

July 7, 2014

**VIA FEDERAL EXPRESS**

Bridget C. Bohac  
Office of the Chief Clerk, MC 105  
Texas Commission on Environmental Quality  
12100 Park 35 Circle  
Austin, Texas 78753

Fulbright & Jaworski LLP  
300 Convent Street, Suite 2100  
San Antonio, Texas 78205-3792  
United States

Direct line +1 210 270 7121  
tom.countryman@nortonrosefulbright.com

Tel +1 210 224 5575  
Fax +1 210 270 7205  
nortonrosefulbright.com

Re: **SUPPLEMENT TO APPEAL OF PURPORTED NEGATIVE USE DETERMINATION**  
Use Determination Application No. 07-11971  
TCEQ Docket No. 2008-0832-MIS-U  
Borger Energy Associates, LP  
Blackhawk Station  
Borger (Hutchinson County)  
Our reference: 11208289

TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY  
JUL - 8 PM 3:01  
CHIEF CLERKS OFFICE

Dear Ms. Bohac:

We represent Borger Energy Associates, LP ("Borger"), the applicant in the above-referenced matter. Please file the following document as a Supplement to be incorporated into Borger's Appeal of Purported Negative Use Determination previously filed in the subject matter on June 24, 2014:

Affidavit of David Baugh in Supplement of Appeal and Record, including:

1. Borger Energy Associates, LP's Application for Use Determination for Pollution Control Property dated March 26, 2008;
2. Borger Energy Associates, LP's Response to Appeal of Executive Director's Use Determination dated December 5, 2008;
3. Borger Energy Associates, LP's Appeal of Purported Negative Use Determination / Notice of Appeal dated July 31, 2012;
4. Response Brief of Appellant Borger Energy Associates, LP dated October 26, 2012;
5. Borger Energy Associates, LP's Supplemental Application dated June 20, 2013; and
6. Borger Energy Associates, LP's Second Supplemental Use Determination Application dated March 6, 2014.

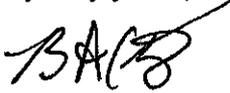
Please also see that these voluminous are electronically posted to TCEQ Docket No. 2008-0832-MIS-U.

Bridget C. Bohac  
July 7, 2014  
Page 2

 NORTON ROSE FULBRIGHT

If you have any questions, please contact me at 210-270-7121.

Very truly yours,



Thomas A. Countryman,  
*Senior Counsel*

TAC/mg  
Enclosures

**TCEQ DOCKET NO. 2008-0832-MIS-U**

**IN THE TEXAS COMMISSION ON ENVIRONMENTAL  
QUALITY**

**APPEAL OF THE EXECUTIVE DIRECTOR'S NEGATIVE USE  
DETERMINATION ISSUED TO BORGER ENERGY ASSOCIATES, LP  
FOR THE BLACKHAWK COGENERATION FACILITY**

**USE DETERMINATION APPLICATION NO. 07-11971**

**AFFIDAVIT OF DAVID BAUGH IN  
SUPPLEMENTATION OF APPEAL RECORD**

**FULBRIGHT & JAWORSKI L.L.P.**

Edward Kliewer III

State Bar No. 11570500

Thomas A. Countryman

State Bar No. 04888100

Rosemary Kanusky

State Bar No. 00790999

300 Convent, Suite 2200

San Antonio, Texas 78205

Telephone: 210.224.5575

Telecopier: 210.270.7205

*Counsel for Appellant, Borger Energy Associates, LP*

STATE OF TEXAS )  
 )  
COUNTY OF HARRIS )

BEFORE ME, the undersigned authority, personally appeared DAVID BAUGH, a person known by me to be fully competent and qualified in all respects to make this Affidavit, who, after being by me first duly sworn, deposed as follows:

INTRODUCTION

1.

I am over twenty-one (21) years of age, of sound mind, and have never been convicted of a felony or other crime involving moral turpitude. I am fully competent, authorized and qualified to make this Affidavit on behalf of Borger Energy Associates, LP (“Borger”). This Affidavit is based upon my own personal knowledge gained while working for Borger and with its attorneys in directing and contributing to Borger’s Application (as supplemented) for a Positive Use Determination (“Supplemented Application”) from the Texas Commission on Environmental Quality (“TCEQ”) for Borger’s Heat Recovery Steam Generators (“HRSGs”) at the Blackhawk Station in Hutchison County, Texas, and in responding to various briefing of the TCEQ’s General Counsel’s office (“General Counsel”) and various Notices of Deficiency provided by the Staff (“Staff”) of the TCEQ’s Executive Director concerning the Supplemented Application.

2.

To specifically supplement Borger’s previously-filed appeal herein of Staff’s most recent Negative Use Determination of the Supplemented Application, and assure inclusion of the following in the record of this controversy and in Borger’s appeal, attached are true and correct copies of each of the following documents. Each of the following were previously provided, as applicable, to the Executive Director’s Staff at TCEQ in relation to the prosecution of the Supplemented Application and/or filed previously under the above TCEQ appeal Docket Number in response to prior, related briefing of TCEQ’s General Counsel:

1. Borger Energy Associates, LP’s Application for Use Determination for Pollution Control Property dated March 26, 2008;
2. Borger Energy Associates, LP’s Response to Appeal of Executive Director’s Use Determination dated December 5, 2008;
3. Borger Energy Associates, LP’s Appeal of Purported Negative Use Determination / Notice of Appeal dated July 31, 2012;
4. Response Brief of Appellant Borger Energy Associates, LP dated October 26, 2012;
5. Borger Energy Associates, LP’s Supplemental Application dated June 20, 2013; and

6. Borger Energy Associates, LP's Second Supplemental Use Determination Application dated March 6, 2014.

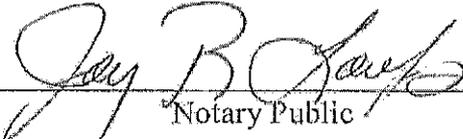
Each of above-described documents, as amended and supplemented by the later filings referenced above (collectively, the "Record Documents"), are expressly incorporated by reference into and made a part of Borger's Appeal of Purported Negative Use Determination previously filed in this matter on June 24, 2014.

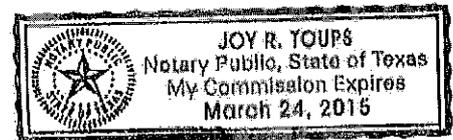
3.

The calculations and factual statements related to Borger's operations, emissions, costs, revenues and its HRSGs and their pollution control function contained in the Record Documents identified above, as ultimately amended and supplemented, are true and correct.

SUBSCRIBED AND SWORN TO BEFORE ME, the undersigned authority, on this, the \_\_\_ day of July, 2014.

  
\_\_\_\_\_  
DAVID BAUGH, Affiant

  
\_\_\_\_\_  
Notary Public





**TCEQ DOCKET NO. 2008-0832-MIS-U**

**IN THE TEXAS COMMISSION ON ENVIRONMENTAL  
QUALITY**

**APPEAL OF THE EXECUTIVE DIRECTOR'S NEGATIVE USE  
DETERMINATION ISSUED TO BORGER ENERGY ASSOCIATES, LP  
FOR THE BLACKHAWK COGENERATION FACILITY**

**USE DETERMINATION APPLICATION No. 07-11971**

**BORGER ENERGY ASSOCIATES, LP'S  
SUPPLEMENT TO APPEAL OF PURPORTED  
NEGATIVE USE DETERMINATION**

**FULBRIGHT & JAWORSKI L.L.P.**

Edward Kliewer III

State Bar No. 11570500

Thomas A. Countryman

State Bar No. 04888100

Rosemary Kanusky

State Bar No. 00790999

300 Convent, Suite 2200

San Antonio, Texas 78205

Telephone: 210.224.5575

Telecopier: 210.270.7205

*Counsel for Appellant, Borger Energy Associates, LP*



DUFF & PHELPS

*Dennis Deegear*  
*Vice President*  
*Phone: (512) 671-5523*  
*dennis.deegear@duffandphelps.com*

March 26, 2008

TCEQ - Cashiers Office MC-214  
Building A  
12100 Park 35 Circle  
Austin, Texas 78753

Subject: Application for Use Determination for Pollution Control Property  
Blackhawk Station - 119 N. Spur Co-Gen Place Borger, TX 79008

Enclosed please find one application (the "Application") for property tax exemptions for certain qualifying pollution control property at the Blackhawk Station Project (the "Facility") in Hutchinson County, Texas.

Pursuant to Title 30 of Chapter 17 of the Texas Administrative Code, the Application has been prepared using the Texas Commission on Environmental Quality ("TCEQ") Application for Use Determination for Pollution Control Property. The enclosed application is a Tier IV Application.

Submission of this Application is required as a process step in the TCEQ's pollution control certification process for tax exemption of certain assets used in pollution control capacities within the Facility. As outlined by the application instructions, the fee for this Tier IV Application is \$500. Enclosed please find a check for \$500 for the Application processing.

The Application can be summarized as follows:

Property	Description	Estimated Cost
Tier IV	See Attached Schedule	\$13,906,514

Please send one copy of the completed property tax exemption Use Determination to the following address:

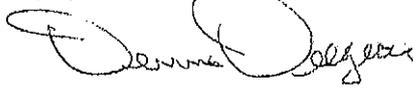
Duff and Phelps LLC  
c/o Dennis Deegear  
919 Congress Ave.  
Suite 1450  
Austin, TX 78701

If you have any questions regarding the Application or the information supplied with these Application, please contact Dennis Deegear of Duff & Phelps, LLC at (512) 671-5523 or e-mail at [dennis.deegear@duffandphelps.com](mailto:dennis.deegear@duffandphelps.com).

Very truly yours,

DUFF & PHELPS, LLC

Signature:



Name:

Dennis Deegear

Title:

Vice President

Enclosures

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
APPLICATION FOR USE DETERMINATION  
FOR POLLUTION CONTROL PROPERTY

2008 MAY 23 AM 8:4  
831771 E 288  
CHIEF CLERKS OFFICE

The TCEQ has the responsibility to determine whether a property is a pollution control property. A person seeking a use determination for pollution control property must complete the attached application or use a copy or similar reproduction. For assistance in completing this form refer to the TCEQ guidelines document, *Property Tax Exemptions for Pollution Control Property*, as well as 30 TAC §17, rules governing this program. For additional assistance please contact the Tax Relief for Pollution Control Property Program at (512) 239-3100. The application should be completed and mailed, along with a complete copy and appropriate fee, to: TCEQ MC-214, Cashiers Office, P.O. Box 13088, Austin, Texas 78711-3088.

1. GENERAL INFORMATION

A. What is the type of ownership of this facility?

- Corporation  Sole Proprietor  
 Partnership  Utility  
 Limited Partnership  Other

B. Size of company: Number of Employees

- 1 to 99  1,000 to 1,999  
 100 to 499  2,000 to 4,999  
 500 to 999  5,000 or more

C. Business Description: Combination Electric and Other Utility (4931)

2. TYPE OF APPLICATION

- Tier I \$150 Application Fee  Tier III \$2,500 Application Fee  
 Tier II \$1,000 Application Fee  Tier IV \$500 Application Fee

NOTE: Enclose a check, money order to the TCEQ, or a copy of the ePay receipt along with the application to cover the required fee.

3. NAME OF APPLICANT

- A. Company Name: Borger Energy Associates, LP  
B. Mailing Address (Street or P.O. Box): 7001 Boulevard 26 Suite 310  
C. City, State, ZIP: North Richland Hills, Texas 76180

4. PHYSICAL LOCATION OF PROPERTY REQUESTING A TAX EXEMPTION

- A. Name of facility: Blackhawk Station  
B. Type of Mfg Process or Service: Combination Electric and Other Utility (4931)  
C. Street Address: 119 N. Spur Co-Gen Place  
D. City, State, ZIP: Borger, TX 79008  
E. Tracking Number Assigned by Applicant: DPBlackhawk B  
F. Customer Number or Regulated Entity Number: N/A

5. APPRAISAL DISTRICT WITH TAXING AUTHORITY OVER PROPERTY

- A. Name of Appraisal District: Hutchinson  
B. Appraisal District Account Number: 990 (1000, 1010, 1100, 1120, 1140, 1160, 1180, 1200, 1220, 1240)

6. CONTACT NAME (must be provided)

A. Company/Organization Name: Duff and Phelps LLC  
B. Name of Individual to Contact: Dennis Deegear  
C. Mailing Address: 919 Congress Ave. Suite 1450  
D. City, State, ZIP: Austin, TX 78701  
E. Telephone number and fax number: (512) 671-5523 Fax (512) 671-5501  
F. E-Mail address (if available): dennis.deegear@duffandphelps.com

7. RELEVANT RULE, REGULATION, OR STATUTORY PROVISION

Please reference Section 8. Each item is detailed with the proper statute, regulation, or environmental regulatory provision.

8. DESCRIPTION OF PROPERTY

Background

Blackhawk Station is a 225 MW cogeneration facility located in Borger, Texas owned by Borger Energy Associates LP. Blackhawk Station's design incorporates two Siemens 501D5A gas turbines, and two Deltak HRSGs. The exhaust from the combustion turbines is directed to the HRSGs where the thermal energy in the exhaust gases is recovered to generate steam. The high pressure steam produced in the HRSGs is exported to the adjoining Wood River Borger Refinery. Natural Gas serves as the fuel for each gas turbine.

Overview of Cogeneration Technology

The Facility is a cogeneration plant that consists of two gas-fired Combustion Turbines ("CTs") equipped with heat recovery steam generators (HRSG's) to capture heat from the turbine exhaust. Steam produced in the HRSG's provides steam for production purposes to the Facility's steam host, Wood River Borger Refinery LLC. Use of the otherwise wasted heat in the turbine exhaust gas results in higher plant thermal efficiency compared to other power generation technologies.

Combined heat and power (CHP) plants are often equipped with a steam turbine and have the added flexibility over a cogeneration plant to generate additional electricity if needed or sell its steam directly to an industrial facility commonly referred to as a "steam host". Additional efficiency is gained in CHP and cogeneration applications by using steam from the steam generator to serve direct thermal loads. Though increasing overall thermal efficiency, the choice of using steam for these applications instead of powering a steam-driven turbine reduces the electrical output of the plant.

The following overview describes technology that is common to both cogeneration and CHP electric power generation facilities. The significant difference between the two types of facilities is the use of the thermal energy generated by the combustion turbines. Because Blackhawk does not have a steam turbine and uses its thermal energy to supply steam to the Wood River Borger Refinery any portion of the

overview relating to steam turbine power generation does not apply to this facility.

The Brayton cycle is a constant pressure thermodynamic cycle that converts heat from combustion into work. A Brayton-engine, as it applies to a gas turbine system, will consist of a fuel or gas compressor, combustion chamber, and an expansion turbine. Air is drawn into the compressor, mixed with the fuel, and ignited. The resulting work output is captured through a pump, cylinder, or turbine. Cogeneration systems typically make use of the waste heat from Brayton engines for steam production.

The Rankine cycle is a thermodynamic cycle that converts heat from an external source into work. In a Rankine cycle, external heat from an outside source is provided to a fluid in a closed-loop system. This fluid, once pressurized, converts the heat into work output using a turbine. The fluid most often used in a Rankine cycle is water (steam) due to its favorable properties, such as nontoxic and unreactive chemistry, abundance, and low cost, as well as its thermodynamic properties. The thermal efficiency of a Rankine cycle is usually limited by the working fluid. Steam generated in a cogeneration plant is typically sold to and directly used by a steam host.

By combining both gas and steam cycles, high input temperatures and low output temperatures can be achieved. A cogeneration plant has a thermodynamic cycle that operates between the gas turbine's high firing temperature and the waste heat temperature from its exhaust. This large range means that the Carnot efficiency of the cycle is high. The actual efficiency, while lower than this is still higher than that of either plant on its own. The thermal efficiency of a cogeneration plant can be measured as the net electric and steam power output of the plant divided by the heating value of the fuel.

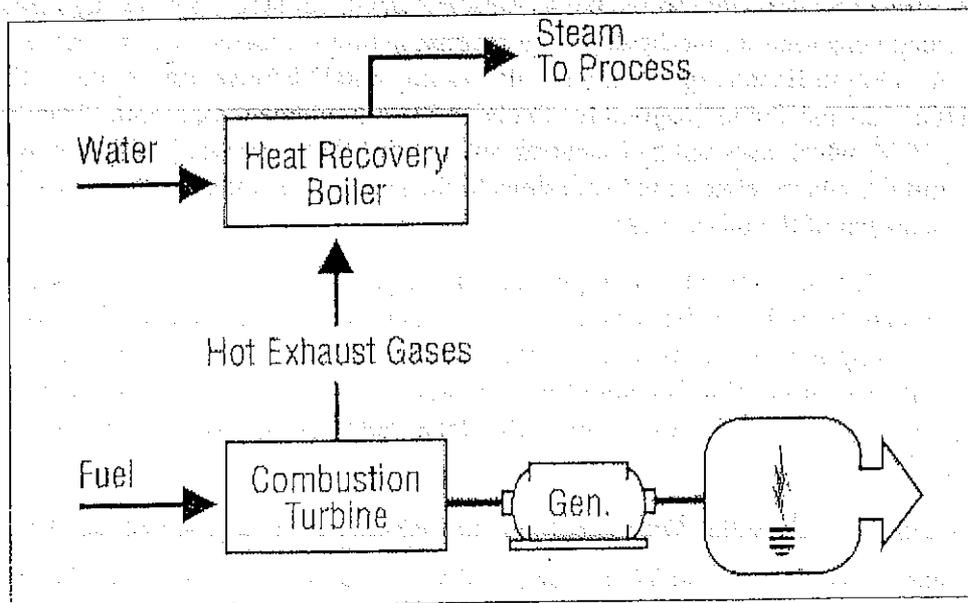


FIGURE 1 - Cogeneration Plant Configuration (1)

A single-train cogeneration plant consists of one CT, a generator, and a HSRG (See Figure 1 – Cogeneration Plant Configuration, below). Because of high thermal efficiency, high reliability, and low air emissions, cogeneration CT's and HRSG's have been the new resource of choice for bulk power generation and industrial steam production for well over a decade. Other attractive features include significant operational flexibility, the availability of relatively inexpensive power augmentation for peak period operation and relatively low carbon dioxide production.

### Current Regulatory Authority for Output-Based Emissions

Innovative power technologies such as cogeneration technology offer enormous potential to improve efficiency and enhance the environmental footprint of power generation through the reduction and/or prevention of air emissions to the environment. Currently, two thirds of the fuel burned to generate electricity in traditional fossil-fired steam boilers is lost. Traditional U.S. power generation facility efficiencies have not increased since the 1950s and more than one fifth of the U.S. power plants are more than 50 years old. In addition, these facilities are the leading contributors to U.S. emissions of carbon dioxide, NO<sub>x</sub>, sulfur dioxide ("SO<sub>2</sub>"), and other contaminants into the air and water.

The ability to recognize and regulate the efficiency benefits of pollution reduction and/or prevention through the use of cogeneration technology is achieved through the use of Output-Based emissions standards, incorporated since September 1998 within the U.S. EPA's new source performance standards ("NSPS") for NO<sub>x</sub>, from both new utility boilers and new industrial boilers. Pursuant to section 407(c) of the Clean Air Act in subpart Da (Electric Utility Steam Generating Units) and subpart Db (Industrial-Commercial-Institutional Steam Generating Units) of 40 CFR part 60, the U.S. EPA revised the NO<sub>x</sub> emissions limits for steam generating units for which construction, modification, or reconstruction commenced after July 9, 1997 (3). Output-Based regulations are also exemplified by those used in the U.S. EPA's NO<sub>x</sub> Cap and Trade Program for the NO<sub>x</sub> State Implementation Plan ("SIP") Call of 1998, which uses units of measure such as lb/MWh generated or lb concentration ("ppm"), which relate to the emissions to the productive output – electrical generation of the process.(4)

The use of innovative technologies such as cogeneration units reduces fossil fuel use and leads to multi-media reductions in the environmental impacts of the production, processing transportation, and combustion of fossil fuels. In addition, reducing fossil fuel combustion is a pollution prevention measure that reduces emissions of all products of combustion, not just the target pollutant (currently NO<sub>x</sub>) of a federal regulatory program.

### Authority to Expand Pollution Control Equipment & Categories in Texas

Under Texas House Bill 3732 ("HB3732") enacted in 2007, Section 11.31 of the Texas Tax Code is amended to add certain plant equipment and systems to the current list of air, water, or land pollution control devices exempt from property taxation in Texas.

Specifically, the language reads as follows:

*SECTION 4. Section 11.31, Tax Code, is amended by adding Subsections (k), (l), and (m) to read as follows:*

*(k) The Texas Commission on Environmental Quality shall adopt rules establishing a nonexclusive list of facilities, devices, or methods for the control of air, water, or land pollution, which must include:*

- (1) coal cleaning or refining facilities;*
- (2) atmospheric or pressurized and bubbling or circulating fluidized bed combustion systems and gasification fluidized bed combustion combined-cycle systems;*
- (3) ultra-supercritical pulverized coal boilers;*
- (4) flue gas recirculation components;*
- (5) syngas purification systems and gas-cleanup units;*
- (6) enhanced heat recovery systems;*
- (7) exhaust heat recovery boilers;*
- (8) heat recovery steam generators;*
- (9) superheaters and evaporators;*
- (10) enhanced steam turbine systems;*
- (11) methanation;*
- (12) coal combustion or gasification byproduct and coproduct handling, storage, or treatment facilities;*
- (13) biomass cofiring storage, distribution, and firing systems;*
- (14) coal cleaning or drying processes, such as coal drying/moisture reduction, air jigging, precombustion decarbonization, and coal flow balancing technology;*
- (15) oxy-fuel combustion technology, amine or chilled ammonia scrubbing, fuel or emission conversion through the use of catalysts, enhanced scrubbing technology, modified combustion technology such as chemical looping, and cryogenic technology;*
- (16) if the United States Environmental Protection Agency adopts a final rule or regulation regulating carbon dioxide as a pollutant, property that is used, constructed, acquired, or installed wholly or partly to capture carbon dioxide from an anthropogenic source in this state that is geologically sequestered in this state;*
- (17) fuel cells generating electricity using hydrogen derived from coal, biomass, petroleum coke, or solid waste; and*
- (18) any other equipment designed to prevent, capture, abate, or monitor nitrogen oxides, volatile organic compounds, particulate matter, mercury, carbon monoxide, or any criteria pollutant.*

*(l) The Texas Commission on Environmental Quality by rule shall update the list adopted under Subsection (k) at least once every three years. An item may be removed from the list if the commission finds compelling evidence to support the conclusion that the item does not provide pollution control benefits.*

*(m) Notwithstanding the other provisions of this section, if the facility, device, or method for the control of air, water, or land pollution described in an application for an exemption under this section is a facility, device, or method included on the list adopted under Subsection (k), the executive director of the Texas Commission on Environmental Quality, not later than the 30th day after the date of receipt of the information required by Subsections (c)(2) and (3) and without regard to whether the information required by Subsection (c)(1) has been submitted, shall determine that the facility, device, or method described in the application is used wholly or partly as a facility, device, or method for the control of air, water, or land pollution and shall take the actions that are required by Subsection (d) in the event such a determination is made.*

Under the TCEQ's recently updated "Tax Relief for Pollution Control Property -- Application Instructions and Equipment and Categories List -- Effective January 2008", the Equipment and Categories List - Part B ("ECL Part B") is a list of the pollution control property categories adopted and set forth in TTC Sec. 26.045(f). The taxpayer is to supply a pollution control percentage for the equipment listed in Part B via calculations demonstrating pollution control, prevention and/or reductions achieved by the listed equipment or systems.

The following property descriptions outline the environmental purpose, including

the anticipated environmental benefit of pollution control additions considered under the Application Instructions' ECL Part B that have been constructed and placed into use at the Facility as of its placed-in-service date, or installed subsequent to in-service since 1994:

## Property Descriptions

Item #1 Cogeneration Gas Turbine Plant Heat Recovery Steam Generator ("HRSG") and Support Systems Tier IV B-8

40 CFR Part 60 Subparts DA and DB, NO<sub>x</sub> Limits for Electric Utility Steam Generating Units and Industrial-Commercial-Institutional Steam Generating Units for New Source Performance Standards ("NSPS").

TAC Rule 106.512, Standard Permit for Electric Generating Units (EGU)

*NOTE: Permits issued under Texas Clean Air Act's Health & Safety Code Sections 382.011, applies to all electric generating units that emit air contaminants, regardless of size, and it is to reflect Best Available Control Technology ("BACT") for electric generating units on an output basis in pounds of NO<sub>x</sub> per megawatt hour, adjusted to reflect a simple cycle power plant.*

The heat recovery steam generator ("HRSG") found in the Facility is a heat exchanger that recovers heat from a hot gas stream. A common application for an HRSG is in a cogeneration power station, where hot exhaust from a gas turbine is fed to an HRSG to generate steam which can either be used to drive a steam turbine or be sold directly to a steam host. This combination produces electricity in a more thermally efficient manner than either the gas turbine or steam turbine alone.

The HRSG is also an important component in cogeneration plants. Cogeneration plants typically have a higher overall efficiency in comparison to a combined cycle plant.

The Facility's HRSGs consist of three major components: the Evaporator, Superheater, and Economizer. The different components are put together to meet the operating requirements of the unit. Modular HRSGs normally consist of three sections: an LP (low pressure) section, a reheat/IP (intermediate pressure) section, and an HP (high pressure) section. The reheat and IP sections are separate circuits inside the HRSG. The IP steam partly feeds the reheat section. Each section has a steam drum and an evaporator section where water is converted to steam. This steam then passes through superheaters to raise the temperature and pressure past the saturation point.

### Pollution Control Percentage Calculation: Avoided Emissions Approach

To calculate the percentage of the equipment or category deemed to be pollution control equipment, the Avoided Emissions approach has been used. This approach relies on thermal output differences between conventional electric power and steam generation equipment and the cogeneration system at the Facility. Specifically, the percentage is determined by calculating the displacement of emissions associated with the Facility's thermal output and subtracting these emissions from a baseline emission rate. These displaced emissions are emissions that would have been generated by the same thermal output from conventional equipment.

Greater energy efficiency reduces all air contaminant emissions, including the

greenhouse gas, carbon dioxide. Higher efficiency processes include cogeneration, combined-cycle, and CHP generation. For electric generation the energy efficiency of the process expressed in terms of British thermal units ("BTU's") per Kilowatt-hour ("kWh"). Lower fuel consumption associated with increased fuel conversion efficiency reduces emissions across the board – that is NO<sub>x</sub>, SO<sub>x</sub>, particulate matter, hazardous air pollutants, and greenhouse gas emissions such as CO<sub>2</sub>.

In calculating the percent exempt for the listed items from the ECL-Part B, we utilized Output-Based NO<sub>x</sub> allocation method for both power generation projects that replaced existing facilities and "Greenfield" steam generation facilities. We looked at the various fossil fuel technologies in use today and chose the baseline electric power generation facility to be a natural gas-fired turbine driven generator without waste heat recovery. The construction of the Blackhawk station and its ability to produce steam replaced some of the steam production generated by the boiler steam plant located at the Wood River Borger Refinery. With this in mind the baseline steam generation facility selected is a gas-fired industrial steam boiler operated without the thermal benefit of waste heat recovery similar to the equipment operated by the refinery. We benchmarked this conventional generation to the subject natural gas-fired cogeneration equipment at the Facility. By doing so, we narrowed the heat rate factors as much as possible to be conservative and uniform in modeling. The benchmark heat rate factor is the following:

Natural Gas-Fired Turbine and Industrial Steam Boiler: 8,864 BTU's/kWh

This baseline heat rate purposely omits other fossil fuel sources in order to eliminate impurity type characteristics, which in turn eliminated the NO<sub>x</sub> emission and cost of control differences of each fossil fuel and generator type. Comparing the emissions impact of different energy generation facilities is concise when emissions are measured per unit of useful energy output. For the purpose of our calculations, we converted the energy output of the steam to units of kWh, and compared the total emission rate to the baseline facility.

The comparison steps to calculate the NO<sub>x</sub> reduction is as follows:

Calculation (Reference Schedule A)

Step 1 – Subject Output-Based Limit Calculation (lbs NOx / MWh)

(Input-based Limit (lbs NOx/MMBTU)) X (Heat Rate (Btu/kWh)) / (1,000,000 Btu / 1,000 kWh) =  
Output: (lbs NOx/MWh),

Step 2 – Subject Output Conversion Calculation (NOx Tons / Year)

(Output (lbs NOx/MWh) X (Unit Design Capacity (MW)) X (Capacity Factor) X ((365 Days) X (24  
hrs/day)) / 2,000 lbs = Output: (NOx Tons/Year)

Step 3 – Baseline Output-Based Limit Calculation (lbs NOx / MWh)

(Input-based Limit (lbs NOx/MWh)) X (Heat Rate (Btu/kWh)) / (1,000,000 Btu / 1,000 kWh) =  
Output: (lbs NOx/MWh)

Step 4 – Baseline Output Conversion Calculation (NOx Tons / Year)

(Output (lbs NOx/MMBtu) X (Unit Design Capacity (MW)) X (Capacity Factor) X ((365 Days) X  
(24 hrs/day)) / 2,000 lbs = Output: (NOx Tons/Year)

Step 5 – Percent NOx Reduction Calculation

$((\text{Output Baseline})_{\text{step 4}} - (\text{Output Subject}))_{\text{step 2}} / (\text{Output Subject})_{\text{step 2}} = \% \text{ Reduction Output Subject}$

Step 6 – Percent Exempt Calculation

(Total Subject Facility Cost) X (% NOx Reduction) = Capital Cost of NOx Avoidance

Step 7 – Percent Exempt Calculation

Total Cost of NOx Avoidance / Total Cost of HB 3732 Equipment = % Exempt

- If % Exempt is greater than 100% HB 3732 Equipment is 100% Exempt
- If % Exempt is less than 100% then HB 3732 Equipment is partially exempt at the Step 6 calculation.

NOTE: See the attached calculation sheet for the details regarding Facility-specific calculations and property tax exemption percentage results based upon these calculations.

## REFERENCES

1. "Output-Based Regulations: A Handbook for Air Regulators", U.S. Environmental Protection Agency, Office of Atmospheric Programs – Climate Protection Partnerships Division, August, 2004, p.4.
2. "Output-Based Emissions Standards; Advancing Innovative Energy Technologies", Northeast-Midwest Institute; 2003, p. 9.
3. IBID, p.13.
4. "Output-Based Regulations: A Handbook for Air Regulators", U.S. Environmental Protection Agency, Office of Atmospheric Programs – Climate Protection Partnerships Division, August, 2004, p.4.
5. [http://www.cogeneration.net/Combined\\_Cycle\\_Power\\_Plants.htm](http://www.cogeneration.net/Combined_Cycle_Power_Plants.htm)
6. "Output-Based Emissions Standards; Advancing Innovative Energy Technologies", Northeast-Midwest Institute; 2003, p. 9.

9. PARTIAL PERCENTAGE CALCULATION

N/A.

10. PROPERTY CATEGORIES AND COSTS

See attached Schedule 10.

11. EMISSION REDUCTION INCENTIVE GRANT

Will an application for an Emission Reduction Incentive Grant be on file for this property/project:

Yes  No

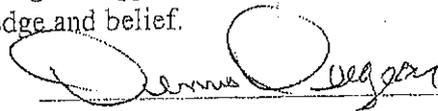
12. APPLICATION DEFICIENCIES

After an initial review of the application, the TCEQ may determine that the information provided with the application is not sufficient to make a use determination. The TCEQ may send a notice of deficiency, requesting additional information that must be provided within 30 days of written notice.

13. FORMAL REQUEST FOR SIGNATURE

By signing this application, you certify that this information is true to the best of your knowledge and belief.

NAME:



DATE:

3/27/08

TITLE:

Vice President

COMPANY:

Duff & Phelps LLC

Under Texas Penal Code, Section 37.10, if you make a false statement on this application, you could receive a jail term of up to one year and a fine up to \$2,000, or a prison term of two to 10 years and a fine of up to \$5,000.

14. DELINQUENT FEE/PENALTY PROTOCOL

This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. (Effective 9/1/2006)

Blackhawk Station  
 119 N. Spur Co-Gen Place  
 TCEQ Use Determination Application - 2008  
 Schedule 10  
 Tier-IV

10. PROPERTY CATEGORIES AND COST

PROPERTY	PROJECT ID. NO.	IN SERVICE DATE	TAXABLE ON OR BEFORE 1/1/94? (Y/N)	TIER IV DECISION FLOW CHART BOX	ECL NUMBER	ESTIMATED PURCHASE COST	% EXEMPT	EXEMPT COST
Heat Recovery Steam Generators (HRSG)	1	1998	N	3	B-8	\$13,906,514	100%	\$13,906,514
Tier IV Total						<u>\$13,906,514</u>		<u>\$13,906,514</u>

Blackhawk Station - 119 N. Spur Co-Gen Place  
 TCEQ Use Determination Application - 2008

**Borger Energy Associates LP  
Blackhawk Station  
Schedule A - 2008 Thermal Efficiency Calculation**

**Subject Details:**

Average Heat Rate <sup>(1)</sup>	7,781 (Btu/kWh)
NOx Emissions <sup>(2)</sup>	15 ppm
Plant Capacity <sup>(3)</sup>	225 MW
Capacity Factor <sup>(4)</sup>	78.50%
Technology <sup>(5)</sup>	Cogeneration
Total Subject Facility Cost <sup>(6)</sup>	\$128,687,174
Total Cost of Tier IV Equipment <sup>(7)</sup>	\$13,906,514

**Baseline Details:**

Average Heat Rate <sup>(8)</sup>	8,864 Btu/kWh
Technology <sup>(9)</sup>	Industrial Steam Boiler

**STEP 1  
Subject Output-Based Limit Calculation (lbs NOx / MWh)**

Input-based Limit (lbs NOx/MMBtu)	x	Heat Rate (Btu/kWh)	/	Unit Conversions (1,000,000 Btu / 1000 kWh)	=	Output-based Limit (lbs NOx/MWh)
0.0551		7,781		1,000		0.4287

**STEP 2  
Subject Output Conversion Calculation (NOx Tons / Year)**

Output-based Limit (lbs NOx/MWh)	x	Capacity (MW)	x	Capacity Factor	x	Unit Conversions (365 days * 24 Hours / 2,000 lbs)	=	Output NOx (Tons/Year)
0.4287		225		78.50%		4		302.9

**STEP 3  
Baseline Output-Based Limit Calculation (lbs NOx / MWh)**

Input-based Limit (lbs NOx/MMBtu)	x	Heat Rate (Btu/kWh)	/	Unit Conversions (1,000,000 Btu / 1000 kWh)	=	Output-based Limit (lbs NOx/MWh)
0.0551		8,864		1,000		0.4884

**STEP 4  
Baseline Output Conversion Calculation (NOx Tons / Year)**

Output-based Limit (lbs NOx/MWh)	x	Capacity (MW)	x	Capacity Factor	x	Unit Conversions (365 days * 24 Hours / 2,000 lbs)	=	Output NOx (Tons/Year)
0.4884		225		78.50%		4		345.1

**STEP 5  
Percent NOx Reduction Calculation**

( Output Baseline 345.1	-	Output Subject 302.9	/	Output Subject 302.9	=	% NOx Reduction 13.9%
----------------------------	---	-------------------------	---	-------------------------	---	--------------------------

**STEP 6  
Percent Exempt Calculation**

Total Subject Unit Cost	x	% NOx Reduction	=	Capital Cost of NOx Avoidance
\$128,687,174		13.9%		\$17,887,517

**STEP 7  
Percent Exempt Calculation**

Total Cost of NOx Avoidance	/	Total Cost of Tier IV Equipment	=	% Exempt
\$17,887,517		\$13,906,514		128.6%

Conclude 100%

- (1) - Heat rate represents plant net heat rate (NHV) based on the energy value of the electricity and steam generated provided by the client
- (2) - NOx emissions is the actual NOx pollutant produce in ppm and was provided by the client
- (3) - Plant capacity is the average nominal capacity and was provided by the client
- (4) - Capacity factor represent an average annual capacity factor and was provided by the client
- (5) - Technology represents the actual technology of the subject
- (6) - Total subject facility cost represents the total cost to build the entire facility and it was determined based on data provide by the client
- (7) - Total Tier IV equipment was determined by allocating the eligible TCEQ ECL part B equipment and their associated cost from actual data provide by the client
- (8) - Baseline heat rate was developed using a combination of simple cycle electric power and stand alone industrial boiler steam generation
- (9) - Baseline technology represents the boiler technology used by the host refinery for steam production. Steam produced by the subject cogeneration facility has displaced some of the steam produced by the host refinery resulting in less fuel consumption by the refinery's boiler equipment and lower overall NOx emissions.



# DUFF & PHELPS

December 5, 2008

Texas Commission on Environmental Quality  
Attention: Docket Clerk  
TCEQ Office of Chief Clerk MC 105  
P.O. Box 13087  
Austin, Texas 78711-3087

Subject: Response to the appeal of the Executive Director's Use Determination (07-11971), regarding Borger Energy Associates; TCEQ Docket Nos. 2008-0832-MIS-U

Dear Commissioners:

Pursuant to Title 30 of Chapter 17 of the Texas Administrative Code, the Applications under appeal were prepared using the Texas Commission on Environmental Quality's ("TCEQ's") Application for Use Determination for Pollution Control Property (TCEQ-0611). For these Tier IV applications, the subject pollution control property included in the application is listed on the TCEQ's Equipment & Categories List ("ECL"), and is identified and summarized as follows:

**Cogeneration Gas Turbine Plant Heat Recovery Steam Generators ("HRSG") and Supporting Systems: (ECL:B-8)**

Pertinent Rule(s), Regulation(s) or Law(s):

*40 CRF Part 60 Subparts DA and DB, NOx Limits for Electric Utility Steam Generating Units and Industrial commercial Institutional Steam Generating Units for New Source Performance Standards ("NSPS")*

TAC Rule 106.512, Standard Permit for electric Generating Units (EGU)

Note: Permits issued under Texas Clean Air Act's Health & Safety code Sections 382.011, applies to all electric generating units that emit air contaminants, regardless of size, and it is to reflect Best Available Control Technology ("BACT") for electric generating units on an output basis in pounds of NOx per megawatt hour, adjusted to reflect a simple cycle power plant.

---

## **BACKGROUND**

### *Texas Pollution Prevention Issue*

Currently in the U.S. two thirds of the potential energy of fossil fuels burned to generate electricity in traditional fossil-fired steam boilers is lost in the form of waste heat released into the atmosphere or surface waters located near these facilities. Traditional U.S. power generation plant efficiencies have not increased since the 1950's and more than one fifth of the U.S. power plant designs are more than 50 years old. These power generation facilities are the leading contributors to U.S. emissions of carbon dioxide, NO<sub>x</sub>, sulfur dioxide, and other contaminants into the air and water due to facility operations.

### *Combined Heat and Power Technology Background*

Innovative power systems such as combined cycle technology, and combined heat and power ("CHP") generation, offer enormous potential to reduce the environmental impacts of power generation through the reduction and/or prevention of air emissions to the environment through the efficient use of fossil fuel. CHP is best thought of as a system, rather than a specific technology or device for efficient use of the inherent chemical energy within fossil fuels such as natural gas. Texas leads the nation in CHP applications, with 23% of all U.S. CHP capacity located in Texas.<sup>1</sup> This CHP capacity produces 20% of the electricity used in Texas.<sup>2</sup>

The U.S. EPA defines cogeneration or CHP, as the simultaneous production of electricity and heat from a single fuel source, such as the natural gas used in the subject plant, Blackhawk Cogeneration Facility. Use of the otherwise wasted heat in the combustion turbine exhaust gas results in a higher plant-wide thermal efficiency compared to other combustion-based technologies. As well, state-of-the-art combined-cycle plants can convert about 50 percent of the chemical energy of natural gas into electricity (HHV basis). CHP systems' capture and use of waste heat allows them to achieve plant-wide fuel efficiencies between 60% and 90%.

The two most common CHP system configurations are:

- Gas turbine or engine with heat recovery unit
- Steam boiler with steam turbine

Gas turbine CHP systems, like the subject plant, Blackhawk Cogeneration Facility, generate electricity by burning a fossil fuel and then use a heat recovery unit to capture heat from the combustion system's exhaust stream. This heat is converted into useful thermal energy, usually in the form of steam or hot water. Per the US EPA, CHP plays an important role in meeting the US energy needs. As well, it reduces the environmental impacts of power generation because of both its fuel efficiency benefits in producing more energy output per pound of fuel burned, and in the resulting reduction in air emissions due to less fuel burned for the same energy output.

---

<sup>1</sup> US DOE, Energy Information Agency (EIA), 2005 Data.

<sup>2</sup> IBID.

## RESPONSE TO PETITION

We concur with the Texas Commissions Executive Use Determination letter received May 1<sup>st</sup>, 2008 whereby the outcome of their review resulted in a Use Determination as follows:

**A 100% positive use determination for the two Heat Recovery Steam Generators. This equipment is considered to be pollution control equipment and was installed to meet or exceed federal or State regulations.**

To date, neither the Appellant nor subsequent Executive Director-assembled workgroups have produced any valid evidence or reasonable agreed-upon conclusions that would lead us to believe that the facts, technical merits, and conclusion of our Application for Use Determination of Pollution Control Property are not valid.

The Executive Director's new technical position released on December 3rd, 2008 where by their findings produce a positive use determination of 61% for the HRSG is not technically correct and promotes environmental loss.

We are appealing the TCEQ's Workgroup and Executive Director's Recommendation regarding the modified version of the calculation presented by Cummings Westlake pertaining to a reasonable use determination percentage for HRSGs. The percentage calculation for this use determination based upon thermal efficiency increases resulting from technology provided by Cummings Westlake, LLC is flawed for a number of reasons. First, it departs from the Decision Flow Charts. Ironically, the TCEQ staff leveled this same change with regard to the application we originally submitted. Second, the calculation of a 39% increase in thermal efficiency is based upon all of the back-end equipment components of the plant contributing to the overall process, not just simply the HRSG - hence misappropriating efficiency and pollution control benefits to other items of machinery and equipment not currently identified on Part A or Part B of the ECL. Third, this very simplified calculation significantly underestimates the efficiency and pollution control contribution resulting from the HRSG as evidenced by the output based calculations provided in our application.

Finally, the most significant flaw in the Cummings Westlake calculation of the positive use determination is that it is contrary to public policy and to the purpose of H.B. 3732. Simple logic will prove that it would be inappropriate to provide a benefit based upon the reasoning provided in the Cummings Westlake calculation. By adopting this approach, it is inferred that there is an inverse relationship between thermal efficiency and pollution control. Assume that the efficiency increase was only 20% instead of 39%, then by the methodology set forth by the Cummings Westlake approach, there would be a resulting 80% positive use determination for the HRSG. Conversely, if there was a 60% increase in efficiency, as opposed to the 39%, then the positive use determination would be dramatically reduced to only 40%. This approach would hinder the advancement of clean energy projects through better efficiencies by penalizing the owner with a lower tax exemption percentage, which is clearly contrary to the intent of H.B. 3732.

Appellant: **I. Property Description**

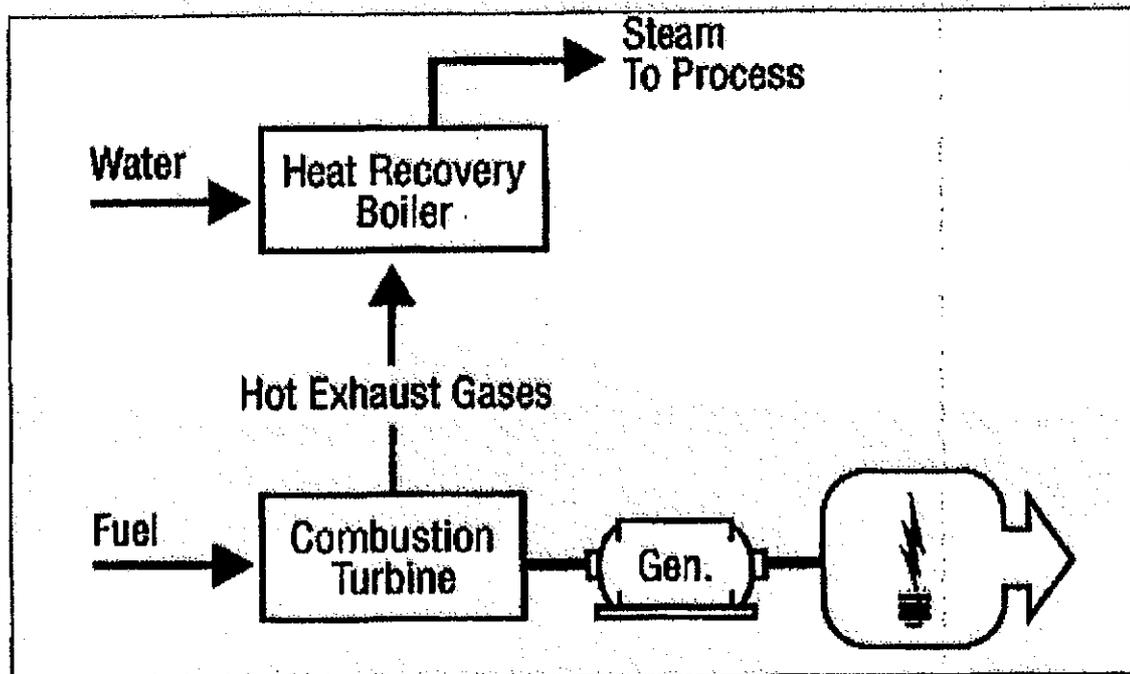
*See Attached (Exhibit A)*

Response: **I. Property Description**

The Blackhawk Cogeneration Facility is a 225 MW cogeneration facility located in Borger, Texas owned by Borger Energy Associates LP. Blackhawk Station's design incorporates two Siemens 501D5A gas turbines, and two Deltak HRSGs. The exhaust from the two combustion turbines is directed to the HRSGs where the thermal energy in the exhaust gases is recovered to generate steam. The HRSGs found in the Blackhawk Cogeneration Facility are therefore, in simple terms, heat exchangers that recover heat from a hot gas stream for reuse versus release into the atmosphere. A common application for an HRSG is in a cogeneration power station, where hot exhaust from a gas turbine is fed to an HRSG to generate steam which can be sold directly to a steam host.

The high pressure steam produced in the HRSGs is exported to the adjoining Wood River Borger Refinery. Natural gas serves as the fuel for each gas turbine. Use of the otherwise wasted heat in the turbine exhaust gas results in higher plant thermal efficiency compared to other power generation technologies employed in Texas.

The Figure below is representative of a simplified CHP plant process flow, similar to the Blackhawk Cogeneration Facility.



