination. Also, please provide a proposed compliance methodology to support an output based BACT numerical limit.
3. Please provide the load efficiency curves for the proposed combustion turbine model.
4. On page 42 of the permit application the application proposes a 3.3% design margin, a 6% reasonable degradation margin, and a 3% degradation margin for the auxiliary equipment. Please provide a basis and supplemental manufacturer's documentation to substantiate these proposed margins.
5. On page 32 of the permit application, it is stated that Tenaska's BACT analysis of carbon capture sequestration (CCS) is based on the capture of 85 to 90 percent of the CO₂ emitted from the plant using the Fluor Econamine FG Plus (amine-based) technology. Please provide the supplemental documentation and calculations to support the cost estimates presented in Table C-2. Please provide the site-specific facility data to evaluate and eliminate CCS. This includes detailed information on the necessary equipment for capture, transportation, and storage. Please provide the separate the costs for construction, annual operation, and maintenance for a CCS system.