Appellant: **II. Rule Change**

*See Attached (Exhibit A)*

**Response: II. Proposition 2 Expansion for Additional Pollution Control Devices**

Under the legislation of Texas House Bill 3732 ("HB3732") enacted in 2007, Section 11.31 of the Texas Tax Code is amended by adding certain plant equipment and systems to the current list of air, water, or land pollution control devices. Specifically, the language reads as follows:

*SECTION 4. Section 11.31, Tax Code, is amended by adding Subsections (k), (l), and (m) to read as follows:*

*(k) The Texas Commission on Environmental Quality shall adopt rules establishing a nonexclusive list of facilities, devices, or methods for the control of air, water, or land pollution, which must include:*

- (1) coal cleaning or refining facilities;*
  - (2) atmospheric or pressurized and bubbling or circulating fluidized bed combustion systems and gasification fluidized bed combustion combined cycle systems;*
  - (3) ultra-supercritical pulverized coal boilers;*
  - (4) flue gas recirculation components;*
  - (5) syngas purification systems and gas-cleanup units;*
  - (6) enhanced heat recovery systems;*
  - (7) exhaust heat recovery boilers;*
  - (8) heat recovery steam generators;*
  - (9) superheaters and evaporators;*
  - (10) enhanced steam turbine systems;*
  - (11) methanation;*
  - (12) coal combustion or gasification byproduct and coproduct handling, storage, or treatment facilities;*
  - (13) biomass cofiring storage, distribution, and firing systems;*
  - (14) coal cleaning or drying processes, such as coal drying/moisture reduction, air jigging, precombustion decarbonization, and coal flow balancing technology;*
  - (15) oxy-fuel combustion technology, amine or chilled ammonia scrubbing, fuel or emission conversion through the use of catalysts, enhanced scrubbing technology, modified combustion technology such as chemical looping, and cryogenic technology;*
  - (16) if the United States Environmental Protection Agency adopts a final rule or regulation regulating carbon dioxide as a pollutant, property that is used, constructed, acquired, or installed wholly or partly to capture carbon dioxide from an anthropogenic source in this state that is geologically sequestered in this state;*
  - (17) fuel cells generating electricity using hydrogen derived from coal, biomass, petroleum coke, or solid waste; and*
  - (18) any other equipment designed to prevent, capture, abate, or monitor nitrogen oxides, volatile organic compounds, particulate matter, mercury, carbon monoxide, or any criteria pollutant.*
- (l) The Texas Commission on Environmental Quality by rule shall update the list adopted under Subsection (k) at least once every three years. An item may be removed from the list if the commission finds compelling evidence to support the conclusion that the item does not provide pollution control benefits.*

*(m) Notwithstanding the other provisions of this section, if the facility, device, or method for the control of air, water, or land pollution described in an application for an exemption under this section is a facility, device, or method included on the list adopted under Subsection (k), the executive director of the Texas Commission on Environmental Quality, not later than the 30th day after the date of receipt of the information required by Subsections (c)(2) and (3) and without regard to whether the information required by Subsection (c)(1) has been submitted, shall determine that the facility, device, or method described in the application is used wholly or partly as a facility, device, or method for the control of air, water, or land pollution and shall take the actions that are required by Subsection (d) in the event such a determination is made.*

Based upon the amended language of Section 11.31 of the Texas Tax Code, it is clear that the enumerated facilities, devices or methods must be considered in whole, or in part, as pollution control facilities, devices or methods by the TCEQ; the TCEQ must treat the enumerated facilities, devices or methods as eligible, in whole or in part, for property tax exemption as pollution control property; and finally, such eligibility for tax exemption must be based upon a methodology to be established by the TCEQ. Therefore, in response to the concern raised by the appellant, it is our contention that the HRSGs embedded within the CHP system of the subject plant are to be treated as qualifying pollution control facilities, devices or methods, and are no longer to be considered solely within the context of a power/steam generation use.

TCEQ's updated "*Tax Relief for Pollution Control Property – Application Instructions and Equipment and Categories List – Effective January 2008*" incorporates a list of the pollution control property categories adopted and set forth in TTC Sec. 26.045(f). Item B-8 of the ECL – Part B lists Heat Recovery Steam Generators (HRSGs).

As required in these instructions, the taxpayer, in its Tier IV application, supplied a pollution control percentage for the equipment listed in Part B via calculations demonstrating pollution control, prevention and/or reductions achieved by the listed equipment or systems, i.e., the subject facility's HRSGs. The subject facility received a 100% property tax exemption from the TCEQ for its HRSGs based upon the technical and statutory positions represented in the facility's application dated March 27, 2008.

#### ***Current Regulatory Authority for Output Based Emissions Standards***

Consideration of the use of output based emissions standards, as is now incorporated within the U.S. EPA's New Source Performance Standards ("NSPS") for NO<sub>x</sub>, are gaining importance for a reason: by determining emission levels based upon the amount of electricity and or thermal energy generated, output based standards support improved efficiency and pollution prevention without regard to the type of fuel or technology used to achieve that improvement. The use of innovative methods of power generation such as combined cycle and CHP reduces fossil fuel use and leads to multi-media reductions in the environmental impacts of the production, processing transportation, and combustion of fossil fuels. Reducing fossil fuel combustion is a pollution prevention measure that reduces emissions of all products of combustion, not just the target pollutant of a regulatory program.

Appellant: **III. Compliance**

*See Attached (Exhibit A)*

Response: **III. Compliance**

The basis by which the taxpayer represented the percentage of tax exemption eligibility for the HRSGs utilized an output-based emissions philosophy to demonstrate the level of emissions avoidance, or reduction, achieved by incorporating the CHP system approach within the Facility's operations. Emissions reductions, as represented by NO<sub>x</sub> emissions reductions achieved through fuel consumption savings, represents the pollution control or prevention purpose of the CHP system. For simplicity, NO<sub>x</sub> emissions were chosen; additional emissions reductions for SO<sub>2</sub>, CO<sub>2</sub>, etc., were also available.

Currently, the subject facility's input based NO<sub>x</sub> emissions standard, as represented in data provided by the taxpayer, does not recognize the subject facility for its fuel consumption savings and resulting emissions reductions. By establishing the amount of reduction found by using output based annual emissions versus input-based standards and multiplying this amount by the subject facility's historical costs, we were able to derive a surrogate for the subject plant's capital costs dedicated to additional NO<sub>x</sub> emissions avoidance, above the historically granted pollution control exemptions recognized on prior TCEQ Tier I or II application reviews. As this value was equal to or greater than the historical cost of the equipment item established on the ECL – Part B, it was considered to be eligible for 100% tax exemption status.

The subject appeal requests that the 100% tax exemption status granted under the methodology demonstrated be vacated and that the technical presumption that the HRSGs are major components of electrical and/or steam production be the only measure of equipment contribution to the subject facility's performance. This argument has ignored the broader policy-driven mandate established in Texas to support and further efficiency in fuel consumption in the state as a measure of pollution control. It also ignores the presentation of fact - made earlier within this rebuttal - that CHP is recognized by the U.S. EPA, by the state of Texas, and in most industry applications currently using such systems have resulted in the prevention and/or reduce air pollution in the State under an output based emissions standard.

Appellant: **IV. Limitations**

*See Attached (Exhibit A)*

Response: **IV. Limitations**

Pollution control percentages greater than 100% is not a flawed calculation; the breakpoints for facility-wide contributions versus equipment-specific contributions should be made relative to the necessary balance-of-plant systems and equipment supportive of the HRSGs in the subject facility. We agree with the appellant that the entire balance of plant equipment that supports the HRSG, e.g., the steam condensing systems, circulating water systems, chemical treatment systems etc., are completely intertwined and necessarily included within the plant-wide calculation of fuel efficiency and emissions reductions for CHP and combined cycle systems.

Therefore, although all such systems and equipment would more appropriately be identified as tax exempt for its emissions prevention capabilities, it can be inferred that the Texas Legislature judiciously considered the two major pieces of equipment within the Combined Cycle and CHP systems - HRSGs and enhanced steam turbine systems - and enumerated them specifically in the equipment list that ultimately exists in the final statute for tax exemption consideration. It is therefore the taxpayer's contention that such equipment's 100% exempt status represents that portion of the entire balance of plant CHP systems eligible for exemption and the remaining portion of the subject plant remain taxable for property tax considerations.

Appellant: **V. Conclusions**

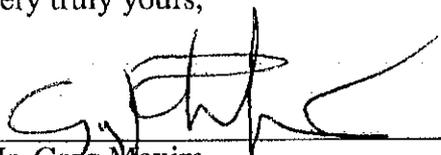
*See Attached (Exhibit A)*

Response: **V. Conclusions**

As stated in the sections above, it is the taxpayer's continued belief, as demonstrated through the Avoided Emissions Approach presented in the attached Appendix, that the HRSGs found in the subject plant are 100% exempt from property tax under their definition as pollution control facilities, devices or methods within the statute established by the Texas Legislature, and that their eligibility as pollution control/pollution prevention devices may be measured through a calculation of emissions avoidance demonstrated within the calculations developed.

If you have any questions regarding the application or the information supplied with these application, please contact me at (512) 671-5580 or Ms. Kathy Tronsberg of Duff & Phelps LLC at (215) 430-6059.

Very truly yours,

  
\_\_\_\_\_  
Mr. Greg Maxim  
Duff & Phelps LLC.

Enclosures

cc: Kathy Tronsberg (Duff & Phelps LLC - Philadelphia)  
Rick Fine (Duff & Phelps LLC - Austin)

**APPENDIX**

### Avoided Emissions Approach

This approach relies on thermal output differences by calculating the displacement of emissions associated with the thermal output and subtracting them from a baseline emission rate. These displaced emissions are emissions that would have been generated by the same thermal output from a conventional system. Greater energy efficiency reduces all air contaminant emissions, including the greenhouse gas carbon dioxide. Higher efficiency processes include combined cycle operation and combined heat and power (CHP) generation. For electric generation the energy efficiency of the process expressed in terms of MMBTU per Megawatt-hr. Lower fuel consumption associated with increased fuel conversion efficiency reduces emissions across the board – that is NO<sub>x</sub>, SO<sub>x</sub>, PM, hazardous air pollutants, and greenhouse gas emissions.

In calculating the percent exempt for the listed items from the ECL-Part B, Duff & Phelps LLC utilized an output based NO<sub>x</sub> allocation method for both Greenfield and Replacement power and heat generation. We looked at the various fossil fuel technologies in use today and chose the baseline facility to be a natural gas fuel-fired steam generator without waste heat recovery. The construction of the Blackhawk station and its ability to produce steam replaced some of the steam production generated by the boiler steam plant located at the Wood River Borger Refinery. With this in mind the baseline steam generation facility selected is a gas-fired industrial steam boiler operated without the thermal benefit of waste heat recovery similar to the equipment formerly operated by the refinery. Duff & Phelps LLC benchmarked this conventional generation to the subject natural gas-fired cogeneration equipment at the Facility. By doing so, we narrowed the heat rate factors as much as possible to be conservative and uniform in modeling. The benchmark heat rate factor is the following:

- Natural Gas-Fired Turbine and Industrial Steam Boiler: **8,864 BTU's/kWh**

This heat rate baseline purposely omits other fossil fuel source in order to eliminate impurities typed characteristics, which in turn eliminated the NO<sub>x</sub> emission and cost of control differences of each fossil fuel and generator type. Comparing the emissions impacts of different energy generation facilities is easy and clear when emissions are measured per unit of useful energy output. For the purpose of our calculations, we converted all the energy output to units of MWh (1 MWh = 3,413 MMBtu), and compared the total emission rate to the baseline facility.

The comparison steps to calculate the NO<sub>x</sub> reduction are as follows:

**A. Plant Input Factors**

Input-based Limit = 0.0551 lbs NO<sub>x</sub>/MMBtu

Unit Design Capacity = 225 MW

Capacity Factor = 78.5 Percent

Baseline/Replacement Plant Heat Rate = 8,864 Btu/kWh

Subject Plant Heat Rate = 7,781 Btu/kWh

**B. Calculation**

**Step 1 – Subject Plant**

$$\frac{(\text{Input Based Limit}) \times (\text{Heat Rate})}{1,000,000 \text{ Btu}} \times 1,000 \text{ kWh/MWh} = \text{Output : lbs NOx/MWh}$$

**Step 2 – Subject Plant**

$$\frac{(\text{Output}) \times (\text{Unit Design Capacity MW}) \times (\text{Capacity Factor}) \times (365 \text{ Days}) \times (24 \text{ hrs/day})}{2,000 \text{ Tons}} = \text{Output : NOx Tons/Year}$$

**Step 3 & 4 – Baseline Plant or Replacement Plant**  
Same as Step 1 and Step 2 (except use Baseline Heat Rate)

**Step 5 – Percent NOx Reduction Calculation**

$$\frac{(\text{Output Baseline}) - (\text{Output Subject})}{(\text{Output Subject})} \times 100 = \% \text{ Reduction}$$

**Step 6 – Percent NOx Reduction Calculation**

$$(\text{Total Subject Unit Cost}) (\% \text{ Reduction}) = \text{Capital Cost of NOx Avoidance}$$

**Step 7 – Percent Exempt Calculation**

$$\frac{\text{Total Cost of NOx Avoidance}}{\text{Total Cost of HB 3732 Equipment}} \times 100 = \% \text{ Exempt}$$

- If % Exempt is greater than 100 then HB 3732 Equipment is 100% Exempt
- If % Exempt is less than 100 then HB 3732 Equipment is partially exempt at the Step 7 calculation

**EXHIBIT A**

**Concerning Eligibility of Heat Recovery Steam Generators**  
**in the**  
**Blackhawk Cogeneration Plant**  
**for**  
**Texas Commission on Environmental Quality**  
**Proposition 2 - Property Tax Exemption Program**

By: Charles Wayne Frazell P.E.

I. Property Description

Cogeneration power plants consist of one or more generators powered by industrial size jet engines. These engines can be fueled by most combustible gas or liquids, but currently, most are fueled by natural gas. The hot exhaust from these engines is passed through a heat recovery steam generator (HRSG). A HRSG is essentially a boiler without the burners. The Blackhawk plant boilers create steam that is sold to a neighboring oil refinery.

II. Rule Change

The TCEQ rules were changed in response to the 2007 Texas Legislature HB 3732. The modified rules created the Part B List which includes Exhaust Heat Recovery Boilers (B-7) and Heat Recovery Steam Generators (B-8).

A HRSG is often added to recover exhaust gases to preheat water entering the boiler of a conventional boiler to improve efficiency, but, they are not the driving force behind the plant production. I believe that this is the type of application that was intended by the inclusion of B-7 and B-8 in the TCEQ Part B List.

### III. Compliance

To some it will appear that the boiler that recovers the exhaust heat from the turbine engines qualifies as a pollution control item. This of course ignores the fact that this boiler is a major component of production. It was installed to produce steam to sell and not to reduce pollution. If the jet engines were not ducted to the boiler and burners were added, the HRSG side of the plant would operate as a conventional steam power plant. The Blackhawk plant uses burners to produce steam to sell when the jet engines are down for repair. It is not the boiler that reduces the pollution. Ducting the hot gases from the jet engine(s) reduces the pollution by reducing the need for an additional heat source (burners).

As a general rule when a component for pollution control is removed, there is little or no loss in production. For example, when a catalytic converter is removed from an engine it still produces the same horsepower. If electronic precipitators are removed from the exhaust of a coal-burning power plant, it still produces the same amount of electricity.

If the boiler is removed from a cogeneration power plant, there is no steam produced. Since removal of this component eliminates production of a product (steam), this boiler is primarily production equipment. It is not a pollution control device.

In 1992 the people of Texas voted and approved Proposition 2 creating the current environmental tax exemption. The ballot read "The constitutional amendment to promote the reduction and encourage the preservation of jobs by authorizing the exemption from ad valorem taxation of real and personal property used for the control of air, water, or land pollution." These boilers are used for production and not to control pollution. I believe the majority of the people would have voted "NO" on this proposition, if they thought it would include production equipment that produces INCOME and is not MANDATED by law!

#### IV. Limitations

A detailed description of what will be exempted needs to be provided to the appraisal district and not just identifying the HRSG. If the HRSG is found to be pollution control equipment, where is the limit? Do we also include the deaerator, the condenser, the pumps and all of the other steam piping and equipment which is installed to produce INCOME? Should we also exempt the plant lighting since this yields fewer emissions than if they had gas lamps? Although there are safety and convenience reasons for electric lighting, the primary reason for their installation is economics - not pollution control.

The primary reason for building a cogeneration power plant is economics and not pollution control. If the gas turbine is removed, then all you need is a set of burners and an intake fan to have the same production on the steam side. Since this type of boiler is a major component of production, it is not pollution control equipment. Only the ducting that conducts the exhaust heat from the gas turbine to the boiler should receive a 100% exemption.

#### V. Conclusions

The Texas Commission on Environmental Quality TCEQ rule changes in response to the 2007 Texas Legislature HB 3732 that created the new Part B non-exclusive list was intended to clarify pollution control devices not previously recognized. There was no mention of including equipment that is in place for producing a product.

The boiler in a cogeneration power plant is installed to produce steam to sell rather than to reduce pollution and does not qualify for a 100% tax exemption. **Therefore, I respectfully request that no Use Determination be granted for the primary boiler (HRSG) of any cogeneration power plant.** Thank you for your favorable consideration.

BROADCAST REPORT

TIME : 12/05/2008 18:46  
 NAME : D&P.AUSTIN  
 FAX : 5126715501  
 TEL :  
 SER.# : BROJ7J706135

PAGE(S)

17

DATE	TIME	FAX NO./NAME	DURATION	PAGE(S)	RESULT	COMMENT
12/05	18:26	STEPH PERDUE	02:47	17	OK	ECM
12/05	18:29	RON HATLETT	02:40	17	OK	ECM
12/05	18:32	BLAS COY	02:45	17	OK	ECM
12/05	18:35	BRIDGET BOHAC	02:45	17	OK	ECM
12/05	18:39	DIANA HOOKS	03:02	17	OK	ECM
12/05	18:42	WAYNE FRAZELL	03:54	17	OK	ECM

BUSY: BUSY/NO RESPONSE  
 NG : POOR LINE CONDITION  
 CV : COVERPAGE

919 CONGRESS 1450  
AUSTIN TX 78701  
512-671-5585  
512-671-5501 FAX  
LAURA.RUSSELL@DUFFANDPHELPS.COM



# Fax

**To:** TCEQ 2008-0832-MIS-0 **From:** Greg Maxim

**Fax:** **Pages:**

**Phone:** **Date:**

**Re:** BORGER ENERGY ASSOC **cc:**

- Urgent
- For Review
- Please Comment
- Please Reply
- Please Recycle

• **Comments:**

- Diana Hooks 806-273-3400 ✓
- Wayne Frazell 817-927-5314
- Stephanie Perdue 512-239-0606
- Ron Hattlett 512-239-3465 5678
- Blas Coy 512-239-6377
- Bridget Bohac 512-239-4007



July 31, 2012

Bridget C. Bohac  
Chief Clerk  
Texas Commission on Environmental Quality  
P. O. Box 13087  
Austin, Texas 78711-3087

VIA FAX

Re: Use Determination Application No. 07-11971  
TCEQ Docket No. 2008-0832-MIS-U  
Borger Energy Associates, LP  
**Appeal of Purported Negative Use Determination**

Dear Ms. Bohac:

We represent Borger Energy Associates, LP (Borger), the applicant in the above-referenced matter. Our client is in receipt of the July 10, 2012 letter from Chance Goodin in which he purports to issue a negative use determination on behalf of the Executive Director for Borger's application. This July 10, 2012 letter was served without an accompanying document signed by the Executive Director.

Pursuant to 30 Tex. Admin. Code § 17.25(a)(2)(A), Borger files this appeal of the purported negative use determination, and it does so without waiving its right to contest whether or not the Executive Director's presumed agent has in fact issued a lawful negative use determination. The information required under 30 Tex. Admin. Code § 17.25(b) is as follows:

- (1) provide the name, address, and daytime telephone number of the person who files the appeal:**

The undersigned is filing this appeal on behalf of Borger. All correspondence for this appeal should be sent to the following:

Edward Kliwer  
Fulbright & Jaworski L.L.P.  
300 Convent Street, Suite 2100  
San Antonio, Texas 78205-3792  
Telephone: (210) 270-7144  
Fax: (210) 270-7205  
Email: ekliwer@fulbright.com

**(2) give the name and address of the entity to which the use determination was issued;**

Borger Energy Associates, LP  
7001 Boulevard 26, Suite 310  
North Richmond Hills, Texas 76180

**(3) provide the use determination application number for the application for which the use determination was issued;**

Use Determination Application 07-11971

**(4) request commission consideration of the use determination; and**

This letter is a formal request to the Commission for consideration of the purported negative use determination.

**(5) explain the basis for the appeal.**

In 2008, Borger applied for a pollution control use determination for two heat recovery steam generators (HRSGs) and support systems at its Blackhawk Station, which is a cogeneration facility which avoids the use of traditional steam boilers. Borger's equipment meets or exceeds regulations issued by environmental agencies to control or reduce air pollution. *See, e.g.*, 30 Tex. Admin. Code § 117.3010; § 106.512; 40 CFR 60.44 subpart DA & DB; 40 C.F.R. § 50.11.

Specifically, the equipment's increased thermal efficiency, as compared to a traditional steam boiler, reduces the fuel needs for the same output, while reducing associated air emissions such as nitrogen oxides (NOx). In addition, the duct burners inside the HRSGs, as designed, may further reduce plant air emissions with additional NOx controls, but such air emissions reductions occur in addition to the efficiency-based reductions.

In 2008, the Executive Director granted a 100% positive use determination for Borger's HRSGs.

However, Hutchinson County Appraisal District appealed to the Commission regarding the positive use determination, and that appeal eventually resulted in the July 10, 2012 letter that purports to issue a negative use determination on Borger's application.

In 2008, the Executive Director correctly applied the law to Borger's facility, as well as to many other similar facilities. In 2012, the Executive Director failed to correctly interpret the controlling statute and applicable regulations. Among other things,

- The Executive Director has not lawfully issued a negative use determination.
- The Executive Director misunderstands the nature, function, and pollution control benefits of Borger's HRSGs. The Executive Director has failed to offer a reasoned and timely explanation for finding 0% pollution control and for rejecting Borger's justifiable

expectations that its equipment was 100% pollution control property as properly determined in 2008.

- The HRSGs at Borger's facility satisfy the statutory definition of 100% pollution control and otherwise fully comply with applicable regulations. Alternatively, the HRSGs are entitled to a partial use determination.
- The Executive Director has applied the wrong administrative rules. On January 1, 2008, Borger was entitled to a 100% positive use determination under Tier II. Alternatively, the appropriate administrative rules were those in effect when Borger filed its application. The 2010 rules are invalid and have no force or effect relative to Borger's application. As applied to Borger, the 2010 rules are unconstitutional because they are an unconstitutional retroactive application of law and violate both due process and equal protection.
- The Executive Director has acted arbitrarily and capriciously, has treated similar property in conflicting ways despite statutory and constitutional prohibitions to the contrary, and has deprived Borger of due process and equal protection.

We look forward to briefing this matter in full and would greatly appreciate the opportunity to address the Commission in person.

Please note that we are providing copies of this notice of appeal to the individuals and entities identified on the Commission's mailing list from Docket No. 2008-0832-MIS-U.

Respectfully submitted,

*Edward Kliever III*

Edward Kliever III  
Counsel for Borger Energy Associates, LP

*with permission*

*Osama Kamaly*

EK/sbc

cc: mailing list from Docket No. 2008-0832-MIS-U



TCEQ Docket No. 2008-0832-MIS-U

**In The Texas Commission on Environmental Quality**

**APPEAL OF THE EXECUTIVE DIRECTOR'S NEGATIVE USE DETERMINATION  
ISSUED TO BORGER ENERGY ASSOCIATES, LP  
FOR THE BLACKHAWK COGENERATION FACILITY**

**USE DETERMINATION APPLICATION NO. 07-11971**

**RESPONSE BRIEF OF APPELLANT  
BORGER ENERGY ASSOCIATES, LP**

**FULBRIGHT & JAWORSKI L.L.P.**

Edward Kliewer III

State Bar No. 11570500

Thomas A. Countryman

State Bar No. 04888100

Rosemarie Kanusky

State Bar No. 00790999

300 Convent, Suite 2200

San Antonio, Texas 78205

Telephone: 210.224.5575

Telecopier: 210.270.7205

*Counsel for Appellant, BORGER ENERGY ASSOCIATES, LP*

**TESTIMONY REQUESTED**  
**(30 TEX. ADMIN. CODE § 17.25(d)(1))**

**TABLE OF CONTENTS**

	<b>Page</b>
INTRODUCTION AND STATEMENT OF THE CASE .....	1
I. THE ED’S APPEALED DECISION IS FATALLY FLAWED ON ITS FACE .....	3
A. The ED’s Appealed Decision is devoid of required factual basis and reasoning.....	3
B. The ED affirmatively abandoned all required factual basis and reasoning .....	4
C. The ED’s Appealed Decision is grossly inconsistent with past, controlling precedent.....	6
II. THE EXECUTIVE DIRECTOR’S APPEALED DECISION EFFECTIVELY, AND IMPERMISSIBLY, REWRITES BOTH TEXAS LAW AND TCEQ REGULATIONS WITHOUT AUTHORITY .....	10
A. The 2008 Amendments of 30 TAC §17 control this case .....	10
B. The ED’s current, uniform, “absolutely-no-exemption-allowed” decision ignores the Texas Tax Code and related, consistent regulations.....	12
C. The ED also failed to follow essential rule-making requirements of the Texas Administrative Procedure Act.....	16
III. THE EXECUTIVE DIRECTOR’S APPEALED DECISION IMPROPERLY IGNORES ALL CREDIBLE “TIER IV” CALCULATIONS OF HRSGS’ POLLUTION CONTROL BENEFITS .....	18
IV. THE EXECUTIVE DIRECTOR’S NEW, WHOLESALE REJECTION OF ALL SUPPORTING ENVIRONMENTAL LAWS IS WRONG, ARBITRARY AND CAPRICIOUS .....	20
V. CONCLUSIONS .....	21
CERTIFICATE OF SERVICE.....	23
 <b>Appendix Item</b>	 <b>PAGE</b>
Affidavit of Mona Johnson .....	A-1
Exhibit 1 – Company “Bio” of Mona Johnson.....	AE 1-1
Exhibit 2 – Borger’s Application for HRSG’s Pollution Control Exemption.....	AE 2-1
Exhibit 3 – ED’s Original Decision: 100% Positive Use Determination [HRSGs] – Borger Energy Associates, L.P.....	AE 3-1
Exhibit 4 – ED’s Blackhawk Technical Review Document.....	AE 4-1
Exhibit 5 – PIC Response.....	AE 5-1
Exhibit 6 – ED Response Brief.....	AE 6-1
Exhibit 7 – Executive Director’s June 18, 2012, Request for Remand.....	AE 7-1

**TABLE OF CONTENTS**  
(continued)

	<b>Page</b>
Exhibit 8 – TCEQ’s June 29, 2012, Notice of Remand .....	AE 8-1
Exhibit 9 – ED’s 7/10/12 Notice of Negative Use Determination, Borger Energy Associates, LP, Application No. 07-11971 (“ED’s Appealed Decision”) .....	AE 9-1
Exhibit 10 – Borger Energy Associates, L.P.’s July 31, 2012, Notice of Appeal ..	AE 10-1
Affidavit of Rhonda Gueringer .....	B-1
Exhibit 1 – TCEQ’s Positive Use Determination letter to Bastrop Energy Partners LP dated May 1, 2008.....	B-5
Exhibit 2 – TCEQ’s Positive Use Determination letter to Baytown Energy Center LP dated May 1, 2008.....	B-6
Exhibit 3 – TCEQ’s Positive Use Determination letter to Calpine Corporation dated May 1, 2008 .....	B-7
Exhibit 4 – TCEQ’s Positive Use Determination letter to Channel Energy Center LP dated May 1, 2008.....	B-8
Exhibit 5 – TCEQ’s Positive Use Determination letter to Corpus Christi Cogeneration LP dated May 1, 2008 .....	B-9
Exhibit 6 – TCEQ’s Positive Use Determination letter to Deer Park Energy Center LP dated May 1, 2008.....	B-10
Exhibit 7 – TCEQ’s Positive Use Determination letter to FPLE Forney LP dated May 1, 2008 .....	B-11
Exhibit 8 – TCEQ’s Positive Use Determination letter to Frontera Generation LP dated May 1, 2008 .....	B-12
Exhibit 9 – TCEQ’s Positive Use Determination letter to Gentex Power Corporation dated May 1, 2008.....	B-13
Exhibit 10 – TCEQ’s Positive Use Determination letter to GS Electrical Generating Coop & Denver dated May 1, 2008.....	B-14
Exhibit 11 – TCEQ’s Positive Use Determination letter to Guadalupe Power Partners LP dated May 1, 2008 .....	B-15
Exhibit 12 – TCEQ’s Positive Use Determination letter to Lamar Power Partners dated May 1, 2008 .....	B-16
Exhibit 13 – TCEQ’s Positive Use Determination letter to Navasota Odessa Energy Partners LP dated May 1 2008.....	B-17
Exhibit 14 – TCEQ’s Positive Use Determination letter to TCEQ’s Positive Use Determination letter to NRG Texas Power LLC (Cedar Bayou IV)dated May 1, 2008 .....	B-18

**TABLE OF CONTENTS**  
(continued)

	<b>Page</b>
Exhibit 15 – TCEQ’s Positive Use Determination letter to NRG Texas Power LLC (TH Wharton) dated May 1, 2008.....	B-19
Exhibit 16 – TCEQ’s Positive Use Determination letter to Odessa-Ector Power Partners dated May 1, 2008 .....	B-20
Exhibit 17 – TCEQ’s Positive Use Determination letter to Pasadena Cogeneration dated May 1, 2008 .....	B-21
Exhibit 18 – TCEQ’s Positive Use Determination letter to Rio Nogales Power Project LP dated May 1, 2008 .....	B-22
Exhibit 19 – TCEQ’s Positive Use Determination letter to Borger Frontier Partners Ltd dated May 1, 2008.....	B-23
Exhibit 20 -- Agenda of the Texas Commission on Environmental Quality dated February 25, 2009.....	B-24
Exhibit 21 -- Minutes of the Tax Relief for Pollution Control Property Advisory Committee Meeting dated February 15, 2012.....	B-43
Application Review Document (Borger Energy Associates, L.P.) .....	C-1

## INTRODUCTION AND STATEMENT OF THE CASE

Prompted by environmental and business concerns, Texans amended their Constitution in 1993 to allow an *ad valorem* property tax exemption for any “facility, device, or method for the control of air, water, or land pollution.” TEX. CONST. art. VIII, § 1-1(a); Tex. H.J. Res. 86, 73d Leg., R.S., 1993 Tex. Gen. Laws 5576. In the same year, the Texas Legislature authorized the tax exemption and created a process for obtaining it. See Act of May 10, 1993, 73d Leg., R.S., ch. 285, 1993 Tex. Gen. Laws 1322 (current version at TEX. TAX CODE § 11.31).

Section 11.31 of the Tax Code requires local appraisal districts to assess a value and administer the tax exemption based on the Texas Commission on Environmental Quality’s (“TCEQ”) determination of whether property qualifies wholly or partly as pollution control. TEX. TAX CODE § 11.31(d), (i). The Executive Director (“ED”) of the TCEQ makes the initial “use determination,” which can be appealed to the TCEQ, and TCEQ’s order can be appealed to the district courts of Travis County. *Id.* § 11.31(e); TEX. WATER CODE § 5.351, § 5.354.

On May 1, 2008, the ED awarded Applicant Borger Energy Associates, LP (“Borger”) a 100% Positive Use Determination (the “ED’s Original Decision”) on its Application No. 07-11971 (the “Application”) for a Positive Use Determination<sup>1</sup> for the HRSGs located at Borger’s Blackhawk Station Cogeneration Facility (“Blackhawk”).<sup>2</sup> See Affidavit of Mona Caesar Johnson, P.E. (“Johnson Aff.”), attached as Exhibit “A” and incorporated herein for all purposes by reference, ¶2, Ex. 3. The ED’s Original Decision was accompanied by an appropriate Technical Review Document (“Borger TRD”) evaluating and discussing the ED’s reasons for his Original Decision. See Johnson Aff., ¶2, Ex. 4. At the same time, the ED awarded 19 other 100% Positive Use Determinations to various other owners of HRSGs, all of which ultimately become final and non-appealable. See Affidavit of Rhonda Gueringer (“Gueringer Aff.”), attached as Exhibit “B” and incorporated herein for all purposes by reference, ¶3, Exs. 1-19.

On May 23, 2008, however, the Hutchinson County Appraisal District (“County”) appealed the ED’s Original Decision concerning Borger’s Application<sup>3</sup> to the TCEQ. On December 3, 2008, after massive briefing by the parties<sup>4</sup> and lengthy consideration by the ED and his Work Group -- see, e.g., Johnson Aff., ¶4, Ex. “6,” the ED’s 12/3/08 Response Brief

---

<sup>1</sup> Under Texas law, a final Positive Use Determination results in a non-discretionary requirement that County Assessors and Appraisal Districts afford the subject property a corresponding Pollution Control Exemption from *ad valorem* taxation. See, e.g., TEX. TAX CODE §11.31(d), (i).

<sup>2</sup> Blackhawk is a cogeneration facility which uses heat recovery steam generators (“HRSGs”) in combination with natural gas powered turbines to generate steam which is transported and sold to the nearby Wood River Borger Refinery (the “Refinery”) for use in Refinery operations.

<sup>3</sup> See Johnson Affidavit, ¶2, Ex. 2. As supplemented by the Johnson Affidavit itself, the Application is incorporated herein for all purposes.

<sup>4</sup> TCEQ’s own Public Interest Counsel filed a Response (“PIC Response”) to the ED’s Original Decision on December 5, 2008. See Johnson Aff., ¶4, Ex. 5. Under the Texas Water Code, the role of the PIC is described as follows:

§ 5.271 WATER Creation and General Responsibility of the Office of Public Interest Counsel. The office of public interest counsel is created to ensure that the commission promotes the public's interest. The primary duty of the office is to represent the public interest as a party to matters before the commission.

("ED Response Brief"), p. 10 -- the ED sought remand of Borger's and all other, then-pending HRSG-related appeals of his prior 100% Positive Use Determinations under "Tier IV."<sup>5</sup> See, *i.e.*, 30 TAC §17.2(16) (*eff.* 2/7/2008).<sup>6</sup> As the sole basis for remand, the ED affirmatively represented that "The Executive Director intends to apply the adopted recommendation to all subsequently filed similar use determination applications, and to those applications currently pending adjudication." See ED Response Brief, p. 11, emphasis added. That recommendation, described by the ED as a "modified version of the calculation presented by Cummings Westlake," was as follows:

The thermal efficiency increase or production gain derived from the installation of a HRSG is approximately 39%. Since this percentage represents the additional amount of electrical energy produced for a given heat input, it therefore represents the production value of the equipment. Based on this production value, the pollution control percentage of a HRSG installed at a combined-cycle facility is 61%. Staff is therefore recommending the positive use determination of 61% for the installation of a HRSG in a combined-cycle facility.

*Id.* [emphasis in original].

Notwithstanding the foregoing, on July 10, 2012, after remand was finally, purportedly granted by the General Counsel of TCEQ,<sup>7</sup> see Johnson Aff., ¶6, Exs. 7-8, the ED rendered

---

<sup>5</sup> These did not include the above-described 20 Positive Use Determinations which, by then, had become final. They only included other HRSG-related "Tier IV" 100% Positive Use Determinations by the ED which, like Borger's, had been timely appealed by the various Appraisal Districts and/or Counties impacted. As indicated above, also involved in the overall "HRSG exemption" controversy -- but *not* this particular appeal -- are a number of "Tier IIP" HRSG-related Applications for which 100% Negative Use Determinations were made originally by the ED and appealed by the HRSGs' owners based on amended regulations (*e.g.*, Tier IV was eliminated in 2010) having no bearing on this case.

<sup>6</sup> For reasons stated in Section II. A., below, all references to statutes and regulations refer to those in effect at the time Borger's Application was deemed administratively complete in April, 2008, unless otherwise specifically noted.

<sup>7</sup> The General Counsel's Remand was improper. Even TCEQ's own Public Interest Counsel ("PIC") agrees that, "The Tax Code does not appear to give the Commission the authority to remand a use determination appeal before considering the appeal at the next practical Agenda meeting." See October 4, 2012 Response to Negative Use Determination ("PIC 2012 Response," on file herein), p. 8 (*citing Denton County Elec. Coop., Inc. v. Pub. Util. Comm'n of Texas*, 818 S.W.2d 490 (Tex. App.-Texarkana 1991, writ denied), and TEX. TAX CODE §11.31(e) ("The commission shall consider the appeal at the next regularly scheduled meeting of the commission for which adequate notice may be given,"). Borger had a vested right to the consideration of the full TCEQ in 2008 when the County's appeal of the ED's Original Decision was perfected. TEXAS TAX CODE §11.31(e); 30 TAC §17.25(d)(2) (2007). Thus, TCEQ's 2010 enactment of new 30 TAC §17.25(d), see ED's 2102 Response, p. 13-14, came too late to affect this appeal. See, *e.g.* Section II.A., below and PIC 2012 Response, p. 8 ("Appellant submitted its application for a Tier IV use determination on March 25, 2008, so the 2010 amendments to Chapter 17 do not apply to this application, including [new] 30 TEX. ADMIN. CODE § 17.25(d)."). The ED's reliance, see ED's 2012 Response, p. 13, on 30 TAC §10.4(d) ("The general counsel may remand a matter *from the commission's agenda* to the executive director if the executive director or the public interest counsel requests a remand," emphasis added) is undercut by all the above, as well as by the fact that this appeal was not on TCEQ's Agenda at or near the time of General Counsel's remand. See Gueringer Aff., ¶4, Exs. 20-21. Finally (*see* ED's 2012 Response, p. 12), there is no evidence herein of any actual statutory or TCEQ delegation of remand power to General Counsel which could have affected Borger's Application under Texas Water Code §5.110(d). There is a remedy for all this, as well: what TCEQ should be hearing, if anything at this late date, is the County's appeal of the ED's Original Decision, and the

uniform, 100% Negative Use Determinations concerning all pending Tier IV *and* Tier III HRSG-related appeals of Applications for Use Determinations (the “ED’s Appealed Decision”), but only on the stated basis that, “Heat recovery steam generators are used solely for production and, therefore, are not eligible for positive use determination.” *See, e.g.*, Johnson Aff., ¶7, Ex. 9, ED’s 7/10/12 Notice of Negative Use Determination, Borger Energy Associates, LP, Application No. 07-11971. Tellingly, the ED’s Appealed Decision (at least, as transmitted to Borger) was not accompanied by any Technical Review Document – new or revised - showing any justification for the changed ruling. *See* Johnson Aff., ¶6; *cf.* 30 TAC §17.25(e)(1)(A), and Johnson Aff., ¶2, Ex. 4; *see also* Section I. B., *infra*.

Borger timely perfected its appeal of the ED’s Appealed Decision by filing its Notice of Appeal on July 30, 2012. *See* Johnson Aff., ¶4, Ex. 10. Reply briefs subsequently were filed by the ED and the County. *See, e.g.*, ED’s October 4, 2012 Response to the Appeals Filed on the Negative Use Determination for the Heat Recovery Steam Generator Applications (“ED 2012 Response”) on file herein. Now, in accord with the briefing schedule set out by TCEQ, and in supplementation of its Application, Borger files this, its Response Brief to the reply Briefs of the County and the ED.

**I. THE ED’S APPEALED DECISION IS FATALLY FLAWED ON ITS FACE.**

**A. The ED’s Appealed Decision is devoid of required factual basis and reasoning.**

Borger’s Application should be remanded back to the ED for a decision consistent with statutory requirements and a new technical review and new use determination that fully lay out the method and formulae used to reach the correct percentages for the use determination. *See* 30 TAC §17.25(d)(1) and 30 TAC §17.25(e)(1)(A). The ED’s Appealed Decision runs afoul of the very same problem repeatedly cited by TCEQ’s own Public Interest Counsel (“PIC”) back in December, 2008:

We take no position on the merits of the Appellant’s issues with the ED’s Decision at this time because we find that *the ED provided no basis for the percentages he concluded were appropriate*. Based on the limited information in the record, we conclude that, while the ED may reject an applicant’s proposed formula for determining the percentages of equipment associated with pollution control, he must provide an explanation of the specific method and analysis used to determine the percentages he recommends. For this reason, OPIC [Office of Public Interest Counsel] recommends that the Commission remand this matter for a new technical review and new use determination that fully lays out the method and formula used to reach the correct percentage for the use determination.

*See* Johnson Aff., Ex. “5,” PIC Response, pp. 2 (emphasis added).

---

ED’s Appealed Decision should be regarded as a nullity. This is but one more reason, among the many others described herein, that this matter should be given the “fresh start” of remand.

Using TCEQ's standards in 2012 when evaluating the ED's Appealed Decision, TCEQ's PIC confirmed nothing has changed:

...[T]he July 10, 2012 letter [the ED's Appealed Decision] provides no information as to why the ED no longer considers HRSGs pollution control equipment....

See October 4, 2012 Response to Negative Use Determination ("PIC 2012 Response," on file herein), p. 12.<sup>8</sup>

**B. The ED affirmatively abandoned all required factual basis and reasoning.**

Clearly, the ED has now abandoned not just his reasoning and calculations in the Borger TRD and his heavily-considered and analyzed "61% solution" (notwithstanding Work Group analysis and input), but all of his 19 prior, final 100% Positive Use Determinations and supporting calculations, in favor of a single conclusory declaration. See Johnson Aff., ¶6, Ex. 9. However, after remand, the ED did not conduct or prepare any new technical review of the Application, in clear violation of 30 TAC §17.25(e)(1):

If the commission remands a use determination to the Executive Director, the Executive Director shall:

(A) conduct a new technical review of the application which includes an evaluation of any information presented during the commission meeting<sup>9</sup>; and

(B) upon completing of the technical review, issue a new determination....

Instead, on July 9, 2012, the ED merely prepared a so-called "*Application* Review Document." (See attached Exhibit "C" ("Borger TRD"), previously produced in Attachment "B" to the ED's 2012 Response) the Borger TRD simply noted and reiterated – without any new factual findings or basis -- the ED's Appealed Decision that, "Heat recovery steam generators are used solely for production and, therefore, are not eligible for positive use determination."<sup>10</sup> As important, the Borger ARD established it was *not*, in fact, a new technical review required by 30 TAC §17.25(e)(1) by expressly noting "Technical Review Completion Date: 04/30/2008." *Id.* This was the date the original Borger TRD was completed, and the Borger TRD actually led to the ED's Original Decision and Borger's 100% Positive Use Determination. Obviously, the ED's Appealed Decision is totally undermined if the Borger TRD is the only technical review

---

<sup>8</sup> Borger disagrees with and denies the PIC's contention that, somehow, the ED can cure this deficiency before TCEQ in this appeal hearing. The ED has done what he has done, and that is the subject of this appeal. The curing, if any, of this "no basis" deficiency can only come through remand, and the required, new technical review applicable specifically to Borger's HRSGs. See 30 TAC §17.25(d)(1) and 30 TAC §17.25(e)(1)(A), and Section I. B., below.

<sup>9</sup> In further support of footnote 8, above, it is instructive to note that new information presented during the commission meeting on the appeal is only to actually be evaluated *after* remand. Thus, while "new" evidence can support a remand, only the ED's Appealed Decision and any accompanying new Technical Review Document, if any (there was none, see below), can support affirmance of the ED's Appealed Decision.

<sup>10</sup> Compounding this problem, the ED did not provide Borger a copy of the Borger ARD, although Borger did receive a copy of the Borger TRD.

supporting it; the two are patently contradictory and irreconcilable. Therefore, at the very least, this case must be remanded for a new technical review pursuant to 30 TAC §17.25(e)(1)(A).

As the ED admits in his 2012 Response, multiple parties, including Borger, have submitted and are continuing to submit specific, “custom” calculations and rationale to support various relevant considerations and, at least, some partial use determinations for HRSGs which neither the ED nor TCEQ can ignore. See, e.g., Johnson Aff. ¶¶8-10; ED’s 2012 Response, p. 14-15. All parties need to know precisely what considerations went into the ED’s Appealed Decision in order to know specifically what reasoning to challenge in this controversy.<sup>11</sup> The sole, stated basis flies in the face of the law and evidence (all as discussed below), but even more important to the question of remand, the ED cites absolutely no specific evidence to support his conclusion. The ED’s Appealed Decision fails to provide adequate – much less, the *required* – notice of either the data or calculations, if any, relied upon; thus, the ED’s decision should be remanded once again so that all Applicants are given fair notice of the specific data, calculations and other reasoning they need to appeal. Consistent with 30 TAC §17.25(e)(1)(A), the fundamental fairness required by the due process clause of the Texas Constitution also required the ED to explain the basis for his Appealed Decision in reasonable detail. *Langford v. Employees Ret. Sys.*, 73 S.W.3d 560, 565-66 (Tex. App.-Austin 2002, pet. denied) (due process concerns arose when agency failed to give applicant grounds on which it would rely for its decision and when agency denied application without deliberation).

The ED’s Appealed Decision is wholly, and wrongly, based on factually unsupported *ipsi dixit*. The ED now uniformly claims, “HRSGs are not used wholly or partly to prevent, monitor, or control air, water or land pollution and, therefore, do not provide an environmental benefit,” ED’s 2012 Response, p. 10 (emphasis added), despite all the myriad calculations to the contrary, and his own 19 prior 100% Positive Use Determinations and Borger TRD. The ED bases his entire Appealed Decision on this touchstone presumption; because it is unsupported factually, and is actually contrary to the factual evidence which has been presented, the ED’s Appealed Decision must be remanded.<sup>12</sup>

---

<sup>11</sup> The question in this appeal is only whether, based on the record being appealed, the ED’s Appealed Decision can be upheld; if not, it can only be remanded. 30 TAC §17.25(d)(2). This effectively places the burden of proof in this appeal on the ED and County. Also, because there is no equivalent of a judicial “reverse and render” with TCEQ, TCEQ cannot affirm the ED’s Appealed Decision based on previously unstated grounds or “new” findings or evidence. Again, if the ED needs, as he does, to present a different, or even just a clearer and more supported Decision for the TCEQ to review, even he has no option except remand at this point. *Id.*

<sup>12</sup> The October 2, 2012, Brief on Behalf of the County (“P&A Brief”), filed by the County’s appraiser, Charles Wayne Frazell (ostensibly of the appraisal firm Pritchard & Abbott (“P&A”)), suffers from the same weaknesses. In the P&A Brief, Mr. Frazell provides no calculations or anything more than a cursory nod to TEX. TAX CODE § 11.31(k), before concluding:

“I believe the majority of people would have voted “**NO**” on this proposition [“Proposition 2 creating the current environmental tax exemption,” see P&A Brief, p. 3], if they thought it would include production equipment...” P&A Brief, pp. 4-5 (emphasis in original).

“Since this type of boiler is a major component of production, it is not pollution control equipment.” P&A Brief, pp. 4.

No evidence is presented of Mr. Frazell’s education, professional qualifications or employment experience. There is no evidence to support any of his conclusions in the P&A Brief, or his qualifications to even state them. His

**C. The ED's Appealed Decision is grossly inconsistent with past, controlling precedent.**

The difference in the ED's Appealed decision and his 19 final Tier IV 100% Positive Use Determinations for HRSGs arose solely from certain affected Counties appeals of his 100% Positive Use Determinations. It is both unreasonable and arbitrary for substantive regulatory decisions to differ based solely, or even primarily, on after the fact challenges. Nevertheless, in rendering the Appealed Decision after the Counties' appeals, the ED ignored all 19 final Tier IV HRSG-related 100% Positive Use Determinations, as follows:

App. No.	Company/ Facility Name	County	Type of Equip	# of HRSG s of Facility	App. Date	TCEQ Deemed App. Admin. Complete	TCEQ Final Positive Use Determ'n Date	TCEQ Determination	Type of Supporting Calculation
12001	Bastrop Energy Partners LP	Bastrop	HRSG and Enhanced Steam Turbine	2	3/18/2008	4/8/2008	5/1/2008	100%+ HRSG (neg on steam turbine)	Compared with Simple Cycle with SCR
11970	Baytown Energy Center	Chambers	HRSG and Enhanced Steam Turbine	3	3/25/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output- based Emissions
11965	Calpine Construction -Magic Valley	Hidalgo	HRSG and Enhanced Steam Turbine	2	3/25/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output- based Emissions
12016	Channel Energy Center, LP	Harris	HRSG and Enhanced Steam Turbine	2	4/1/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output- based Emissions

personal opinions and purported policy arguments against tax exemptions – wholly unsupported by any fundamental factual basis, research or anything other than his own speculation – are irrelevant and, without more, also incompetent as a legal matter. Whether HRSGs are “a major component of production” is not even the statutory or regulatory test at issue: the existence of pollution control functions and benefits are. *Regardless* of whether HRSGs are deemed involved in “production,” or not, HRSGs still are conclusively recognized by both TCEQ and the Texas Legislature as having pollution control effects which entitle them to at least partial *ad valorem* tax exemptions. TCEQ should disregard Mr. Frazell’s work product and alleged “briefing” to the contrary.

11968	Corpus Christi Cogeneration LP	Nueces	HRSG and Enhanced Steam Turbine	2	3/25/2008	4/14/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output-based Emissions
11967	Deer Park Energy Center Limited Partnership	Harris	HRSG and Enhanced Steam Turbine	4	3/25/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output-based Emissions
11916	Florida Power and Light (FPLE Forney Power Plant)	Kaufman	HRSG and Enhanced Steam Turbine	6	3/13/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output-based Emissions
12000	Frontera Generation	Hidalgo	HRSG and Enhanced Steam Turbine	2	3/18/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Compared with Simple Cycle with SCR
11964	Gentex Power Corporation	Bastrop	HRSG and Enhanced Steam Turbine	2	3/25/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output-based Emissions
11972	GS Electric Generating Cooperative, Inc. (and Denver City Energy Assoc., LP)	Yoakum	HRSG and Enhanced Steam Turbine	2	3/27/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output-based Emissions
11943	Guadalupe Power Partners LP	Guadalupe	HRSG and Enhanced Steam Turbine	4	3/12/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Compared with Simple Cycle with SCR
11917	Lamar Power Partners, LP	Lamar	HRSG and Enhanced Steam Turbine	4	3/13/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output-based Emissions

11927	Navasota Odessa Energy Partners LP	Ector	HRSG and Enhanced Steam Turbine	2	4/22/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output- based Emissions,
12005	NRG Texas Power - Wharton	Harris	HRSG	4	3/31/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output- based Emissions
12003	NRG Texas- Cedar Bayou IV	Chambers	HRSG and Enhanced Steam Turbine	4	3/31/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output- based Emissions
11942	Odessa-Ector Power Partners, LP	Ector	HRSG and Enhanced Steam Turbine	4	3/12/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Compared with Simple Cycle with SCR
12015	Pasadena Cogeneration	Harris	HRSG and Enhanced Steam Turbine	3	4/1/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Output- based Emissions
11921	Rio Nogales Power Project LP	Guadalupe	HRSG and Enhanced Steam Turbine	3	3/10/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Compared with Simple Cycle with SCR
11915	Tenaska Frontier Partners, Ltd	Grimes	HRSG and Enhanced Steam Turbine	3	3/7/2008	4/8/2008	5/1/2008	100%+ HRSG; (neg on steam turbine)	Compared with Simple Cycle with SCR

See Gueringer Aff., ¶3, Exs. 1-19.<sup>13</sup>

Treating similar properties disparately is the very definition of arbitrary and capricious action. See, e.g., *Contractors Transp. Corp. v. U.S.*, 537 F.2d 1160, 1162 (4th Cir. 1976);

<sup>13</sup> P&A's reliance on the September 28, 2005, XTO Energy claim (Use Determination 04-8353) is plainly misplaced. P&A Brief, p. 3. That claim was decided approximately *two years before* the 2007 amendments which added Subsections (k)-(m) to Section 11.31 of the Texas Tax Code and resulted in the creation of the ECL/ERL and the Application itself. Also, the XTO Energy claim was not a "HRSG" claim.

*Brennan v. Gilles & Cotting, Inc.*, 504 F.2d 1255, 1264-65 (4th Cir. 1974). Although an agency is not bound to follow its decisions in prior cases in the same way that a court is, any alteration of an agency's prior interpretation must be accompanied by a timely and rational explanation. *Flores v. Employees Ret. Sys.*, 74 S.W.3d 532, 538-545 (Tex. App.-Austin 2002, pet. denied) (agency acted arbitrarily and capriciously by failing to give prehearing notice of intention not to follow previous decisions). Sudden and unexplained change is arbitrary, capricious and an abuse of discretion. *Smiley v. Citibank (S.D.), N.A.*, 517 U.S. 735, 742 (1996). Such is the case here, where there is no factual explanation for the Executive Director's action in treating similar properties in completely different ways.

The ED's actions are so arbitrary and capricious that they violate both the Tax Code and the State Constitution. See TEX. TAX CODE § 11.31(g)(2) (requiring pollution control determinations to be equal and uniform); TEX. CONST. art. VIII, § 1(a) (requiring taxation to be equal and uniform). Like Texas, the United States Constitution itself prohibits arbitrary legal distinctions (and related discrimination) by government when regulating similarly-situated people or entities. See, e.g., *Reynolds v. Sims*, 377 U.S. 533, 565 (1964).<sup>14</sup> Yet, this is precisely what the ED did when ignoring his own twenty (20) prior, and final, 100% Positive Use Determinations specifically filed under Tier IV.<sup>15</sup> Without an articulated and sufficient justification, an agency acts arbitrarily any time it treats similarly situated applicants differently. *BMW of N. Am. v. Motor Vehicle Ed*, 115 S. W.3d 722, 726 (Tex. App.-Austin 2003, pet. denied). Also, an agency action that is flatly inconsistent with other decisions of the same agency will be set aside. *Id.*; see also *Occidental Permian Ltd. v. R.R. Comm 'n*, 47 S.W.3d 801, 810-12 (Tex. App.-Austin 2001, no pet.).<sup>16</sup> Based on the foregoing, the ED's change of position

---

<sup>14</sup> These principles do not (as the ED seems to imply, but never quite says, see, e.g., ED's 2012 Response, p. 7), "trump" the requirements of TEX. TAX CODE § 11.31(d) and 30 TAC 17.17(d) requiring the ED's individual consideration of each Application and allowing for "custom" calculations of use percentages. See, e.g., ED's 2012 Response, p. 4. Most certainly, they do not justify, much less require, the ED's single, uniform Negative Use Determination for all HRSGs, regardless of circumstances.

<sup>15</sup> The ED's answer is to claim, "We weren't discriminating: we were just wrong." See, e.g., ED 2012 Response, p. 14-15. However, attempting to change things simply by issuing a new decree at odds with the facts is the very essence of illegal discrimination, Again, at the very least, remand for a new technical review is required before the ED can actually implement any change from his Original Decision.

<sup>16</sup> The ED responds that these precedents and cases should not control TCEQ's disposition of this case, essentially because he has a right to change his mind. ED's 2012 Response, p. 15. See, however, Section II., *infra*. As tellingly, he states:

The initial 25 positive use determinations were issued in error.... [T]here was no basis for the 100% positive use determination.

ED's 2012 Response, p. 15 (emphasis added).

*If*, indeed, a lack of factual basis was the reason the ED reversed himself (which Borger explicitly denies, see above), the same reasoning should apply here, and TCEQ should, at least, remand the Application for a new technical review and some legitimate, factual basis for a decision thereon. See Section I.A. and B., *supra*. The ED's reasoning here provides no foundation for the affirmance of the ED's Appealed Decision itself. In fact, as discussed in the Borger TRD and Johnson Aff., ¶¶9-10, there actually is more than sufficient factual basis to support a 100% Positive Use Determination for Borger's HRSGs.

with utterly no backup, support or calculated justification is patently “arbitrary and capricious.”<sup>17</sup> Such arbitrary actions of the ED simply cannot stand. *Lewis v. Metro Sav. & Loan Ass'n*, 550 S.W.2d 11, 16 (Tex. 1977).<sup>18</sup>

## II. THE EXECUTIVE DIRECTOR’S APPEALED DECISION EFFECTIVELY, AND IMPERMISSIBLY, REWRITES BOTH TEXAS LAW AND TCEQ REGULATIONS WITHOUT AUTHORITY.

### A. The 2008 Amendments of 30 TAC §17 control this case.

Section 11.31 of the Texas Tax Code, specifically subsections (k)-(m), and the version of 30 TAC §17 effective in the latter part of February, 2008, clearly govern this case, which must be resolved as a “Tier IV” case thereunder. Borger’s appeal herein was filed on March 27, 2008. *See Johnson Aff.*, Ex. 10. Borger’s Application was deemed administratively complete, and Borger’s rights vested thereunder, on April 8, 2008. *See Johnson Aff.*, Ex. 4. The Texas Court of Appeals for the Third District (the same Court that would hear this appeal) has just recently reconfirmed that “retroactive application of a law is unconstitutional... when it destroys or impairs vested rights.” *Mont Belvieu Caverns, LLC, v. Texas Commission on Environmental Quality, et al.*, No. 03-11-00442 CV, \_\_\_ S.W.3d \_\_\_, 2012 WL 315576 at 13 (Tex. App – Austin 2012, no pet.) (“*Mont Belvieu*”) In this case, applying any post-April, 2008 version of governing statutes, rules or regulations would effectively deprive Borger of its vested, Tier IV rights, as TCEQ purported to abolish Tier IV in 2010. Thus, while there have been several regulatory amendments since the Application was accepted by the ED as complete (and, in fact, all were also enacted after the ED’s Original Decision), the laws applicable to April, 2008, must be applied to the Application.

---

<sup>17</sup> TCEQ’s PIC’s argument that TCEQ need not consider the “arbitrary and capricious” legal standard in reviewing this appeal, PIC 2012 Response, p. 13, is specious. Even the PIC candidly notes, “...any appeal arising from the Commission’s final action may be evaluated by reviewing courts as to whether the decision is arbitrary and capricious.” *Id.* It makes no sense for TCEQ to review this appeal using any standard *other* than what a reviewing court would apply to TCEQ’s own decision herein.

<sup>18</sup> The ED’s citation of *First American Title Insurance Co. v. Strayhorn*, 169 S.W.3d 298, 306 (Tex.App.-Austin 2005), *aff’d on other grounds sub nom First Am. Title Ins. Co. v. Combs*, 258 S.W.3d 627 (Tex. 2008) (“*Strayhorn*”), *see* ED’s 2012 Response, p. 15, actually supports Borger’s position. As even the ED notes, *id.*(sic), the Third Court only sustained the Comptroller’s tax scheme *because it did not contravene the statute or any formally promulgated rule.* *See Strayhorn*, 169 S.W.3d at 306, *citing Tarrant Appraisal District v. Moore*, 845 S.W.2d 820, 823 (Tex. 1993). Such is clearly not the case here, as the ED’s Appealed Decision directly violates numerous statutes and rules. *See, e.g.*, Sections II. B. and C., below.

For the same reason, *Grocers Supply Co. v. Sharp*, 978 S.W.2d 638, 640 (Tex. App.-Austin 1998, pet. denied), also relied on by the ED (*see* ED’s 2012 Response, p. 15), also supports Borger’s position. The Court merely held there that the Comptroller could change his mind regarding his *interpretation* of rules, but could not change the actual rules themselves. *See Grocers Supply Co. v. Sharp*, 978 S.W.2d at 642 (“What is at issue in this case, then, is the Comptroller’s substitution of one *interpretation* of his rule for another, not the Comptroller’s contravention of one of his rules promulgated under the notice-and-comment procedures of the Administrative Procedures Act.”) This case involves the exact opposite situation: the ED is rewriting (and so, violating) rules and statutes by his “blanket” Appealed Decision.

While the sovereign clearly can change its mind by way of Constitutional or statutory revision, the prohibition against *ex post facto* laws limits that ability to changes that do not nullify previously vested rights (in this case, rights that were timely claimed AND should have been determined by laws and regulations in place long before the 2010 amendments to 30 TAC §17<sup>19</sup>). See TEX. CONST. art. I, § 16 (“No bill of attainder, *ex post facto* law, retroactive law, or any law impairing the obligation of contracts, shall be made.”); *Mont Belvieu, id.*, and authorities cited therein. Post-2008 amendments of statutes, rules and regulations were not and could not be effective to retroactively divest rights which, prior to those amendments: Borger claimed; the ED granted; and which were then appealed - all under Tier IV.<sup>20</sup>

TCEQ’s own Public Interest Counsel agrees that laws and regulations governing this case must be those in effect at the time the Application was received by the ED as administratively complete in April, 2008:

Because Brazos’ [*sic* - Borger’s] applications were deemed administratively complete on April 8, 2008, after the February 7, 2008, effective date of the Chapter 17 amendments, the current Chapter 17 rules [those in effect as of April 8, 2008], apply to these Applications.

See Johnson Aff., Ex. “5,” PIC Response, pp. 2-3.

Appellant submitted its application for a Tier IV use determination on March 25, 2008, so the 2010 amendments to Chapter 17 do not apply to this application.... Remanding the matter under a rule that was not in effect when the Appellant submitted its application- and has no basis in the governing statute-would be improper.

\* \* \*

OPIC finds that the rules and statutes in effect when the Appellant submitted its application should be applied....

Appellant submitted its application in April of 2008, therefore HB 3206 and HB 3544 as well as the 2010 amendments to Chapter 17 abolishing Tier IV would not apply to this application. If appeal of the 2012 negative use determinations is granted and this matter is remanded to the ED for a new use determination, the ED should process this application as a Tier IV application.

PIC 2012 Response, pp. 8, 10-11.

The ED agrees as well:

---

<sup>19</sup> It is not clear why TCEQ did not remand the Application or rule on it at all from December of 2008 until June of 2012, but whatever the reason, it was under TCEQ’s exclusive control. Appellees should not be heard to claim that this administrative delay gives them the right to have new laws applied to this case now that did not even exist in 2008 when the Application was filed and the ED originally ruled.

<sup>20</sup> Notably, *none* of the interested parties have asserted this case is *not* subject to Tier IV principles.

HB 3206 and 3544 [the Bills enacting 30 Tax Code §§11.31 (g-1 and (n))]<sup>21</sup> do not apply to applications filed prior to January 1, 2009, or to applications filed after January 1, 2009, that received final determinations prior to September 1, 2009.

ED 2012 Response, p. 3, *citing* HB 3206 § 5 and HB 3544 § 5. There seems to be no dispute about the fact that Borger's Application is to be judged according to the law in effect as of April, 2008. *See* ED's 2012 Response, p. 4-5. However, the ED's 2012 Response frequently fails to distinguish explicitly between the law controlling the ED's rulings on his "Group I" Tier IV Applications and later-amended laws and regulations allegedly controlling his "Group II" Tier III Applications.<sup>22</sup> Therefore, to be very clear, political subdivisions or agencies of the sovereign (like the ED) are *not* entitled to change *their* minds about anything in disregard of statutes the sovereign itself enacted to govern their decisions and actions. *See, e.g., Public Util. Comm'n v. Gulf States Utils. Co.*, 809 S.W.2d 201, 207 (Tex. 1991) (agencies can only act in accord with the statutes which govern them). This, unfortunately, is precisely what the ED has impermissibly done in his Appealed Decision.

**B. The ED's current, uniform, "absolutely-no-exemption-allowed" decision ignores the Texas Tax Code and related, consistent regulations.**

Subsection (a) of [Texas Tax Code] section 11.31 states that "[a] person is entitled to an exemption from taxation of all or part of real and personal property that the person owns and that is used *wholly or partly* as a facility, device, or method for the control of air, water, or land pollution." TEX. TAX CODE ANN. § 11.31(a). A "facility, device, or method for the control of air, water, or land pollution," is defined in subsection (b) of section 11.31 as:

land that is acquired after January 1, 1994, or any structure, building, installation, excavation, machinery, equipment, or device, and any attachment or addition to or reconstruction, replacement, or improvement of that property, that is used, constructed, acquired, or installed *wholly or partly* to meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution.

*Id.* § 11.31(b).

---

<sup>21</sup> The ED notes these amendments were the basis of his 2010 elimination of Tier IV Applications, among other things. *See* ED's 2012 Response, p. 3.

<sup>22</sup> For example, the ED relies heavily on 2009's HB 3206 and 3544 and their addition of TEX. TAX CODE §11.31(g-1)'s uniformity requirement. *See, e.g.,* ED's 2012 Response, p. 3. Also, the ED still maintains he can change his mind relative to the Application and effectively eliminate HRSGs from TEX. TAX CODE ANN. § 11.31(k)(8) and the related Figure: 30 TAC §17.14(a). *See* ED's 2012 Response, pp. 15-16. While this latter claim is addressed more specifically in Section II. B. and C., below, the authorities in this Section also apply to prevent the ED from "changing his mind" and revising his rules and regulations in any way that would impair Borger's vested rights under the Application.

See *Mont Belvieu*, 2012 WL 315576 at 4 [emphasis added]. In 2007, the Texas Legislature expressly amended Section 11.31 of the Tax Code to add Subsections (k), (l) and (m), *inter alia*, to recognize previously unrecognized pollution control functions and benefits of various, specific equipment. The Texas Legislature literally *mandated* that TCEQ:

*shall* adopt rules establishing a nonexclusive list of facilities, devices, or methods for the control of air, water or land pollution, which *must* include: ... (8) heat recovery steam generators.

TEX. TAX CODE ANN. § 11.31(k). (“Subsection (k)”, emphasis added.)

The Legislature was equally adamant that items may be “removed from the list only if the Commission *finds compelling evidence* to support the conclusion that the item... *does not* render pollution control benefits.” TEX. TAX CODE §11.31(l). In response, TCEQ adopted an Equipment and Categories List (“ECL”), which included HRSGs. See 30 TAC §17.14(a) and Figure: 30 TAC §17.14, #B-8. TCEQ also expressly adopted TEX. TAX CODE §11.31(l) as part of its own regulations. See 30 TAC §17.14(b)(2). Thereafter, although required to revisit the ECL at least once every three years, see TEX. TAX CODE §11.31(l); 30 TAC §17.14(b), to this very day, TCEQ has *never* removed HRSGs from its ECL or its successor, the Expedited Review List (“ERL”). See Figure: 30 TAC §17.14(a) (versions *eff.* 2008 and 2010).<sup>23</sup>

HRSGs are eligible for positive use determinations because they have been expressly defined by statute and regulation as pollution control equipment.<sup>24</sup> TCEQ has never found compelling evidence that HRSGs do *not* render pollution control benefits.<sup>25</sup> *Id.* Since the ED’s Appealed Decision, on its face, is in direct conflict with the ECL, ERL and Subsection (k), the ED’s Appealed Decision must be remanded for reconsideration in light of those governing laws. The Tax Code completely undercuts the idea that the ED’s 100% negative use determination is even legally possible for a HRSG:

Notwithstanding the other provisions of this section, **if the facility, device or method for the control of air, water, or land pollution described in an application for an exemption under this section is a facility, device, or method included on the list adopted under Subsection (k)**, the executive director... ***shall determine that the... facility, device, or method described in the application IS used WHOLLY OR PARTLY as a facility, device or method for the control of air, water, or land pollution ....***

<sup>23</sup> For definitional purposes only, Appellant notes that HRSGs are actually described by TCEQ itself in its ERL at #B-8 as “[a] counter-flow heat exchanger consisting of a series of super-heater, boiler (or evaporator) and economizer tube sections, arranged from the gas inlet to the gas outlet to maximize heat recovery from the gas turbine exhaust gas.”

<sup>24</sup> This is completely appropriate. See, e.g., *Johnson Aff.*, ¶¶8-10.

<sup>25</sup> Significantly, TCEQ did not remove HRSGs from the ECL/ERL despite having *had* to reconsider the question, at least, in 2010, well after the County’s appeal of the ED’s Original Decision had been perfected and was awaiting decision by TCEQ.

TEX. TAX CODE §11.31(m) (“Subsection (m),” emphasis added).<sup>26</sup>

Neither TCEQ nor the ED has any power inconsistent with that delegated to them by the Legislature. *Public Util. Comm'n v. City Pub. Serv. Bd.*, 53 S.W.3d 310, 312 (Tex. 2001); *Tennessee Gas Pipeline Co. v. Rylander*, 80 S.W.3d 200, 203 (Tex. App.-Austin 2002, pet. denied). To understand their relevant power here, one need only look to TEX. TAX CODE §11.31. In so doing, the primary objective must be to give effect to the Legislature's intent. *State v. Shumake*, 199 S.W.3d 279, 284 (Tex. 2006). The Court should give effect to the Legislature's intent “first and foremost” via the statutory text. *Lexington Ins. Co. v. Strayhorn*, 209 S.W.3d 83, 85 (Tex. 2006). The Court can rely on the plain meaning of the text, unless a different meaning is supplied by legislative definition or is apparent from context, or unless a plain meaning leads to absurd or unreasonable results. *City of Rockwall v. Hughes*, 246 S.W.3d 621, 625-26 (Tex. 2008); *see also* TEX. GOV'T CODE § 311.011 (“Words and phrases shall be read in context and construed according to the rules of grammar and common usage,” but “[w]ords and phrases that have acquired a technical or particular meaning, whether by legislative definition or otherwise, shall be construed accordingly.”). **These principles take precedence over the general rule that tax exemptions are strictly construed.** *Sharp v. Tyler Pipe Indus., Inc.*, 919 S.W.2d 157, 161 (Tex. App.—Austin 1996, writ denied).<sup>27</sup>

Since the subject statutory and regulatory texts are not ambiguous, it is not even appropriate to resort to rules of construction or extrinsic aids: “Where text is clear, text is determinative of that [legislative] intent.” *Entergy Gulf States, Inc. v. Summers*, 282 S.W.3d 433, 437 (Tex. 2009) (*citing In re Estate of Nash*, 220 S.W.3d 914, 917 (Tex. 2007); *Shumake*, 199 S.W.3d at 284; and *Alex Sheshunoff Mgmt. Servs. v. Johnson*, 209 S.W.3d 644, 651–52 (Tex. 2006)). Also, it is presumed that: 1) the Legislature knew background law and acted with reference to it, *see Acker v. Texas Water Comm'n*, 790 S.W.2d 299, 301 (Tex. 1990); 2) the Legislature selected statutory words, phrases, and expressions deliberately and purposefully, *see Texas Lottery Comm'n v. First State Bank of DeQueen*, 325 S.W.3d 628, 635 (Tex. 2010); *Shook v. Walden*, 304 S.W.3d 910, 917 (Tex. App.-Austin 2010, no pet.); and that 3) “the entire statute is intended to be effective” and “a just and reasonable result is intended” TEX. GOV'T CODE § 311.021(2), (3).

<sup>26</sup> Appellees' misguided focus is on the *primary economic motivation of the HRSGs' owners*, not on the actual function and pollution control benefits of the *HRSGs themselves*. P&A/the County actually compound this error by focusing on whole *plant* economics, not the pollution control effects of HRSGs themselves. *See, e.g.*, P&A Brief, p. 4 (“The primary reason for building combined-cycle and cogeneration plants is economics and not pollution control.”). This reasoning, carried to its logical conclusion, would eliminate pollution control exemptions for any pollution control devices employed in facilities such as refineries and chemical plants built for any economic gain.

<sup>27</sup> The doctrine of legislative acceptance, *see* ED's 2012 Response, p. 7, actually supports the ED's Original Decision, too. Before July, 2012, the ED never claimed HRSGs could never be eligible for any positive use determination. Every rule, regulation and decision applied or made by the ED prior to or essentially contemporaneously with the ED's Original Decision actually affirmed not just that HRSGs are entitled to *ad valorem* exemptions as pollution control equipment, but that they could qualify for 100% Positive Use Determinations. If legislative acceptance applies here (certainly, no controlling statute invalidated the ED's Original Decision), it applies in favor of awarding HRSGs 100% Positive Use Determinations. Given the plain, crystalline clarity of the statutes and regulations cited above, however, this is a collateral point. There is no statutory or regulatory ambiguity, nor does the ED assert any such ambiguity exists. Consequently, principles of interpretation are generally inapplicable to this case. All Borger asks is that TCEQ enforce controlling statutes and its own applicable regulations as written.

“An administrative agency is said to act arbitrarily or capriciously where, among other things, it fails to consider a factor the Legislature has directed it to consider...” *City of Waco v. Texas Comm'n on Env'tl. Quality*, 346 S.W.3d 781, 819 (Tex. App.-Austin 2011, pet. denied) (citing *City of El Paso v. Public Util. Comm'n*, 883 S.W.2d 179, 184 (Tex. 1994)). Under Subsection (m), any equipment listed in Subsection (k) is necessarily entitled to some pollution control exemption. Consequently, it is simply not possible for the ED to render a 100% negative use determination for Blackhawk's HRSGs, and the ED's Appealed Decision is therefore arbitrary and capricious and must be remanded for findings consistent with Subsections (k) and (m). See, e.g., *Rodriguez v. Service Lloyds Ins. Co.*, 997 S.W.2d 248, 254–55 (Tex. 1999) (“If the Commission does not follow the clear, unambiguous language of its own regulation, we reverse its action as arbitrary and capricious.”).<sup>28</sup> Moreover, administrative rules also are interpreted like statutes because they have the force and effect of statutes. *Rodriguez*, 997 S.W.2d at 254.

Thus, it should be no surprise that, in *Mont Belvieu*, the Third Court of Appeals effectively recognized that “variable,” see Figure: 30 TAC §17.14(a), Part B, like the “wholly or partly” language in TEX. TAX CODE §11.31, mean that HRSGs' involvement in “production,” if any, does not negate their entitlement to a Positive Use Determination and *ad valorem* tax exemption based on its pollution control function.<sup>29</sup> *Mont Belvieu* merely recognized that the proportion of a property's value attributable to a pollution-control feature or function must be distinguished from that attributable to its capacity to produce goods and services, if any. See *Mont Belvieu*, 2012 WL 315576 at 12, citing 30 TAC §11.31(c)(3). Clearly, the ED's Appealed Decision cannot stand in light of governing statutory and regulatory requirements.

The ED repeatedly claims that “Just because a piece of equipment is listed in §11.31(k) does not mean that it is automatically entitled to a positive use determination.” See, e.g., ED 2012 Response, p. 3 and §III. A. Borger respectfully disagrees, and notes the following language from the ED's 2012 Response, along with TEXAS TAX CODE §11.31(m) itself, plainly belie the ED's position:

Section 11.31(m) requires the Executive Director to distinguish the production portion of the §11.31(k)-listed equipment from the pollution control portion. The Executive Director must determine the appropriate use determination percentage...

That is as far as Texas Tax Code Section 11.31(m) goes.<sup>30</sup> The ED, however, engrafts an additional condition not stated in the statute (and which is contrary to it for the reasons set out

<sup>28</sup> Neither the ED nor the TCEQ itself would be entitled to any deference from the Courts of this State if ruling otherwise, because the subject statute and implementing regulations are not ambiguous. *Railroad Comm'n v. Texas Citizens for a Safe Future & Clean Water*, 336 S.W.3d 619, 624–25 (Tex. 2011); *City of Waco*, 346 S.W.3d at 800 (citing *Texas Citizens*, 336 S.W.3d at 625).

<sup>29</sup> The ED persistently reads the “or partly” out of the Constitutional and legislative mandates. See, e.g., ED's 2012 Response, p. 6.

<sup>30</sup> Texas Attorney General Opinion JC-0372 (2001) agrees that equipment can be involved in production yet still be entitled to a Positive Use Determination for pollution reduction:

Section 11.31 is broadly written, and we believe its plain meaning is clear. It embraces any property, real or personal, “that is used wholly or partly as a facility, device, or method for the control of air, water or land pollution ....” (emphasis added)."

above): "...which includes 0% if none of the equipment is used for pollution control." See ED's 2012 Response, p. 6. He purportedly relies on 33 Tex. Reg. 932 at 933 (February 1, 2008) repealed by 35 Tex. Reg. 10964 (November 18, 2010) and TCEQ's Figure: 30 TAC §17.14(a)<sup>31</sup> in asserting it. Again, however, based on the authorities cited above, no rule, regulation, proclamation or other action of an agency can contradict or alter the statute giving rise to it. See, e.g., *Public Util. Comm'n v. City Pub. Serv. Bd.*, 53 S.W.3d at 312; *Tennessee Gas Pipeline Co. v. Rylander*, 80 S.W.3d at 203. Consequently, the ED's (and TCEQ's) attempts to engraft any additional condition upon the unconditional mandate of Subsection (m) – especially ones which purport to effectively nullify it – are simply ineffective and void, and the ED's Appealed Decision must be remanded.<sup>32</sup>

**C. The ED also failed to follow essential rule-making requirements of the Texas Administrative Procedure Act.**

The ED's new, apparently universal, determination that HRSGs are not eligible for any, *even potential*, Positive Use Determination also ignores and violates formal rulemaking procedures under the Texas Administrative Procedure Act ("APA"). The ED's Appealed Decision clearly manifests a rule change by effectively eliminating HRSGs from Figure: 30 TAC §17.14(a), Part B: a "rule" is any "state agency statement of general applicability that ... implements, interprets, or prescribes law or policy," including "the amendment or repeal of a prior rule." TEX. GOV'T CODE § 2001.003(6). A state agency can only promulgate new rules through formal rulemaking procedures, including prior notice of a proposed new rule and an opportunity for public comment, legislative review, and a formal order adopting it. TEX. GOV'T CODE §§2001.23; 2001.029; 2001.032-.033. The APA also requires the advance notice to contain enough information to allow interested persons to determine if they need to participate to

---

Next, we consider whether section 11.31 excludes from its scope pollution-reducing production equipment. Significantly, the statute applies to property used "wholly or partly" for pollution control. See *id.* § 11.31(a). To qualify for the exemption, property must be used "wholly or partly" to meet or exceed environmental rules. See *id.* § 11.31 (b). The term "wholly" clearly refers to property that is used only for pollution control, such as an add-on device. See *Merriam Webster's Collegiate Dictionary* 1351 (10th ed. 1993) (defining "wholly" to mean "to the full or entire extent: ... to the exclusion of other things"). The term "partly," however, embraces property that has only some pollution-control use. See *id.* at 848 (defining "partly" to mean "in some measure or degree"). This broad formulation clearly embraces more than just add-on devices. Furthermore, that statute clearly embraces not only "facilities" and "devices" but also "methods" that prevent, monitor, control, or reduce pollution. "Methods" is an extremely broad term that clearly embraces means of production designed, at least in part, to reduce pollution. See *id.* at 732 (defining "method" to include "a way, technique, or process of or for doing something").

The ED does not disagree, citing Attorney General Opinion JC-0372, pg. 6, himself when noting that pollution-reducing production equipment may receive a partial tax exemption. See ED 2012 Response, p. 9, *fn.* 35.

<sup>31</sup> Among other things, Figure: 30 TAC §17.14(a), in the introductory narrative of Table B, does state, "Property used solely for product collection or for production purposes is not eligible for a positive use determination." (Emphasis added.)

<sup>32</sup> This argument, to some extent, begs the question of the ED's factual basis for his Appealed Decision. The fact is, the ED cannot point to any test, calculation or factual measurement that supports his Negative Use Determination. Without such a factual basis, the ED's Appealed Decision cannot stand, regardless of Subsections (k) and (m) and other laws cited in this Section II.

protect their own rights. *Tex. Workers' Comp. Comm 'n v. Patient Advocates*, 136 S.W.3d 643, 650 (Tex. 2004).

Chapter 17 of the Texas Administrative Code was created to establish how any owner of pollution control property could get a use determination. 30 TAC §17.1. Because the universal decree of the ED's Appealed Decision ostensibly implements law or describes procedure, its new proclamation is one of general applicability, and changes in relevant rules governing the process can only be made through the formal notice and comment process discussed above.<sup>33</sup> *See, e.g., El Paso Hospital District v. Texas Health and Human Commission, et al.*, 247 S.W.3d 247, 714 (Tex. 2008).<sup>34</sup> To remove HRSGs from the 30 TAC §17.14(a) ECL/ERL, then, the ED would need to implement future rulemaking procedures pursuant to 30 TAC §17.14(b) and the Texas Government Code sections cited above, too.<sup>35</sup>

Instead, the ED has simply chosen to make an unsupported, but nonetheless “blanket,” decree, “Heat recovery steam generators are used solely for production and, therefore, are not eligible for positive use determination.” This proclamation circumvented required rulemaking procedures, as well as Subsections (k) and (m). Clearly, the ED's Appealed Decision, applied as it patently is across the board to all pending HRSG Applications, and all HRSGs generally, reads HRSGs right off of the ECL/ERL and out of the implementing statutes, Subsections (k) and (m), without regard to the specific use or effects of any actual HRSG itself. The ED's Appealed Decision thus implements an impermissible new, universal rule applicable to all HRSGs, which the Legislature never foresaw, intended or authorized, and it cannot stand.<sup>36</sup> Because the ED's

---

<sup>33</sup> The ED's reliance (ED's 2012 Response, p. 16) on *Texas Mutual Insurance Co., v. Vista Community Medical Center, LLP.*, 275 S.W.3d 538, 555 (Tex. App.-Austin 2008, no pet.) is also misplaced on its face. The ED admits the Court distinguished that case from *El Paso Hospital, supra*, specifically on the basis that “the ...[*Texas Mutual*] report does not contradict Rule 134.401.” *See Texas Mutual Insurance Co.*, 275 S.W.3d at 556. Here, the ED's Appealed Decision clearly contravenes both a rule (30 TAC §17.14(a) and its accompanying Figure) and Subdivisions (k) and (m), and it also operates as a rule of general applicability to all HRSGs.

The ED's reliance on *Railroad Commission of Texas v. WBD Oil & Gas Co.*, 104 S.W.3d 69, 79 (Tex. 2003) (ED's 2012 Response, p. 17) is equally off base. The *Railroad Commission* Court only held, as the ED admits, that orders detailing regulations for a certain, *specific* field are not APA “rules.” In the instant case, the ED obviously intended and preferred a rule of “general applicability.” His statement to the contrary (“This change is not a rule of general applicability,” *id.*) is just another unsubstantiated conclusion that flies in the face of the actual facts.

<sup>34</sup> Without actually saying so, the ED suggests that the ED's Appealed Decision is not a rule change but only “a new formula resulting in the negative use determinations.” ED's 2012 Response, p. 16. This actually highlights the nature of the ED's decree in his Appealed Decision as a rule change, because no formula is even proposed to support it.

<sup>35</sup> For reasons previously stated, of course, 30 TAC §17.14(b) could never be amended to remove HRSGs specifically from the ECL/ERL without a prior amendment of TEX. TAX CODE §11.31(k)(8) in the first place.

<sup>36</sup> Even the County's appraiser, Pritchard & Abbott (“P&A”), expressly disagrees with the ED's blanket assertion:

A HRSG is often added to recover exhaust gases to preheat water entering the boiler of a conventional electric generating plant to improve efficiency.... If a HRSG is **added** just to improve efficiency, the HRSG may qualify for an exemption.... Ducting the hot gases from the [combustion turbines'] jet engine(s) reduces the pollution by reducing the need for an additional heat source (burners).” P&A's October 2, 2012, Brief on behalf of the County (“P&A Brief”), p. 2 (emphasis in original).

effective removal of HRSGs from the ECL/ERL was not in the form of a properly promulgated rule under the APA, TCEQ should remand the ED's Appealed Decision.

### III. THE EXECUTIVE DIRECTOR'S APPEALED DECISION IGNORES ALL CREDIBLE "TIER IV" CALCULATIONS OF HRSGS' POLLUTION CONTROL BENEFITS.

As discussed in Section II., *supra*, the ED's assertion that "Heat recovery steam generators are used solely for production..." is in direct conflict with the Legislative mandates and findings of Subsections (k) and (m) and the ECL/ERL, Item B-8. The question for HRSGs is not *whether* they are entitled to a Positive Use Determination, but *how much* of a Positive Use Determination they are, in fact, entitled to receive. TEX. TAX CODE §11.31(m). Even the ECL/ERL itself associates Item B-8, Heat Recovery Steam Generators, with a "V," or variable, percentage, meaning that:

The pollution control percentage for this equipment is listed as a "V," for variable, and must be calculated on an application specific basis.

See Figure: 30 TAC §17.14(a), Part B, introductory narrative (emphasis added).

Thus, ED's current, apparent rule that *every* HRSG Use Determination must (or even should or could be) a uniform, "zero" proposition now and forevermore is also manifestly against the above-stated requirements, and it wrongly ignores all the actual available, credible evidence. For example, the Johnson Aff. (¶¶8-10) presents several methodologies whereby a Positive Use Determination can be calculated for Blackhawk's HRSGs:

METHODOLOGY ONE-- Avoided NOx Emissions: *see* Johnson Aff. ¶8 (91.4% Positive Use Determination);

METHODOLOGY TWO – Alternative Avoided NOx Emissions (Duff & Phelps): *see* Johnson Aff. ¶9 (100% Positive Use Determination);

The ED contends no HRSG is entitled to a 100% Positive Use Determination based on alleged "concessions" by "Applicants" that HRSGs are used for production purposes, so (the logic goes) they cannot be used wholly for pollution control purposes. *See* ED's 2012 Response, p. 9. Nothing in TEXAS TAX CODE §11.31 compels that conclusion or excludes the idea that equipment can simultaneously be used in "production," yet have pollution control benefits. The ED's Borger TRD; Methodology Two; and the fact that Borger's HRSGs save fossil fuel and reduce emissions by transferring energy into different forms (without actually producing anything "new"), all support the 100% Positive Use Determination originally awarded in the ED's Original Decision. Johnson Aff. ¶¶9-10. *See also*: Johnson Aff. Ex. "4", the ED's Borger TRD.<sup>37</sup>

<sup>37</sup> Of course, other HRSG owner/appellants also have provided TCEQ and the ED with their own "custom" calculations of positive Partial Use Determinations they contend should be granted their particular HRSGs. But none of them are "zero," either.

All of the foregoing methodologies utilize different data, perspectives and reasoning to actually calculate potential pollution control Positive Use Determinations for Borger's HRSGs ranging from approximately 91.4% to 100%. The point of this section, however -- solely for the purposes of this appeal and securing remand of the ED's Appealed Decision, *see* *fn*t. 8, *supra* -- is *not* to determine which calculation or calculations are objectively the "best," or most correct.<sup>38</sup> The point here is simply that the actual, credible evidence indicates, consistent with Figure: 30 TAC §17.14(a), above, that the ED's "zero" is not an option, and that remand, therefore, is required. *See* Johnson Aff. ¶11. There simply is *no* credible calculation that supports a "zero" Use Determination for all HRSGs everywhere and forevermore, as the ED maintains, so the Appealed Decision must be revisited.<sup>39</sup>

Further, even the ED acknowledges that each of his HRSG Use Determinations at least *should be* based on "a case-by-case review of each application." *See, e.g.*, ED's 2012 Response, p. 17.<sup>40</sup> He acknowledges the need for each Use Determination to have its own technical review. *See, e.g.*, ED's 2012 Response, p. 17. He even admits:

As can be seen from reviewing the applications, appeals, and Executive Director's initial brief on the six appeals, there are many different ways to view the HRSG applications.

ED's 2012 Response, p. 14-15,

Yet, the ED ignored all the above; made up a new universal rule; and arbitrarily and capriciously applied it across the board to all pending Tier IV and Tier III appeals. The ED made no effort to evaluate one claim apart from another, or to distinguish or even compare

---

<sup>38</sup> That will be an issue which can only be determined on remand, so Borger expressly reserves that question for remand.

<sup>39</sup> P&A initially erroneously claimed on the County's behalf that its self-styled "Tier III" calculation actually supports a use determination for Borger's Tier IV Application of *less* than zero. *See* P&A's 12/16/08 Reply Brief for Hutchinson County, *et al.*, Appraisal Districts, Exs. 2-3. It appears from the face of the ED's Appealed Decision that the ED properly ignored P&A's original briefing. Among other problems, as described in *fn*t. 12 above, it is not supported by qualified expert testimony. Nevertheless, and while there are many things wrong with P&A's approach, suffice it to say here that P&A only reached its conclusion (and *could* only have reached it) by mutilating the formula in 30 TAC §17.17(b) and admittedly substituting "Operating Cost Savings" for the "Byproduct" required in the formula. Whatever P&A's rationale for fundamentally changing the formula, "Operating Cost Savings" just are not and cannot be equated to any "Byproduct," specifically defined in 30 TAC §17.2(1) as:

a chemical or material that would normally be considered a waste material requiring disposal or destruction, that due to pollution control property is now used as a raw material in a manufacturing process or as an end product. The pollution control property extracts, recovers, or processes the waste material so that it can be used in another manufacturing process or an end product.

Significantly, just eliminating the deduction of operating cost savings from P&A's calculation changes the partial use determination from a negative 91.77% to a *positive* 33.3% partial use exemption. Obviously, P&A's formula is outcome determinative, and its focus is not on the pollution control aspect of the property for which the exemption is claimed. It is unsurprising, then, that in its brief to the TCEQ in this appeal, P&A abandoned its earlier approach.

<sup>40</sup> *See also* ED's 2012 Response, p. 4:

Tier IV applications allowed applicants to propose a reasonable method for calculating an appropriate use determination percentage, and required the ED to review the proposed calculation method and make a final determination. This resulted in widely varying calculated use determination percentages..

claims on any technical, legal or factual grounds, even to show why they should be treated the same. Clearly, what the ED did is not what he admits should have been done. It is highly unlikely that any “one size fits all” solution to the “HRSR issue” is even possible. *See, e.g., Johnson Aff.*, ¶¶ 7, 10-11. But certainly, the single “solution” the ED presently proclaims is not supported by the actual evidence, and this appeal must be remanded for his further consideration.

#### **IV. THE EXECUTIVE DIRECTOR’S NEW, WHOLESALE REJECTION OF ALL SUPPORTING ENVIRONMENTAL LAWS IS WRONG, ARBITRARY AND CAPRICIOUS.**

Over *four years* after the County perfected its appeal of the ED’s Original Decision, and the ED’s Response Brief was filed, in the ED’s 2012 Response, §III. E., for the first time, the ED suddenly proclaimed a new, blanket rejection of *every single* environmental law cited and relied on by any Applicant (collectively, the “Cited Regulations”). Some of the rejected, Cited Regulations (like Borger’s and the 19 final 100% Positive Use Determination recipients’), were *previously accepted by the ED* as “appropriate rules.” *See, e.g., Johnson Aff.*, ¶4, Ex. 5.<sup>41</sup> The ED’s only justification for this paradigm shift is a new, and completely undefined, “nexus” requirement he now unilaterally purports to engraft upon controlling statutes, regulations and rules. *Id.*, p. 11 (“A sufficient nexus must exist between the equipment and the environmental rule.”).

Fundamentally, the ED cites no statute, regulation or case law that alludes to, much less actually requires, his mysterious, alleged “nexus.” *Id.* There is not even a suggestion that any statute, regulation or case law provides any guidance as to what might be a “sufficient” nexus. Just as fundamentally, then, the ED’s arguments on this topic fail for a number of reasons.

First, the ED’s contention, made for the first time on appeal, clearly violates due process. *Langford v. Employees Ret. Sys.*, 73 S.W.3d at 565-66. Since the ED never expressly defines his “nexus,” let alone what might make it “sufficient,” his “nexus” is void for vagueness. Also, Borger was never given notice of this hypothesized “nexus” requirement or the necessity of having to address it in their Applications or otherwise. *See, e.g., Johnson Aff.*, ¶2 and Ex. 4. Had Borger’s Application actually been deficient in its failure to properly cite “an applicable environmental regulation,” *see* ED’s 2012 Response, Topic III. E., p. 10, Borger would have been entitled to a Notice of Deficiency and an opportunity to supplement its allegedly “incomplete” Application. *See* 30 TAC §17.12(2)(A). This never occurred because the Application was not, and was never considered by anyone to be, deficient in any way. *See Johnson Aff.*, ¶2, 3 and Ex. 4.<sup>42</sup>

Second, the ED’s new, wholesale rejection of the Cited Regulations also runs afoul of equal protection principles and the requirements of uniformity, equality and fairness in approach. *See* TEX. TAX CODE § 11.31(g)(2); TEX. CONST. art. VIII, § 1(a); *Reynolds v. Sims*, 377 U.S. at

---

<sup>41</sup> In Borger’s TRD, *see Johnson Aff.*, ¶2, Ex. 4, the ED specifically found 60 CFR 60.44Da was “an appropriate rule.” Borger continues to maintain its Application was complete and appropriately supported.

<sup>42</sup> TCEQ should not miss the fact that, as late as July 9, 2012, the ED *still* agreed the Application was administratively complete, *in spite of the fact* that he also noted at that time that, “This rule does not require the installation of this equipment.” *See* attached Ex. “C,” the Borger ARD.

565. The ED has already granted 19 final 100% Positive Use Determinations based on Cited Regulations. Imposition of any new “nexus” requirement against Applicants/appellants now would be intrinsically discriminatory, and seemingly based on nothing more than Applicants’ status as appellants herein.

Perhaps most instructively, the ED’s new “nexus” requirement just is not a part of any governing statute or regulation. There simply is no statutory or regulatory requirement that the subject “rules or regulations” actually require installation of a HRSG or specify standards that could only be met by a HRSG, as the ED infers. *See* ED’s 2012 Response, p. 11.<sup>43</sup>

The ED’s attempt to engraft *any* “nexus” requirement into these controlling laws runs afoul of the very same principles and authorities cited in Section II. A. – C. which, for brevity, are simply reurged and incorporated herein for all purposes by reference.<sup>44</sup> Regardless, as a wholly new stated basis for the ED’s Appealed Decision, his “nexus” contention can only be a basis for remand, not affirmance. *See* fnnts. 8-9, and related authorities cited *supra*. Since this issue compels a “no affirmance” result regardless of how TCEQ looks at it, the Application must be remanded.

## V. CONCLUSIONS

The authorities and evidence cited in this Brief compel the conclusion that TCEQ simply must remand this case. There is no point in affirming a decision with so many associated, fatal problems, just so the Courts can fix them on appeal. The Commission should fix what it can now and force the ED to take a “fresh look” at all the particulars of this controversy in light of all the evidence presented.<sup>45</sup> The fact that the ED has gone from 100% Positive Use Determinations

---

<sup>43</sup> The ED’s contention that a “mere” emissions limit would necessarily “make the entire plant pollution control equipment,” stretches argumentative hyperbole to the breaking point and ignores other legal requirements for pollution control exemptions. To illustrate, EPA has specifically cited the environmental benefits achieved from HRSGs associated with combined-cycle combustion turbines. According to EPA, the use of such a system “decreases NOx emissions by 14 percent over simple-cycle combustion turbines and 89 percent over existing coal electricity generation plants. In addition, CO<sub>2</sub> emissions will be 5 percent lower than emissions from SCCTs and 64 percent lower than existing coal plants.” EPA, Economic Impact Analysis of the Stationary Combustion Turbines NSPS: Final Report, Feb. 2006, pp. 2-3, 2-4. However, HRSGs are the mechanisms or devices that distinguish a combined-cycle combustion turbine system from a simple, single cycle system. Without HRSGs, Blackhawk would be a single-cycle combustion turbine system; more energy would be needed to produce the same amount of electricity; and, as EPA has noted, more emissions would result. HRSGs are, therefore, the device to which the air emission reductions are and should be attributed.

<sup>44</sup> In the alternative, however, a “nexus” is simply “a connection or link between things.” *See, e.g.,* <http://dictionary.findlaw.com/definition/nexus.html>. If required – which Borger continues to deny – specific references to HRSGs (as in 40 CFR §Da(e), and in the definition of “combined cycle gas turbine” in incorporated subpart 40 CFR Subpart GG (“any stationary gas turbine *which recovers heat from the gas turbine exhaust gases to heat water or generate steam*”) provide a more than sufficient connection between those environmental regulations and HRSGs. Also, Subpart Da regulates each electric utility steam generating unit. *See* 40 CFR § 60.40Da(a). An electric utility combined cycle gas turbine is part of such a unit. *See* 40 CFR § 60.41Da. Since a HRSG is part of the combined cycle gas turbine system regulated by Subparts Da/GG, *see* 40 CFR § 60.40Da(a)(4), there is a connection between HRSGs and 60 CFR 60.44Da.

<sup>45</sup> Borger is well aware this controversy has been pending for more than four years now. All parties would doubtless appreciate an expeditious conclusion. However, the desire for expediency must take a back seat to the

to 0% (or 100% Negative Use Determinations) uniformly, without sufficient factual explanation and with flawed legal reasoning, is *prima facie* proof of the need for remand.<sup>46</sup> The ED has no cognizable evidence that the subject HRSGs are not entitled to some *ad valorem* tax exemption under Subsections (k) and (m).

Whatever Use Determination ultimately is given Borger's HRSGs, it is abundantly clear that the ED's Appealed Decision of "zero" cannot be it. The ED's Appealed Decision is wholly conclusory and unsupported by any of the analyses and calculations required by the Texas Administrative Code. It contravenes – and even worse, impermissibly rewrites -- controlling laws and regulations (including TCEQ's own mandates). It completely ignores numerous prior inconsistent decisions concerning similarly-situated parties and HRSGs. The ED's Appealed Decision itself is impermissibly "outcome determinative and not focused on the pollution control aspects of the property."

Borger's evidence and authorities cited, like its Application itself, establish that its HRSGs are, in fact, entitled to at least some exemption from *ad valorem* taxes. As discussed herein, Borger is entitled to a Positive Use Determination from the ED based on the unique specifics of its own HRSGs and their operation and effects.

Appellees seem inordinately focused on securing a result that clearly was never intended by the Legislature or TCEQ: a "one-size-fits-all" standard use determination for all HRSGs to apply now and in the future. While such might be attractive from a strictly utilitarian point of view, it obviously is not what the Legislature or TCEQ itself contemplated. Governing statutes and regulations discussed above establish that both the Legislature and TCEQ recognized one practical fact: *ad valorem* tax exemptions to which HRSGs are entitled must be determined based on the specifics of each facility's configuration, environment and other circumstances of their use. The ED must evaluate the specifics of each individual owner's use calculations, for their own HRSGs. Inasmuch as the ED's Appealed Decision fails to comply with and statutory or regulatory requirements or precedent and specifically ignores all actual evidence, it simply must be remanded.

WHEREFORE, PREMISES CONSIDERED, Appellant Borger Partners, Ltd. respectfully requests that the TCEQ remand this controversy and Borger's Application to the Executive Director for a new technical review and decision consistent with governing law and the credible evidence.

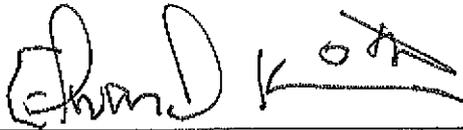
---

need for correctness and justice. Unfortunately, the only way to achieve that result at this point is to send the Executive Director "back to the drawing board."

<sup>46</sup> Also, the Executive Director's Appealed Decision is wholly contrary to his stated reason for requesting the remand: to implement a positive, 61% Partial Use Determination. See Johnson Aff., ¶¶4-5, Ex. 6. Having secured remand based on a specific promise to implement that use determination, he should not be permitted to recant his promise now. At least, the ED should be estopped from rendering any decision on Borger's Application less than the promised 61% Positive Use Determination. See *City of Hutchins v. Prasifka*, 450 S.W.2d 829, 836 (Tex. 1970) (noting that estoppel may apply to prevent manifest injustice).

Respectfully submitted,

FULBRIGHT & JAWORSKI L.L.P.

By: 

Edward Kliewer III

State Bar No. 11570500

Thomas A. Countryman

State Bar No. 04888100

Rosemarie Kanusky

State Bar No. 00790999

300 Convent Street, Suite 2100

San Antonio, Texas 78205-3792

Telephone: (210) 224-5575

Facsimile: (210) 270-7205

ATTORNEYS FOR APPELLANT

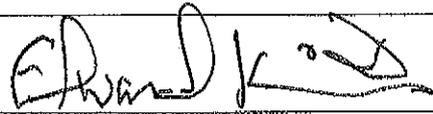
BORGER ENERGY ASSOCIATES, LP.

### CERTIFICATE OF SERVICE

I certify that the foregoing has been properly served on interested parties or their counsel of record on this 26th day of October, 2012.

Joe Raper Chief Appraiser Hutchinson County Appraisal District 920 Illinois Avenue Borger, Texas 79007-6112 Telephone: 806/274-2294 Facsimile: 806/273-3400	Chance Goodin TCEQ Office of Air MC 206 P.O. Box 13087 Austin, Texas 78711-3087 Telephone: 512/239-6335 Facsimile: 512/239-6188 E-mail: <a href="mailto:chance.goodin@tceq.texas.gov">chance.goodin@tceq.texas.gov</a>
Steve Hagle, Deputy Director TCEQ Office of Air MC 122 P.O. Box 13087 Austin, Texas 78711-3087 Telephone: 512/239-2104 Facsimile: 512/239-3341	Robert Martinez TCEQ Environmental Law Division MC 173 P.O. Box 13087 Austin, Texas 78711-3087 Telephone: 512/239-0600 Facsimile: 512/239-0606
Bias Coy TCEQ Office of Public Interest Counsel MC 103 P.O. Box 13087 Austin, Texas 78711-3087 Telephone: 512/239-6363 Facsimile: 512/239-6377	Docket Clerk TCEQ Office of Chief Clerk MC 105 P.O. Box 13087 Austin, Texas 78711-3087 Telephone: 512/239-3300 Facsimile: 512/239-3311

<p>Kyle Lucas TCEQ Alterative Dispute Resolution Program MC P.O. Box 13087 Austin, Texas 78711-3087 Telephone: 512/239-0687 Facsimile: 5121239-4015</p>	<p>C. Wayne Frazell, P.E., RPA Pritchard &amp; Abbott, Inc. 4900 Overton Commons Court Ft. Worth, Texas 76132-3687 Telephone: 817/926-7861 Facsimile: 817/927-5314 E-mail: <a href="mailto:wfrazell@pandai.com">wfrazell@pandai.com</a></p>
<p>Jules P. Slim Attorney and Counselor P. O. Box 140307 Irving, Texas 75014-0307 Telephone: 214-350-5183 Facsimile: 214-350-5184 E-mail: <a href="mailto:jslim@slimlawfirm.com">jslim@slimlawfirm.com</a></p>	



Edward Kliewer III / Thomas A. Countryman



June 20, 2013

**Via USPS Overnight Mail and E-Mail**

Fulbright & Jaworski LLP  
300 Convent Street, Suite 2100  
San Antonio, Texas 78205-3792  
United States

Texas Commission on Environmental Quality  
Tax Relief for Pollution Control Property Program  
MC 110  
P.O. Box 13087  
Austin, Texas 78711-3087  
ATTN: Mr. Ron Hatlett

Direct line +1 210 270 7121  
tom.countryman@nortonrosefulbright.com

Tel +1 210 224 5575  
Fax +1 210 270 7205  
nortonrosefulbright.com

Re: Notice of Technical Deficiency dated February 21, 2013  
Borger Energy Associates, LP  
Blackhawk Station Cogeneration Facility  
Application Number 07-11971  
Our reference: 11208289

Dear Mr. Hatlett:

This letter transmits Borger Energy Associates, LP's Supplemental Application which, among other things, responds to the Issues identified in the Texas Commission on Environmental Quality's February 21, 2013, Notice of Technical Deficiency. If you have any questions, please contact me at 210-270-7121.

Very truly yours,



Thomas A. Countryman,  
Senior Counsel

TAC/bsp  
Enclosure

cc: Mr. Chance Goodin  
Team Leader, Stationary Source Programs  
Texas Commission on Environmental Quality  
MC 206  
P.O. Box 13087  
Austin, Texas 78711  
**Via E-Mail**

# **In The Texas Commission on Environmental Quality**

## **REGARDING BORGER ENERGY ASSOCIATES, LP USE DETERMINATION APPLICATION NO. 07-11971 CONCERNING THE BLACKHAWK COGENERATION FACILITY**

### **SUPPLEMENTAL USE DETERMINATION APPLICATION NO. 07-11971**

#### **INTRODUCTORY STATEMENT**

The information in this Supplemental Use Determination Application No. 07-11971 (“Supplement”) is presented in support, supplementation and amendment of Borger Energy Associates, LP’s (“Borger”) original Use Determination Application No. 07-11971 (“Application”)<sup>1</sup> seeking a Positive Use Determination (and related *ad valorem* property tax exemption) for Borger’s heat recovery steam generators (“HRSGs”) at the Blackhawk Cogeneration Facility (“Blackhawk”). It is also provided in response to the related February 21, 2013 Notice of Technical Deficiency and the March 20, 2013 clarifying correspondence (collectively, the “NOD”) sent to Borger by the Texas Commission on Environmental Quality (“TCEQ”). For ease of reference, this Supplement will be divided in Sections responsive to the various Issues specified in the NOD (“Issues”).

The following directly responds, in brief, to the Issues posed in TCEQ’s NODs. However, to better assure understanding and complete supplementation of the Application, Borger also refers TCEQ staff and the Commissioners to the attached Appendix and various Exhibits, all of which are incorporated herein for all purposes by reference.

#### **ISSUE 1: Application Review.**

##### **Confirmation:**

Except as amended or supplemented as set out below or in the Appendix, the information contained in the Application remains current.

##### **Amendments:**

As indicated above, portions of this Supplement, including the Appendix, do specifically correct and revise parts of Borger’s original Application, and all such revisions are identified and

---

<sup>1</sup> A true copy of Borger’s Application, including its 12/5/08 Response Brief and Supplement, is collectively attached as Exhibit “1” and incorporated herein for all purposes. Except to the extent specifically modified herein, Borger expressly incorporates and reurges the Application in its entirety herein.

discussed in detail below and in the attached Appendix. Without limitation, significant revisions include the following.

1. Removal of Borger's reference to and reliance on 30 TAC §106.512 in Section 8, page "7 of 11," of the Application. *See* ISSUE 3, below.

2. Relative to pp. 7-9 of Borger's original Application, its "Schedule A – 2008 Thermal Efficiency Calculation" and the Appendix to Borger's December 5, 2008 Response Brief and Supplement which is part of Exhibit "1," this Supplement amends Borger's submitted Tier IV Methodology. *See* ISSUE 5, **I. Amended Avoided NOx Emissions Calculation**, below.

**Supplementation:**

In addition, the Application is hereby supplemented as follows:

1. Relative to Sections 7 and 8 of the Application, Borger adds the following additional citations (and related discussion in the Appendix) of specific laws, rules and regulations being met or exceeded by the installation and use of the subject HRSGs (collectively, "Supporting Laws"):

a) 30 TAC §101.506(c); and the Clean Air Interstate Rule ("CAIR"), *see* 70 Fed. Reg. 25162 (in particular but without limitation, 25226-25227, Tables IV-14 and IV-15 and 25205-25213);

b) TCEQ's Best Available Control Technology ("BACT") requirements. *See, e.g.,* 30 TAC §116.10(1); 30 TAC §§116.111(a)(2)(C), 116.160(c)(1)(A); *see also* 40 CFR §52.21(b)(12);

c) Texas House Bill 788 (2013) and EPA regulations concerning Greenhouse Gasses, *see, e.g., PSD and Title V Permitting Guidance for Greenhouse Gases*, Office of Air Quality Planning and Standards, United States Environmental Protection Agency, March, 2011; and

d) National Ambient Air Quality Standards ("NAAQS") for NO<sub>2</sub> (40 CFR §50.11), and 30 TAC §§101.20 and 101.21 (incorporating federal standards); for SO<sub>2</sub> (40 CFR §50.17); for PM<sub>10</sub> (40 CFR §50.6); and for CO (40 CFR §50.8);

*See also:* Appendix, ISSUE 2: Rule, Regulatory and/or Statutory Support ("Supporting Laws"), incorporated herein.

2. Subject to and without waiving Borger's various objections asserted below in relation thereto, and only because it was requested by TCEQ (even though TCEQ may not require any "cost analysis procedure ("CAP")" or other specific calculation under Tier IV<sup>2</sup>), Borger includes discussion of a use calculation in compliance with the so-called CAP proposed by TCEQ in the NOD. *See* Appendix, ISSUE 4: Modified Tier III Cost Analysis Procedure ("CAP").

---

<sup>2</sup> As indicated therein, the Application was specifically filed under "Tier IV." *See* 30 TAC §17.2(16) (2008). Under Tier IV, it is *the Applicant* who has the right to determine the "method and the calculation used to calculate the use percentage." *See* 30 TAC §17.10(d)(6) (2008); *see also* NOD, Issue 4. Because the Application involves no property which is *not* on the Equipment and Categories List, TCEQ has no right to require Borger to utilize any particular formula or calculation. *See* 30 TAC §17.10(d)(5) (2008).

3. In addition to Borger's amended Tier IV Methodology discussed in ISSUE 5, below, Borger also supplements its Application with an additional proposed Methodology, **The ED's Adopted Recommendation**, as described under ISSUE 5, below.

4. Borger includes responses to a variety of issues identified throughout the Appendix concerning TCEQ's NOD's requests, prior and anticipated claims and interpretations of relevant laws and facts.

5. Further, Borger here supplements its Application to include a discussion of the Part B Decision Flow Chart identified at Figure: 30 TAC §17.15(b) (2008). Boxes 1, 2 and 3 are all marked "Yes." Specifically,

The Heat Recovery Steam Generators (HRSGs) are listed on Part B of the Equipment & Categories List as item B-8. As Part B equipment, the HRSGs pass through Box I of the Part B Decision Flow Chart with a yes answer. The use of the HRSGs at a combined cycle plant, as opposed to having a simple cycle plant, provides an environmental benefit of, among other things, reduced NOx emissions at the site, so there is a yes answer for Box 2. The installed HRSGs meet or exceed the numerous Supporting Laws cited above and there are numerous environmental Laws, rules and regulations which are being met by the reduction of emissions caused by the HRSG's use, so there is a yes answer to Box 3.<sup>3</sup>

**ISSUE 2: [1] Specify the subsections of Title 40 Code of Federal Regulations (CFR) §60 Subparts Da and Db being met as a result of the installation and use of the heat recovery steam generators (HRSG); and [2] explain how the HRSG use causes the facility to meet or exceed an environmental rule.**

TEXAS TAX CODE §11.31(m) obviates the need for *any* regulatory citation in support of the Application. Nevertheless, Borger specifically responds to Issue 2 of the NOD, as requested, as follows:

1. Section 60.44Da, the subpart of Title 40 Code of Federal Regulations (CFR) §60 Da applicable to the Blackhawk HRSGs, is the subsection being met.

2. The HRSGs' and their use at Blackhawk cause the facility and its components, as applicable, to meet or exceed the requirements of all Supporting Laws, including 40 CFR §60.44Da. The steam creation and corresponding cooling (or, more simply, the passive energy shift) that occurs in the HRSGs is just a managed reaction – not production - of the same elements (heat and water) produced in the absence of HRSGs. Using the HRSGs to create steam from otherwise wasted heat in the CTs exhaust gas results in higher thermal efficiency and fewer NOx emissions compared to using a boiler to create steam.

*See also:* APPENDIX: ISSUE 2 - Rule, Regulatory and/or Statutory Support ("Supporting Laws").

---

<sup>3</sup> Essentially, this is the same justification used by the ED in awarding Borger its original 100% Positive Use Determination for its HRSGs. *See* attached Exhibit "2," p. AE4-2.

**ISSUE 3: 30 TAC §106.512**

The Application's citation of 30 TAC §106.512, as discussed above, was inappropriate, and the Application is hereby amended to remove it from Section 8 of the Application.

**ISSUE 4: Use of NOD-Modified Tier III Cost Analysis Procedure (CAP).**

Subject to the objections set out above and therein, *see* Appendix, ISSUE 4: Modified Tier III Cost Analysis Procedure ("CAP") and attached Exhibit "5."

**ISSUE 5: Applicant's Proposed Calculations Of Use Determination Percentage.**

In lieu of the Tier IV Methodology described in the original Application, Borger submits the following methods of calculating a use determination percentage for its HRSGs.

**I. Amended Avoided NOx Emissions Calculation**

This Air Pollution Control Equipment Use Determination methodology compares, on a lbs-NOx/lb-steam produced basis: a) actual nitrogen oxide ("NOx") emissions from the Blackhawk Facility's two natural gas combustion turbines ("CTs"), each with a HRSG; to b) NOx emissions from the boiler ("Boiler") at the Wood River Borger Refinery (the "Refinery"). The Boiler was effectively replaced by the HRSGs at the Facility, because steam from the HRSGs is provided to the Refinery for its operations and replaces the steam previously provided by the Boiler.<sup>4</sup>

a. Annual NOx emissions attributed to steam production from the cogeneration unit at Blackhawk are calculated as follows:

$$\text{Annual NOx (tpy)} = \text{Emission Factor} \left( \frac{\text{lb}_{\text{NOx}}}{\text{MMBtu}} \right) \times \text{Heat Input} \left( \frac{\text{MMBtu}}{\text{yr}} \right) \times \frac{1 \text{ ton}}{2,000 \text{ lb}}$$

$$\text{Annual NOx} = 0.047 \frac{\text{lb}_{\text{NOx}}}{\text{MMBtu}} \times 1,877,176 \frac{\text{MMBtu}}{\text{yr}} \times \frac{1 \text{ ton}}{2,000 \text{ lb}} = 44 \text{ tpy}_{\text{NOx}}$$

Where:

Annual NOx	Annual NOx emission rate, in tons per year
Emission Factor	NOx emission factor reported to EPA using Part 75 quality-assured data, in units of lb-NOx/MMBtu
Heat Input	Annual average heat input for steam production, as recorded by Part 75 quality-assured fuel flow meters, in MMBtu/yr, with fuel use attributed to power augmentation operation mode (power production) omitted

<sup>4</sup> The Refinery's Boiler did not have sufficient capacity to match the Refinery's current steam demand that Blackhawk is able to support. Therefore, the emissions were scaled below to meet current production levels. While this discussion refers to one "Boiler," the emission reduction takes into account sufficient boiler capacity (in effect, multiple boilers) to meet the total steam demand now being met by Blackhawk.

b. The Blackhawk cogeneration plant can produce roughly 1,200,000 lb-steam per hour. Therefore, the lb-NOx/lb-steam produced ratio can be calculated as follows:

$$\text{Cogeneration Ratio} \left( \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}} \right) = \frac{\text{Annual NOx} \left( \frac{\text{ton}_{\text{NOx}}}{\text{yr}} \right) \times \frac{2,000 \text{ lb}}{1 \text{ ton}}}{\text{Steam Production} \left( \frac{\text{lb}_{\text{steam}}}{\text{hr}} \right) \times \text{Operating Hours} \left( \frac{\text{hr}}{\text{yr}} \right)}$$

$$\text{Cogeneration Ratio} = \frac{44 \frac{\text{ton}_{\text{NOx}}}{\text{yr}} \times 2,000 \frac{\text{lb}}{\text{ton}}}{1,200,000 \frac{\text{lb}_{\text{steam}}}{\text{hr}} \times 8,043 \frac{\text{hr}}{\text{yr}}} = 0.0000091 \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}}$$

Where:

- Annual NOx            Annual NOx emission rate from the cogeneration plant, in tons per year
- Steam Production    Hourly steam production by the cogeneration plant, in pounds per hour
- Operating Hours     Annual operating hours of the cogeneration plant, based in 2011 data, in hours per year

c. The annual NOx emissions generated by the Boiler were determined using permitted emission rate limits and actual steam production information. The Boiler is permitted to emit 71 tpy NOx for a 4,800-hour operating year. This equates to an average of roughly 29.58 lbs-NOx/hr. The Boiler is capable of producing approximately 280,000 lbs-steam/hr. Therefore, the lb-NOx/lb-steam produced ratio for the Boiler can be calculated as follows:

$$\text{Refinery Ratio} \left( \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}} \right) = \frac{\text{Hourly NOx} \left( \frac{\text{lb}_{\text{NOx}}}{\text{hr}} \right)}{\text{Steam Production} \left( \frac{\text{lb}_{\text{steam}}}{\text{hr}} \right)}$$

$$\text{Hourly NOx} \left( \frac{\text{lb}_{\text{NOx}}}{\text{hr}} \right) = \frac{\text{Annual NOx} \left( \frac{\text{ton}_{\text{NOx}}}{\text{yr}} \right) \times 2,000 \frac{\text{lb}}{\text{ton}}}{\text{Operating Hours} \left( \frac{\text{hr}}{\text{yr}} \right)}$$

$$\text{Hourly NOx} = \frac{71 \frac{\text{ton}_{\text{NOx}}}{\text{yr}} \times 2,000 \frac{\text{lb}}{\text{ton}}}{4,800 \frac{\text{hr}}{\text{yr}}} = 29.58 \frac{\text{lb}_{\text{NOx}}}{\text{hr}}$$

$$\text{Refinery Ratio} = \frac{29.58 \frac{\text{lb}_{\text{NOx}}}{\text{hr}}}{280,000 \frac{\text{lb}_{\text{steam}}}{\text{hr}}} = 0.000106 \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}}$$

Where:

Hourly NOx	Hourly NOx emission rate of the Boiler, based on authorized limit and hours of operation, in pounds per hour
Steam Production	Hourly steam production by the Boiler, in pounds per hour
Annual NOx	Annual NOx emission rate of the Boiler, based on authorized limit in tons per year
Operating Hours	Annual operating hours based on authorized limit, in hours per year

d. Therefore, the NOx that would be emitted to produce the equivalent amount of steam from the Boiler rather than the cogeneration/HRSG unit is:

$$(\text{Annual NOx})_{\text{Boiler}} = (\text{Annual NOx})_{\text{Cogen}} \times \frac{\text{Refinery Ratio} \left( \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}} \right)}{\text{Cogeneration Ratio} \left( \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}} \right)}$$

$$(\text{Annual NOx})_{\text{Boiler}} = 44 \text{ tpy} \times \frac{0.000106 \left( \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}} \right)}{0.0000091 \left( \frac{\text{lb}_{\text{NOx}}}{\text{lb}_{\text{steam}}} \right)} = 510 \text{ tpy}$$

Where:

$(\text{Annual NOx})_{\text{Boiler}}$	Annual NOx that would be emitted to produce the equivalent amount of steam from the Boiler, in tons per year
$(\text{Annual NOx})_{\text{Cogen}}$	Annual NOx emitted to produce the equivalent amount of steam from the cogeneration unit, in tons per year
Refinery Ratio	Ratio of pounds of NOx emitted by pounds of Steam produced at the Boiler, in pounds of NOx per pounds of steam
Cogeneration Ratio	Ratio of pounds of NOx emitted by pounds of Steam produced at the cogeneration unit, in pounds of NOx per pounds of steam

e. Thus, the amount of pollution reduced by using HRSG units for steam production rather than the Boiler is **510 tpy less 44 tpy = 466 tpy**.

f. This equates to 91.4% pollution control. This is the actual percentage of NOx emissions reduction attributable specifically to the Blackhawk HRSG equipment, calculated using the formula specified by TCEQ in the NOD, Issue 5 (and Issue 2 in the March 20, 2013 clarifying correspondence):

$$\frac{\text{Output Baseline} - \text{Output Subject}}{\text{Output Baseline}} = \frac{510 \text{ tpy} - 44 \text{ tpy}}{510 \text{ tpy}} = 91.4\%$$

The 91.4% pollution control functionality of the Facility's HRSGs is consistent with the control levels obtained through the use of selective catalytic reduction systems ("SCR"). SCRs are a pollution control strategy that routinely receives a 100% Positive Use Determination from the TCEQ.

## **II. The ED's Adopted Recommendation**

While primarily relying on the foregoing and continuing to request a 91.4% Positive Use Determination, Borger submits this Methodology solely in the alternative thereto. After issuing the ED's Original Decision, the ED formed a Work Group ("Work Group") of various industry representatives and specialists in the field to determine and quantify HRSGs' pollution control benefits. See ED's December 3, 2008 Response Brief to Rusk County, *et al.*, Appraisal Districts' Appeals of the Executive Director's Use Determinations ("ED Response Brief," a true copy of which is attached and incorporated herein for reference purposes as Exhibit "6,") §IV, pp. 10-11. On December 3, 2008, the ED affirmatively represented that "The Executive Director intends to apply the adopted recommendation to all subsequently filed similar use determination applications, and to those applications currently pending adjudication." *Id.* [emphasis added]. That recommendation was based, among other things, on the Work Group's efforts and read as follows:

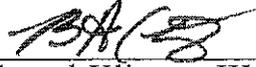
The thermal efficiency increase or production gain derived from the installation of a HRSG is approximately 39%. Since this percentage represents the additional amount of electrical energy produced for a given heat input, it therefore represents the production value of the equipment. Based on this production value, the pollution control percentage of a HRSG installed at a combined-cycle facility is 61%. Staff is therefore recommending the positive use determination of 61% for the installation of a HRSG in a combined-cycle facility.

*Id.* at p. 11 [emphasis in original].

Respectfully submitted,

**BORGER ENERGY ASSOCIATES, LP**

**BY: FULBRIGHT & JAWORSKI L.L.P.**



---

Edward Kliewer III

State Bar No. 11570500

Thomas A. Countryman

State Bar No. 04888100

300 Convent, Suite 2200

San Antonio, Texas 78205

Telephone: 210.224.5575

Telecopier: 210.270.7205

*Counsel for Applicant, Borger Energy  
Associates, LP*

# APPENDIX

## ISSUE 2: Rule, Regulatory and/or Statutory Support (“Supporting Laws”).

### 1.

As an initial proposition, Borger notes that the express language of the TEXAS TAX CODE obviates the need for any regulatory citation in support of the Application. Specifically, TEXAS TAX CODE §11.31(m) provides:

**Notwithstanding the other provisions of this section, if the ... device ... for the control of air, water, or land pollution described in an application for an exemption under this section is a ... device... included on the list adopted under [TEXAS TAX CODE §11.31] Subsection (k), the executive director of the Texas Commission on Environmental Quality, not later than the 30th day after the date of receipt of the information required by Subsections (c)(2) and (3) and without regard to whether the information required by Subsection (c)(1) has been submitted, shall determine that the facility, device, or method described in the application is used wholly or partly as a facility, device, or method for the control of air, water, or land pollution and shall take the actions that are required by Subsection (d) in the event such a determination is made.**

HRSBs are unquestionably “included on the list adopted under Subsection (k).” Consequently, their environmental benefits have already been legislatively determined to exist, and there is no need for any citation of Supporting Laws.<sup>5</sup>

### 2.

Nevertheless, and in further support of 40 CFR §60.44Da as one Supporting Law, Borger notes that on May 1, 2008, the TCEQ’s Executive Director (“ED”) initially awarded Borger a 100% Positive Use Determination on its Application based specifically on 40 CFR §60.44Da. *See* ED’s May 1, 2008 100% Positive Use Determination of Borger’s Application and supporting Technical Review Document (collectively, the “ED’s Original Decision”) attached collectively as Exhibit “2” and incorporated herein for all purposes.<sup>6</sup> 40 CFR §60.44Da establishes standards of performance for NOx emissions for “electric utility steam generating units,” like Blackhawk’s: 1) for which construction commenced after July 9, 1997 but before March 1, 2005

---

<sup>5</sup> As Chairman Shaw remarked at the December 5, 2012 hearing on Borger’s appeal of the ED’s negative use determination concerning the Application (the “Appeal Hearing”):

I can understand how one might read that [subsections (m) and (k)] and say, well, we don’t really have to cite the rules and regulations that are met or exceeded because of this, because the legislature said the ED is going to determine that this, they shall determine that this is pollution control equipment, it’s just a matter of determining what proportion of that is. And so I think at a minimum, it’s problematic to suggest that negative use determination should be made because they failed to cite an applicable rule in light of that. I think that, it makes it difficult to square that with what the legislature was intending whenever they included that in the rule or in their legislation. [Emphasis added.]

<sup>6</sup> Notably, the Technical Review Document supporting Borger’s Application also established the Application’s administrative completeness as of April 8, 2008, and no Notice of Deficiency concerning the Application was ever provided by the ED to Borger prior to the February 21, 2013 NOD.

(see 40 CFR §60.44Da(d)), and 2) that are “capable of combusting more than 73 megawatts (MW) (250 million British thermal units per hour (MMBtu/hr)) heat input of fossil fuel (either alone or in combination with any other fuel).” See 40 CFR §60.40Da(a).<sup>7</sup>

3.

The increased fuel efficiency resulting from the use of Borger’s HRSGs<sup>8</sup> also allows Blackhawk to stay below the state allocation for NOx emissions under 30 TAC §101.506(c) and the Clean Air Interstate Rule (“CAIR”). Based, *inter alia*, on State obligations to address and reduce interstate transport of pollutants under section 110 of the Federal Clean Air Act, see 42 USC §7410, EPA implemented CAIR by specifying statewide emissions reduction and reporting requirements (for, among other emissions, NOx). See, e.g., 70 Fed. Reg. 25162 (see in particular but without limitation re: NOx: 25226-25227, Tables IV-14 and IV-15; 25317-25328; 25205-25213; 25339-25362) (May 12, 2005); see also: 40 CFR §§51.121–51.123; 40 CFR Part 96, Subparts AA-HH. 30 TAC §101.506 implements CAIR’s NOx reductions in Texas and applies them to Blackhawk and other such facilities by specifically focusing and relying on increased fuel efficiency. See, e.g., Figure: 30 TAC §101.506(c).

4.

TCEQ’s Best Available Control Technology (“BACT”) requirements in place at the time the HRSG units were permitted also are exceeded by the use of Borger’s HRSGs. In Texas, BACT is defined as

An air pollution control method for a new or modified facility that through experience and research, has proven to be operational, obtainable, and capable of reducing or eliminating emissions from the facility, and is considered technically practical and economically reasonable for the facility. *The emissions reduction can be achieved through technology such as* the use of add-on control equipment or by enforceable changes in *production processes, systems, methods*, or work practice. Ref. 30 TAC §116.10.

See Air Permit Reviewer Reference Guide APDG 6110, “*Air Pollution Control: How to Conduct a Pollution Control Evaluation*,” Air Permits Division, Texas Commission on Environmental Quality, Appendix A, p. 29 (emphasis added).

BACT, then, is measured by the reduction in total emissions that can be achieved through production processes, systems and methods. See 30 TAC §116.10(1). As described above, the

---

<sup>7</sup> Although not a prerequisite to any Positive Use Determination, see Paragraph 7, below, as part of an “affected facility,” which is by definition an “electric utility steam generating unit,” Borger’s HRSGs are specifically subject to regulation under 40 CFR § 60.40Da, *et seq.* Under 40 CFR §60.41Da, an “electric utility combined cycle gas turbine” is part of such an “electric utility steam generating unit” and Blackhawk’s HRSGs are part of Blackhawk’s electric utility combined cycle gas turbine by design and under law. See, e.g., 40 CFR §60.40Da(e)(1).

<sup>8</sup> As Commissioner Rubenstein noted at the Appeal Hearing:

...I don’t disagree that there’s great production value in having the HRSGs there. None, nobody disputes that. But, I also don’t think it’s appropriate to discount the fact that that efficiency ends up in emission avoidance, and . . . we’ve touted the improvements in air quality that we’ve made because we’re targeting the emissions. In large respects, the increased efficiencies because of the regulations that we have also let us get there, and so we can’t like it here and not like it over on this end.

“production processes, systems and methods” Borger’s HRSGs are, create and facilitate do, in fact, insure Blackhawk exceeds applicable BACT requirements.

BACT is a limitation addressed through a permit application and TCEQ’s processing of that permit application. The permit reflects the results of that analysis and establishes an emissions limitation but does not always identify specific equipment as being “required Best Available Control Technology.” However, as a permit application’s representations are considered conditions upon which the permit is issued, and are enforceable as such, Borger is entitled to rely on these representations for purposes of establishing that its HRSGs constitute BACT for Blackhawk and to establish that the HRSG meets or exceeds the requirements of 30 TAC §§116.111(a)(2)(C), 116.160(c)(1)(A); 40 CFR §52.21(b)(12). See PSD Permit No. 32096/PSD-TX-925; and Title V Operating Permit No. O-1753, copies attached as Exhibits “3” and “4,” respectively, and incorporated herein by reference.

5.

The EPA’s and TCEQ’s (pursuant to newly enacted Texas House Bill 788 (2013)) regulation of Greenhouse Gasses (“GHG”) establishes further support for the Application. EPA determined GHGs must be regulated under the Clean Air Act and has started implementation through BACT reviews (in SIP-authorized states) or *via* a FIP in states such as Texas, and through the proposal of New Source Performance Standards (NSPS) that, once finalized, will impose output-based emission limits on GHGs which will confirm again that HRSGs are pollution control equipment. Based on EPA’s GHG BACT reviews to date, efficiency reflected through lower output-based emissions of GHGs is the most important factor in meeting the GHG BACT requirements. In its GHG BACT Guidance Document, the EPA states,

Considering the most energy efficient technologies in the BACT analysis helps reduce the products of combustion, which includes not only GHGs but other regulated NSR pollutants (*e.g.* NO<sub>x</sub>, SO<sub>2</sub>, PM/PM<sub>10</sub>/PM<sub>2.5</sub>, CO *etc.*) Thus, it is also important to emphasize that energy efficiency should be considered in BACT determinations for all regulated NSR pollutants (not just GHGs).

*PSD and Title V Permitting Guidance for Greenhouse Gases*, p. 21 (Office of Air Quality Planning and Standards, United States Environmental Protection Agency, March, 2011).

The fact that output-based emission reductions have been so clearly identified by the EPA, and now the Texas Legislature, as a preferred method of compliance with BACT for a wide range of pollutants should end any debate about whether a sufficient regulatory basis exists to conclude that HRSGs qualify as pollution control property.

6.

To the extent, if any, that TCEQ feels additional “legal” support is needed for the Application, the National Ambient Air Quality Standards (“NAAQS”) for NO<sub>2</sub>, 40 CFR §50.11,<sup>9</sup> and 30 TAC §§101.20 and 101.21 (incorporating federal standards) also are exceeded by the use of Borger’s HRSGs.

---

<sup>9</sup> The subject HRSGs also assure Blackhawk exceeds NAAQS for PM<sub>10</sub> (40 CFR §50.6) and CO (40 CFR §50.8).

There is no legal requirement that any Supporting Law either: i) expressly require use of HRSGs to meet environmental quality standards or emissions reductions stated therein; or ii) specify environmental quality standards or emissions reductions which can only be satisfied by the use of HRSGs. Rather, TEXAS TAX CODE §11.31(b) only requires that:

In this section, "facility, device, or method for the control of air, water, or land pollution" means... any... machinery, equipment, or device, and any attachment or addition to... that property, that is used, constructed, acquired, or installed wholly or partly to meet or exceed **rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution.** (Emphasis added.)

Similarly, 30 TAC §17.4(a) merely requires, in pertinent part:

To obtain a positive use determination, the pollution control property must be used, constructed, acquired, or installed wholly or partly to meet or exceed **laws, rules, or regulations adopted by any environmental protection agency of the United States, Texas, or a political subdivision of Texas, for the prevention, monitoring, control, or reduction of air, water, or land pollution.** (Emphasis added.)

Both tests are met in Borger's supplemented Application. Any contrary ruling at this late date also would run afoul of equal protection principles and the requirements of uniformity, equality and fairness in approach. See TEX. TAX CODE § 11.31(g)(2); TEX. CONST. art. VIII, § 1(a); *Reynolds v. Sims*, 377 U.S. 533, 565 (1964). On or about May 1, 2008, the ED awarded 100% Positive Use Determinations for HRSGs belonging to 19 different Applicants, and those 100% Positive Use Determinations now are final and non-appealable. As TCEQ well knows, many of those Determinations also relied on one or more of the Supporting Laws.

# APPENDIX

## ISSUE 4: Modified Tier III Cost Analysis Procedure (“CAP”).

1.

As an initial objection to the NOD’s ‘Issue 4’ requirements, the Tier III CAP formula proposed in the NOD (the “NOD CAP”) simply cannot be applied to Borger’s HRSGs legally or credibly.<sup>10</sup> The reasons are many, including the following.

a. Under TCEQ’s own regulations, no CAP can ever be applied to Borger’s Tier IV Application. *See* 30 TAC §17.17(b) (2008) and 30 TAC §17.17(c)(2010). Again, TCEQ simply has no legal right to impose any CAP on Borger. *See* 30 TAC §17.10(d)(6) (2008); *cf.* 30 TAC §17.10(d)(5) (2008).

b. The logical inconsistency of determining the alleged percentage of *pollution control function* solely by a comparison of *equipment costs* less certain *revenues* without *any* consideration of actual emissions reduction affirmatively establishes that the NOD CAP is flawed, at least in application here (as the 2008 or current CAPs would be, if applied).

1) This “economics-only” focus assures that the NOD CAP, the 2008 CAP and the current CAP (collectively, the “CAPs”) all operate in this situation to actually reward inefficiency and punish efficiency. Simply, the more efficient a combined cycle unit is, the more Marketable Product (or Byproduct) it will produce, and the larger its related deduction will be in the CAPs. Conversely, the more inefficient a plant is, the higher will be its pollution control exemption. This result is logically inconsistent and diametrically opposed to TCEQ’s fundamental responsibility of protecting the environment and incentivizing environmentally friendly equipment, processes and actions. It simply cannot be what the Legislature intended when enacting TEXAS TAX CODE §11.31.

2) Texas appraisal districts have authority to use and are legally required to consider the income approach when appraising plants like Blackhawk. *See, e.g.,* TEX. TAX CODE §§23.01(b), 23.0101. The income approach considers all plant revenues, including all those, if any, attributable to HRSGs. TEX. TAX CODE §§23.012. Accordingly, the deduction of any NPVMP or Byproduct in the CAP would cause an inappropriate and unjust “double counting” of any “HRSG” revenues and, as far as *ad valorem* taxation goes, effectively cause Borger to pay a “double tax” on them.

c. There simply is no “comparable equipment or process without the pollution control [HRSGs]” as required for “Capital Cost Old” (“COO”). *See, e.g.,* Figure: 30 TAC §17.17(b)(n. 3) (2008). None of the four hierarchical methods set forth in 30 TAC § 17.17(b)(1)

---

<sup>10</sup> Notably, TCEQ’s NOD does not apply or even refer to the correct CAP formula. *See* 2/21/13 NOD, pp. 1-3. The CAP applicable to the time Borger’s Application was filed is found at 30 TAC §17.17, Figure: 30 TAC §17.17(b) and Figure: 30 TAC §17.17(c) (2008) (the “2008 CAP”). However, as one example only, the NOD improperly requires an “NPVMP” deduction, in place of the correct “Byproduct.” The NOD CAP is clearly derived from the *current* CAP which can never be applied to the Application. More to the point, in an obvious admission that no regulatory CAP works when applied as written to Blackhawk’s HRSGs, TCEQ’s NOD also changes various CAP terms and definitions, and/or applies them in legally inconsistent ways, when trying to force Borger’s compliance with the NOD’s unique Tier III CAP. *See* 2/21/13 NOD, p. 2-3.

apply. There is no equipment that serves the function of the HRSG without its pollution control feature. Borger is not replacing an existing unit of any sort. There is no alternative equipment that could be manufactured to serve the function of the HRSG without its pollution control feature. COO should be zero.

1) Comparing the NOD's so-called CCO – the “cost of a [hypothetical] boiler(s) required to produce the same amount of steam produced by the HRSGs” - to the HRSGs' cost as CCN does not comply with the governing regulation.<sup>11</sup>

2) The Executive Director's staff has directed all HRSG Applicants to calculate the Production Capacity Factor (“PCF”) in a way consistent with Figure: 30 TAC § 17.17(b)(n. 1). However, that rule has specifically recognized that the PCF is to be included in the CAP formula only in limited circumstances. *Id.* Because there is no existing [“old”] equipment or process, there is no increase or decrease in capacity, and the rule indicates that portion of the CAP which calculates PCF should be omitted.

3) Moreover, the NOD's comparison is pragmatically unrealistic and unfairly results-oriented without full consideration of all other costs of the necessarily resulting, required, “conversion” of the whole Blackhawk plant from a simple cycle (without HRSGs) to a combined cycle (with HRSGs) design. By definition, hypothetical comparator boilers would necessarily “downgrade” Blackhawk to a completely different plant, and the “upgrade” to a combined cycle plant would cost far more than just the cost of HRSGs.<sup>12</sup>

d. Production Costs of the “Marketable Product” under the *current* CAP include “the costs directly attributed to the production of the product, including raw materials, storage, transportation and personnel, but excluding non-cash costs...” See 30 TAC §17.17(c); Figure: 30 TAC §17.17(c)(2)(2010). The NOD CAP's exclusion of various legitimate Production Costs, *especially* fuel costs, is also impermissibly results-oriented and unfair. Without fuel and other Production Costs the NOD purports to exclude, no heat could ever be received, much less utilized, by Blackhawk's HRSGs, and no steam could be produced (or provided to the steam turbines to implement their production of electricity).

For all of these reasons, among others, the NOD CAP is at odds with the very statute it was promulgated to implement and constitutes improper and illegal rulemaking. Further, the true CAP apparently was conceived mainly for equipment which can be added to (or removed from) existing equipment without any more fundamental design or function changes. The CAPs' evaluative scenario is just not applicable here; it is simply not suitable for a use determination analysis based on efficiency, or pollution avoidance (rather than pollution control). Most important, its actual focus and results are completely *contrary* to the very purposes it is supposed

---

<sup>11</sup> If one does use this CCO from the NOD, there should be no discount in the NOD CAP for the HRSGs' steam value at all. NPVMP is designed to capture “the production benefits of property used partially for pollution control and partially for production.” See 35 Tex. Reg. 10964, 10965 (Dec 10, 2010). Because CCO and CCN are definitionally equalized in the NOD, the HRSG is not producing more steam than the CCO. Therefore, there is no basis for subtracting NPVMP under such circumstances.

<sup>12</sup> This cost issue is irrelevant where one is comparing only the *emissions* from (or fuel used by) boilers and HRSGs, another reason to utilize Borger's Tier IV Methodologies.

to serve. Borger's HRSGs are far better evaluated as pollution control equipment by a different, Tier IV approach.<sup>13</sup>

2.

Each of the above factors operates to assure that any factual response to the NOD's Issue 3 will, at best, be inappropriate. Cumulatively, they formulaically assure a result that is both legally and factually wrong.

3.

While continuing to deny that such could be legitimately used to evaluate the Application, in further response to Issue 4, and subject to the above objections, Borger also provides the attached Exhibit "5," applying the NOD CAP with the various factors ostensibly "required" in the NOD. This information is provided simply and exclusively because TCEQ purported to require it in the NOD. Clearly, its conclusion of a -2541.7% negative use determination is not logical, credible or in accord with the provisions or legislative intent of TEXAS TAX CODE §11.31, particularly subsections (k) and (m) thereof. It suggests the HRSGs actually increase emissions pollution, a factual impossibility. It should not (and legally, cannot) be considered by the TCEQ for any purpose related to the Application.

---

<sup>13</sup> Arguably, all Applicants whose pollution control equipment is recognized as such under TEXAS TAX CODE §11.31(k) should be allowed to develop or apply a use calculation which actually fits their individual circumstances.



## Exhibit 1

**DUFF & PHELPS**

*Dennis Deegear  
Vice President  
Phone: (512) 671-3523  
dennis.deegear@duffandphelps.com*

March 26, 2008

TCEQ - Cashiers Office MC-214  
Building A  
12100 Park 35 Circle  
Austin, Texas 78753

**Subject:** Application for Use Determination for Pollution Control Property  
Blackhawk Station - 119 N. Spur Co-Gen Place Berger, TX 79008

Enclosed please find one application (the "Application") for property tax exemptions for certain qualifying pollution control property at the Blackhawk Station Project (the "Facility") in Hutchinson County, Texas.

Pursuant to Title 30 of Chapter 17 of the Texas Administrative Code, the Application has been prepared using the Texas Commission on Environmental Quality ("TCEQ") Application for Use Determination for Pollution Control Property. The enclosed application is a Tier IV Application.

Submission of this Application is required as a process step in the TCEQ's pollution control certification process for tax exemption of certain assets used in pollution control capacities within the Facility. As outlined by the application instructions, the fee for this Tier IV Application is \$500. Enclosed please find a check for \$500 for the Application processing.

The Application can be summarized as follows:

Property	Description	Estimated Cost
Tier IV	See Attached Schedule	\$13,906,514

Please send one copy of the completed property tax exemption Use Determination to the following address:

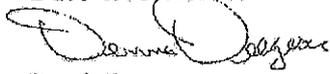
Duff and Phelps LLC  
c/o Dennis Deegear  
919 Congress Ave.  
Suite 1450  
Austin, TX 78701

If you have any questions regarding the Application or the information supplied with these Application, please contact Dennis Deegear of Duff & Phelps, LLC at (512) 671-5523 or e-mail at [dennis.deegear@duffandphelps.com](mailto:dennis.deegear@duffandphelps.com).

Very truly yours,

DUFF & PHELPS, LLC

Signature:



Name: Dennis Deegear

Title: Vice President

Enclosures

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
APPLICATION FOR USE DETERMINATION  
FOR POLLUTION CONTROL PROPERTY

831771  
MAY 23 AM 8:43  
# 288  
CHIEF CLERKS OFFICE

The TCEQ has the responsibility to determine whether a property is a pollution control property. A person seeking a use determination for pollution control property must complete the attached application or use a copy or similar reproduction. For assistance in completing this form refer to the TCEQ guidelines document, *Property Tax Exemptions for Pollution Control Property*, as well as 30 TAC §17, rules governing this program. For additional assistance please contact the Tax Relief for Pollution Control Property Program at (512) 239-3100. The application should be completed and mailed, along with a complete copy and appropriate fee, to: TCEQ, MC-214, Cashiers Office, P.O. Box 13088, Austin, Texas 78711-3088.

1. GENERAL INFORMATION

A. What is the type of ownership of this facility?

- Corporation  Sole Proprietor  
 Partnership  Utility  
 Limited Partnership  Other

B. Size of company: Number of Employees

- 1 to 99  1,000 to 1,999  
 100 to 499  2,000 to 4,999  
 500 to 999  5,000 or more

C. Business Description: Combination Electric and Other Utility (4931)

2. TYPE OF APPLICATION

- Tier I \$150 Application Fee  Tier III \$2,500 Application Fee  
 Tier II \$1,000 Application Fee  Tier IV \$500 Application Fee

NOTE: Enclose a check, money order to the TCEQ, or a copy of the ePay receipt along with the application to cover the required fee.

3. NAME OF APPLICANT

- A. Company Name: Borger Energy Associates, LP  
B. Mailing Address (Street or P.O. Box): 7001 Boulevard 26 Suite 310  
C. City, State, ZIP: North Richland Hills, Texas 76180

4. PHYSICAL LOCATION OF PROPERTY REQUESTING A TAX EXEMPTION

- A. Name of facility: Blackhawk Station  
B. Type of Mfg Process or Service: Combination Electric and Other Utility (4931)  
C. Street Address: 119 N. Spur Co-Gen Place  
D. City, State, ZIP: Borger, TX 79008  
E. Tracking Number Assigned by Applicant: DPBlackhawk B  
F. Customer Number or Regulated Entity Number: N/A

5. APPRAISAL DISTRICT WITH TAXING AUTHORITY OVER PROPERTY

- A. Name of Appraisal District: Hutchinson  
B. Appraisal District Account Number: 990 (1000, 1010, 1100, 1120, 1140, 1160, 1180, 1200, 1220, 1240)

1107A

6. CONTACT NAME (must be provided)

A. Company/Organization Name: Duff and Phelps LLC  
B. Name of Individual to Contact: Dennis Deegear  
C. Mailing Address: 919 Congress Ave. Suite 1450  
D. City, State, ZIP: Austin, TX 78701  
E. Telephone number and fax number: (512) 671-5523 Fax (512) 671-5501  
F. E-Mail address (if available): demis.deegear@duffandphelps.com

7. RELEVANT RULE, REGULATION, OR STATUTORY PROVISION

Please reference Section 8. Each item is detailed with the proper statute, regulation, or environmental regulatory provision.

8. DESCRIPTION OF PROPERTY

Background

Blackhawk Station is a 225 MW cogeneration facility located in Borger, Texas owned by Borger Energy Associates LP. Blackhawk Station's design incorporates two Siemens 501D5A gas turbines, and two Deltak HRSGs. The exhaust from the combustion turbines is directed to the HRSGs where the thermal energy in the exhaust gases is recovered to generate steam. The high pressure steam produced in the HRSGs is exported to the adjoining Wood River Borger Refinery. Natural Gas serves as the fuel for each gas turbine.

Overview of Cogeneration Technology

The Facility is a cogeneration plant that consists of two gas-fired Combustion Turbines ("CTs") equipped with heat recovery steam generators (HRSG's) to capture heat from the turbine exhaust. Steam produced in the HRSG's provides steam for production purposes to the Facility's steam host, Wood River Borger Refinery LLC. Use of the otherwise wasted heat in the turbine exhaust gas results in higher plant thermal efficiency compared to other power generation technologies.

Combined heat and power (CHP) plants are often equipped with a steam turbine and have the added flexibility over a cogeneration plant to generate additional electricity if needed or sell its steam directly to an industrial facility commonly referred to as a "steam host". Additional efficiency is gained in CHP and cogeneration applications by using steam from the steam generator to serve direct thermal loads. Though increasing overall thermal efficiency, the choice of using steam for these applications instead of powering a steam-driven turbine reduces the electrical output of the plant.

The following overview describes technology that is common to both cogeneration and CHP electric power generation facilities. The significant difference between the two types of facilities is the use of the thermal energy generated by the combustion turbines. Because Blackhawk does not have a steam turbine and uses its thermal energy to supply steam to the Wood River Borger Refinery any portion of the

overview relating to steam turbine power generation does not apply to this facility.

The Brayton cycle is a constant pressure thermodynamic cycle that converts heat from combustion into work. A Brayton engine, as it applies to a gas turbine system, will consist of a fuel or gas compressor, combustion chamber, and an expansion turbine. Air is drawn into the compressor, mixed with the fuel, and ignited. The resulting work output is captured through a pump, cylinder, or turbine. Cogeneration systems typically make use of the waste heat from Brayton engines for steam production.

The Rankine cycle is a thermodynamic cycle that converts heat from an external source into work. In a Rankine cycle, external heat from an outside source is provided to a fluid in a closed-loop system. This fluid, once pressurized, converts the heat into work output using a turbine. The fluid most often used in a Rankine cycle is water (steam) due to its favorable properties, such as nontoxic and unreactive chemistry, abundance, and low cost, as well as its thermodynamic properties. The thermal efficiency of a Rankine cycle is usually limited by the working fluid. Steam generated in a cogeneration plant is typically sold to and directly used by a steam host.

By combining both gas and steam cycles, high input temperatures and low output temperatures can be achieved. A cogeneration plant has a thermodynamic cycle that operates between the gas turbine's high-firing temperature and the waste heat temperature from its exhaust. This large range means that the Carnot efficiency of the cycle is high. The actual efficiency, while lower than this is still higher than that of either plant on its own. The thermal efficiency of a cogeneration plant can be measured as the net electric and steam power output of the plant divided by the heating value of the fuel.

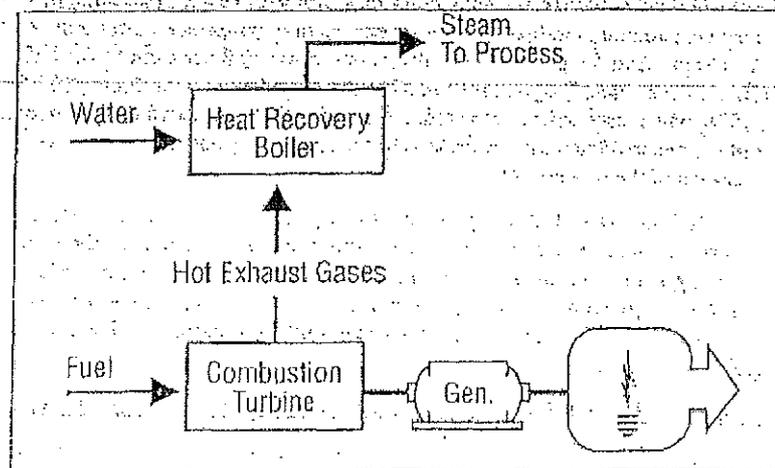


FIGURE 1 - Cogeneration Plant Configuration (1)

A single-train cogeneration plant consists of one CT, a generator, and a HSRG (See Figure 1 – Cogeneration Plant Configuration, below). Because of high thermal efficiency, high reliability, and low air emissions, cogeneration CT's and HSRG's have been the new resource of choice for bulk power generation and industrial steam production for well over a decade. Other attractive features include significant operational flexibility, the availability of relatively inexpensive power augmentation for peak period operation and relatively low carbon dioxide production.

#### Current Regulatory Authority for Output-Based Emissions

Innovative power technologies such as cogeneration technology offer enormous potential to improve efficiency and enhance the environmental footprint of power generation through the reduction and/or prevention of air emissions to the environment. Currently, two thirds of the fuel burned to generate electricity in traditional fossil-fired steam boilers is lost. Traditional U.S. power generation facility efficiencies have not increased since the 1950s and more than one fifth of the U.S. power plants are more than 50 years old. In addition, these facilities are the leading contributors to U.S. emissions of carbon dioxide, NO<sub>x</sub>, sulfur dioxide ("SO<sub>2</sub>"), and other contaminants into the air and water.

The ability to recognize and regulate the efficiency benefits of pollution reduction and/or prevention through the use of cogeneration technology is achieved through the use of Output-Based emissions standards, incorporated since September 1998 within the U.S. EPA's new source performance standards ("NSPS") for NO<sub>x</sub>, from both new utility boilers and new industrial boilers. Pursuant to section 407(c) of the Clean Air Act in subpart Da (Electric Utility Steam Generating Units) and subpart Db (Industrial-Commercial-Institutional Steam Generating Units) of 40 CFR part 60, the U.S. EPA revised the NO<sub>x</sub> emissions limits for steam generating units for which construction, modification, or reconstruction commenced after July 9, 1997 (3). Output-Based regulations are also exemplified by those used in the U.S. EPA's NO<sub>x</sub> Cap and Trade Program for the NO<sub>x</sub> State Implementation Plan ("SIP") Call of 1998, which uses units of measure such as lb/MWh generated or lb concentration ("ppm"), which relate to the emissions to the productive output – electrical generation of the process.(4)

The use of innovative technologies such as cogeneration units reduces fossil fuel use and leads to multi-media reductions in the environmental impacts of the production, processing transportation, and combustion of fossil fuels. In addition, reducing fossil fuel combustion is a pollution prevention measure that reduces emissions of all products of combustion, not just the target pollutant (currently NO<sub>x</sub>) of a federal regulatory program.

#### Authority to Expand Pollution Control Equipment & Categories in Texas

Under Texas House Bill 3732 ("HB3732") enacted in 2007, Section 11.31 of the Texas Tax Code is amended to add certain plant equipment and systems to the current list of air, water, or land pollution control devices exempt from property taxation in Texas.

Specifically, the language reads as follows:

*SECTION 4. Section 11.31, Tax Code, is amended by adding Subsections (k), (l), and (m) to read as follows.*

*(k) The Texas Commission on Environmental Quality shall adopt rules establishing a nonexclusive list of facilities, devices, or methods for the control of air, water, or land pollution, which must include:*

- (1) coal cleaning or refining facilities;*
- (2) atmospheric or pressurized and bubbling or circulating fluidized bed combustion systems and gasification fluidized bed combustion combined-cycle systems;*
- (3) ultra-supercritical pulverized coal boilers;*
- (4) flue gas recirculation components;*
- (5) syngas purification systems and gas-cleanup units;*
- (6) enhanced heat recovery systems;*
- (7) exhaust heat recovery boilers;*
- (8) heat recovery steam generators;*
- (9) superheaters and evaporators;*
- (10) enhanced steam turbine systems;*
- (11) methanation;*
- (12) coal combustion or gasification byproduct and coproduct handling, storage, or treatment facilities;*
- (13) biomass co-firing storage, distribution, and firing systems;*
- (14) coal cleaning or drying processes, such as coal drying/moisture reduction, air jigging, pre-combustion decarbonization, and coal flow balancing technology;*
- (15) oxy-fuel combustion technology, amine or chilled ammonia scrubbing, fuel or emission conversion through the use of catalysts, enhanced scrubbing technology, modified combustion technology such as chemical looping, and cryogenic technology;*
- (16) if the United States Environmental Protection Agency adopts a final rule or regulation regulating carbon dioxide as a pollutant, property that is used, constructed, acquired, or installed wholly or partly to capture carbon dioxide from an anthropogenic source in this state that is geologically sequestered in this state;*
- (17) fuel cells generating electricity using hydrogen derived from coal, biomass, petroleum coke, or solid waste; and*
- (18) any other equipment designed to prevent, capture, abate, or monitor nitrogen oxides, volatile organic compounds, particulate matter, mercury, carbon monoxide, or any criteria pollutant.*

*(l) The Texas Commission on Environmental Quality by rule shall update the list adopted under Subsection (k) at least once every three years. An item may be removed from the list if the commission finds compelling evidence to support the conclusion that the item does not provide pollution control benefits.*

*(m) Notwithstanding the other provisions of this section, if the facility, device, or method for the control of air, water, or land pollution described in an application for an exemption under this section is a facility, device, or method included on the list adopted under Subsection (k), the executive director of the Texas Commission on Environmental Quality, not later than the 30th day after the date of receipt of the information required by Subsections (c)(2) and (3) and without regard to whether the information required by Subsection (c)(1) has been submitted, shall determine that the facility, device, or method described in the application is used wholly or partly as a facility, device, or method for the control of air, water, or land pollution and shall take the actions that are required by Subsection (d) in the event such a determination is made.*

Under the TCEQ's recently updated "Tax Relief for Pollution Control Property – Application Instructions and Equipment and Categories List – Effective January 2008", the Equipment and Categories List - Part B ("ECL Part B") is a list of the pollution control property categories adopted and set forth in TJC Sec. 26.045(f). The taxpayer is to supply a pollution control percentage for the equipment listed in Part B via calculations demonstrating pollution control, prevention and/or reductions achieved by the listed equipment or systems.

The following property descriptions outline the environmental purpose, including

the anticipated environmental benefit of pollution control additions considered under the Application Instructions' ECL Part B that have been constructed and placed into use at the Facility as of its placed-in-service date, or installed subsequent to in-service since 1994:

### Property Descriptions

Item #1 Cogeneration Gas Turbine Plant Heat Recovery Steam Generator ("HRSG") and Support Systems Tier IV B-8

40 CFR Part 60 Subparts DA and DB, NO<sub>x</sub> Limits for Electric Utility Steam Generating Units and Industrial-Commercial-Institutional Steam Generating Units for New Source Performance Standards ("NSPS").

TAC Rule 106.517, Standard Permit for Electric Generating Units (EGU).

*NOTE: Permit issued under Texas Clean Air Act's Health & Safety Code Sections 382.011, applies to all electric generating units that emit air contaminants, regardless of size, and it is to reflect Best Available Control Technology ("BACT") for electric generating units on an output basis in pounds of NO<sub>x</sub> per megawatt hour, adjusted to reflect a simple cycle power plant.*

The heat recovery steam generator ("HRSG") found in the Facility is a heat exchanger that recovers heat from a hot gas stream. A common application for an HRSG is in a cogeneration power station, where hot exhaust from a gas turbine is fed to an HRSG to generate steam which can either be used to drive a steam turbine or be sold directly to a steam host. This combination produces electricity in a more thermally efficient manner than either the gas turbine or steam turbine alone.

The HRSG is also an important component in cogeneration plants. Cogeneration plants typically have a higher overall efficiency in comparison to a combined cycle plant.

The Facility's HRSGs consist of three major components: the Evaporator, Superheater, and Economizer. The different components are put together to meet the operating requirements of the unit. Modular HRSGs normally consist of three sections: an LP (low pressure) section, a reheat/IP (intermediate pressure) section, and an HP (high pressure) section. The reheat and IP sections are separate circuits inside the HRSG. The IP steam partly feeds the reheat section. Each section has a steam drum and an evaporator section where water is converted to steam. This steam then passes through superheaters to raise the temperature and pressure past the saturation point.

#### Pollution Control Percentage Calculation: Avoided Emissions Approach

To calculate the percentage of the equipment or category deemed to be pollution control equipment, the Avoided Emissions approach has been used. This approach relies on thermal output differences between conventional electric power and steam generation equipment and the cogeneration system at the Facility. Specifically, the percentage is determined by calculating the displacement of emissions associated with the Facility's thermal output and subtracting these emissions from a baseline emission rate. These displaced emissions are emissions that would have been generated by the same thermal output from conventional equipment.

Greater energy efficiency reduces all air contaminant emissions, including the

greenhouse gas, carbon dioxide. Higher efficiency processes include cogeneration, combined-cycle, and CHP generation. For electric generation the energy efficiency of the process expressed in terms of British thermal units ("BTU's") per Kilowatt-hour ("kWh"). Lower fuel consumption associated with increased fuel conversion efficiency reduces emissions across the board - that is NOx, SOx, particulate matter, hazardous air pollutants, and greenhouse gas emissions such as CO2.

In calculating the percent exempt for the listed items from the ECL-Part B, we utilized Output-Based NOx allocation method for both power generation projects that replaced existing facilities and "Greenfield" steam generation facilities. We looked at the various fossil fuel technologies in use today and chose the baseline electric power generation facility to be a natural gas-fired turbine driven generator without waste heat recovery. The construction of the Blackhawk station and its ability to produce steam replaced some of the steam production generated by the boiler steam plant located at the Wood River Berger Refinery. With this in mind the baseline steam generation facility selected is a gas-fired industrial steam boiler operated without the thermal benefit of waste heat recovery similar to the equipment operated by the refinery. We benchmarked this conventional generation to the subject natural gas-fired cogeneration equipment at the Facility. By doing so, we narrowed the heat rate factors as much as possible to be conservative and uniform in modeling. The benchmark heat rate factor is the following:

Natural Gas-Fired Turbine and Industrial Steam Boiler: 8,864 BTU's/kWh.

This baseline heat rate purposely omits other fossil fuel sources in order to eliminate impurity type characteristics, which in turn eliminated the NOx emission and cost of control differences of each fossil fuel and generator type. Comparing the emissions impact of different energy generation facilities is concise when emissions are measured per unit of useful energy output. For the purpose of our calculations, we converted the energy output of the steam to units of kWh, and compared the total emission rate to the baseline facility.

The comparison steps to calculate the NOx reduction is as follows:

Calculation (Reference Schedule A)

Step 1 – Subject Output-Based Limit Calculation (lbs NOx / MWh)

(Input-based Limit (lbs NOx/MMBTU)) X (Heat Rate (Btu/kWh)) / (1,000,000 Btu / 1,000 kWh) =  
Output: (lbs NOx/MWh),

Step 2 – Subject Output Conversion Calculation (NOx Tons / Year)

(Output (lbs NOx/MWh)) X (Unit Design Capacity (MW)) X (Capacity Factor) X ((365 Days) X (24  
hrs/day)) / 2,000 lbs = Output: (NOx Tons/Year)

Step 3 – Baseline Output-Based Limit Calculation (lbs NOx / MWh)

(Input-based Limit (lbs NOx/MMBTU)) X (Heat Rate (Btu/kWh)) / (1,000,000 Btu / 1,000 kWh) =  
Output: (lbs NOx/MWh)

Step 4 – Baseline Output Conversion Calculation (NOx Tons / Year)

(Output (lbs NOx/MMBTU)) X (Unit Design Capacity (MW)) X (Capacity Factor) X ((365 Days) X  
(24 hrs/day)) / 2,000 lbs = Output: (NOx Tons/Year)

Step 5 – Percent NOx Reduction Calculation

$((\text{Output Baseline})_{\text{step 4}} - (\text{Output Subject})_{\text{step 2}}) / (\text{Output Subject})_{\text{step 2}} = \% \text{ Reduction Output Subject}$

Step 6 – Percent Exempt Calculation

(Total Subject Facility Cost) X (% NOx Reduction) = Capital Cost of NOx Avoidance

Step 7 – Percent Exempt Calculation

Total Cost of NOx Avoidance / Total Cost of HB 3732 Equipment = % Exempt

- If % Exempt is greater than 100% HB 3732 Equipment is 100% Exempt
- If % Exempt is less than 100% then HB 3732 Equipment is partially exempt at the Step 6 calculation.

NOTE: See the attached calculation sheet for the details regarding Facility-specific calculations and property tax exemption percentage results based upon these calculations.

## REFERENCES

1. "Output-Based Regulations: A Handbook for Air Regulators", U.S. Environmental Protection Agency, Office of Atmospheric Programs – Climate Protection Partnerships Division, August, 2004, p.4.
2. "Output-Based Emissions Standards; Advancing Innovative Energy Technologies", Northeast-Midwest Institute; 2003, p. 9.
3. IBID, p.13.
4. "Output-Based Regulations: A Handbook for Air Regulators", U.S. Environmental Protection Agency, Office of Atmospheric Programs – Climate Protection Partnerships Division, August, 2004, p.4.
5. [http://www.cogeneration.net/Combined\\_Cycle\\_Power\\_Plants.htm](http://www.cogeneration.net/Combined_Cycle_Power_Plants.htm)
6. "Output-Based Emissions Standards; Advancing Innovative Energy Technologies", Northeast-Midwest Institute; 2003, p. 9.

9. PARTIAL PERCENTAGE CALCULATION

N/A.

10. PROPERTY CATEGORIES AND COSTS

See attached Schedule 10.

11. EMISSION REDUCTION INCENTIVE GRANT

Will an application for an Emission Reduction Incentive Grant be on file for this property/project:

Yes  No

12. APPLICATION DEFICIENCIES

After an initial review of the application, the TCEQ may determine that the information provided with the application is not sufficient to make a use determination. The TCEQ may send a notice of deficiency, requesting additional information that must be provided within 30 days of written notice.

13. FORMAL REQUEST FOR SIGNATURE

By signing this application, you certify that this information is true to the best of your knowledge and belief.

NAME: [Signature] DATE: 3/27/08

TITLE: Vice President

COMPANY: Duff & Phelps LLC

Under Texas Penal Code, Section 37.10, if you make a false statement on this application, you could receive a jail term of up to one year and a fine up to \$2,000, or a prison term of two to 10 years and a fine of up to \$5,000.

14. DELINQUENT FEE/PENALTY PROTOCOL

This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. (Effective 9/1/2006)

Blackhawk Station  
 119 N. Spur Co-Gen Place  
 FCEC Use Determination Application - 2008  
 Schedule 10  
 Tier IV

10. PROPERTY CATEGORIES AND COST

PROPERTY	PROJECT ID. NO.	IN SERVICE DATE	TAXABLE ON OR BEFORE 1/1/94? (Y / N)	TIER IV DECISION FLOW CHART BOX	ECL NUMBER	ESTIMATED PURCHASE COST	% EXEMPT	EXEMPT COST
Haal Recovery Steam Generators (HRSG)	1	1998	N	3	B-8	\$13,906,514	100%	\$13,906,514
Tier IV Total						\$13,906,514		\$13,906,514

Blackhawk Station - 119 N. Spur Co-Gen Place  
 FCEC Use Determination Application - 2008

**Horner Energy Associates, L.P.**  
**Winn-Dixie Station**  
**Schedule A - 2003 Thermal Efficiency Calculation**

Subject Details	
Average Heat Rate <sup>(1)</sup>	7,781 (Btu/kWh)
NOx Emissions <sup>(2)</sup>	15 ppm
Heat Capacity <sup>(3)</sup>	225 MW
Capacity Factor <sup>(4)</sup>	78.50%
Technology <sup>(5)</sup>	Conventional
Total Subject Facility Cost <sup>(6)</sup>	\$128,893,174
Total Cost of Ther IV Equipment <sup>(7)</sup>	\$11,706,514

Baseline Details	
Average Heat Rate <sup>(1)</sup>	8,854 (Btu/kWh)
Technology <sup>(5)</sup>	Industrial Steam Driven

**STEP 1**  
**Subject Output Based Limit Calculation (lbs NOx/MWh)**

Output-based Limit (lbs NOx/MWh)	Heat Rate (Btu/kWh)	Unit Conversion (lb/1000 Btu)	Output-based Limit (lbs NOx/MWh)
0.0551	7,781	1.000	0.439%

**STEP 2**  
**Subject Output Conversion Calculation (Tons/Year)**

Output-based Limit (lbs NOx/MWh)	Capacity (MW)	Capacity Factor	Unit Conversion (24 hrs * 24 Hours)	Output NOx (Tons/Year)
0.439%	225	78.50%	2,200	202.9

**STEP 3**  
**Baseline Output-based Limit Calculation (lbs NOx/MWh)**

Input-based Limit (lbs NOx/MWh)	Heat Rate (Btu/kWh)	Unit Conversion (lb/1000 Btu)	Output-based Limit (lbs NOx/MWh)
0.0551	8,854	1.000	0.438%

**STEP 4**  
**Baseline Output Conversion Calculation (Tons/Year)**

Output-based Limit (lbs NOx/MWh)	Capacity (MW)	Capacity Factor	Unit Conversion (24 hrs * 24 Hours)	Output NOx (Tons/Year)
0.438%	225	78.50%	2,200	199.1

**STEP 5**  
**Percent NOx Reduction Calculation**

(Output Baseline - Output Subject)	Output Subject	% NOx Reduction
345.1	202.9	13.0%

**STEP 6**  
**Percent Investment Calculation**

Total Subject Unit Cost	% NOx Reduction	Capital Cost of NOx Avoidance
\$128,893,174	13.0%	\$12,892,517

**STEP 7**  
**Percent Payback Calculation**

Total Cost of NOx Avoidance	Total Cost of THH	% Payback
\$12,892,517	\$11,706,514	128.6%

Conclude 100%

- (1) - Heat rate represents actual heat rate (Btu/kWh) based on the energy value of the chemistry and gases generated provided by the client.
- (2) - NOx emissions is the actual NOx production rate (lbs per ton) and was provided by the client.
- (3) - Plant capacity is the average installed capacity and was provided by the client.
- (4) - Capacity factor represents the average capacity factor and was provided by the client.
- (5) - Technology represents the plant technology of the subject.
- (6) - Total subject facility unit represents the total cost to build the entire facility and it was determined based on data provided by the client.
- (7) - Total cost of IV equipment was determined by utilizing the applicable TCEQ TCEQ, and IV equipment and then allocated the total cost data provided by the client.
- (8) - The baseline heat rate was developed using a combination of simple cycle electric power and waste steam industrial boiler steam generation.
- (9) - The baseline technology represents the boiler technology used by the baseline facility for steam production. Steam produced by the subject represents the baseline technology of the client's facility and the baseline heat rate was determined by the client's boiler equipment and heat rate NOx emissions.

## DUFF & PHELPS

December 5, 2008

Texas Commission on Environmental Quality  
Attention: Docket Clerk  
TCEQ Office of Chief Clerk MC 105  
P.O. Box 13087  
Austin, Texas 78711-3087

Subject: Response to the appeal of the Executive Director's Use Determination (07-11971); regarding Borger Energy Associates; TCEQ Docket Nos. 2008-0832-MIS-U

Dear Commissioners:

Pursuant to Title 30 of Chapter 17 of the Texas Administrative Code, the Applications under appeal were prepared using the Texas Commission on Environmental Quality's ("TCEQ's") Application for Use Determination for Pollution Control Property (TCEQ-0611). For these Tier IV applications, the subject pollution control property included in the application is listed on the TCEQ's Equipment & Categories List ("ECL"), and is identified and summarized as follows:

**Cogeneration Gas Turbine Plant Heat Recovery Steam Generators ("HRSG") and Supporting Systems: (ECL:B-8)**

Pertinent Rule(s), Regulation(s) or Law(s):

*40 CFR Part 60 Subparts DA and DB, NOx Limits for Electric Utility Steam Generating Units and Industrial, commercial, Institutional Steam Generating Units for New Source Performance Standards ("NSPS")*

TAC Rule 106.512, Standard Permit for electric Generating Units (EGU)

Note: Permits issued under Texas Clean Air Act's Health & Safety code Sections 382.011, applies to all electric generating units that emit air contaminants, regardless of size, and it is to reflect Best Available Control Technology ("BACT") for electric generating units on an output basis in pounds of NOx per megawatt hour, adjusted to reflect a simple cycle power plant.

## BACKGROUND

### *Texas Pollution Prevention Issue*

Currently in the U.S. two thirds of the potential energy of fossil fuels burned to generate electricity in traditional fossil-fired steam boilers is lost in the form of waste heat released into the atmosphere or surface waters located near these facilities. Traditional U.S. power generation plant efficiencies have not increased since the 1950's and more than one fifth of the U.S. power plant designs are more than 50 years old. These power generation facilities are the leading contributors to U.S. emissions of carbon dioxide, NO<sub>x</sub>, sulfur dioxide, and other contaminants into the air and water due to facility operations.

### *Combined Heat and Power Technology Background*

Innovative power systems such as combined cycle technology, and combined heat and power ("CHP") generation, offer enormous potential to reduce the environmental impacts of power generation through the reduction and/or prevention of air emissions to the environment through the efficient use of fossil fuel. CHP is best thought of as a system, rather than a specific technology or device for efficient use of the inherent chemical energy within fossil fuels such as natural gas. Texas leads the nation in CHP applications, with 23% of all U.S. CHP capacity located in Texas.<sup>1</sup> This CHP capacity produces 20% of the electricity used in Texas.<sup>2</sup>

The U.S. EPA defines cogeneration or CHP, as the simultaneous production of electricity and heat from a single fuel source, such as the natural gas used in the subject plant, Blackhawk Cogeneration Facility. Use of the otherwise wasted heat in the combustion turbine exhaust gas results in a higher plant-wide thermal efficiency compared to other combustion-based technologies. As well, state-of-the-art combined-cycle plants can convert about 50 percent of the chemical energy of natural gas into electricity (HHV basis). CHP systems' capture and use of waste heat allows them to achieve plant-wide fuel efficiencies between 60% and 90%.

The two most common CHP system configurations are:

- Gas turbine or engine with heat recovery unit
- Steam boiler with steam turbine

Gas turbine CHP systems, like the subject plant, Blackhawk Cogeneration Facility, generate electricity by burning a fossil fuel and then use a heat recovery unit to capture heat from the combustion system's exhaust stream. This heat is converted into useful thermal energy, usually in the form of steam or hot water. Per the US EPA, CHP plays an important role in meeting the US energy needs. As well, it reduces the environmental impacts of power generation because of both its fuel efficiency benefits in producing more energy output per pound of fuel burned, and in the resulting reduction in air emissions due to less fuel burned for the same energy output.

<sup>1</sup> US DOE, Energy Information Agency (EIA), 2005 Data.

<sup>2</sup> IBID.

## RESPONSE TO PETITION

We concur with the Texas Commission's Executive Use Determination letter received May 1<sup>st</sup>, 2008 whereby the outcome of their review resulted in a Use Determination as follows:

**A 100% positive use determination for the two Heat Recovery Steam Generators. This equipment is considered to be pollution control equipment and was installed to meet or exceed federal or State regulations.**

To date, neither the Appellant nor subsequent Executive Director-assembled work groups have produced any valid evidence or reasonable agreed-upon conclusions that would lead us to believe that the facts, technical merits, and conclusion of our Application for Use Determination of Pollution Control Property are not valid.

The Executive Director's new technical position released on December 3rd, 2008 where by their findings produce a positive use determination of 61% for the HRSG is not technically correct and promotes environmental loss.

We are appealing the TCEQ's Workgroup and Executive Director's Recommendation regarding the modified version of the calculation presented by Cummings Westlake pertaining to a reasonable use determination percentage for HRSGs. The percentage calculation for this use determination based upon thermal efficiency increases resulting from technology provided by Cummings Westlake, LLC is flawed for a number of reasons. First, it departs from the Decision Flow Charts. Ironically, the TCEQ staff leveled this same change with regard to the application we originally submitted. Second, the calculation of a 39% increase in thermal efficiency is based upon all of the back-end equipment components of the plant contributing to the overall process, not just simply the HRSG - hence misappropriating efficiency and pollution control benefits to other items of machinery and equipment not currently identified on Part A or Part B of the ECL. Third, this very simplified calculation significantly underestimates the efficiency and pollution control contribution resulting from the HRSG as evidenced by the output based calculations provided in our application.

Finally, the most significant flaw in the Cummings Westlake calculation of the positive use determination is that it is contrary to public policy and to the purpose of H.B. 3732. Simple logic will prove that it would be inappropriate to provide a benefit based upon the reasoning provided in the Cummings Westlake calculation. By adopting this approach, it is inferred that there is an inverse relationship between thermal efficiency and pollution control. Assume that the efficiency increase was only 20% instead of 39%; then by the methodology set forth by the Cummings Westlake approach, there would be a resulting 80% positive use determination for the HRSG. Conversely, if there was a 60% increase in efficiency, as opposed to the 39%, then the positive use determination would be dramatically reduced to only 40%. This approach would hinder the advancement of clean energy projects through better efficiencies by penalizing the owner with a lower tax exemption percentage, which is clearly contrary to the intent of H.B. 3732.

Appellant: **I. Property Description**

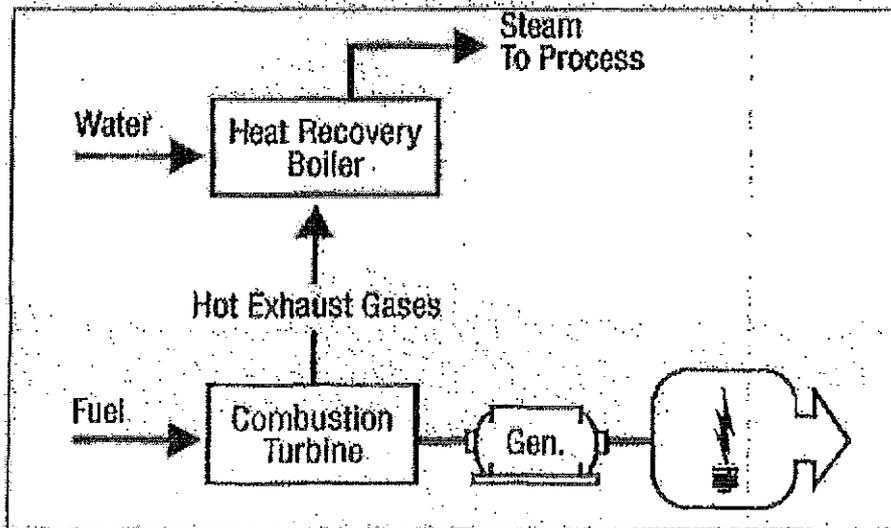
See Attached (Exhibit A)

Response: **I. Property Description**

The Blackhawk Cogeneration Facility is a 225 MW cogeneration facility located in Borger, Texas, owned by Borger Energy Associates LP. Blackhawk Station's design incorporates two Siemens 501D5A gas turbines, and two Deltak HRSGs. The exhaust from the two combustion turbines is directed to the HRSGs where the thermal energy in the exhaust gases is recovered to generate steam. The HRSGs found in the Blackhawk Cogeneration Facility are therefore, in simple terms, heat exchangers that recover heat from a hot gas stream for reuse versus release into the atmosphere. A common application for an HRSG is in a cogeneration power station, where hot exhaust from a gas turbine is fed to an HRSG to generate steam which can be sold directly to a steam host.

The high pressure steam produced in the HRSGs is exported to the adjoining Wood River Borger Refinery. Natural gas serves as the fuel for each gas turbine. Use of the otherwise wasted heat in the turbine-exhaust gas results in higher plant thermal efficiency compared to other power generation technologies employed in Texas.

The Figure below is representative of a simplified CHP plant process flow, similar to the Blackhawk Cogeneration Facility.



Appellant: **II. Rule Change**

See Attached (Exhibit A)

Response: **II. Proposition 2 Expansion for Additional Pollution Control Devices**

Under the legislation of Texas House Bill 3732 ("HB3732") enacted in 2007, Section 11.31 of the Texas Tax Code is amended by adding certain plant equipment and systems to the current list of air, water, or land pollution control devices. Specifically, the language reads as follows:

*SECTION 4. Section 11.31, Tax Code, is amended by adding Subsections (k), (l), and (m) to read as follows:*

*(k) The Texas Commission on Environmental Quality shall adopt rules establishing a nonexclusive list of facilities, devices, or methods for the control of air, water, or land pollution, which must include:*

- (1) coal cleaning or refining facilities;*
  - (2) atmospheric or pressurized and bubbling or circulating fluidized bed combustion systems and gasification fluidized bed combustion combined cycle systems;*
  - (3) ultra-supercritical pulverized coal boilers;*
  - (4) flue gas recirculation components;*
  - (5) syngas purification systems and gas-cleanup units;*
  - (6) enhanced heat recovery systems;*
  - (7) exhaust heat recovery boilers;*
  - (8) heat recovery steam generators;*
  - (9) superheaters and evaporators;*
  - (10) enhanced steam turbine systems;*
  - (11) methanation;*
  - (12) coal combustion or gasification byproduct and coproduct handling, storage, or treatment facilities;*
  - (13) biomass cofiring storage, distribution, and firing systems;*
  - (14) coal cleaning or drying processes, such as coal drying/moisture reduction, air jigging, precombustion decarbonization, and coal flow balancing technology;*
  - (15) oxy-fuel combustion technology, amine or chilled ammonia scrubbing, fuel or emission conversion through the use of catalysts, enhanced scrubbing technology, modified combustion technology such as chemical looping, and cryogenic technology;*
  - (16) if the United States Environmental Protection Agency adopts a final rule or regulation regulating carbon dioxide as a pollutant, property that is used, constructed, acquired, or installed wholly or partly to capture carbon dioxide from an anthropogenic source in this state that is geologically sequestered in this state;*
  - (17) fuel cells generating electricity using hydrogen derived from coal, biomass, petroleum coke, or solid waste; and*
  - (18) any other equipment designed to prevent, capture, abate, or monitor nitrogen oxides, volatile organic compounds, particulate matter, mercury, carbon monoxide, or any criteria pollutant.*
- (l) The Texas Commission on Environmental Quality by rule shall update the list adopted under Subsection (k) at least once every three years. An item may be removed from the list if the commission finds compelling evidence to support the conclusion that the item does not provide pollution control benefits.*

(m) Notwithstanding the other provisions of this section, if the facility, device, or method for the control of air, water, or land pollution described in an application for an exemption under this section is a facility, device, or method included on the list adopted under Subsection (k), the executive director of the Texas Commission on Environmental Quality, not later than the 30th day after the date of receipt of the information required by Subsections (c)(2) and (3) and without regard to whether the information required by Subsection (c)(1) has been submitted, shall determine that the facility, device, or method described in the application is used wholly or partly as a facility, device, or method for the control of air, water, or land pollution and shall take the actions that are required by Subsection (d) in the event such a determination is made.

Based upon the amended language of Section 11.31 of the Texas Tax Code, it is clear that the enumerated facilities, devices or methods must be considered in whole, or in part, as pollution control facilities, devices or methods by the TCEQ; the TCEQ must treat the enumerated facilities, devices or methods as eligible, in whole or in part, for property tax exemption as pollution control property; and finally, such eligibility for tax exemption must be based upon a methodology to be established by the TCEQ. Therefore, in response to the concern raised by the appellant, it is our contention that the HRSGs embedded within the CHP system of the subject plant are to be treated as qualifying pollution control facilities, devices or methods, and are no longer to be considered solely within the context of a power/steam generation use.

TCEQ's updated "*Tax Relief for Pollution Control Property - Application Instructions and Equipment and Categories List - Effective January 2008*" incorporates a list of the pollution control property categories adopted and set forth in TTC Sec. 26.045(f). Item B-8 of the ECL - Part B lists Heat Recovery Steam Generators (HRSGs).

As required in these instructions, the taxpayer, in its Tier IV application, supplied a pollution control percentage for the equipment listed in Part B via calculations demonstrating pollution control, prevention and/or reductions achieved by the listed equipment or systems, i.e., the subject facility's HRSGs. The subject facility received a 100% property tax exemption from the TCEQ for its HRSGs based upon the technical and statutory positions represented in the facility's application dated March 27, 2008.

#### ***Current Regulatory Authority for Output Based Emissions Standards***

Consideration of the use of output based emissions standards, as is now incorporated within the U.S. EPA's New Source Performance Standards ("NSPS") for NO<sub>x</sub>, are gaining importance for a reason: by determining emission levels based upon the amount of electricity and or thermal energy generated, output based standards support improved efficiency and pollution prevention without regard to the type of fuel or technology used to achieve that improvement. The use of innovative methods of power generation such as combined cycle and CHP reduces fossil fuel use and leads to multi-media reductions in the environmental impacts of the production, processing transportation, and combustion of fossil fuels. Reducing fossil fuel combustion is a pollution prevention measure that reduces emissions of all products of combustion, not just the target pollutant of a regulatory program.

Appellant: III. Compliance

See Attached (Exhibit A)

Response: III. Compliance

The basis by which the taxpayer represented the percentage of tax exemption eligibility for the HRSGs utilized an output-based emissions philosophy to demonstrate the level of emissions avoidance, or reduction, achieved by incorporating the CHP system approach within the Facility's operations. Emissions reductions, as represented by NO<sub>x</sub> emissions reductions achieved through fuel consumption savings, represents the pollution control or prevention purpose of the CHP system. For simplicity, NO<sub>x</sub> emissions were chosen; additional emissions reductions for SO<sub>2</sub>, CO<sub>2</sub>, etc., were also available.

Currently, the subject facility's input based NO<sub>x</sub> emissions standard, as represented in data provided by the taxpayer, does not recognize the subject facility for its fuel consumption savings and resulting emissions reductions. By establishing the amount of reduction found by using output based annual emissions versus input-based standards and multiplying this amount by the subject facility's historical costs, we were able to derive a surrogate for the subject plant's capital costs dedicated to additional NO<sub>x</sub> emissions avoidance, above the historically granted pollution control exemptions recognized on prior TCEQ Tier I or II application reviews. As this value was equal to or greater than the historical cost of the equipment item established on the ECL - Part B, it was considered to be eligible for 100% tax exemption status.

The subject appeal requests that the 100% tax exemption status granted under the methodology demonstrated be vacated and that the technical presumption that the HRSGs are major components of electrical and/or steam production be the only measure of equipment contribution to the subject facility's performance. This argument has ignored the broader policy-driven mandate established in Texas to support and further efficiency in fuel consumption in the state as a measure of pollution control. It also ignores the presentation of fact - made earlier within this rebuttal - that CHP is recognized by the U.S. EPA, by the state of Texas, and in most industry applications currently using such systems have resulted in the prevention and/or reduce air pollution in the State under an output based emissions standard.

Appellant: IV. Limitations

*See Attached (Exhibit A)*

Response: IV. Limitations

Pollution control percentages greater than 100% is not a flawed calculation; the breakpoints for facility-wide contributions versus equipment-specific contributions should be made relative to the necessary balance-of-plant systems and equipment supportive of the HRSGs in the subject facility. We agree with the appellant that the entire balance of plant equipment that supports the HRSG, e.g., the steam condensing systems, circulating water systems, chemical treatment systems etc., are completely intertwined and necessarily included within the plant-wide calculation of fuel efficiency and emissions reductions for CHP and combined cycle systems.

Texas Commission on Environmental Quality  
Tax Relief for Pollution Control Property Program  
December 5, 2008  
Page 8

Therefore, although all such systems and equipment would more appropriately be identified as tax exempt for its emissions prevention capabilities, it can be inferred that the Texas Legislature judiciously considered the two major pieces of equipment within the Combined Cycle and CHP systems - HRSGs and enhanced steam turbine systems - and enumerated them specifically in the equipment list that ultimately exists in the final statute for tax exemption consideration. It is therefore the taxpayer's contention that such equipment's 100% exempt status represents that portion of the entire balance of plant CHP systems eligible for exemption and the remaining portion of the subject plant remain taxable for property tax considerations.

Appellant: **V. Conclusions**

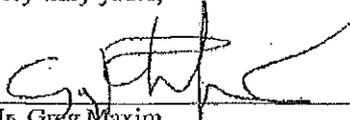
*See Attached (Exhibit A)*

Response: **V. Conclusions**

As stated in the sections above, it is the taxpayer's continued belief, as demonstrated through the Avoided Emissions Approach presented in the attached Appendix, that the HRSGs found in the subject plant are 100% exempt from property tax under their definition as pollution control facilities, devices or methods within the statute established by the Texas Legislature, and that their eligibility as pollution control/pollution prevention devices may be measured through a calculation of emissions avoidance demonstrated within the calculations developed.

If you have any questions regarding the application or the information supplied with these application, please contact me at (512) 671-5580 or Ms. Kathy Tronsberg of Duff & Phelps LLC at (215) 430-6059.

Very truly yours,

  
\_\_\_\_\_  
Mr. Greg Maxim  
Duff & Phelps LLC.

Enclosures

cc: Kathy Tronsberg (Duff & Phelps LLC - Philadelphia)  
Rick Fine (Duff & Phelps LLC - Austin)

APPENDIX

#### Avoided Emissions Approach

This approach relies on thermal output differences by calculating the displacement of emissions associated with the thermal output and subtracting them from a baseline emission rate. These displaced emissions are emissions that would have been generated by the same thermal output from a conventional system. Greater energy efficiency reduces all air contaminant emissions, including the greenhouse gas carbon dioxide. Higher efficiency processes include combined cycle operation and combined heat and power (CHP) generation. For electric generation the energy efficiency of the process, expressed in terms of MMBTU per Megawatt-hr. Lower fuel consumption associated with increased fuel conversion efficiency reduces emissions across the board - that is NOx, SOx, PM, hazardous air pollutants, and greenhouse gas emissions.

In calculating the percent exempt for the listed items from the ECL-Part B, Duff & Phelps LLC utilized an output based NOx allocation method for both Greenfield and Replacement power and heat generation. We looked at the various fossil fuel technologies in use today and chose the baseline facility to be a natural gas fuel-fired steam generator without waste heat recovery. The construction of the Blackhawk station and its ability to produce steam replaced some of the steam production generated by the boiler steam plant located at the Wood River Borger Refinery. With this in mind the baseline steam generation facility selected is a gas-fired industrial steam boiler operated without the thermal benefit of waste heat recovery similar to the equipment formerly operated by the refinery. Duff & Phelps LLC benchmarked this conventional generation to the subject natural gas-fired cogeneration equipment at the Facility. By doing so, we narrowed the heat rate factors as much as possible to be conservative and uniform in modeling. The benchmark heat rate factor is the following:

- Natural Gas-Fired Turbine and Industrial Steam Boiler: 8,864 BTU's/kWh

This heat rate baseline purposely omits other fossil fuel source in order to eliminate impurities typed characteristics, which in turn eliminated the NOx emission and cost of control differences of each fossil fuel and generator type. Comparing the emissions impacts of different energy generation facilities is easy and clear when emissions are measured per unit of useful energy output. For the purpose of our calculations, we converted all the energy output to units of MWh (1 MWh = 3.413 MMBtu), and compared the total emission rate to the baseline facility.

The comparison steps to calculate the NOx reduction are as follows:

A. Plant Input Factors

Input-based Limit = 0.0551 lbs NOx/MMBtu

Unit Design Capacity = 225 MW

Capacity Factor = 78.5 Percent

Baseline/Replacement Plant Heat Rate = 8,864 Btu/kWh

Subject Plant Heat Rate = 7,781 Btu/kWh

B. Calculation

**Step 1 – Subject Plant**

$$\frac{(\text{Input Based Limit}) \times (\text{Heat Rate})}{1,000,000 \text{ Btu}} \times 1,000 \text{ kWh/MWh} = \text{Output : lbs NOx/MWh}$$

**Step 2 – Subject Plant**

$$\frac{(\text{Output}) \times (\text{Unit Design Capacity MW}) \times (\text{Capacity Factor}) \times (365 \text{ Days}) \times (24 \text{ hrs/day})}{2,000 \text{ Tons}} = \text{Output : NOx Tons/Year}$$

**Step 3 & 4 – Baseline Plant or Replacement Plant**  
Same as Step 1 and Step 2 (except use Baseline Heat Rate)

**Step 5 – Percent NOx Reduction Calculation**

$$\frac{(\text{Output Baseline}) - (\text{Output Subject})}{(\text{Output Subject})} \times 100 = \% \text{ Reduction}$$

**Step 6 – Percent NOx Reduction Calculation**

$$(\text{Total Subject Unit Cost}) (\% \text{ Reduction}) = \text{Capital Cost of NOx Avoidance}$$

**Step 7 – Percent Exempt Calculation**

$$\frac{\text{Total Cost of NOx Avoidance}}{\text{Total Cost of HB 3732 Equipment}} \times 100 = \% \text{ Exempt}$$

- If % Exempt is greater than 100 then HB 3732 Equipment is 100% Exempt
- If % Exempt is less than 100 then HB 3732 Equipment is partially exempt at the Step 7 calculation

EXHIBIT A

Concerning Eligibility of Heat Recovery Steam Generators  
in the

Blackhawk Cogeneration Plant

for

Texas Commission on Environmental Quality  
Proposition 2- Property Tax Exemption Program

By: Charles Wayne Frazell P.E.

I. Property Description

Cogeneration power plants consist of one or more generators powered by industrial size jet engines. These engines can be fueled by most combustible gas or liquids, but currently, most are fueled by natural gas. The hot exhaust from these engines is passed through a heat recovery steam generator (HRSG). A HRSG is essentially a boiler without the burners. The Blackhawk plant boilers create steam that is sold to a neighboring oil refinery.

II. Rule Change

The TCEQ rules were changed in response to the 2007 Texas Legislature HB 3732. The modified rules created the Part B List which includes Exhaust Heat Recovery Boilers (B-7) and Heat Recovery Steam Generators (B-8).

A HRSG is often added to recover exhaust gases to preheat water entering the boiler of a conventional boiler to improve efficiency, but, they are not the driving force behind the plant production. I believe that this is the type of application that was intended by the inclusion of B-7 and B-8 in the TCEQ Part B List.

### III. Compliance

To some it will appear that the boiler that recovers the exhaust heat from the turbine engines qualifies as a pollution control item. This of course ignores the fact that this boiler is a major component of production. It was installed to produce steam to sell and not to reduce pollution. If the jet engines were not ducted to the boiler and burners were added, the HRSG side of the plant would operate as a conventional steam power plant. The Blackhawk plant uses burners to produce steam to sell when the jet engines are down for repair. It is not the boiler that reduces the pollution. Ducting the hot gases from the jet engine(s) reduces the pollution by reducing the need for an additional heat source (burners).

As a general rule when a component for pollution control is removed, there is little or no loss in production. For example, when a catalytic converter is removed from an engine it still produces the same horsepower. If electronic precipitators are removed from the exhaust of a coal-burning power plant, it still produces the same amount of electricity.

If the boiler is removed from a cogeneration power plant, there is no steam produced. Since removal of this component eliminates production of a product (steam), this boiler is primarily production equipment. It is not a pollution control device.

In 1992 the people of Texas voted and approved Proposition 2 creating the current environmental tax exemption. The ballot read "The constitutional amendment to promote the reduction and encourage the preservation of jobs by authorizing the exemption from ad valorem taxation of real and personal property used for the control of air, water, or land pollution." These boilers are used for production and not to control pollution. I believe the majority of the people would have voted "NO" on this proposition, if they thought it would include production equipment that produces INCOME and is not MANDATED by law!

#### IV. Limitations

A detailed description of what will be exempted needs to be provided to the appraisal district and not just identifying the HRSG. If the HRSG is found to be pollution control equipment, where is the limit? Do we also include the deaerator, the condenser, the pumps and all of the other steam piping and equipment which is installed to produce INCOME? Should we also exempt the plant lighting since this yields fewer emissions than if they had gas lamps? Although there are safety and convenience reasons for electric lighting, the primary reason for their installation is economics - not pollution control.

The primary reason for building a cogeneration power plant is economics and not pollution control. If the gas turbine is removed, then all you need is a set of burners and an intake fan to have the same production on the steam side. Since this type of boiler is a major component of production, it is not pollution control equipment. Only the ducting that conducts the exhaust heat from the gas turbine to the boiler should receive a 100% exemption.

#### V. Conclusions

The Texas Commission on Environmental Quality TCEQ rule changes in response to the 2007 Texas Legislature HB 3732 that created the new Part B non-exclusive list was intended to clarify pollution control devices not previously recognized. There was no mention of including equipment that is in place for producing a product.

The boiler in a cogeneration power plant is installed to produce steam to sell rather than to reduce pollution and does not qualify for a 100% tax exemption. Therefore, I respectfully request that no Use Determination be granted for the primary boiler (HRSG) of any cogeneration power plant. Thank you for your favorable consideration.

BROADCAST REPORT

TIME : 12/05/2008 18:46  
 NAME : D&P.AUSTIN  
 FAX : 5126715501  
 TEL :  
 SER.# : BROJ7J706136

PAGE(S) 17

DATE	TIME	FAX NO./NAME	DURATION	PAGE(S)	RESULT	COMMENT
12/05	18:25	STEPH PERDUE	02:47	17	OK	ECM
12/05	18:29	RON HATLETT	02:48	17	OK	ECM
12/05	18:32	BLAS COY	02:45	17	OK	ECM
12/05	18:35	BRIDGET BOHAC	02:45	17	OK	ECM
12/05	18:39	DIANA HOOKS	03:02	17	OK	ECM
12/05	18:42	WAYNE FRAZELL	03:54	17	OK	ECM

BSY: BUSY/NO RESPONSE  
 NG : POOR LINE CONDITION  
 CV : COVERPAGE

919 CONGRESS 1450  
AUSTIN TX 78701  
512-671-6586  
512-671-6501 FAX  
LAURA.RUSSELL@DUFFANDPHELPS.COM

**DUFF AND PHELPS**

**Fax**

To: TCEQ 2008-0832-MIS-D From: Greg Maxim

Fax: Pages:

Phone: Date:

Re: BORGER ENERGY ASSOC. cc:

Urgent  For Review  Please Comment  Please Reply  Please Recycle

• Comments:

Diana Hooks	806-273-3400 ✓
Wayne Frazell	817-927-5314
Stephanie Perdue	512-239-0606
Ron Hallett	612-239-2485 5678
Blas Coy	512-239-6377
Bridget Bohac	512-239-4007



Exhibit 2

Buddy Garcia, *Chairman*  
Larry R. Sownd, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

May 1, 2008

CHIEF APPRAISER  
HUTCHINSON COUNTY APPRAISAL DISTRICT  
PO BOX 5065  
BORGER, TX 79008

This letter is to inform you that on 5/1/2008, a final determination was issued with regard to Use Determination application 07-11971, filed by:

BORGER ENERGY ASSOCIATES LP  
BORGER ENERGY BLACKHAWK STATION  
119 N. SPUR CO-GEN PLACE  
BORGER, TX 79008

A copy of the use determination is included with this letter. House Bill 3121, enacted during the 77th Legislature Session, established a process for appealing a use determination. The Texas Commission on Environmental Quality (TCEQ) rules that implement the appeals process are at 30 TAC 17.25. Pursuant to 17.25(a)(1), an appeal must be filed within 20 days of receipt of the use determination. Should you choose to appeal the use determination, please submit a copy of your appeal to the TCEQ Tax Relief for Pollution Control Property program at the time of filing the appeal with the Chief Clerk of the commission.

In order to qualify for a tax exemption, the applicant must file an exemption request with your appraisal district. This exemption request must be accompanied by a copy of the positive use determination issued by the TCEQ. If you have any questions regarding this Use Determination or the appeals process, please call me at 512/239-3100.

Sincerely,

A handwritten signature in black ink, appearing to read "David Greer".

David Greer  
Team Leader, Pollution Prevention

Buddy Garcia, *Chairman*  
Larry R. Soward, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
*Protecting Texas by Reducing and Preventing Pollution*

May 1, 2008

DUFF & PHELPS LLC  
DENNIS DEEGEAR  
919 CONGRESS #1450  
AUSTIN, TX 78701

This letter is to inform you that on 5/1/2008, the technical review of Use Determination Application 07-11971 was completed. This application is for:

BORGER ENERGY ASSOCIATES LP  
BORGER ENERGY BLACKHAWK STATION  
119 N. SPUR CO-GEN PLACE  
BORGER, TX 79008

The use determination is included with this letter. In order to request an exemption, a copy of this Use Determination, along with a completed exemption request form #50-248 (can be found at [www.epa.state.tx.us](http://www.epa.state.tx.us)), must be provided to the Chief Appraiser of the appropriate appraisal district. This request must be made by April 30.

House Bill 3121, enacted during the 77th Legislative Session, established a process for appealing a use determination. The Texas Commission on Environmental Quality (TCEQ) rules that implement the appeals process are at 30 TAC 17.25. Pursuant to 17.25(a)(1), an appeal must be filed within 20 days of receipt of the use determination. Should you choose to appeal the use determination, please submit a copy of your appeal to the TCEQ Tax Relief for Pollution Control Property Program at the time of filing the appeal with the Chief Clerk of the commission.

If you have any questions or require any additional information, please contact the Tax Relief for Pollution Control Property Program at (512) 239-3100.

Sincerely,

A handwritten signature in black ink, appearing to read "David Greer".

David Greer  
Team Leader, Pollution Prevention

Buddy Garcia, *Chairman*  
Larry R. Soward, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
*Protecting Texas by Reducing and Preventing Pollution*

## USE DETERMINATION

The Texas Commission on Environmental Quality has reviewed Use Determination Application, 07-11971, filed by:

**BORGER ENERGY ASSOCIATES LP  
BORGER ENERGY BLACKHAWK STATION  
119 N. SPUR CO-GEN PLACE  
BORGER TX 79008**

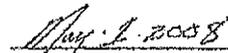
The pollution control property/project listed in the Use Determination Application is:

This facility has two thermally efficient heat recovery steam generators (HRSGs). This application is a Tier IV application seeking a partial use determination for the two HRSGs.

The outcome of the review is:

A 100% positive use determination for the two Heat Recovery Steam Generators. This equipment is considered to be pollution control equipment and was installed to meet or exceed federal or state regulations.

  
Executive Director

  
Date

TAX RELIEF FOR POLLUTION CONTROL PROPERTY: TECHNICAL REVIEW DOCUMENT

Reviewed By: RLH App. No.: 07-11971 Review Start Date: 4/8/2008

Company Name: BORGER ENERGY ASSOCIATES LP  
Facility Name: BORGER ENERGY BLACKHAWK STATION  
County: HUTCHINSON Outstanding Fees: N  
Batch/Voucher Number: B500156

ADMINISTRATIVE REVIEW

Administrative Complete Date: 4/8/2008

TIER LEVEL

What Tier is this application? The application was filed as a Tier IV application. Is this the appropriate level?

The property listed on this application, Heat Recovery Steam Generators, is item B8 on the Equipment and Categories List. This application was filed as a Tier IV. Tier IV is the appropriate level for this application.

RELEVANT RULE, REGULATION, OR STATUTORY PROVISION

The rule listed in the application is: 40 CFR 60.44Da

The appropriate rule is: 40 CFR 60.44Da

Explain why this is the appropriate rule?

40 CFR 60, Subpart DA: Standards of Performance for New Stationary Sources. Standards of performance for Electric Utility Steam Generating Units for Which Construction is Commenced after September 18, 1978. This is an appropriate rule.

BRIEF DESCRIPTION OF PROPERTY

The property is described as:

This facility has two thermally efficient heat recovery steam generators (HRSGs). This application is a Tier IV application seeking a partial use determination for the two HRSGs.

Is an adequate description and purpose of the property provided? Does it list the anticipated environmental benefits? Are sketches and flow diagrams provided if needed?

An adequate description of the property was provided, and the purpose of the property was listed. The anticipated environmental benefit is listed. Sketches and flow diagrams were provided.

DECISION FLOWCHART (30 TAC 17.15(a))

Mark the appropriate boxes: Box 3  Box 5  Box 6 (IV)  Box 10 (III)  Box 12 (I)  Box 13 (II)

PART B DECISION FLOWCHART (17.15(b))

Mark the appropriate boxes: Box 1  Box 2  Box 3

Describe how the property flowed through the Decision Flowchart:

Since the property is listed on Part B of the Equipment & Categories List this property leaves the Decision Flow Chart at Box 6. It passes through Box 1 of the Part B Decision Flow Chart with a yes answer. The use of this property at a combined cycle plant, as opposed to having a simple cycle plant, provides an environmental benefit of reduced NOx emissions at the site. So there is a

Yes answer for Box 2, Since there is a reduction in NOx emissions there is an environmental rule which is being met so there is a yes answer to Box 3.

#### TIER III or IV APPLICATIONS

Does your calculation agree with the applicants?

No: The application contains a proposed formula for calculating the pollution control value of the HRSGs and the steam turbine. The formula is outcome determinative, and its focus is not on the pollution control aspect of the property. The Executive Director disagrees with this formula.

#### PROPERTY CATEGORIES AND COSTS

Is the table completed correctly? Has the applicant certified that all listed property became taxable for the first time after January 1, 1994? Is all information necessary for conducting the technical review included.

The table was completed correctly. The applicant certified that all listed property became taxable for the first time after January 1, 1994. All the information necessary for conducting the technical review was included on the application.

#### TECHNICAL DEFICIENCIES

Is the application complete as received: Y If the application was not administratively complete explain below when justifying the final decision in the final determination section. If the application was not technically complete then:

Provide the language to be used in the Notice of Deficiency (NOD) letter:

Summarize the NOD response:

Provide the language used in the second NOD letter:

Summarize the second NOD response:

Provide the language used in the third NOD letter:

Summarize the third NOD response:

#### FINAL DETERMINATION

If the property description has been summarized enter the detailed property description:

This facility has two thermally efficient heat recovery steam generators (HRSGs). This application is a Tier IV application seeking a partial use determination for the two HRSGs.

Provide the reason for your final determination:

The Heat Recovery Steam Generators meet all of the requirements of Chapter 17. A positive use determination based on the most appropriate formula should be issued for the Heat Recovery Steam Generators. The most appropriate formula has been determined by the Executive Director.

Provide the language for the final determination.

A positive use determination of 100% for the two Heat Recovery Steam Generators.

Highlight the required signatures and establish the appropriate due dates.

Reviewed: *Ronald P. [Signature]* Date Signed: 5/1/08

Peer Reviewer: *Grays M. [Signature]* Date Signed: 5/1/08

Team Leader: *[Signature]* Date Signed: 5/1/08

Section Manager: *[Signature]* Date Signed: MAY 1, 2008

Division Director: *[Signature]* Date Signed: MAY 1, 2008



## Exhibit 3

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
*Protecting Texas by Reducing and Preventing Pollution*

August 16, 2011

MR MALCOLM CARROLL  
BEA ASSET MANAGER  
BORGER ENERGY ASSOCIATES LP  
919 MILAM ST STE 2300  
HOUSTON TX 77002-5418

Re: Permit Alteration  
Permit Numbers: 32096 and PSDTX867  
Blackhawk Power Plant  
Borger, Hutchinson County  
Regulated Entity Number: RN100217298  
Customer Reference Number: CN600129092  
Account Number: HW-0081-I

Dear Mr. Carroll:

This is in response to your letter received April 28, 2011, requesting alteration of the conditions and maximum allowable emission rates table (MAERT) of the above-referenced permit. We understand you wish to make minor corrections to the Special Conditions and MAERT associated with findings from a comprehensive voluntary audit, conducted by Borger Energy Associates at the Blackhawk Power Plant. These corrections include correction of Carbon Dioxide (CO) concentrations in turbine emissions without duct burner firing, clarification of emission limits from turbines and duct burners; define startup, shutdown and normal operations; allow the replacement of performance specifications for the CO continuous emissions monitoring system (CEMS), as stated in 40 Code of Federal Regulations, Subpart GG (40 CFR Part 60, Subpart GG), with 40 CFR Part 75, Appendix D; and define sulfur content sampling frequency in refinery fuel gas. TCEQ was unable to authorize that portion of the alteration request regarding a change in the hydrogen sulfide (H<sub>2</sub>S) limitation in the refinery gas at this time due to insufficient data in the application. You may resubmit information related to the H<sub>2</sub>S content of the refinery gas at a later date in a separate permit action for consideration.

As indicated in Title 30 Texas Administrative Code § 116.116(c) [30 TAC § 116.116(c)], and based on our review, the noted portions of Permit Number 32096 are altered. Enclosed are the altered permit conditions and MAERT to replace those currently attached to your permit. Please attach these to your permit.

Planned maintenance, startup, and shutdown for the sources identified on the MAERT have been reviewed and included in the MAERT and specific maintenance activities are identified in the permit special conditions. Any other maintenance activities are not authorized by this permit and will need to obtain separate authorization.

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • [tceq.texas.gov](http://tceq.texas.gov)

How is our customer service? [tceq.texas.gov/goto/customersurvey](http://tceq.texas.gov/goto/customersurvey)  
printed on recycled paper

Mr. Malcolm Carroll  
Page 2  
August 16, 2011

Re: Permit Numbers: 32096 and PSDTX867.

As of July 1, 2008, all analytical data generated by a mobile or stationary laboratory in support of compliance with air permits must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory under the Texas Laboratory Accreditation Program or meet one of several exemptions. Specific information concerning which laboratories must be accredited and which are exempt may be found in 30 TAC § 25.4 and § 25.6.

For additional information regarding the laboratory accreditation program and a list of accredited laboratories and their fields of accreditation, please see the following Web site:

[www.tceq.texas.gov/compliance/compliance\\_support/qa/env\\_lab\\_accreditation.html](http://www.tceq.texas.gov/compliance/compliance_support/qa/env_lab_accreditation.html)

For questions regarding the accreditation program, you may contact the Texas Laboratory Accreditation Program at (512) 239-3754 or by e-mail at [labprgrms@tceq.texas.gov](mailto:labprgrms@tceq.texas.gov).

Your cooperation in this matter is appreciated. If you need further information or have any questions, please contact Mr. Joe Bryan at (512) 239-5358 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Sincerely,



Michael P. Wilson, P.E., Director  
Air Permits Division  
Office of Air  
Texas Commission on Environmental Quality

MW/JB/jb

Enclosure

cc: Air Section Manager, Region 1 - Amarillo  
Air Permits Section Chief, New Source Review, Section (6PD-R), U.S. Environmental  
Protection Agency, Region 6, Dallas

Project Number: 165310

## SPECIAL CONDITIONS

Permit Numbers 32096 and PSD-TX-867

### Emission Standards, Plant Design, Work Practices, and Fuel Specifications

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," (MAERT) and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits and operating schedules is based on a rolling 12-month period (i.e., updated monthly) rather than the calendar year.
2. The facilities operated under this permit shall comply with all applicable requirements of the Environmental Protection Agency (EPA) Regulations on Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units and Stationary Gas Turbines in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subparts A, Db, and GG. If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.
3. Water or steam injection may be utilized to augment the power generating capability of each combustion turbine. Water or steam injection/power augmentation will be limited to a maximum of 210 hours per year.
4. During operation of the natural gas-fired combustion turbine units with duct burners unfired, the average hourly concentration in parts per million by volume dry (ppmvd) corrected to 15 percent oxygen (O<sub>2</sub>) in the stack gases shall not exceed 15 ppmvd (25 ppmvd during power augmentation) for nitrogen oxides (NO<sub>x</sub>) and 25 ppmvd (50 ppmvd during power augmentation) for carbon monoxide (CO). (08/11)

During operation of the natural gas-fired combustion turbine units with firing of the duct burner, the average hourly concentration in ppmvd corrected to 15 percent oxygen (O<sub>2</sub>) in the stack gases shall not exceed 19 ppmvd (25 ppmvd during power augmentation) for NO<sub>x</sub> and 28 ppmvd (50 ppmvd during power augmentation) for CO. These limits shall apply for each hour during which the duct burners are fired for any portion of the clock hour. (08/11)

The NO<sub>x</sub> and CO exhaust concentrations in this special condition shall apply except during periods of start-up or shutdown. Individual startup/shutdown periods shall not exceed three hours each. Startup is defined as operation from ignition/flame to 80 megawatt (MW) output. Shutdown is defined as operation at less than 70 MW output. Normal operation, for the purpose of permit compliance demonstration, is defined as operation at greater than 80 MW output. In addition, the above limits shall not apply when it is necessary, due to mechanical constraints, including fuel curtailment, to operate the gas turbines at a partial load level (i.e. sustained operations at less than 80 MW) at which times emissions may

## SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 2

exceed these values. These periods shall not exceed 12 hours per event and limitations stated in the MAERT. (08/11)

5. Emissions from each unit's duct burner shall not exceed 0.1 pound (lb) NO<sub>x</sub> per million Btu (MMBtu) heat input, higher heating value (HHV), and 0.08 lb CO/MMBtu heat input (HHV) (or 0.088 lb CO/MMBtu during power augmentation) at 100 percent load. Demonstration of compliance with this condition is by initial performance tests, as described in Special Condition No. 11F. Initial performance tests were conducted for the duct burners in April and May, 1999. (08/11)
6. A copy of this permit, amendments and compliance test data shall be kept at the plant site and made immediately available at the request of personnel from the Texas Commission on Environmental Quality (TCEQ), EPA, or any local air pollution control agency having jurisdiction. In addition, the holder of this permit shall clearly label all equipment at the property that has the potential of emitting air contaminants. Permitted emission points shall be clearly labeled corresponding to the emission point numbering on the MAERT.
7. Fuel fired in the gas turbines is limited to natural gas containing no more than 0.5 grain hydrogen sulfide (H<sub>2</sub>S) per 100 standard cubic feet (scf) and 20 grains total sulfur/100 scf. Fuel fired in the heat recovery steam generator (HRSG) duct burners is limited to refinery gas or natural gas as described above. The H<sub>2</sub>S content of the refinery gas will be less than 50 ppm. However, the H<sub>2</sub>S content of the refinery gas may experience an H<sub>2</sub>S level above 50 ppm to as high as 400 ppm for no more than 144 hours per year. Use of any other fuel shall require modification to this permit.
8. Each combustion turbine is limited to a fuel flow of 1,400 MMBtu/hr. The duct burner system for each HRSG is limited to a maximum fuel flow rate of 501.3 MMBtu/hr. (08/11)
9. On an 18-month inspection schedule, to commence upon start-up of the facility, the low-NO<sub>x</sub> duct burners shall be visually inspected for erosion, corrosion, plugging, or any other alteration that may adversely affect low-NO<sub>x</sub> performance. The TCEQ shall be notified at least seven days prior to any planned inspection in order to be given an opportunity to witness the inspection procedure.
10. Emissions from the turbines and duct burners shall not exceed 5 percent opacity as determined by EPA Reference Method 9, except during periods of start-up or shutdown which shall not exceed three hours.

SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 3

Initial Determination Of Compliance

11. Unless already completed, the holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the turbines and duct burners. Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with EPA Reference Methods 201A and 202 or Reference Method 5, modified to include back-half condensibles, for the concentration of particulate matter less than ten microns in diameter (PM<sub>10</sub>) with the allowance for ambient particulates (i.e., subtracting out particulates entering the turbine); Reference Method 8 for sulfur dioxide (SO<sub>2</sub>); Reference Method 9 for opacity (consisting of 30 six-minute readings as provided in 40 CFR 60.11[b]); Reference Method 10 for the concentration of CO; Reference Method 25A, modified to exclude methane and ethane, for the concentration of volatile organic compounds (VOC) (to measure total carbon as propane); and Reference Method 20 for the concentrations of NO<sub>x</sub> and O<sub>2</sub> or equivalent methods. Fuel sampling using the methods and procedures of 40 CFR § 60.335(d) may be conducted in lieu of stack sampling for SO<sub>2</sub>. If fuel sampling is used, compliance with applicable SO<sub>2</sub> emission limitations of Special Condition Nos. 1 and 2 shall be based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operation at his expense.
- A. The TCEQ Amarillo Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Method for determining turbine load both before and after sampling.

The purpose of the pretest meeting is to review and formalize the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, to identify each operating parameter which is significant to maintaining emission compliance, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in this permit condition or any TCEQ or EPA sampling procedures shall be made available to the TCEQ at or prior to the pretest meeting. The TCEQ Regional

## SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 4

Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in Special Condition No. 11B of this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate procedure proposals for New Source Performance Standard testing which must have EPA approval shall be submitted to the TCEQ Air Permits Division in Austin. Any alternate test procedures or any test waivers must be approved by the TCEQ prior to the date required in Special Condition No. 11F for conducting the tests.

- B. Air emissions from the gas turbines (with no duct burner firing) to be tested for while at full load include (but are not limited to)  $\text{NO}_x$ ,  $\text{O}_2$ , CO, VOC,  $\text{SO}_2$ , and opacity. (Fuel sampling using the methods and procedures of 40 CFR § 60.335[d] may be conducted in lieu of stack sampling for  $\text{SO}_2$ ).

Sampling of each turbine shall occur within 60 days after achieving the maximum production rate at which the turbine will be operated but no later than 180 days after initial start-up of the turbine. Additional sampling shall occur as may be required by the TCEQ or EPA.

- C. The  $\text{SO}_2$  shall be sampled from gas turbine alone while firing natural gas to demonstrate initial compliance with Special Condition No. 2. (Fuel sampling using the methods and procedures of 40 CFR § 60.335[d] may be conducted in lieu of stack sampling for  $\text{SO}_2$ ).
- D. The  $\text{NO}_x$ ,  $\text{O}_2$ , and CO shall be sampled from the turbine alone while firing natural gas at the minimum point in the normal operating range, 80 percent capacity, and the peak capacity for the atmospheric conditions occurring during the test. Emissions of  $\text{NO}_x$  and CO shall be calculated and reported in units of the standard. This testing will be used to demonstrate initial compliance with Special Condition No. 1.
- E. Sampling of each HRSG shall occur within 60 days after achieving the maximum production rate at which the HRSG will be operated but no later than 180 days after initial start-up of the HRSG. Additional sampling shall occur as may be required by the TCEQ or EPA.
- F. Duct burner  $\text{NO}_x$ ,  $\text{PM}_{10}$ , and CO emissions shall be determined by sampling the stack downstream from the HRSG and turbine. The turbine must be operating at a maximum rate for the ambient conditions. The HRSG emissions will be the remainder of emissions after subtracting the emissions from turbine-only operation from the total stack emissions. For the purposes of demonstrating initial compliance, emissions from each unit's duct burner shall not exceed the limits specified in Special Condition No. 5.

SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 5

- G. Within 60 days after the completion of the testing and sampling required herein, three copies of the sampling report shall be distributed as follows:

One copy to the TCEQ Amarillo Regional Office.

One copy to the EPA Region 6 Office, Dallas.

Continuous Demonstration Of Compliance

12. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) or a predictive emissions monitoring system (PEMS) to measure and/or predict and record the concentrations of NO<sub>x</sub> and CO at the Cogeneration Unit Stacks (Emission Point Nos. [EPNs] 1-1 and 2-1). Either a CEMS or a PEMS shall be fully operational after the initial 180-day test period following start-up, prior to which there will be periods when continuous monitoring will not occur. The NO<sub>x</sub> and CO concentrations shall be reported as required to demonstrate compliance with Special Conditions No 4. The monitoring system shall meet either the following section of Requirements for CEMS or the section Requirements for PEMS, as applicable.  
Requirements for CEMS

The holder of this permit shall install, calibrate, maintain, and operate a CEMS to:

- A. Measure and record the concentrations of NO<sub>x</sub>, CO, and diluent gas (CO<sub>2</sub> or O<sub>2</sub>) in each cogeneration unit exhaust stack. The NO<sub>x</sub> and CO concentrations shall be corrected and records maintained as noted in Special Condition No. 18.
- B. The CEMS required in Special Condition No. 12 shall comply with the following requirements:
- (1) The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendix A. The Performance Specification tests shall be conducted prior to or during the sampling required by Special Condition No. 11, and written copies of the results shall be submitted within 60 days of completion of the tests to the TCEQ Amarillo Regional Office; the TCEQ Compliance Support Division in Austin; and the EPA Region 6 Office in Dallas. (08/11)
  - (2) The system shall be zeroed and spanned daily and corrective action taken when the 24-hour calibration error exceeds two times the amounts specified in

SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 6

40 CFR Part 75, Appendix A. Each gaseous monitor shall be quality-assured at least quarterly using the linearity check procedures found in 40 CFR Part 60, Appendix B.

- (3) The gaseous monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. Two valid data points shall be generated during the hourly period in which zero and span is performed.
- (4) Compliance with the continuous emissions monitoring requirements of 40 CFR Part 60, Subpart B, Performance Specification No. 2 can be demonstrated by meeting the applicable requirements of 40 CFR Part 75 provided that the holder of this permit demonstrates compliance with all applicable 40 CFR Part 60 emission standards. (08/11)
- (5) All linearity check exceedances greater than  $\pm 5$  percent accuracy, CGA exceedances greater than  $\pm 15$  percent accuracy, and any unscheduled CEMS downtime shall be reported in the reports required by Special Condition No. 18 to the TCEQ Amarillo Regional Office with the necessary corrective action taken. Supplemental stack concentration measurements may be required at the discretion of the TCEQ Regional Director. (08/11)

Requirements for PEMS

- C. A PEMS may be used for demonstrating continuous compliance if it can be proven to have the same or better accuracy, precision, reliability, accessibility, and timeliness as that provided by a hardware CEMS. All PEMS shall be subject to the approval of the Executive Director of the TCEQ. Owners or operators must petition the TCEQ Executive Director for approval to use PEMS. The petition must include results of tests conducted beforehand to demonstrate equivalent accuracy and precision of PEMS to that of hardware CEMS. Demonstrating equivalency of PEMS to CEMS shall be met by instantaneously comparing data collected by PEMS with that collected by a certified hardware CEMS or an EPA reference method. For a PEMS replacing a CEMS, both systems shall remain in place for at least an operating quarter collecting valid information before the CEMS is removed.
- D. For any unit at which the PEMS is installed, PEMS initial certification by the TCEQ shall occur while the unit is firing its primary fuel. The owner or operator shall:

SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 7

- (1) Conduct relative accuracy testing for NO<sub>x</sub> and CO at the Cogeneration Unit Stacks, EPNs 1-1 and 2-1, per 40 CFR Part 60, Appendix B, Performance Specifications 2 and 3.
- (2) Conduct statistical test analyses at low, medium, and high levels of the most significant operating parameter affecting NO<sub>x</sub> emissions and CO emissions at the Cogeneration Unit Stacks, EPNs 1-1 and 2-1. A minimum of 30 successive paired data points which are either 15-minute averages, 20-minute averages, or hourly averages must be collected at each tested level before a reliable statistical test can be performed. Data collection must be continuous at all times except when calibration of the reference method must be conducted for the purpose of collecting data for relative accuracy test audit (RATA).

The following three tests must be conducted to demonstrate precision:

- a. A T-test for bias per Appendix A, 40 CFR Part 75, §7.6. The test shall be conducted using all paired data points collected at all three tested levels.
  - b. An F-test per 40 CFR § 75.41(c)(1). The F-test must be conducted separately at the three tested levels.
  - c. A correlation analysis per 40 CFR 75.41(c)(2). Calculation of the correlation coefficient (Equation 27) shall be performed using all paired data points collected at all three tested levels.
- (3) When conducting an F-test for NO<sub>x</sub>, use a reference method standard deviation (SD) of the greater of 5 ppm or 3 percent of span if the SD of the reference method is less than either 3 percent of the span or 5 ppm.
  - (4) At any one tested level for NO<sub>x</sub>, all statistical tests are waived for that emission parameter at that specific tested level if the mean value of the reference is less than either 10 ppm or 5 percent of the span.
- E. The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in pounds per hour at least once every hour and cumulative tons per year on a 12-month rolling average at least once every month.

SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 8

- F. All monitoring data and quality-assurance data shall be maintained by the permit holder for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request.
- G. Any PEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Owners or operators shall demonstrate that all missing data can be accounted for in accordance with the applicable missing data procedures of 40 CFR Part 75, Subpart D. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.
- H. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to each annual RATA in order to provide them the opportunity to observe the testing.
- I. The owner or operator shall perform daily sensor validation. The owner or operator shall develop and implement plans that will ensure proper functioning of the monitoring systems, ensure proper accuracy, and calibration of all operational parameters that affect emissions and serve as input to the predictive monitoring system, and ensure continuous operation within the certified operating range.
- J. In accordance with the procedure of § 2.3.1, Appendix B of 40 CFR Part 75, a RATA must be performed every six months for each unit while firing its primary fuel. A RATA may be performed annually if the relative accuracy of the previous audit is 7.5 percent or less.
- K. For each of the three successive quarters following the quarter in which initial certification was conducted, RATA and statistical testing must be conducted for at least one unit in a category of units in accordance with the procedures outlined for initial certification under Special Condition No. 11 of this permit.
- L. Any RATA exceeding 20 percent or statistical test exceeding the applicable standard shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken.
- M. When an alternative fuel is fired in a unit, PEMS must be recertified in accordance with the certification procedures outlined for initial certification under Special Condition No. 12 of this permit. Owners or operators may justify to the satisfaction of the TCEQ Executive Director that slight changes in fuel composition do not constitute an alternative fuel. No additional recertification procedures are required if the unit meets the current monitoring requirements when switching back to the normal fuel from an alternate fuel.

SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 9

- N. The system is required to provide valid emission predictions for at least 95 percent of the time that the unit being monitored is operated. The following rules for tuning without recertification shall be followed:
- (1) The model did not change fundamentally.
  - (2) The model continues to operate within the initially-certified operating ranges.
- Otherwise, the system must be recertified. Any tuning must be documented and the records must be made available during any future inspection.
- O. All owners/operators shall develop a quality-assurance plan/manual that insures continuous and reliable performance of the PEMS. As part of the plan, owners/operators shall recommend a frequency for calibrating each sensor whose readout serves as an input to the model. All sensors, at a minimum, shall be calibrated as often as recommended by the manufacturer.
13. During periods when the emissions monitoring system required by Special Condition No. 12 is unable to provide valid data, the standard missing data substitution procedure provided in 40 CFR §75.33(c) will be used to estimate the NO<sub>x</sub> and CO emissions used to demonstrate compliance with the pounds per hour (lb/hr) and tons per year emission limits for EPNs 1-1 and 2-1. (08/11)
14. If the natural gas described in Special Condition No. 7 qualifies as pipeline quality natural gas, based on a valid contract or tariff sheet, sampling for total sulfur is not required. If fuel sampling and analysis is used to qualify a fuel as pipeline natural gas, sampling must be conducted annually and whenever the fuel supply changes. Sampling shall be conducted according to the methods specified in 40 CFR Part 75, Appendix D, Section 2.3.3.1.2 and 2.3.4. The definition of pipeline natural gas is given in 40 CFR §72.2.

If the natural gas does not meet the definition of pipeline natural gas, the sulfur content of the natural gas must be sampled daily using the procedures of 40 CFR Part 75, Appendix D, Section 2.3.3. In lieu of daily sampling, the holder of this permit may either use the total sulfur content specified in a contract or tariff sheet as the SO<sub>2</sub> default emission rate or may calculate the default SO<sub>2</sub> emission rate based on fuel sampling results, according to the requirements of 40 CFR Part 75, Appendix D, Section 2.3.2.1.1 and Table D-5 in Section 2.3. If fuel sampling and analysis is used to qualify a fuel as natural gas, fuel samples must be taken annually and whenever the fuel supply changes.

## SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 10

15. The sulfur content of the refinery gas must be sampled hourly, unless a demonstration is provided under 40 CFR Part 75, Appendix D, Section 2.3.6 showing that the fuel qualifies for less frequent (i.e. daily or annual) sampling. The demonstration of fuel sulfur variability may also be used to demonstrate that the fuel qualifies to use a default SO<sub>2</sub> emission rate (calculated using Equation D-1h in Section 2.3.2.1.1 of 40 CFR Part 75, Appendix D), or an alternate method approved by the EPA for the purpose of reporting hourly SO<sub>2</sub> mass emissions. Blackhawk will request approval from the EPA to use Equation D-4, instead of Equation D-1h, and the 90th percentile value from the fuel sulfur variability study to calculate the default SO<sub>2</sub> emission rate. If the refinery gas meets the criteria of Section 2.3.6(b)(1) or (b)(2), and the permit holder elects to use a default SO<sub>2</sub> emission rate, the fuel is subject to the annual total sulfur sampling requirement under Section 2.3.2.4(e). The sample results must be used in the calculations as stipulated in Section 2.3.7(b)(3). (08/11)
16. After the initial demonstration of compliance required in Special Condition No. 11, the CEMS (or PEMS) required in Special Condition No. 12 and the fuel quality monitoring required in Special Condition Nos. 14 and 15 shall constitute the methods for demonstrating continuous compliance with the standards. The CEMS (or PEMS), mass emission calculations, and the fuel quality monitoring data will be used to evaluate compliance with the applicable emission limitations of Special Condition Nos. 1, 2, 4 and 7.

### Ammonia Monitoring

17. The holder of this permit must implement a program and maintain records for an auditory, visual, and olfactory leak monitoring program to check for ammonia leaks at valves, flanges, and other accessible connections in the ammonia system at least once per day. Repair of all leaks must commence within five hours of detection. In addition, TCEQ New Source Review Disaster Review and U.S. Environmental Protection Agency Risk Management Planning Guidelines must be followed for any ammonia containers and handling facilities of a size and configuration to which the regulations apply. (10/06)

### Recordkeeping Requirements

18. The holder of this permit shall make and maintain records of: (08/11)
  - A. Average hourly NO<sub>x</sub>, CO, and diluent gas (carbon dioxide or O<sub>2</sub>) concentrations monitored pursuant to Special Condition No. 12.

## SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 11

- B. Calculated emissions of NO<sub>x</sub>, CO, and SO<sub>2</sub> in units of the standard using the procedures and methods provided in 40 CFR Part 75, Appendices D and F, modified to include CO equations, CEMS (or PEMS) data, and vendor fuel Btu analysis. Hourly values shall be cumulatively added during each hour of the month to show total NO<sub>x</sub>, CO and SO<sub>2</sub> emissions for each month. Applicable methods outlined in 40 CFR Part 60, Appendix A may be used as an acceptable substitute for calculating emissions of NO<sub>x</sub>, CO and SO<sub>2</sub>. Records of annual emissions (tons/yr) will be maintained on a 12-month rolling basis.

Short-term and annual ammonia (NH<sub>3</sub>) emission rates shall be calculated using the site-specific emission factor (lb NH<sub>3</sub>/MMBtu) determined on the basis of the results of the December 11, 2002 performance tests of Unit 2, which included duct firing. Records of emissions will be maintained.

- C. The results of all fuel sampling conducted pursuant to Special Conditions Nos. 14 and 15. If a contract or tariff sheet is used to demonstrate that the natural gas qualifies as pipeline natural gas, the contract or tariff sheet must be available for inspection.
- D. The results of all stack tests conducted pursuant to Special Condition No. 11.
- E. Hours of operation and fuel usage of the turbines and duct burners to demonstrate compliance with Special Condition No. 8.
- F. Hours of operation with steam injection/power augmentation.
- G. A raw data file of CEMS (or PEMS) data including calibration checks and adjustments and maintenance performed on these systems or devices in a permanent form suitable for inspection.
- H. Ammonia leak inspections and repairs, in compliance with Special Condition No. 17. (10/06)

These records shall be maintained at the plant site on a five-year rolling retention basis and shall be made available to representatives of the TCEQ, EPA, or any local air pollution control agency having jurisdiction upon request.

### Reporting Requirements

19. The holder of this permit shall submit to the EPA Region 6 Office in Dallas and TCEQ Amarillo Regional Office, periodic reports semi-annually as described in 40 CFR § 60.7.

SPECIAL CONDITIONS

Permit Numbers 32096 and PSDTX867

Page 12

Such reports are required for each emission unit which is required to be continuously monitored pursuant to Special Condition No. 12. In addition to the information specified in 40 CFR 60.7(c), each report shall contain: (08/11)

- A. Hours of operation of the facility, a summary of the periods of noncomplying emissions, CEMS (or PEMS) system percent reliability, and CEMS (or PEMS) downtimes by cause;
- B. All linearity check exceedances of greater than  $\pm 5$  percent accuracy; and if a linearity check fails both the accuracy and mean difference tests, as defined in 40 CFR Part 75, Appendix A, Section 3.2, an explanation of the correction action taken will be reported.
- C. All calibration gas audit (CGA) exceedances of  $\pm 15$  percent accuracy and the corrective action taken.

The reporting of excess emissions required by this condition does not relieve the holder of this permit from the notification requirements of upset conditions or maintenance as required by Title 30 Texas Administrative Code §§ 101.201 and 101.211.

Dated August 16, 2011

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 32096 and PSDTX867

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/day	TPY (4)
1-1	Combustion Turbine Unit No. 1 (Natural Gas-Fired) & Heat Recovery Steam Generator	NO <sub>x</sub>	184	541
		SO <sub>2</sub>	102	146
		CO	194	510
		PM <sub>10</sub>	21.7	91.0
		VOC	8.32	34.0
		NH <sub>3</sub>	37.1	152
2-1	Combustion Turbine Unit No. 2 (Natural Gas-Fired) & Heat Recovery Steam Generator	NO <sub>x</sub>	184	541
		SO <sub>2</sub>	102	146
		CO	194	510
		PM <sub>10</sub>	21.7	91.0
		VOC	8.32	34.0
		NH <sub>3</sub>	37.1	152
FUG	Fugitives Unloading and Piping Fugitives (5)	VOC	0.07	0.31

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter  
 CO - carbon monoxide  
 NH<sub>3</sub> - ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

Date: August 16, 2011





## Texas Commission on Environmental Quality

### Major NSR Summary Table - Instructions

#### General:

The Major NSR Summary Table is the resolution of the United States Environmental Protection Agency's (EPA) objection to Incorporation by Reference (IBR) of major New Source Review (NSR) in Title V Site Operating Permits (SOP). This table must be submitted for every major NSR permit held at a site or application area. The purpose of this form is to identify monitoring, recordkeeping, reporting, and testing (MRRT) requirements for each emission point as reflected on the Maximum Allowable Emission Rate Table (MAERT). The Major NSR Summary Table follows the general format of the MAERT found in the major NSR permit, with three additional columns. The MRRT columns must include any special condition number(s) which contain the indicated requirement for the specified emission point. The remaining columns must be populated as they appear in the most recently issued MAERT. All necessary footnotes from the MAERT should be included after the table.

The Major NSR Summary Table must be submitted electronically in Word format upon request from the permit reviewer. The table has been specifically formatted to merge into the Title V SOP. Please do not make any changes to the formatting, size or orientation of the table, as these changes will cause problems with the document merge.

*Note: The Major NSR Summary Table cannot be used to change underlying NSR conditions, emission limits, or to add MRRT. Changes to underlying NSR conditions, emission limits, or the addition of MRRT are changes to the major NSR permit and should be handled through an appropriate NSR application process.*

When completing the table, consider the following:

- Include any special conditions which reference state or federal regulations with relevant requirements such as 40 CFR Part 60, 40 CFR Part 61 or 40 CFR Part 63 (NSPS, NSHAP or MACT)
- A condition, which requires monitoring or testing with a reporting or notification requirement implies recordkeeping even if records are not stated in the condition.
- Include the special condition numbers for one-time tests, which have been completed.
- Include special conditions, which establish, monitor or test a parameter used in the calculation of an emission rate and indirectly monitor an emission source such as annual leak testing of tank trucks, rail cars, or marine vessels.
- List only the special condition number which applies. Subparagraph designations or text describing the special condition should not be included with the condition number.

#### Specific:

The permit numbers and issuance date must be included in the header of the form. Enter the 30 TAC Chapter 116 permit (XXXX) and associated Prevention of Significant Deterioration (PSD) permit number (PSDTXXXXXX) or Nonattainment (NA) permit number (NXXXXXX) held for the application area. Enter the most recent issuance date (MM/DD/YYYY) for the permit.

**Emission Point Number:** Enter the emission point no. as identified on the applicable MAERT.

**Source Name:** Enter the source name as identified on the applicable MAERT.

**Air Contaminant Name:** Enter the air contaminant name as identified on the applicable MAERT.

## Major NSR Summary Table – Instructions

**Emission Rates:** Enter the emission rates (lb/hr) and (TPY) as identified on the applicable MAERT.

**Monitoring and Testing Requirements:** Enter the special condition number requiring monitoring of the relevant emission point against the applicable emission rate and/or testing in conjunction with the control standard, emission limit, operations of control equipment, or monitoring equipment of this emission rate. Also, enter the special condition number requiring any monitoring and/or testing of specific parameters used to calculate an emission rate.

**Recordkeeping Requirements:** Enter the special condition number requiring recordkeeping of the relevant emission point against the applicable emission rate. Also, include the special condition number requiring recordkeeping for any parameter used in the calculation of an emission rate.

**Reporting Requirements:** Enter the special condition number requiring reporting of the relevant point against the applicable emission rate.

**Footnotes:** Include all necessary footnotes from the MAERT.



Texas Commission on Environmental Quality

Major NSR Summary Table

Emission Point No. (1)		Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
				lb/hr	TPY**(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
1-1		Combustion Turbine Unit No. 1 (Natural Gas-Fired) & Heat Recovery Steam Generator	NOX	184	541	2; 5; 9; 11; 12; 13	4; 6; 11; 12; 18	11; 12; 19
			SO <sub>2</sub>	102	146	2; 11; 14; 15	6; 11; 14; 15; 18	11
			CO	194	510	2; 5; 11; 12; 13	4; 6; 11; 12; 18	11; 12; 19
			PM <sub>10</sub>	21.7	91.0	2; 10; 11	6; 11; 18	11
			VOC	8.32	34.0	2; 11	6; 11; 18	11
2-1		Combustion Turbine Unit No. 2 (Natural Gas-Fired) & Heat Recovery Steam Generator	NH <sub>3</sub>	37.1	152	2; 17	6; 17; 18	
			NOX	184	541	2; 5; 9; 11; 12; 13	4; 6; 11; 12; 18	11; 12; 19
			SO <sub>2</sub>	102	146	2; 11; 14; 15	6; 11; 14; 15; 18	11
			CO	194	510	2; 5; 11; 12; 13	4; 6; 11; 12; 18	11; 12; 19
			PM <sub>10</sub>	21.7	91.0	2; 10; 11	6; 11; 18	11
FUG		Fugitive Unloading and Piping Fugitives (5)	VOC	8.32	34.0	2; 11	6; 11; 18	11
			NH <sub>3</sub>	37.1	152	2; 17	6; 17; 18	
				0.07	0.31		6	

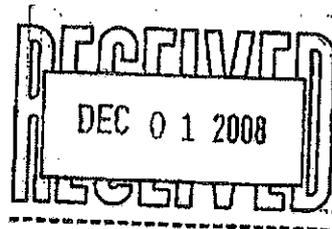
Footnotes:

- (1) Emission point identification – either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC – volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1
  - NOx – total oxides of nitrogen
  - SO<sub>2</sub> – sulfur dioxide
  - PM<sub>10</sub> – total particulate matter equal to or less than 10 microns in diameter
  - CO – carbon monoxide
  - NH<sub>3</sub> – ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.



Exhibit 4

Buddy Garcia, *Chairman*  
Larry R. Soward, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
*Protecting Texas by Reducing and Preventing Pollution*

November 17, 2008

MR DAVID L COKE  
PROJECT GENERAL MANAGER  
BORGER ENERGY ASSOCIATES LP  
STE 310  
7001 BLVD 26  
NORTH RICHLAND HILLS TX 76180-8813

Re: Effective Permit Approval  
Renewal  
Permit Number: O1753  
Borger Energy Associates, L.P.  
Blackhawk Power Plant  
Borger, Hutchinson County  
Regulated Entity Number: RN100217298  
Customer Reference Number: CN600129092  
Account Number: HW-0081-I

Dear Mr. Coke:

The effective federal operating permit (FOP) for Borger Energy Associates, L.P., Blackhawk Power Plant, is enclosed. This FOP constitutes authority to operate the emission units identified in the FOP application.

All site operating permits are subject to public petition for 60 days following the expiration of the 45-day U.S. Environmental Protection Agency (EPA) review. The public petition period for the FOP extends from October 25, 2008 until December 23, 2008. If the EPA receives a valid petition and objects to the above-referenced permit, you will be notified promptly by the Texas Commission on Environmental Quality (TCEQ).

It should be noted that from the date of this letter Borger Energy Associates, L.P., Blackhawk Power Plant, must operate in accordance with the requirements of Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122) and the FOP. Some of the terms and conditions contained in the FOP include recordkeeping conditions, reporting conditions (which includes deviation reporting), and compliance certification conditions. All reports, along with any questions regarding the reports, shall be forwarded to the Texas Commission on Environmental Quality Amarillo Regional Office, 3918 Canyon Drive, Amarillo, Texas 79109-4933.

EXHIBIT 4

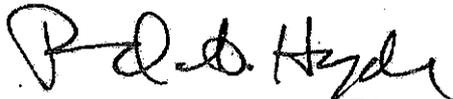
Mr. David L. Coke  
Page 2  
November 17, 2008

Consistent with 30 TAC Chapter 122, Subchapter C, the permit holder shall submit an application to the Air Permits Division (APD) for a revision to an FOP for those activities at a site which change, add, or remove one or more FOP terms or conditions. The permit holder shall also submit an application to the APD for a revision to a permit to address the following: the adoption of an applicable requirement previously designated as federally enforceable only; the promulgation of a new applicable requirement; the adoption of a new state-only requirement; or a change in a state-only designation.

Thank you again for your cooperation in this matter. If you have questions concerning the review of this notice, please contact Mr. Chuck Lowary, P.E., at (512) 239-1263.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,



Richard A. Hyde, P.E., Director  
Air Permits Division  
Office of Permitting, Remediation, and Registration  
Texas Commission on Environmental Quality

RAH/ECL/ssl

cc: Mr. Jim Cumbest, Environmental, Health, and Safety Coordinator, Borger Energy  
Associates, L.P., Borger  
Mr. John Hudspeth, P.E., V-Tech Environmental Services, Lubbock  
Air Section Manager, Region 1 - Amarillo

Enclosure: Effective Permit

cc: Air Permit Section Chief, U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 11544

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Borger Energy Associates, L.P.

AUTHORIZING THE OPERATION OF

Blackhawk Power Plant  
Electric Services

LOCATED AT

Hutchinson County, Texas

Latitude 35° 41' 46" Longitude 101° 21' 36"

Regulated Entity Number: RN100217298

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units, and affected sources listed in this permit. Operations of the site, emission units, and affected sources listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units, and affected sources authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units, and affected sources.

Permit No: 01753 Issuance Date: November 17, 2008

  
For the Commission

## TABLE OF CONTENTS

Section	Page
GENERAL TERMS AND CONDITIONS .....	1
SPECIAL TERMS AND CONDITIONS:.....	1
Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting: .....	1
Additional Monitoring Requirements .....	8
New Source Review Authorization Requirements .....	9
Compliance Requirements .....	9
Risk Management Plan .....	10
Permit Location.....	10
Permit Shield (30 TAC § 122.148).....	10
Acid Rain Permit Requirements .....	11
Clean Air Interstate Rule Permit Requirements.....	15
ATTACHMENTS.....	21
Applicable Requirements Summary .....	22
Additional Monitoring Requirements .....	26
Permit Shield.....	29
New Source Review Authorization References.....	31
APPENDIX A.....	34
Acronym List .....	35

## GENERAL TERMS AND CONDITIONS

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit shall be forwarded to the TCEQ Central Office and to the TCEQ Regional Office for your site. Reports submitted must include a cover letter which identifies the following information: company name, TCEQ regulated entity number, site name, area name (if applicable), and Air Permits Division permit number.

## SPECIAL TERMS AND CONDITIONS:

### Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting:

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. For stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment, the permit holder shall comply with the following requirements:
    - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
    - (ii) Title 30 TAC § 111.111(a)(1)(E)
    - (iii) Title 30 TAC §§ 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
    - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from (but not limited to) particulate matter, acid gases, and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146.

These periodic monitoring requirements do not apply to vents that do not emit visible emissions such as vents that emit only VOC or vents that provide passive ventilation, such as plumbing vents; or vents that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) and Compliance Assurance Monitoring, as specified in the attached "Applicable Requirements Summary" and "Additional Monitoring Requirements:"

1. An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
2. For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
3. Records of all observations shall be maintained.
4. Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

5. Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC §§ 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC §§ 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from (but not limited to) particulate matter, acid gases, and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

1. An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
2. Records of all observations shall be maintained.
3. Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
4. Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC §§ 111.111(a)(7) and (a)(7)(A).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall

list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC §§ 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC §§ 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC §§ 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from (but not limited to) particulate matter, acid gases, and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

1. An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
2. Records of all observations shall be maintained.
3. Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
4. Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC §§ 111.111(a)(8) and (a)(8)(A).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
- (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping).

- B. Title 40 CFR § 60.8 (relating to Performance Tests)
- C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
- D. Title 40 CFR § 60.12 (relating to Circumvention)
- E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
- F. Title 40 CFR § 60.14 (relating to Modification)
- G. Title 40 CFR § 60.15 (relating to Reconstruction)
- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

#### **Additional Monitoring Requirements**

5. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
  - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
  - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
  - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
  - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
6. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span

adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

### **New Source Review Authorization Requirements**

7. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
8. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

### **Compliance Requirements**

9. The permit holder shall certify compliance with all permit terms and conditions using, at a minimum (but not limited to) the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
10. Use of Discrete Emission Credits to Comply with Applicable Requirements:
  - A. Unless other wise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117

- (iii) If applicable, offsets for Title 30 TAC Chapter 116
  - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
  - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
  - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
  - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

#### **Risk Management Plan**

11. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

#### **Permit Location**

12. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on-site.

#### **Permit Shield (30 TAC § 122.148)**

13. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the

permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

#### Acid Rain Permit Requirements

14. For Unit 1 and Unit 2 (identified in the Certificate of Representation as 001 and 002), located at the affected source identified by ORIS/Facility code (55064), the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

##### A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

##### B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO<sub>2</sub> and NO<sub>x</sub> under the ARP.

- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO<sub>2</sub> emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO<sub>2</sub>.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the units's compliance subaccount, allowances in an amount not less than the total annual emissions of SO<sub>2</sub> for the previous calendar year.
- (iii) Each ton of SO<sub>2</sub> emitted in excess of the acid rain emissions limitations for SO<sub>2</sub> shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO<sub>2</sub> emissions requirements as follows:
  - 1. Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
  - 2. Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO<sub>2</sub> in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO<sub>x</sub> Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO<sub>x</sub> under 40 CFR Part 76.

E. Excess emissions requirements for SO<sub>2</sub> and NO<sub>x</sub>.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
  - 1. Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
  - 2. Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on-site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the permitting authority or the EPA Administrator.
  - 1. The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on-site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
  - 2. All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a three-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the three-year period shall apply.

3. Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
  4. Copies of all documents used to complete a acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an a 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.

- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans
  - (ii) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments
  - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law
  - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
  - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established
- I. The number of SO<sub>2</sub> allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

#### **Clean Air Interstate Rule Permit Requirements**

15. For Unit 1 and Unit 2 (identified in the Certificate of Representation as 001 and 002), located at the site identified by ORIS/Facility code (55064), the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

#### **A. General Requirements**

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
- (iii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO<sub>x</sub> source with the CAIR NO<sub>x</sub> emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO<sub>2</sub> source with the CAIR SO<sub>2</sub> emissions limitation.

C. NO<sub>x</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances

available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance the requirements 40 CFR Part 96, Subpart HH.

- (ii) A CAIR NO<sub>x</sub> unit shall be subject to the requirements of paragraph C(i) of this CAIR Permit starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR §§ 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (iv) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in this CAIR permit.

D. NO<sub>x</sub> excess emissions requirements

- (i) If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, the owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO<sub>2</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance the requirements 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO<sub>2</sub> unit shall be subject to the requirements of paragraph E(i) of this CAIR Permit starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR §§ 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (iv) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in this CAIR permit.

F. SO<sub>2</sub> excess emissions requirements

- (i) If a CAIR SO<sub>2</sub> source emits sulfur dioxides during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, the owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.

- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall keep on-site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the permitting authority or the Administrator.
  1. The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO<sub>x</sub> designated representative for the source and each CAIR NO<sub>x</sub> unit and the CAIR SO<sub>2</sub> designated representative for the source and each CAIR SO<sub>2</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on-site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
  2. All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a three-year period for recordkeeping, the three-year period shall apply.
  3. Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or relied upon for compliance determinations.
  4. Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program.
- (ii) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.

- H. The CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit shall meet the requirements of the CAIR SO<sub>2</sub> Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source or the CAIR designated representative of a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source or CAIR NO<sub>x</sub> unit or a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

## **ATTACHMENTS**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

### Applicable Requirements Summary

**Unit Summary .....23**

**Applicable Requirements Summary .....24**

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement driver
GRP-HRSG	Boilers/Steam Generators/Steam Generating Units	HRSG 1, HRSG 2	60 Db	40 CFR Part 60, Subpart Db	No changing attributes.
GRP-STK	Emission Points/Stationary Vents/Process Vents	EPN 1-1, EPN 2-1	60 A	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-GT	Stationary Turbines	UNIT 1, UNIT 2	60 GG	40 CFR Part 60, Subpart GG	No changing attributes.

Applicable Requirements Summary

Unit/Group/Process		SOP Index No.	Pollutant	Emission Limitation/Standard or Equipment Specification		Textual Description (See Special Permit and Condition 1B)	Monitoring And Testing Requirements	Recordkeeping Requirements	Reporting Requirements
ID No.	Type			Name	Citation				
GRP-HRSG	EU	60 Db	SO2	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-HRSG	EU	60 Db	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-HRSG	EU	60 Db	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-HRSG	EU	60 Db	NOX	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-STK	EP	60 A	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	(G)§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit/Group/Process		SOP Index No.	Pollutant	Emission Limitation/Standard/Equipment Specification		Textual Description (See Special Permit and Condition (B))	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
ID No.	Type			Name	Citation				
GRP-GT	EU	60 GG	SO2	40 CFR Part 60, Subpart GG	§ 60.331(G)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(1) § 60.334(i) § 60.334(j)(2) § 60.334(k) § 60.334(l)(2)(i) § 60.334(l)(2)(iii)	§ 60.334(i) § 60.334(j)(2)	§ 60.334(i) § 60.334(k)(5)
GRP-GT	EU	60 GG	NOX	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	(G)§ 60.334(b) § 60.334(j) § 60.334(k)(1) (G)§ 60.334(j)(1)(iii) (G)§ 60.335(e) § 60.335(b)(2) § 60.335(b)(3) ** See CAM Summary	(G)§ 60.334(b)	§ 60.334(i) § 60.334(j)(5)

**Additional Monitoring Requirements**

**Compliance Assurance Monitoring Summary.....27**  
**Periodic Monitoring Summary.....28**

### CAM Summary

UNIT/GROUP/PROCESS INFORMATION	
ID No.: GRP-GT	Applicable Form: OP-UA11
Control Device ID No.: GRP-SCR	Control Device Type: Selective Catalytic Reduction (SCR)
APPLICABLE REGULATORY REQUIREMENT	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60 GG
Pollutant: NOX	Main Standard: § 60.332(a)(1)
MONITORING INFORMATION	
Indicator: NOx concentration	
Minimum Frequency: Four times per hour	
Averaging Period: One hour	
Deviation Limit: Greater than 75 ppmv NOx	
<p>CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the concentration of nitrogen oxides and oxygen in the exhaust stream of the control device. The CEMS shall operate in accordance with the requirements of 40 CFR Part 75.</p> <p>The CEMS shall be operated in accordance with monitoring provisions of CFR Part 75, Subpart B and the operations and maintenance requirements of Subpart C.</p> <p>The CEMS shall be operated in accordance with all appropriate specifications and procedures of 40 CFR Part 75.</p>	

Periodic Monitoring Summary

UNIT/GROUP/PROCESS INFORMATION	
ID No.: GRP-STK	Applicable Form: OP-UA15
Control Device ID No.:	Control Device Type:
APPLICABLE REGULATORY REQUIREMENT	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 60 A
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
MONITORING INFORMATION	
Indicator: For natural gas - Maintain fuel purchase receipts. For liquid fuel - Visible emissions, unless permit holder opts to use EPA Test Method 9 for confirmation.	
Minimum Frequency: For natural gas - At each fuel purchase. For liquid fuel - Each period for which liquid fuel is fired for a consecutive period greater than or equal to 24 hours.	
Averaging Period: n/a	
Deviation Limit: If liquid fuel is fired for a period greater than or equal to 24 consecutive hours and visible emissions are observed, it is considered a deviation unless the following occurs: the permit holder opts to verify visible emissions by using EPA Test Method 9 and such a test confirms that the opacity standard (15% opacity averaged over a 6 minute period) is not exceeded.	
Periodic Monitoring Text: Record the type of fuel used by the facility. For natural gas, maintain fuel purchase receipts. If liquid fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Documentation of the observations shall be maintained. If visible emissions are present during the firing of liquid fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with EPA Test Method 9. Any opacity readings that are above 15% opacity averaged over a 6 minute period shall be considered and reported as a deviation.	

**Permit Shield**

**Permit Shield .....30**

**Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

ID No.	Unit/Group/Process		Regulation	Basis of Determination
	Group	Inclusive Units		
AIR COND	N/A		40 CFR Part 82, Protection of Stratospheric Ozone	No ozone depleting materials are used by on-site workers; appliances are repaired by certified contractors. No appliance contains more than 50 pounds, or more, of CFC.

**New Source Review Authorization References**

**New Source Review Authorization References .....32**  
**New Source Review Authorization References by Emission Unit.....33**

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

PSD Permits	NA Permits
PSD Permit No.: PSD-TX-867	NA Permit No.:
PSD Permit No.:	NA Permit No.:
PSD Permit No.:	NA Permit No.:
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area	
Authorization No.: 32096	Authorization No.:
Authorization No.:	Authorization No.:
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number:	Version No./Date:
Municipal Solid Waste and Industrial Hazardous Waste Permits With an Air Addendum	
Permit No.:	Permit No.:

**New Source Review Authorization References by Emissions Unit**

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EPN 1-1	STACK ATTACHED TO HRSG1 & UNIT 1	32096,PSD-TX-867
EPN 2-1	STACK ATTACHED TO HRSG2 & UNIT 2	32096,PSD-TX-867
HRSG 1	HEAT RECOVERY STEAM GENERATOR 1	32096,PSD-TX-867
HRSG 2	HEAT RECOVERY STEAM GENERATOR 2	32096,PSD-TX-867
UNIT 1	GAS-FUELED COMBUSTION TURBINE 1	32096,PSD-TX-867
UNIT 2	GAS-FUELED COMBUSTION TURBINE 2	32096,PSD-TX-867

**APPENDIX A**

**Acronym List.....35**

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM .....	actual cubic feet per minute
AMOC.....	alternate means of control
ARP .....	Acid Rain Program
ASTM .....	American Society of Testing and Materials
B/PA.....	Beaumont/Port Arthur (nonattainment area)
CAM .....	Compliance Assurance Monitoring
CD .....	control device
COMS .....	continuous opacity monitoring system
CVS.....	closed-vent system
D/FW.....	Dallas/Fort Worth (nonattainment area)
DR .....	Designated Representative
EIP .....	El Paso (nonattainment area)
EP .....	emission point
EPA .....	U.S. Environmental Protection Agency
EU .....	emission unit
FCAA Amendments.....	Federal Clean Air Act Amendments
FOP .....	federal operating permit
GF .....	grandfathered
gr/100 scf .....	grains per 100 standard cubic feet
HAP.....	hazardous air pollutant
H/G.....	Houston/Galveston (nonattainment area)
H <sub>2</sub> S .....	hydrogen sulfide
ID No. ....	identification number
lb/hr .....	pound(s) per hour
MMBtu/hr .....	Million British thermal units per hour
MRRT .....	monitoring, recordkeeping, reporting, and testing
NA .....	nonattainment
N/A.....	not applicable
NADB .....	National Allowance Data Base
NO <sub>x</sub> .....	nitrogen oxides
NSPS .....	New Source Performance Standard (40 CFR Part 60)
NSR.....	New Source Review
ORIS .....	Office of Regulatory Information Systems
Pb .....	lead
PBR.....	Permit By Rule
PM.....	particulate matter
ppmv .....	parts per million by volume
PSD .....	prevention of significant deterioration
RO.....	Responsible Official
SO <sub>2</sub> .....	sulfur dioxide
TSP.....	total suspended particulate
TVP .....	true vapor pressure
U.S.C.....	United States Code
VOC.....	Volatile organic compound



Borger Energy  
Associates  
P.O. Box 29  
Borger, TX 79007  
Main: 806.274.3340  
Fax: 806.274.7488

March 22, 2013

Texas Commission on Environmental Quality  
Air Permits Initial Review Team (APIRT), MC 161  
12100 Park 35 Circle, Building C, Third Floor  
Austin, Texas 78753

RE: Title V Renewal Application, Permit No.: O1753  
Borger Energy Associates, L.P.  
Blackhawk Station, Hutchinson County, Texas  
RN100217298, CN600129092  
TCEQ Account No.: HW-0081-I

Dear Sir/Madam,

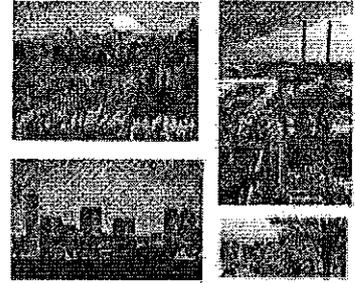
Borger Energy Associates, L.P. is submitting a renewal application for the Federal Operating Permit (FOP) No. O1753 for Blackhawk Station. This application package contains all documentation, including applicable Texas FOP program forms, to assist TCEQ in its review of this renewal application.

Please contact me at (713) 358-9734 or via email at [mlindsey@camstex.com](mailto:mlindsey@camstex.com), if you have any questions or need additional information.

Sincerely,

Matt Lindsey  
Senior EHS Specialist

CC: Electronic Copy to EPA Region 6 at [R6AirPermits@epa.gov](mailto:R6AirPermits@epa.gov)  
TCEQ Region 1, Attn: Eddy Vance, 3918 Canyon Dr., Amarillo, TX 79109-4933



**Borger Energy Associates, L.P.  
Blackhawk Power Plant  
Title V Site Operating Permit Renewal  
Hutchinson County, Texas  
TCEQ Account No. HW-0081-I  
CN600129092 / RN100217298**

**March 2013**

*Prepared for:*

Borger Energy Associates, L.P.  
Spur 119, N. Cogen Place  
Borger, Texas 79007



*Prepared by:*

Alliant Environmental, LLC  
1842 Snake River Road  
Katy, TX 77449  
Phone: (505) 205-4819



## Table of Contents

<b>1.0</b>	<b>Introduction .....</b>	<b>1-1</b>
<b>2.0</b>	<b>Recent Relevant Permitting Activity .....</b>	<b>2-1</b>
<b>3.0</b>	<b>Facility Description / Process Overview .....</b>	<b>3-1</b>
<b>4.0</b>	<b>Regulatory Applicability.....</b>	<b>4-1</b>
4.1	Federal Requirements .....	4-1
4.1.1	40 CFR Part 70 - Operating Permit Program .....	4-1
4.1.2	40 CFR Part 60 - New Source Performance Standards (NSPS).....	4-1
4.1.3	40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants .....	4-3
4.1.4	40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories.....	4-3
4.1.5	40 CFR Part 64 - Compliance Assurance Monitoring (CAM) .....	4-3
4.1.6	40 CFR Part 68 - Chemical Accident Prevention and Risk Management Programs.....	4-4
4.1.7	40 CFR Parts 72 – 77 - Acid Rain Regulations .....	4-4
4.1.8	40 CFR Parts 96 – 97 – Clean Air Interstate Rule Permit Requirements.....	4-4
4.1.9	40 CFR Part 82 - Stratospheric Ozone Protection Regulations.....	4-4
4.2	State Requirements .....	4-4
4.2.1	Chapter 101 – General Rules .....	4-4
4.2.2	Chapter 106 – Permits By Rule.....	4-5
4.2.3	Chapter 111 – Visible Emissions and Particulate Matter .....	4-5
4.2.4	Chapter 112 – Sulfur Compounds .....	4-5
4.2.5	Chapter 113 – Toxic Materials .....	4-5
4.2.6	Chapter 114 – Motor Vehicles.....	4-5
4.2.7	Chapter 115 – Volatile Organic Chemicals.....	4-5
4.2.8	Chapter 116 – Control of Air Pollution by Permits for New Construction / Modifications .....	4-5
4.2.9	Chapter 117 – Nitrogen Compounds .....	4-5
4.2.10	Chapter 118 – Air Pollution Episodes .....	4-5
4.2.11	Chapter 122 – Federal Operating Permits.....	4-5

## **List of Appendices**

- Appendix A TCEQ Core Data Form
- Appendix B TCEQ Form OP-CRO1 Certification by Responsible Official
- Appendix C TCEQ Form OP-1 Site Information Summary
- Appendix D TCEQ Form OP-2 Application for Permit Revision/Renewal
- Appendix E TCEQ Form OP-REQ1 Application Area-Wide Applicability Determinations and General Information
- Appendix F TCEQ Form OP-REQ2 Negative Applicable Requirement Determination
- Appendix G TCEQ Form OP-REQ3 Applicable Requirements Summary
- Appendix H TCEQ Form OP-SUM Individual Unit Summary
- Appendix I TCEQ Forms OP-UA (2, 4, 6, 11, 15), OP-ACPS, and OP-AR1
- Appendix J Facility Plot Plan, Process Flow Diagram, and Area Map

**List of Tables**

Table 3.1 – Blackhawk Power Plant Equipment List ..... 3-1  
Table 4.1 – Blackhawk Station GHG Applicability..... 4-1

## 1.0 Introduction

Borger Energy Associates, L.P. (Borger), owns and operates Blackhawk Power Plant (Blackhawk Station), a gas fired steam and electric generation facility, located in Hutchinson County, Texas, approximately two (2) miles Northeast of Borger, Texas. The facility includes two (2) combustion turbines each nominally rated at 115 megawatts (MW) with supplementary fired heat recovery steam generators (HRSGs). The combustion turbines fire natural gas and the HRSG duct burners are fueled by refinery fuel gas (RFG) or a mixture of RFG and natural gas.

The Blackhawk Station operates under a Site Operating Permit (SOP), permit number O1753. As required by 30 TAC Chapter 122, Borger is required to submit a SOP renewal application no later than six (6) months before their permit expiration date. The Blackhawk Station was granted a SOP on November 17, 2008; therefore, an administratively complete renewal application for the Blackhawk Station is due to the Texas Commission on Environmental Quality (TCEQ) no later than May 17, 2013. With this application, Borger is requesting a renewal of the Blackhawk Station SOP.

This permit renewal application includes a description of the operations at Blackhawk Station, a summary of equipment including recent relevant permitting activity, and an identification of applicable air pollution control requirements. The appendices of this application contain completed TCEQ Title V forms, a current facility plot plan, process flow diagram, and area map.

Questions regarding this SOP revision application may be referred to:

Matt Lindsey  
Senior EHS Specialist  
919 Milam Street, Suite 2300  
Houston, TX 77002

Bret Fry  
EHS Coordinator  
P.O. Box 29, Spur 119N, Cogen Place  
Borger, TX 79007

OR

Phone: (713) 358-9734  
Fax: (713) 358-9730  
Email: mlindsey@camstex.com

Phone: (806) 274-3340  
Fax: (806) 274-7488  
E-mail: bfry@beablackhawk.com

## **2.0 Recent Relevant Permitting Activity**

The initial New Source Review (NSR) and Prevention of Significant Deterioration (PSD) permit (NSR Permit No. 32096 and PSD-TX-867 authorization for the Blackhawk Station) was issued to Southwestern Public Service Company (SPS) on October 23, 1996.

On October 23, 2006, Borger Energy Associates, L.P. received a renewal permit for permit No. 32096 and PSD-TX-867. This permitting action also consolidated Standard Permit No. 50369, which authorized the installation of a selective catalytic reduction system with ammonia injection for nitrogen oxide control.

The Blackhawk Station SOP, permit number O1753 was issued by TCEQ on November 17, 2008.

On January 31, 2011, Permit By Rule (PBR) No. 94422 was issued by TCEQ to authorize emissions associated with maintenance, start-up and shut down (MSS) under PBR 106.263. On February 3, 2011, an Off-Permit/Operational Flexibility Notification Acknowledgement related to PBR No. 94422 was provided by TCEQ. PBR No. 94422 was revised and authorized on February 14, 2013.

### 3.0 Facility Description / Process Overview

The existing sources at the Blackhawk Station include:

- Two (2) Siemens 115 MW (nominal) combustion turbines (EPNs: 1-1, 2-1) that operate at a maximum design rate of 1,400 MMBtu/hr for electric generation and steam production;
- Two (2) heat recovery steam generators and associated compressor engines (electric powered);
- Station fugitives, including loading/unloading and piping emissions.

The Blackhawk Station is a cogeneration facility. The turbines are fueled by natural gas (El Paso and/or DCP natural gas) and the duct burners combust refinery fuel gas (RFG) provided by the adjacent Wood River Borger (WRB) Complex. Each combustion turbine/HRSG train is identical and operated independently. The combustion turbine powers the electrical generator and the excess heat discharged from the exhaust is recovered in the HRSG to produce export steam for use in the WRB Complex. The duct burners located at the inlet of each HRSG supplement the steam generation.

Equipment located at the Blackhawk Station that is used in support of generating electricity include portable heaters, one (1) diesel-fired emergency water-pump, one (1) remote reservoir cleaner (degreaser), water treatment units, organic and inorganic liquid tanks, and a 300 gallon diesel and a 500 gallon gasoline tank. In the past these sources were classified as insignificant sources with no applicable requirements. The gasoline tank and the dispensing of gasoline qualify as a dispensing facility. The monthly gasoline throughput is far less than 10,000 gallons. Piping components are sources of potential fugitive emissions. Table 3.1, below, lists all equipment at the station along with the preconstruction authorization numbers.

A process flow diagram and facility plot plan are included in Appendix K.

**Table 3.1 – Blackhawk Station Equipment List**

FIN	EPN	Name / Description	Preconstruction Authorization and Date
1-1	1-1	Combustion Turbine Unit No. 1 (Natural Gas-Fired) & Heat Recovery Steam Generator	NSR Permit No. 32096/PSD-TX-867 October 23, 1996 (Renewed October 19, 2006)
2-1	2-1	Combustion Turbine Unit No. 2 (Natural Gas-Fired) & Heat Recovery Steam Generator	NSR Permit No. 32096/PSD-TX-867 October 23, 1996 (Renewed October 19, 2006)
Fugitives	Fugitives	Unloading and Piping Fugitives	NSR Permit No. 32096/PSD-TX-867 October 23, 1996 (Renewed October 19, 2006)
EMENG1	EMENG1	Diesel-fired emergency water-pump	PBR 106.511 March 14, 1997

## 4.0 Regulatory Applicability

Blackhawk Station is located in Hutchinson County, which is designated as unclassifiable/attainment for all criteria pollutants per 40 CFR § 81.344. Therefore, Non-Attainment New Source Review does not apply to this permit application. The applicability of federal and state regulations to the Blackhawk Station is discussed in the following sections.

### 4.1 Federal Requirements

The applicability of federal requirements to Blackhawk Station is discussed in this section.

#### 4.1.1 40 CFR Part 70 - Operating Permit Program

Blackhawk Station is considered a major source for oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and greenhouse gas (carbon dioxide equivalents: CO<sub>2</sub>e) for Title V purposes and operates under Title V SOP Permit Number O1753. Blackhawk Station is revising the current SOP via this Title V SOP permit revision application.

Blackhawk Station consists of two Combustion Turbines and Heat Recovery Steam Generating Systems and a diesel powered emergency fire water pump. This facility has the potential to emit >100,000 tons per year of CO<sub>2</sub>e, therefore, it is a Title V and PSD Major site. Blackhawk Station is subject to 40 CFR 98 Reporting requirements of the Greenhouse Gas Mandatory Reporting Rule under Subpart D (Tier 4) for the combined cycle units of the Greenhouse Gas regulations. Form OP-1 has been filled out to reflect the major source status of Greenhouse Gases.

**Table 4.1 – Blackhawk Station GHG Applicability**

Unit Description	TV Permit Unit ID	ARP and CAIR Unit ID	GHG Applicability	CO <sub>2</sub> Equation	CH <sub>4</sub> and N <sub>2</sub> O Equation
Combined Cycle Unit	001	Unit 001	Subpart D (Tier 4)	40 CFR 75 with metric conversion	98.33(c)(4) Eq. C-10
Combined Cycle Unit	002	Unit 002	Subpart D (Tier 4)	40 CFR 75 with metric conversion	98.33(c)(4) Eq. C-10

#### 4.1.2 40 CFR Part 60 - New Source Performance Standards (NSPS)

Applicability or negative applicability under 40 CFR 60 (NSPS), 61 (NESHAP), and 63 (MACT) at Blackhawk Station is discussed in the following sections.

##### 4.1.2.1 40 CFR 60 Subpart D - Standards of Performance for Fossil Fuel-Fired Steam Generators

Blackhawk Station HRSG duct burners design capacities meet the requirements for 40 CFR 60 Subpart Da; therefore Subpart D is not applicable.

##### 4.1.2.2 40 CFR 60 Subpart Da - Standards of Performance for Electric Utility Steam Generating Units

The units are affected units under the Acid Rain Program and have historically demonstrated compliance with 40 CFR Part 60, Subparts Db and GG, as required by the terms and conditions of

the issued New Source Review (NSR) and Title V Permits. Although the NSR and Title V permits indicate that Blackhawk is subject to the requirements of 40 CFR 60 Subpart Db, it was discovered during a protected audit that the plant is, in fact, subject to 40 CFR 60 Subpart Da.

Each of the two HRSGs is equipped with a duct burner system with a design heat input capacity of 501.3 MMBtu/hr (HHV) to supplement steam generation. Blackhawk Station's HRSGs are used to produce steam, except during power augmentation mode, which is limited by permit to 210 hours per year. Natural gas and/or pipeline natural gas is fired in the combustion turbines and RFG gas from the adjacent WRB Refinery is fired in the duct burners.

The HRSG duct burners' design heat input of 501.3 MMBtu/hr (HHV) is greater than the Subpart Da applicability threshold of 250 MMBtu/hr and the duct burners were constructed after September 18, 1978. Therefore, the Blackhawk Station HRSG duct burners meet the applicability requirements of §60.40Da(e)(1). As described in §60.40b(e) a steam generation unit that meets the applicability requirements of Subpart Da is not subject to Subpart Db. Accordingly, this Title V Renewal Application requests changes to the Operating Permit to reflect 40 CFR 60 subpart Da applicability rather than Subpart Db.

**4.1.2.3 40 CFR 60 Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units**

The Blackhawk Station HRSG duct burners design capacities meet the requirements for 40 CFR 60 Subpart Da; therefore Subpart Db is not applicable.

**4.1.2.4 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

40 CFR 60 Subpart Da is applicable to the facility. The steam generating units each have a maximum design heat capacity greater than 29 MW (100 MMBtu/hr). Therefore, Subpart Dc is not applicable.

**4.1.2.5 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines**

This regulation applies to stationary gas turbines with a heat input at peak load of equal to or greater than 10 MMBtu/hr. The two Westinghouse Model 501D5A gas turbines at the Blackhawk Station each has a maximum heat input greater than 10 MMBtu/hr and were constructed, modified, or reconstructed prior to February 2005. Therefore, the Blackhawk Station shall operate both turbines in compliance with all applicable requirements under Subpart GG.

**4.1.2.6 40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels**

This regulation applies to volatile organic liquid storage vessels with storage capacity greater than 75 cubic meters (19,813 gallons) and constructed, reconstructed, or modified after July 23, 1984. There are no storage vessels storing volatile organic liquids at the Blackhawk Station with a storage capacity greater than 75 cubic meters (19,813 gallons); therefore, this subpart does not apply.

**4.1.2.7 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

The two stationary combustion turbines operated at the Blackhawk Station commenced construction, and/or modification prior to February 18, 2005; therefore, this subpart is not applicable.

**4.1.2.8 40 CFR 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

Blackhawk Station operates a diesel powered emergency water-pump. Subpart JJJJ does not apply to the emergency water pump because the emergency engine is not a stationary spark ignition internal combustion engine that commenced construction or modified/reconstruction after 6/12/2006.

**4.1.2.9 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

The emergency fire water-pump engine was constructed, modified and/or reconstructed prior to July 11, 2005; therefore Subpart IIII does not apply.

**4.1.3 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants**

**4.1.3.1 40 CFR Part 61 Subpart M - National Emission Standard for Asbestos**

The facility could be potentially subject to Subpart M, Standards for Demolition and Renovation (40 CFR 61.145); however, no demolition or renovation work is currently planned. Therefore, this regulation does not apply at this time.

**4.1.4 40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories**

**4.1.4.1 40 CFR Part 63 Subpart YYYY – National Emission Standards for Stationary Combustion Turbines**

Subpart YYYY is not applicable for the Blackhawk Station since this facility is not a major source of HAP.

**4.1.4.2 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Stationary Reciprocating Internal Combustion Engines**

NESHAP for Stationary RICE codified in 40 CFR 63 Subpart ZZZZ apply to certain engines located at major and area sources of hazardous air pollutants (HAPs). The Blackhawk Station is an area source of HAPs and operates one emergency stationary compression ignition combustion fire water-pump engine rated at 208 horse power (hp). Subpart ZZZZ is applicable to this engine under 40 CFR 63.6625(e)(3), 63.6625 (f), and 63.6640 (f)(1)(i) through (iii).

**4.1.4.3 40 CFR Part 63 Subpart CCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities**

Blackhawk Station is an area source of HAP emissions and has one 500 gallon gasoline storage tank onsite with a monthly throughput of less than 10,000 gallons of gasoline, which supplies gasoline to onsite equipment; therefore, this subpart is applicable to the facility. Blackhawk Station has an annual gasoline throughput of less than 1,000 gallons. Site-wide requirements shall be contained in the permit's special terms and conditions.

**4.1.5 40 CFR Part 64 - Compliance Assurance Monitoring (CAM)**

The enhanced monitoring requirements adopted into 40 CFR Part 64 are referred to as Compliance Assurance Monitoring (CAM). CAM is applicable to certain units located at major Title V sources that employ control devices.

Continuous Air Monitoring (CAM) is required for air emission sources operating under a SOP if the following criteria are met:

- (A) The emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
- (B) The emission unit uses a control device to achieve compliance with the emission limitation or standard; and
- (C) The emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year required for a site to be classified as a major source.

The two combustion turbines are equipped with a selective catalytic reduction system with anhydrous ammonia injection for nitrogen oxide (NO<sub>x</sub>) control. Pre-control emissions exceed major source levels; therefore, CAM is applicable to the turbines/HRSGs.

#### **4.1.6 40 CFR Part 68 - Chemical Accident Prevention and Risk Management Programs**

The Blackhawk Station is considered a stationary source under 40 CFR 68.3 (Chemical Accident Prevention) and subject to the Chemical Accident Prevention Provisions in 40 CFR Part 68. For processes subject to 40 CFR Part 68 Blackhawk Station complies with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68.

#### **4.1.7 40 CFR Parts 72 – 77 - Acid Rain Regulations**

Blackhawk Station is subject to and will comply with the federal acid rain regulations found at 40 CFR Parts 72 through 77.

#### **4.1.8 40 CFR Parts 96 – 97 – Clean Air Interstate Rule Permit Requirements**

Blackhawk Station is subject to and will comply with the Clean Air Interstate Rule (CAIR) Permit Requirements. In addition, Blackhawk Station will be subject to the proposed Transport Rule (TR) if or once it is adopted and will comply with all requirements under the TR.

#### **4.1.9 40 CFR Part 82 - Stratospheric Ozone Protection Regulations**

Subpart F, Recycling and Emissions Reductions, of 40 CFR Part 82, *Protection of Stratospheric Ozone*, generally requires that all repairs, service, and disposal of appliances containing Class I or Class II ozone depleting substances are conducted by properly certified persons. The facility will comply with this regulation should it become applicable.

### **4.2 State Requirements**

The applicability of TCEQ Title 30 TAC Chapters 101 through 122 to the Blackhawk Station and the Title V SOP permit application is discussed in this section.

#### **4.2.1 Chapter 101 – General Rules**

Blackhawk Station is in compliance with all applicable requirements of this Chapter, including the filing of annual Emission Inventories and payment of annual Emission Fees.

**4.2.2 Chapter 106 – Permits By Rule**

Blackhawk Station includes equipment that is authorized by specific PBRs. The PBRs are listed in TCEQ Form OP-REQ1, Appendix E to this SOP application. The facility will meet the requirements of each PBR.

**4.2.3 Chapter 111 – Visible Emissions and Particulate Matter**

The combustion turbines/HRSGs duct burners operated at Blackhawk Station are not subject to NESHAP or MACT requirements, but are subject to NSPS requirements. The combustion turbines/HRSGs stacks are subject to an opacity standard under 30 TAC 111. Blackhawk Station will demonstrate compliance with the requirements of 30 TAC 111, including periodic monitoring (PM), where applicable.

**4.2.4 Chapter 112 – Sulfur Compounds**

This chapter is not applicable since the combustion units fire only natural and refinery fuel gas.

**4.2.5 Chapter 113 – Toxic Materials**

Blackhawk Station does not have the potential to emit more than 25 tons per year (tpy) of aggregated HAPs or 10 tpy of any single HAP; therefore, Blackhawk Station is not a major source of HAPs and the requirements of Chapter 113 do not apply.

**4.2.6 Chapter 114 – Motor Vehicles**

This chapter is not applicable to the emission units addressed in this SOP permit revision.

**4.2.7 Chapter 115 – Volatile Organic Chemicals**

Hutchinson County is located in North Texas and is not an affected “covered county” under Chapter 115. Therefore, Blackhawk Station is not subject to the requirements of this chapter.

**4.2.8 Chapter 116 – Control of Air Pollution by Permits for New Construction / Modifications**

Emission sources identified in this permit application are authorized under various provisions of 30 TAC Chapter 116.

**4.2.9 Chapter 117 – Nitrogen Compounds**

The turbines addressed in this application are used in an electric power generating system, but they are not located in the Houston/Galveston/Brazoria, Dallas/Ft. Worth ozone non-attainment area. Therefore, the requirements of 30 TAC 117 Subchapter B “Combustion at Major Sources” do not apply.

**4.2.10 Chapter 118 – Air Pollution Episodes**

There are no requirements applicable to the emission units addressed in this application.

**4.2.11 Chapter 122 – Federal Operating Permits**

On November 17, 2008, TCEQ issued Borger Energy Associates, L.P. an SOP for Blackhawk Station in Hutchinson County, TX. With this application, Borger Energy Associates, L.P. requests renewal of SOP No. O1753.

## **Appendix A**

### **TCEQ Core Data Form**



TCEQ Use Only

# TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

## SECTION I: General Information

1. Reason for Submission <i>(If other is checked please describe in space provided)</i>	
<input type="checkbox"/> New Permit, Registration or Authorization <i>(Core Data Form should be submitted with the program application)</i>	<input checked="" type="checkbox"/> Renewal <i>(Core Data Form should be submitted with the renewal form)</i>
<input type="checkbox"/> Other	
2. Attachments Describe Any Attachments: <i>(ex. Title V Application, Waste Transporter Application, etc.)</i>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Title V Renewal
3. Customer Reference Number <i>(if issued)</i>	4. Regulated Entity Reference Number <i>(if issued)</i>
CN 600129092	RN 100217298

## SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)		3 / 2 5 / 2 0 1 3	
6. Customer Role (Proposed or Actual) - as it relates to the Regulated Entity listed on this form. Please check only one of the following:			
<input type="checkbox"/> Owner	<input type="checkbox"/> Operator	<input checked="" type="checkbox"/> Owner & Operator	
<input type="checkbox"/> Occupational Licensee	<input type="checkbox"/> Responsible Party	<input type="checkbox"/> Voluntary Cleanup Applicant	<input type="checkbox"/> Other: _____
7. General Customer Information			
<input type="checkbox"/> New Customer	<input checked="" type="checkbox"/> Update to Customer Information	<input type="checkbox"/> Change in Regulated Entity Ownership	
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State)		<input type="checkbox"/> No Change**	
<b>**If "No Change" and Section I is complete, skip to Section III - Regulated Entity Information.</b>			
8. Type of Customer:		<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual
		<input type="checkbox"/> Sole Proprietorship- D.B.A	
<input type="checkbox"/> City Government	<input type="checkbox"/> County Government	<input type="checkbox"/> Federal Government	<input type="checkbox"/> State Government
<input type="checkbox"/> Other Government	<input type="checkbox"/> General Partnership	<input checked="" type="checkbox"/> Limited Partnership	<input type="checkbox"/> Other: _____
9. Customer Legal Name <i>(if an individual, print last name first: ex: Doe, John)</i>		<i>If new Customer, enter previous Customer below</i>	
Borger Energy Associates L.P.		End Date: _____	
10. Mailing Address:			
PO Box 29			
City	Borger	State	TX
ZIP	79008	ZIP + 4	
11. Country Mailing Information <i>(if outside USA)</i>		12. E-Mail Address <i>(if applicable)</i>	
13. Telephone Number		14. Extension or Code	15. Fax Number <i>(if applicable)</i>
( 806 ) 274-3340			( 806 ) 274-7488
16. Federal Tax ID <i>(9 digits)</i>	17. TX State Franchise Tax ID <i>(11 digits)</i>	18. DUNS Number <i>(if applicable)</i>	19. TX SOS Filing Number <i>(if applicable)</i>
752721304	17575272130	023963080	
20. Number of Employees			21. Independently Owned and Operated?
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## SECTION III: Regulated Entity Information

22. General Regulated Entity Information <i>(If "New Regulated Entity" is selected below this form should be accompanied by a permit application)</i>			
<input type="checkbox"/> New Regulated Entity	<input type="checkbox"/> Update to Regulated Entity Name	<input checked="" type="checkbox"/> Update to Regulated Entity Information	<input type="checkbox"/> No Change** <i>(See below)</i>
<b>**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.</b>			
23. Regulated Entity Name <i>(name of the site where the regulated action is taking place)</i>			
Blackhawk Power Plant			

24. Street Address of the Regulated Entity: (No P.O. Boxes)	Spur 119, N. Cogen Place						
	City	Borger	State	TX	ZIP	79007	ZIP + 4
25. Mailing Address:	PO Box 29						
	City	Borger	State	TX	ZIP	79008	ZIP + 4
26. E-Mail Address:	bfry@beablackhawk.com						
27. Telephone Number	28. Extension or Code		29. Fax Number (if applicable)				
( 806 ) 274-3340	8		( 806 ) 274-7488				
30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)		33. Secondary NAICS Code (5 or 6 digits)			
4911		221112					
34. What is the Primary Business of this entity? (Please do not repeat the SIC or NAICS description.)							
Gas Fueled Steam and Electric Generation							

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	Spur 119, 2 miles North of Borger						
36. Nearest City	County		State		Nearest ZIP Code		
Borger	Hutchinson		TX		79008		
37. Latitude (N) In Decimal:	35.695			38. Longitude (W) In Decimal:	101.36		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
35	41	42	101	21	36		

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input checked="" type="checkbox"/> Industrial Hazardous Waste	<input type="checkbox"/> Municipal Solid Waste
			85709	
<input checked="" type="checkbox"/> New Source Review – Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS	<input type="checkbox"/> Sludge
32096/PSD-TX-867				
<input type="checkbox"/> Stormwater	<input checked="" type="checkbox"/> Title V – Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil	<input type="checkbox"/> Utilities
	O-1753			
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

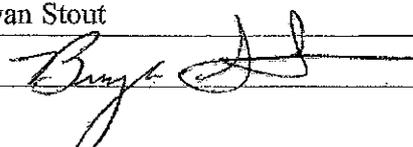
#### SECTION IV: Preparer Information

40. Name:	Bret Fry			41. Title:	EHS Specialist
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
( 806 ) 274-3340	8	( 806 ) 274-7488	bfry@beablackhawk.com		

#### SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	CAMS Texas (O&M), LLC	Job Title:	Plant Manager
Name (In Print):	Bryan Stout	Phone:	( 806 ) 274-3340
Signature:		Date:	3/25/2013

**Appendix B**

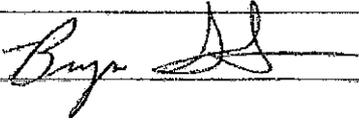
**TCEQ Form OP-CRO1 Certification by Responsible Official**





**Form OP-CRO1**  
**Certification by Designated Representative**  
**Acid Rain, Clean Air Interstate Rule (CAIR)**

All initial permit application, permit revision, and renewal submittals requiring certification must be accompanied by this form. Updates to acid rain or CAIR (other than public notice verification materials) must be certified prior to authorization of public notice for the draft permit.

<b>I. IDENTIFYING INFORMATION</b>					
RN: RN100217298		CN: CN600129092		Account No: HW-0081-I	
Permit No.: O1753			Project No.: TBD		
Area Name: Blackhawk Power Plant			Company Name: Borger Energy Associates, L.P.		
<b>II. CERTIFICATION TYPE</b> <i>(Please mark the appropriate box)</i>					
<input checked="" type="checkbox"/> Designated Representative			<input type="checkbox"/> Alternated Designated Representative		
<b>III. PERMIT and SUBMITTAL TYPE</b> <i>(Please mark the appropriate box for each column)</i>					
Permit Type: <input checked="" type="checkbox"/> Acid Rain <input checked="" type="checkbox"/> CAIR					
Submittal Type: <input type="checkbox"/> Initial Permit Application		<input type="checkbox"/> Update to Permit Application			
<input checked="" type="checkbox"/> Permit Revision or Renewal		<input type="checkbox"/> Other: _____			
<b>IV. CERTIFICATION OF TRUTH</b>					
I, <u>Bryan Stout</u> , the <u>DR</u> <i>(Name printed or typed)</i> <span style="float:right"><i>(DR or ADR)</i></span>					
am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment. The above certification is for the statements and information dated during the time period or on the specific date(s) below:					
<i>Note: Enter EITHER a Time Period OR Specific Date(s) for each certification. This section must be completed. The certification is not valid without documentation date(s).</i>					
Time Period: From _____ to _____ <span style="margin-left: 150px;"><i>State Date</i></span> <span style="margin-right: 150px;"><i>End Date</i></span>					
Specific Dates: <u>3 / 25 / 2013</u> _____ <span style="margin-left: 50px;"><i>Date 1</i></span> <span style="margin-left: 50px;"><i>Date 2</i></span> <span style="margin-left: 50px;"><i>Date 3</i></span> <span style="margin-left: 50px;"><i>Date 4</i></span> <span style="margin-left: 50px;"><i>Date 5</i></span> <span style="margin-left: 50px;"><i>Date 6</i></span>					
Signature: <u></u>			Signature Date: <u>3/25/2013</u>		
Title: <u>Plant Manager</u>					

## **Appendix C**

### **TCEQ Form OP-1 Site Information Summary**



Texas Commission on Environmental Quality  
 Federal Operating Permit Program  
 Site Information Summary  
 Form OP-1 (Page 1)

Please print or type all information. Direct any questions regarding this application form to the Air Permits Division at (512) 239-1250. Address written inquiries to the Texas Commission on Environmental Quality, Office of Permitting and Registration, Air Permits Division (MC 163), P.O. Box 13087, Austin, Texas 78711-3087.

I. COMPANY IDENTIFYING INFORMATION													
A. Company Name:		Borger Energy Associates, L.P.											
B. Customer Reference Number (CN):		CN600129092											
C. Submittal Date (mm/dd/yyyy):		3/25/2013											
II. SITE INFORMATION													
A. Site Name: Blackhawk Power Plant													
B. Regulated Entity Reference Number (RN):		RN100217298											
C. Primary Account Number for Site:		HW-0081-I											
D. Indicate affected state(s) required to review permit application: <i>(Place an "X" in the appropriate box[es].)</i>													
AR		CO		KS		LA		NM		OK		N/A	X
E. Indicate all pollutants for which the site is a major source based on the site's potential to emit:													
Pollutant		VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	CO	Pb	HAPS	Other: CO <sub>2e</sub>				
Major at the Site (YES/NO):		No	Yes	Yes	No	Yes	No	No	Yes				
F. Is the source a non-major source subject to the Federal Operating Permit Program?										<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
G. Is the site within a local program area jurisdiction?										<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
H. Will emissions averaging be used to comply with any Subpart of 40 CFR Part 63?										<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
I. Indicate the 40 CFR Part 63 Subpart(s) that will use emissions averaging:													
III. PERMIT TYPE													
A. Type of Permit Requested: <i>(Select only one response and place an "X" in the box.)</i>													
Site Operating Permit (SOP)		X	Temporary Operating Permit (TOP)				General Operating Permit (GOP)						
IV. INITIAL APPLICATION INFORMATION <i>(Complete for Initial Issuance Applications only.)</i>													
A. Is this submittal an abbreviated or a full application?										<input type="checkbox"/> Abbreviated <input type="checkbox"/> Full			
B. If this is a full application, is the submittal a follow-up to an abbreviated application?										<input type="checkbox"/> YES <input type="checkbox"/> NO			
C. If this is an abbreviated application, is this an early submittal for a combined SOP and Acid Rain/CAJR permit?										<input type="checkbox"/> YES <input type="checkbox"/> NO			
D. Has a copy of this application been submitted (or is being submitted) to EPA? (Refer to the form instructions for additional information.)										<input type="checkbox"/> YES <input type="checkbox"/> NO			



Texas Commission on Environmental Quality  
 Federal Operating Permit Program  
 Site Information Summary  
 Form OP-1 (Page 2)

<b>V. CONFIDENTIAL INFORMATION</b>		
A. Is confidential information submitted in conjunction with this application?		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>VI. RESPONSIBLE OFFICIAL (RO)</b>		
A. RO Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) Bryan Stout		
B. RO Title: Plant Manager		
C. Employer Name: Consolidated Asset Management Services (CAMS) Texas (O&M), LLC		
D. Mailing Address: P.O. Box 29		
City: Borger	State: TX	ZIP Code: 79008
Territory:	Country: US	Foreign Postal Code:
E. Internal Mail Code:		F. Telephone: (806) 274-3340
G. Fax: (806) 274-7488		H. E-mail: cstout@beablackhawk.com
<b>VII. TECHNICAL CONTACT IDENTIFYING INFORMATION (Complete if different from RO.)</b>		
A. Technical Contact Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) Bret Fry		
B. Technical Contact Title: EHS Specialist		
C. Employer Name: CAMS Texas (O&M), LLC		
D. Mailing Address: P.O. Box 29		
City: Borger	State: TX	ZIP Code: 79008
Territory:	Country: US	Foreign Postal Code:
E. Internal Mail Code:		F. Delivery Address:
City:	State:	ZIP Code:
Territory:	Country:	Foreign Postal Code:
G. Internal Mail Code:		H. Telephone: (806) 274-3340
I. Fax: (806) 274-7488		J. E-mail: bfry@beablackhawk.com
<b>VIII. REFERENCE ONLY REQUIREMENTS (For reference only.)</b>		
A. State Senator: Senator Kel Seliger (Senate District 31)		
B. State Representative: Walter T. "Four" Price (House District 87)		
C. Has the applicant paid emissions fees for the most recent agency fiscal year (Sept. 1 - August 31)?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
D. Is the site subject to bilingual notice requirements pursuant to 30 TAC § 122.322?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
E. Indicate the alternate language(s) in which public notice is required:		Spanish



Texas Commission on Environmental Quality  
 Federal Operating Permit Program  
 Site Information Summary  
 Form OP-1 (Page 3)

<b>IX. OFF-SITE PERMIT REQUEST</b> <i>(Optional for applicants requesting to hold the FOP and records at an off-site location.)</i>		
A. Office/Facility Name:		
B. Physical Address:		
City:	State:	ZIP Code:
Territory:	Country:	Foreign Postal Code:
C. Physical Location:		
D. Contact Name: ( <input type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.)		
E. Telephone:		
<b>X. APPLICATION AREA INFORMATION</b>		
A. Area Name: Blackhawk Power Plant		
B. Physical Address: Spur 199 E		
City: Borger	State: TX	ZIP Code: 79007
C. Physical Location: 2 miles Northeast of Borger on Spur 119		
D. Nearest City: Borger		
E. State: TX		F. ZIP Code: 79007
G. Latitude (nearest second): 35° 41' 42"		H. Longitude (nearest second): 101° 21' 36"
I. Are there any emission units that were not in compliance with the applicable requirements identified in the application at the time of application submittal?		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
J. Indicate the estimated number of emission units in the application area:		4
K. Are there any emission units in the application area subject to the Acid Rain Program and/or CAIR?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>XI. PUBLIC NOTICE</b> <i>(Complete this section for SOP Applications and Acid Rain Permit Applications only.)</i>		
A. Name of public place to view application and draft permit: Hutchinson County Library		
B. Physical Address: 625 Weatherly		
City: Borger	ZIP Code: 79007	
C. Contact Person (Someone who will answer questions from the public, during the public notice period): ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) Bret Fry		
D. Contact Mailing Address: P.O. Box 29, Spur 119 N. Cogen Place		
City: Borger	State: TX	ZIP Code: 79007
Territory:	Country: US	Foreign Postal Code:
E. Internal Mail Code:		F. Telephone: (806) 274-3340
<b>XII. DELINQUENT FEES AND PENALTIES</b>		
<b>Notice:</b> This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of Attorney General on behalf of the TCEQ are paid in accordance with the "Delinquent Fee and Penalty Protocol."		



Texas Commission on Environmental Quality  
 Federal Operating Permit Program  
 Site Information Summary  
 Form OP-1 (Page 4)

Complete Sections XIII and XIV for Acid Rain Permit and CAIR Permit applications only. Please include a copy of the Certificate of Representation submitted to EPA.

**XIII. DESIGNATED REPRESENTATIVE (DR) IDENTIFYING INFORMATION**

A. DR Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) Bryan Stout		
B. DR Title: Plant Manager		
C. Employer Name: CAMS Texas (O&M), LLC		
D. Mailing Address: P.O. Box 29		
City: Borger	State: TX	ZIP Code: 79008
Territory:	Country: US	Foreign Postal Code:
E. Internal Mail Code:	F. Telephone: (806) 274-3340	
G. Fax: (806) 274-7488	H. E-mail: cstout@beablackhawk.com	

**XIV. ALTERNATE DESIGNATED REPRESENTATIVE (ADR) IDENTIFYING INFORMATION**

A. ADR Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) Matt Lindsey		
B. ADR Title: Senior EHS Specialist		
C. Employer Name: Consolidated Asset Management Services, LLC		
D. Mailing Address: 919 Milam Street, Suite 2300		
City: Houston	State: TX	ZIP Code: 77002
Territory:	Country: US	Foreign Postal Code:
E. Internal Mail Code:	F. Telephone: (713) 358-9734	
G. Fax: (713) 358-9730	H. E-mail: mlindsey@camstex.com	

**Appendix D**

**TCEQ Form OP-2 Application for Permit Revision/Renewal**



Texas Commission on Environmental Quality  
Federal Operating Permit Program  
Application for Permit Revision/Renewal  
Form OP-2  
Table 1

Date: March 25, 2013	Permit No.: O1753	Account No.: HW-0081-I	Regulated Entity No.: RN100217298
Area Name: Blackhawk Power Plant		Company Name: Borger Energy Associates, L.P.	
		Customer Reference No.: CN600129092	

**For Submissions to EPA (SOP renewal, minor revision, and significant revision applications only)**

Has a copy of this application been submitted (or is being submitted) to EPA? (Refer to the form instructions for additional information.)

YES  NO

<b>I. APPLICATION TYPE</b>																	
Indicate the type of application:	<input checked="" type="checkbox"/> Renewal <input type="checkbox"/> Significant Revision <input type="checkbox"/> Administrative Revision <input type="checkbox"/> Streamlined Revision (Must include provisional terms and conditions as explained in the instructions.) <input type="checkbox"/> Revision Requesting Prior Approval <input type="checkbox"/> Response to Reopening																
<b>II. QUALIFICATION STATEMENT</b>																	
For SOP Revisions Only	The referenced changes qualify for the marked revision type. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>																
For GOP Revisions Only	The permitted area continues to qualify for a GOP. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>																
<b>III. MAJOR SOURCE POLLUTANTS (Complete this section if the permit revision is due to a change at the site.)</b>																	
Indicate all pollutants for which the site is a major source based on the site's potential to emit after the change is operated:																	
Pollutant	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">VOC</td> <td style="width: 15%;">NO<sub>x</sub></td> <td style="width: 15%;">SO<sub>2</sub></td> <td style="width: 15%;">PM<sub>10</sub></td> <td style="width: 15%;">CO</td> <td style="width: 15%;">Pb</td> <td style="width: 15%;">HAPs</td> <td style="width: 15%;">Other</td> </tr> <tr> <td> </td> </tr> </table>	VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	CO	Pb	HAPs	Other								
VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	CO	Pb	HAPs	Other										
Major at the Site (YES/NO):																	
<b>IV. FEE INFORMATION</b>																	
Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)? <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A</span>																	
<b>V. DELINQUENT FEES AND PENALTIES</b>																	
Notice: This form will not be processed until all delinquent fees and/or penalties owed the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and penalty protocol.																	



Texas Commission on Environmental Quality  
 Federal Operating Permit Program  
 Application for Permit Revision/Renewal  
 Form OP-2  
 Table 2

Date: March 25, 2013	Permit No.: 01753	Account No.: HW-0081-I	Regulated Entity No.: RN100217298
Area Name: Blackhawk Power Plant		Company Name: Borger Energy Associates, L.P. Customer Reference No.: CN600129092	

I. DESCRIPTION OF REVISION					
Revision No.	Revision Code	Unit/Group Process		NSR Authorization	Description of Changes and Provisional Terms and Conditions
		New Unit	ID No.		
1	MS-C	NO	GRP-HRSG	NSR Permit No. 32096 / PSD-TX-867	The HRSG duct burners are required to comply with 40 CFR Part 60 Subpart Da, not 40 CFR Part 60 Subpart Db as currently stated in the SOP.
2	MS-C	YES	EMENGI	PBR 106.511	The Emergency Fire Pump Engine is required to comply with 40 CFR Part 63 Subpart ZZZZ.
3	MS-C	YES	GASTANK1	PBR 106.412	Gasoline fuel dispensing is required to comply with 40 CFR 63 subpart CCCCCC

## **Appendix E**

### **TCEQ Form OP-REQ1 Application Area-Wide Applicability Determinations and General Information**



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 1)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>I. TITLE 30 TAC CHAPTER 111 - CONTROL OF AIR POLLUTION FROM VISIBLE EMISSIONS AND PARTICULATE MATTER</b>		
<b>A. Visible Emissions</b>		
◆	1. The application area includes stationary vents constructed on or before January 31, 1972.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
◆	2. The application area includes stationary vents constructed after January 31, 1972.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	3. All stationary vents are addressed on a unit specific basis. <i>If the response to Question I.A.3. is "YES," go to Question I.A.5.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	4. Stationary vents constructed after January 31, 1972 are subject to compliance assurance monitoring requirements.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	5. Test Method 9 (40 CFR Part 60, Appendix A, Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources) is used to determine opacity of emissions in the application area.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆	6. The application area includes structures subject to 30 TAC § 111.111(a)(7)(A).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	7. The application area includes sources, other than those specified in 30 TAC § 111.111(a)(1), (4), or (7), subject to 30 TAC § 111.111(a)(8)(A).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	8. Emissions from units in the application area include contributions from uncombined water.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	9. The application area is located in the City of El Paso, including Fort Bliss Military Reservation, and includes solid fuel heating devices subject to 30 TAC § 111.111(c).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
<b>B. Materials Handling, Construction, Roads, Streets, Alleys, and Parking Lots</b>		
	1. Items a - d determines applicability of any of these requirements based on geographical location.	
◆	a. The application area is located within the City of El Paso.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	b. The application area is located within the Fort Bliss Military Reservation, except areas specified in 30 TAC § 111.141.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 2)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>I. TITLE 30 TAC CHAPTER 111 - CONTROL OF AIR POLLUTION FROM VISIBLE EMISSIONS AND PARTICULATE MATTER (continued)</b>		
<b>B. Materials Handling, Construction, Roads, Streets, Alleys, and Parking Lots (continued)</b>		
◆	c. The application area is located in the portion of Harris County inside the loop formed by Beltway 8.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	d. The application area is located in the area of Nueces County outlined in Group II state implementation plan (SIP) for inhalable particulate matter adopted by the TCEQ on May 13, 1988.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<i>If there is any "YES" response to Questions I.B.1.a - d, answers Questions I.B.2.a - d. If all responses to Questions I.B.1.a-d are "NO", go to Section I.C.</i>		
2. Items a - d determine the specific applicability of these requirements.		
◆	a. The application area is subject to 30 TAC § 111.143.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	b. The application area is subject to 30 TAC § 111.145.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	c. The application area is subject to 30 TAC § 111.147.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	d. The application area is subject to 30 TAC § 111.149.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>C. Emissions Limits on Nonagricultural Processes</b>		
◆	1. The application area includes nonagricultural processes subject to 30 TAC § 111.151.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	2. The application area includes vents from a nonagricultural process that are subject additional monitoring requirements. <i>If the response to Question I.C.2. is "NO," go to Question I.C.4.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	3. All vents from nonagricultural processes in the application area are subject to additional monitoring requirements.	<input type="checkbox"/> YES <input type="checkbox"/> NO
	4. The application area includes oil or gas fuel-fired steam generators subject to 30 TAC §§ 111.153(a) and 111.153(e).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	5. The application area includes oil or gas fuel-fired steam generators that are subject to additional monitoring requirements. <i>If the response to Question I.C.5. is "NO," go to Question I.C.7.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 3)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>I. TITLE 30 TAC CHAPTER 111 - CONTROL OF AIR POLLUTION FROM VISIBLE EMISSIONS AND PARTICULATE MATTER (continued)</b>		
<b>C. Emissions Limits on Nonagricultural Processes (continued)</b>		
6.	All oil or gas fuel-fired steam generators in the application area are subject to additional monitoring requirements.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
7.	The application area includes solid fossil fuel-fired steam generators subject to 30 TAC §§ 111.153(a) and 111.153(b).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
8.	The application area includes solid fossil fuel-fired steam generators that are subject to additional monitoring requirements. <i>If the response to Question I.C.8. is "NO," go to Section I.D.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
9.	All solid fossil fuel-fired steam generators in the application area are subject to additional monitoring requirements.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>D. Emissions Limits on Agricultural Processes</b>		
1.	The application area includes agricultural processes subject to 30 TAC § 111.171.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>E. Outdoor Burning</b>		
◆ 1.	Outdoor burning is conducted in the application area. <i>If the response to Question I.E.1 is "NO," go to Section II.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆ 2.	Fire training is conducted in the application area and subject to the exception provided in 30 TAC § 111.205.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆ 3.	Fires for recreation, ceremony, cooking, and warmth are used in the application area and subject to the exception provided in 30 TAC § 111.207.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆ 4.	Disposal fires are used in the application area and subject to the exception provided in 30 TAC § 111.209.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆ 5.	Prescribed burning is used in the application area and subject to the exception provided in 30 TAC § 111.211.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆ 6.	Hydrocarbon burning is used in the application area and subject to the exception provided in 30 TAC § 111.213.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆ 7.	The application area has received the TCEQ Executive Director approval of otherwise prohibited outdoor burning according to 30 TAC § 111.215.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 4)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>II. TITLE 30 TAC CHAPTER 112 - CONTROL OF AIR POLLUTION FROM SULFUR COMPOUNDS</b>	
<b>A. Temporary Fuel Shortage Plan Requirements</b>	
1. The application area includes units that are potentially subject to the temporary fuel shortage plan requirements of 30 TAC §§ 112.15 - 112.18.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs)</b>	
<b>A. Applicability</b>	
◆ 1. The application area is located in the Houston/Galveston/Brazoria area, Beaumont/Port Arthur area, Dallas/Fort Worth area, El Paso area, or a covered attainment county as defined by 30 TAC § 115.10. <i>See instructions for inclusive counties. If the response to Question III.A.1 is "NO", go to Section IV.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>B. Storage of Volatile Organic Compounds</b>	
◆ 1. The application area includes storage tanks, reservoirs, or other containers capable of maintaining working pressure sufficient at all times to prevent any VOC vapor or gas loss to the atmosphere.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>C. Industrial Wastewater</b>	
1. The application area includes affected VOC wastewater streams of an affected source category, as defined in 30 TAC § 115.140. <i>If the response to Question III.C.1 is "NO" or "N/A," go to Section III.D.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
2. The application area is located at a petroleum refinery in the Beaumont/Port Arthur or Houston/Galveston/Brazoria area. <i>If the response to Question III.C.2 is "YES" and the refinery is in the Beaumont/Port Arthur area, go to Section III.D.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area is complying with the provisions of 40 CFR Part 63, Subpart G, as an alternative to complying with this division (relating to Industrial Wastewater). <i>If the response to Question III.C.3 is "YES," go to Section III.D.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 5)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs) (continued)</b>		
<b>C. Industrial Wastewater (continued)</b>		
4.	The application area is located at a plant with an annual VOC loading in wastewater, as determined in accordance with 30 TAC § 115.148, less than or equal to 10 Mg (11.03 tons). <i>If the response to Question III.C.4 is "YES," go to Section III.D.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
5.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that are subject to the control requirements of 30 TAC § 115.142(1).	<input type="checkbox"/> YES <input type="checkbox"/> NO
6.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that handle streams chosen for exemption under 30 TAC § 115.147(2).	<input type="checkbox"/> YES <input type="checkbox"/> NO
7.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that have an executive director approved exemption under 30 TAC § 115.147(4).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>D. Loading and Unloading of VOCs</b>		
◆ 1.	The application area includes VOC loading operations.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 2.	The application area includes VOC transport vessel unloading operations. <i>For GOP applications, if the responses to Questions III.D.1 - D.2, are "NO," go to Section III.E.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 3.	Transfer operations at motor vehicle fuel dispensing facilities are the only VOC transfer operations conducted in the application area. <i>If the response to Question III.D.3 is "YES," go to Section III.E.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 4.	For application areas in the Houston/Galveston/Brazoria area, marine terminal transfer operations are conducted in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 6)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs)		
E. Filling of Gasoline Storage Vessels (Stage 1) for Motor Vehicle Fuel Dispensing Facilities		
◆	1. The application area includes one or more motor vehicle fuel dispensing facilities and gasoline is transferred from a tank-truck tank into a stationary storage container. <i>If the response to Question III.E.1 is "NO," go to Section III.F.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	2. Transfers to stationary storage containers used exclusively for the fueling of agricultural implements are the only transfer operations conducted at facilities in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	3. All transfers at facilities in the application area are made into stationary storage containers with internal floating roofs, external floating roofs, or their equivalent. <i>If the response to Question III.E.2 and/or E.3 is "YES," go to Section III.F.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	4. The application area is located in a covered attainment county as defined in 30 TAC § 115.10. <i>If the response to Question III.E.4 is "NO," go to Question III.E.9.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	5. Stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons are located at the facility.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	6. Stationary gasoline storage containers with a nominal capacity greater than 1,000 gallons are located at the facility.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	7. At facilities located in covered attainment counties other than Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, or Wilson County, transfers are made to stationary storage tanks greater than 1000 gallons located at a facility which has dispensed less than 125,000 gallons of gasoline in a calendar month after January 1, 1999. <i>If the response to Question III.E.7 is "YES," go to Section III.F.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	8. At facilities located in Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, or Wilson County, transfers are made to stationary storage tanks greater than 1000 gallons located at a facility which has dispensed no more than 25,000 gallons of gasoline in a calendar month after December 31, 2004. <i>If the response to Question III.E.8. Is "YES," go to Section III.F.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 7)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs) (continued)</b>		
<b>E. Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Fuel Dispensing Facilities (continued)</b>		
◆	9. Transfers are made to stationary storage tanks located at a motor vehicle fuel dispensing facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991 and for which construction began prior to November 15, 1992.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	10. At facilities located in Ellis, Johnson, Kaufman, Parker, or Rockwall County, transfers are made to stationary storage tanks located at a facility which has dispensed at least 10,000 gallons of gasoline but less than 125,000 gallons of gasoline in a calendar month after April 30, 2005.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>F. Control of VOC Leaks from Transport Vessels (Complete this section for GOP applications for GOPs 511, 512, 513 and 514 only)</b>		
◆	1. Tank-truck tanks are filled with, or emptied of, gasoline at a facility that is subject to 30 TAC § 115.214(a)(1)(C) or 115.224(2) within the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆	2. Tank-truck tanks are filled with non-gasoline VOCs having a TVP greater than or equal to 0.5 psia under actual storage conditions at a facility subject to 30 TAC § 115.214(a)(1)(C) within the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆	3. Tank-truck tanks are filled with, or emptied of, gasoline at a facility that is subject to 30 TAC § 115.214(b)(1)(C) or 115.224(2) within the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>G. Control of Vehicle Refueling Emissions (Stage II) at Motor Vehicle Fuel Dispensing Facilities</b>		
◆	1. The application area includes one or more motor vehicle fuel dispensing facilities and gasoline is transferred from a stationary storage container into motor vehicle fuel tanks. <i>If the response to Question III.G.1 is "NO" or "N/A," go to Section III.H.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 8)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs) (continued)</b>		
<b>G. Control of Vehicle Refueling Emissions (Stage II) at Motor Vehicle Fuel Dispensing Facilities (continued)</b>		
◆	2. Transfer operations used exclusively for the fueling of aircraft, watercraft, or agricultural implements are the only transfer operations conducted at facilities in the application area. <i>If the response to Question III.G.2 is "YES," go to Section III.H.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
	3. The application area includes facilities where 95% or more of the motor vehicle fleet being fueled is equipped with onboard refueling vapor recovery equipment. <i>Note: If the response to Question III.G.3 is "NO," go to Question III.G.5.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
	4. All facilities in the application area provide fueling only for motor vehicle fleets where 95% or more of the motor vehicle fleet being fueled is equipped with onboard refueling vapor recovery equipment. <i>Note: If the response to Questions III.G.3. and III.G.4. are both "YES," go to Section III.H.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	5. The application area includes facilities that began construction on or after November 15, 1992.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	6. The application area includes facilities that began construction prior to November 15, 1992.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	7. The application area includes facilities that have a monthly throughput of less than 10,000 gallons of gasoline.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>H. Control Of Reid Vapor Pressure (RVP) of Gasoline</b>		
◆	1. The application area includes stationary tanks, reservoirs, or other containers holding gasoline that may ultimately be used in a motor vehicle in El Paso County. <i>If the response to Question III.H.1 is "NO" or "N/A," go to Section III.I.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆	2. The application area includes stationary tanks, reservoirs, or other containers holding gasoline that will be used exclusively for the fueling of agricultural implements.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 9)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs) (continued)</b>		
<b>H. Control Of Reid Vapor Pressure (RVP) of Gasoline (continued)</b>		
◆	3. The application area includes a motor vehicle fuel dispensing facility.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	4. The application area includes stationary tanks, reservoirs, or other containers holding gasoline and having a nominal capacity of 500 gallons or less.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>I. Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries</b>		
	1. The application area is located at a petroleum refinery.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>J. Surface Coating Processes (Complete this section for GOP applications only.)</b>		
◆	1. Surface coating operations (other than those performed on equipment located on-site and in-place) that meet the exemption specified in 30 TAC § 115.427(a)(3)(A) or 115.427(b)(1) are performed in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>K. Cutback Asphalt</b>		
	1. Conventional cutback asphalt containing VOC solvents for the paving of roadways, driveways, or parking lots, is used or specified for use in the application area by a state, municipal, or county agency. <i>If the response to Question III.K.1 is "N/A," go to Section III.L.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
	2. The use, application, sale, or offering for sale of conventional cutback asphalt containing VOC solvents for the paving of roadways, driveways, or parking lots occurs in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
	3. Asphalt emulsion is used or produced within the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO
	4. The application area is using an alternate control requirement as specified in 30 TAC § 115.513. <i>If the response to Question III.K.4 is "NO," go to Section III.L.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
	5. The application area uses, applies, sells, or offers for sale asphalt concrete, made with cutback asphalt, that meets the exemption specified in 30 TAC § 115.517(1).	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 10)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs) (continued)</b>		
<b>K. Cutback Asphalt (continued)</b>		
6.	The application area uses, applies, sells, or offers for sale cutback asphalt that is used solely as a penetrating prime coat.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7.	The applicant using cutback asphalt is a state, municipal, or county agency.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>L. Degassing or Cleaning of Stationary, Marine, and Transport Vessels</b>		
◆ 1.	The application area includes degassing or cleaning operations for stationary, marine, and/or transport vessels. <i>If the response to Question III.L.1 is "NO" or "N/A," go to Section III.M.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆ 2.	Degassing or cleaning of only ocean-going, self-propelled VOC marine vessels is performed in the application area. <i>If the response to Question III.L.2 is "YES," go to Section III.M.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆ 3.	Degassing or cleaning of stationary VOC storage vessels with a nominal storage capacity of 1,000,000 gallons or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆ 4.	Degassing or cleaning of stationary VOC storage vessels with a nominal storage capacity of 250,000 gallons or more, or a nominal storage capacity of 75,000 gallons and storing materials with a true vapor pressure greater than 2.6 psia, and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆ 5.	Degassing or cleaning of VOC transport vessels with a nominal storage capacity of 8,000 gallons or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 6.	Degassing or cleaning of VOC marine vessels with a nominal storage capacity of 10,000 barrels (420,000 gallons) or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 11)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs) (continued)</b>	
<b>L. Degassing or Cleaning of Stationary, Marine, and Transport Vessels (continued)</b>	
◆ 7. Degassing or cleaning of VOC marine vessels that do not meet one or more of the exemptions specified in 30 TAC § 115.547(1), (2), or (5), but have sustained damage as specified in 30 TAC § 115.547(4) is performed in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>M. Petroleum Dry Cleaning Systems</b>	
1. The application area contains one or more petroleum dry cleaning facilities that use petroleum based solvents.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>N. Vent Gas Control (Highly-reactive volatile organic compounds (HRVOC))</b>	
1. The application area includes one or more vent gas streams containing HRVOC.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
2. The application area includes one or more flares that emit or have the potential to emit HRVOC. <i>If the response to Question III.N.1. and III.N.2. are both "NO" or "N/A," go to Section III.O. If the response to Question III.N.1 is "YES," continue with Question III.N.3.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
3. All vent streams in the application area that are routed to a flare contain less than 5.0% HRVOC by weight at all times.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. All vent streams in the application area that are not routed to a flare contain less than 100 ppmv HRVOC at all times. <i>If the response to Questions III.N.3. and III.N.4. are both "NO," go to Section III.O.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area contains pressure relief valves that are not controlled by a flare.	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The application area has at least one vent stream which has no potential to emit HRVOC.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area has vent streams from a source described in 30 TAC § 115.727(c)(3)(A) - (H).	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 12)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>III. TITLE 30 TAC CHAPTER 115 - CONTROL OF AIR POLLUTION FROM VOLATILE ORGANIC COMPOUNDS (VOCs) (continued)</b>	
<b>Q. Cooling Tower Heat Exchange Systems (HRVOC)</b>	
1. The application area includes one or more cooling tower heat exchange systems that emit or have the potential to emit HRVOC.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>IV. TITLE 30 TAC CHAPTER 117 - CONTROL OF AIR POLLUTION FROM NITROGEN COMPOUNDS</b>	
<b>A. Applicability</b>	
◆ 1. The application area is located in the Houston/Galveston/Brazoria, Beaumont/Port Arthur, Dallas/Fort Worth, or Dallas/Fort Worth Eight-Hour area. <i>For SOP applications, if the response to Question IV.A.1 is "YES," complete Sections IV.B - IV.F and IV.H.</i> <i>For GOP applications for GOPs 511, 512, 513, or 514, if the response to Question IV.A.1 is "YES," go to Section IV.F.</i> <i>For GOP applications for GOP 517, if the response to Question IV.A.1 is "YES," complete Sections IV.C. and IV.F.</i> <i>For GOP applications, if the response to Question IV.A.1 is "NO," go to Section VI.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area is located in Bexar, Comal, Ellis, Hays, or McLennan County and includes a cement kiln. <i>If the response to Question IV.A.2 is "YES," go to Question IV.H.1.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area includes a utility electric generator in an east or central Texas county. See instructions for a list of counties included. <i>If the response to Question IV.A.3 is "YES," go to Question IV.G.1.</i> <i>If the responses to Questions IV.A.1 - 3 are all "NO," go to Question IV.H.1.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>B. Utility Electric Generation in Ozone Nonattainment Areas</b>	
1. The application area includes units specified in 30 TAC §§ 117.1000, 117.1200, or 117.1300. <i>If the response to Question IV.B.1. is "NO," go to Question IV.C.1.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
2. The application area is complying with a System Cap in 30 TAC §§ 117.1020 or 117.1220.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 13)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>IV. TITLE 30 TAC CHAPTER 117 - CONTROL OF AIR POLLUTION FROM NITROGEN COMPOUNDS (continued)</b>		
<b>C. Commercial, Institutional, and Industrial Sources in Ozone Nonattainment Areas</b>		
◆	1. The application area is located at a site subject to 30 TAC Chapter 117, Subchapter B and includes units specified in 30 TAC §§ 117.100, 117.300, or 117.400. <i>For SOP applications, if the response to Question IV.C.1. is "NO," go to Question IV.D.1.</i> <i>For GOP applications for GOP 517, if the response to Question IV.C.1. is "NO," go to Section IV.F.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	2. The application area is located at a site that was a major source of NO <sub>x</sub> before November 15, 1992.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆	3. The application area includes an electric generating facility required to comply with the System Cap in 30 TAC § 117.320.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>D. Adipic Acid Manufacturing</b>		
	1. The application area is located at, or part of, an adipic acid production unit.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>E. Nitric Acid Manufacturing - Ozone Nonattainment Areas</b>		
	1. The application area is located at, or part of, a nitric acid production unit.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>F. Combustion Control at Minor Sources in Ozone Nonattainment Areas - Boilers, Process Heaters, Stationary Engines and Gas Turbines</b>		
◆	1. The application area is located at a site that is a minor source of NO <sub>x</sub> in the Houston/Galveston/Brazoria or Dallas/Fort Worth Eight-Hour areas. <i>For SOP applications, if the response to Question IV.F.1 is "NO," go to Question IV.H.1.</i> <i>For GOP applications, if the response to Question IV.F.1 is "NO," go to Section VI.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	2. The application area is located in the Houston/Galveston/Brazoria area and has units that qualify for an exemption under 30 TAC § 117.2003(a).	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 14)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>IV. TITLE 30 TAC CHAPTER 117 - CONTROL OF AIR POLLUTION FROM NITROGEN COMPOUNDS (continued)</b>		
<b>F. Combustion Control at Minor Sources in Ozone Nonattainment Areas - Boilers, Process Heaters, Stationary Engines and Gas Turbines (continued)</b>		
◆	3. The application area is located in the Houston/Galveston/Brazoria area and has units that qualify for an exemption under 30 TAC § 117.2003(b).	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	4. The application area is located in the Dallas/Fort Worth Eight-Hour area and has units that qualify for an exemption under 30 TAC § 117.2103.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	5. The application area has units subject to the emission specifications under 30 TAC §§ 117.2010 or 30 TAC § 117.2110.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>G. Utility Electric Generation in East and Central Texas</b>		
	1. The application area includes utility electric power boilers and/or stationary gas turbines (including duct burners used in turbine exhaust ducts) that were placed into service before December 31, 1995. <i>If the response to Question IV.G.1 is "NO," go to Question IV.H.1.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	2. The application area is complying with the System Cap in 30 TAC § 117.3020.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>H. Multi-Region Combustion Control - Water Heaters, Small Boilers, and Process Heaters</b>		
	1. The application area includes a manufacturer, distributor, retailer or installer of natural gas fired water heaters, boilers or process heaters with a maximum rated capacity of 2.0 MMBtu/hr or less. <i>If the response to question IV.H.1. is "NO" go to Section V.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	2. All water heaters, boilers or process heaters manufactured, distributed, retailed or installed qualify for an exemption under 30 TAC § 117.3203.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 15)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

**V. TITLE 40 CODE OF FEDERAL REGULATIONS PART 59 (40 CFR PART 59) - NATIONAL VOLATILE ORGANIC COMPOUND EMISSION STANDARDS FOR CONSUMER AND COMMERCIAL PRODUCTS**

**A. Subpart B-- National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings**

1. The application area manufactures automobile refinish coatings or coating components and sells or distributes these coatings or coating components in the United States.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area imports automobile refinish coatings or coating components, manufactured on or after January 11, 1999, and sells or distributes these coatings or coating components in the United States. <i>If the responses to Questions V.A.1 and V.A.2 are both "NO", go to Section V.B.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. All automobile refinish coatings or coating components manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR § 59.100(c)(1) - (6).	<input type="checkbox"/> YES <input type="checkbox"/> NO

**B. Subpart C National Volatile Organic Compound Emission Standards for Consumer Products**

1. The application area manufactures consumer products for sale or distribution in the United States.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area imports consumer products manufactured on or after December 10, 1998 and sells or distributes these consumer products in the United States.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area is a distributor of consumer products whose name appears on the label of one or more of the products. <i>If the responses to Questions V.B.1 - V.B.3 are all "NO", go to Section V.C.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
4. All consumer products manufactured, imported, or distributed by the application area meet one or more of the exemptions specified in 40 CFR § 59.201(c)(1) - (7).	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 16)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>V. TITLE 40 CODE OF FEDERAL REGULATIONS PART 59 (40 CFR PART 59) - NATIONAL VOLATILE ORGANIC COMPOUND EMISSION STANDARDS FOR CONSUMER AND COMMERCIAL PRODUCTS</b>	
<b>C. Subpart D – National Volatile Organic Compound Emission Standards for Architectural Coatings</b>	
1. The application area manufactures or imports architectural coatings for sale or distribution in the United States.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area manufactures or imports architectural coatings that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act. <i>If the responses to Questions V.C.1 and V.C.2 are both "NO," go to Section V.D.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. All architectural coatings manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR § 59.400(c)(1) - (5).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>D. Subpart F – Control of Evaporative Emissions From New and In-Use Portable Fuel Containers</b>	
1. The application area manufactures or imports portable fuel containers for sale or distribution in the United States. <i>If the response to Question V.D.1 is "NO," go to Section VI.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. All portable fuel containers manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR § 59.605(a) - (c).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS)</b>	
<b>A. Applicability</b>	
◆ 1. The application area includes a unit(s) that is subject to one or more 40 CFR Part 60 subparts. <i>If the response to Question VI.A.1 is "NO," go to Section VII.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>B. Subpart Y - Standards of Performance for Coal Preparation and Processing Plants</b>	
1. The application area is located at a coal preparation and processing plant. <i>If the response to Question VI.B.1 is "NO," go to Section VI.C.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 17)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS) (continued)</b>		
<b>B. Subpart Y - Standards of Performance for Coal Preparation and Processing Plants (continued)</b>		
2.	The coal preparation and processing plant has a design capacity greater than 200 tons per day (tpd). <i>If the response to Question VI.B.2 is "NO," go to Section VI.C.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.	The plant has an option to enforceably limit its operating level to less than 200 tpd and is choosing this option. <i>If the response to Question VI.B.3. is "YES," go to Section VI.C.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
4.	The plant contains an open storage pile, as defined in § 60.251, as an affected facility. <i>If the response to Question VI.B.4. is "NO," go to Section VI.C.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
5.	The open storage pile was constructed, reconstructed or modified after May 27, 2009.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>C. Subpart GG - Standards of Performance for Stationary Gas Turbines (GOP applicants only)</b>		
◆ 1.	The application area includes one or more stationary gas turbines that have a heat input at peak load greater than or equal to 10 MMBtu/hr (10.7GJ/hr), based on the lower heating value of the fuel fired. <i>If the response to Question VI.C.1 is "NO" or "N/A," go to Section VI.D.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆ 2.	One or more of the affected facilities were constructed, modified, or reconstructed after October 3, 1977 and prior to February 19, 2005. <i>If the response to Question VI.C.2 Is "NO," go to Section VI.D.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
3.	One or more stationary gas turbines in the application area are using a previously approved alternative fuel monitoring schedule as specified in 40 CFR § 60.334(h)(4).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
4.	The exemption specified in 40 CFR § 60.332(e) is being utilized for one or more stationary gas turbines in the application area.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
5.	One or more stationary gas turbines subject to 40 CFR Part 60, Subpart GG in the application area is injected with water or steam for the control of nitrogen oxides.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 18)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS) (continued)</b>		
<b>D. Subpart XX - Standards of Performance for Bulk Gasoline Terminals</b>		
1.	The application area includes bulk gasoline terminal loading racks. <i>If the response to Question VI.D.1 is "NO," go to Section VI.E.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
2.	One or more of the loading racks were constructed or modified after December 17, 1980.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>E. Subpart LLL - Standards of Performance for Onshore Natural Gas Processing: Sulfur Dioxide (SO<sub>2</sub>) Emissions</b>		
◆	1. The application area includes affected facilities identified in 40 CFR § 60.640(a) that process natural gas (onshore). <i>For SOP applications, if the response to Question VI.E.1 is "NO," go to Section VI.F.</i> <i>For GOP applications, if the response to Question VI.E.1 is "NO" or "N/A," go to Section VI.H.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	2. The affected facilities that were constructed or modified after January 20, 1984.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	3. The application area includes a gas sweetening unit with a design capacity greater than or equal to 2 long tons per day (LTPD) of hydrogen sulfide but operates at less than 2 LTPD.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>F. Subpart 000 - Standards of Performance for Nonmetallic Mineral Processing Plants</b>		
	1. The application area includes affected facilities identified in 40 CFR § 60.670(a)(1) that are located at a fixed or portable nonmetallic mineral processing plant. <i>If the response to Question VI.F.1 is "NO," go to Section VI.G.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	2. Affected facilities identified in 40 CFR § 60.670(a)(1) and located in the application area are subject to 40 CFR Part 60, Subpart 000.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 19)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS) (continued)</b>	
<b>G. Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems</b>	
1. The application area is located at a petroleum refinery and includes one or more of the affected facilities identified in 40 CFR § 60.690(a)(2) - (4) for which construction, modification, or reconstruction was commenced after May 4, 1987. <i>If the response to Question VI.G.1 is "NO," go to Section VI.H.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area includes stormwater sewer systems.	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area includes ancillary equipment which is physically separate from the wastewater system and does not come in contact with or store oily wastewater.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area includes non-contact cooling water systems.	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area includes individual drain systems. <i>If the response to Question VI.G.5 is "NO," go to Section VI.H.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The application area includes one or more individual drain systems that meet the exemption specified in 40 CFR § 60.692-2(d).	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area includes completely closed drain systems.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>H. Subpart AAAA - Standards of Performance for Small Municipal Waste Incineration Units for Which Construction Commenced After August 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 6, 2004</b>	
◆ 1. The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator. <i>If the response to Question VI.H.1. is "N/A," go to Section VI.I. If the response to Question VI.H.1. is "NO," go to Question VI.H.4.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆ 2. The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator, constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 20)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS) (continued)</b>	
<b>H. Subpart AAAA - Standards of Performance for Small Municipal Waste Incineration Units for Which Construction Commenced After August 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 6, 2004</b>	
◆	3. The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator, constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
◆	4. The application area includes at least one air curtain incinerator. <i>Note: If the response to Question VI.H.4. is "NO," go to Section VI.I.</i> <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>
◆	5. The application area includes at least one air curtain incinerator constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006. <i>If the response to Question VI.H.5. is "NO," go to Question VI.H.7.</i> <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
◆	6. All air curtain incinerators constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006 combust only yard waste. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
◆	7. The application area includes at least one air curtain incinerator constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
◆	8. All air curtain incinerators constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006 combust only yard waste. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
<b>I. Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Commenced After November 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 1, 2001</b>	
◆	1. The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator. <i>If the response to Question VI.I.1. is "N/A," go to Section VI.J. If the response to Question VI.I.1. is "NO," go to Question VI.I.4.</i> <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A</span>



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 21)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS) (continued)</b>		
<b>I. Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Commenced After November 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 1, 2001 (continued)</b>		
◆	2. The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator, constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	3. The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator, constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	4. The application area includes at least one air curtain incinerator. <i>If the response to Question VI.I.4. is "NO," go to Section VI.J.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	5. The application area includes at least one air curtain incinerator, constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001. <i>If the response to Question VI.I.5. is "NO," go to VI.I.7.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	6. All air curtain incinerators constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	7. The application area includes at least one air curtain incinerator, constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	8. All air curtain incinerators constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 22)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS) (continued)</b>		
<b>J. Subpart EEEE - Standards of Performance for Other Solid Waste Incineration Units for Which Construction Commenced After December 9, 2004 or for Which Modification or Reconstruction Commenced on or After June 16, 2006</b>		
◆	1. The application area includes at least one very small municipal waste incineration unit or institutional incineration unit, other than an air curtain incinerator. <i>If the response to Question VI.J.1. is "N/A," go to Section VII. If the response to Question VI.J.1. is "NO," go to Question VI.J.4.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆	2. The application area includes at least one very small municipal waste incineration unit, other than an air curtain incinerator, constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	3. The application area includes at least one very small municipal waste incineration unit, other than an air curtain incinerator, constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	4. The application area includes at least one air curtain incinerator. <i>If the response to Question VI.J.4. is "NO," go to Section VII.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	5. The application area includes at least one air curtain incinerator constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006. <i>If the response to Question VI.J.5. is "NO," go to Question VI.J.7.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	6. All air curtain incinerators constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	7. The application area includes at least one air curtain incinerator constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	8. All air curtain incinerators constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 23)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VI. TITLE 40 CODE OF FEDERAL REGULATIONS PART 60 (40 CFR PART 60) - NEW SOURCE PERFORMANCE STANDARDS (NSPS) (continued)</b>	
<b>J. Subpart EEEE- Standards of Performance for Other Solid Waste Incineration Units for Which Construction Commenced After December 9, 2004 or for Which Modification or Reconstruction Commenced on or After June 16, 2006 (continued)</b>	
◆	9. The air curtain incinerator is located at an institutional facility and is a distinct operating unit of the institutional facility that generated the waste. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
◆	10. The air curtain incinerator burns less than 35 tons per day of wood waste, clean lumber, or yard waste or a mixture of these materials. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)</b>	
<b>A. Applicability</b>	
◆	1. The application area includes a unit(s) that is subject to one or more 40 CFR Part 61 subparts. <i>If the response to Question VII.A.1 is "NO" or "N/A," go to Section VIII.</i> <span style="float: right;"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A</span>
<b>B. Subpart F - National Emission Standard for Vinyl Chloride</b>	
	1. The application area is located at a plant which produces ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, vinyl chloride by any process, and/or one or more polymers containing any fraction of polymerized vinyl chloride. <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>
<b>C. Subpart J - National Emission Standard for Benzene Emissions for Equipment Leaks (Fugitive Emission Sources) of Benzene (Complete this section for GOP applications only)</b>	
◆	1. The application area includes equipment in benzene service. <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A</span>
<b>D. Subpart I - National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants</b>	
	1. The application area is located at a coke by-product recovery plant and includes one or more of the affected sources identified in 40 CFR § 61.130(a) - (b). <i>If the response to Question VII.D.1 is "NO," go to Section VII.E.</i> <span style="float: right;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</span>



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 24)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) (continued)</b>	
<b>D. Subpart L - National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants (continued)</b>	
2. The application area includes equipment in benzene service as determined by 40 CFR § 61.137(b).	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area has elected to comply with the provisions of 40 CFR § 61.243-1 and 40 CFR § 61.243-2.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>E. Subpart M - National Emission Standard for Asbestos</b>	
<b>Applicability</b>	
1. The application area includes sources, operations, or activities specified in 40 CFR §§ 61.143, .144, .146, 147, .148, or .155. <i>If the response to Question VII.E.1 is "NO," go to Section VII.F.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>Roadway Construction</b>	
2. The application area includes roadways constructed or maintained with asbestos tailings or asbestos-containing waste material.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Manufacturing Commercial Asbestos</b>	
3. The application area includes a manufacturing operation using commercial asbestos. <i>If the response to Question VII.E.3 is "NO," go to Question VII.E.4.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
a. Visible emissions are discharged to outside air from the manufacturing operation	<input type="checkbox"/> YES <input type="checkbox"/> NO
b. An alternative emission control and waste treatment method is being used that has received prior U.S. Environmental Protection Agency (EPA) approval.	<input type="checkbox"/> YES <input type="checkbox"/> NO
c. Asbestos-containing waste material is processed into nonfriable forms.	<input type="checkbox"/> YES <input type="checkbox"/> NO
d. Asbestos-containing waste material is adequately wetted.	<input type="checkbox"/> YES <input type="checkbox"/> NO
e. Alternative filtering equipment is being used that has received EPA approval.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 25)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (continued)</b>	
<b>E. Subpart M - National Emission Standard for Asbestos (continued)</b>	
<b>Manufacturing Commercial Asbestos (continued)</b>	
f. A high efficiency particulate air (HEPA) filter is being used that is certified to be at least 99.97% efficient for 0.3 micron particles	<input type="checkbox"/> YES <input type="checkbox"/> NO
g. The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Asbestos Spray Application</b>	
4. The application area includes operations in which asbestos-containing materials are spray applied. <i>If the response to Question VII.E.4 is "NO," go to Question VII.E.5.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
a. Asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and are not friable after drying. <i>If the response to Question VII.E.4.a is "YES," go to Question VII.E.5.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
b. Spray-on applications on buildings, structures, pipes, and conduits do not use material containing more than 1% asbestos.	<input type="checkbox"/> YES <input type="checkbox"/> NO
c. An alternative emission control and waste treatment method is being used that has received prior EPA approval.	<input type="checkbox"/> YES <input type="checkbox"/> NO
d. Asbestos-containing waste material is processed into nonfriable forms.	<input type="checkbox"/> YES <input type="checkbox"/> NO
e. Asbestos-containing waste material is adequately wetted.	<input type="checkbox"/> YES <input type="checkbox"/> NO
f. Alternative filtering equipment is being used that has received EPA approval.	<input type="checkbox"/> YES <input type="checkbox"/> NO
g. A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3 micron particles.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 26)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (continued)</b>	
<b>E. Subpart M - National Emission Standard for Asbestos (continued)</b>	
<b>Asbestos Spray Application (continued)</b>	
h. The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Fabricating Commercial Asbestos</b>	
5. The application area includes a fabricating operation using commercial asbestos. <i>If the response to Question VII.E.5 is "NO," go to Question VII.E.6.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
a. Visible emissions are discharged to outside air from the manufacturing operation.	<input type="checkbox"/> YES <input type="checkbox"/> NO
b. An alternative emission control and waste treatment method is being used that has received prior EPA approval.	<input type="checkbox"/> YES <input type="checkbox"/> NO
c. Asbestos-containing waste material is processed into nonfriable forms.	<input type="checkbox"/> YES <input type="checkbox"/> NO
d. Asbestos-containing waste material is adequately wetted.	<input type="checkbox"/> YES <input type="checkbox"/> NO
e. Alternative filtering equipment is being used that has received EPA approval.	<input type="checkbox"/> YES <input type="checkbox"/> NO
f. A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3 micron particles.	<input type="checkbox"/> YES <input type="checkbox"/> NO
g. The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Non-sprayed Asbestos Insulation</b>	
6. The application area includes insulating materials (other than spray applied insulating materials) that are either molded and friable or wet-applied and friable after drying.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 27)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.  
 ♦ For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (continued)</b>	
<b>Asbestos Conversion</b>	
7. The application area includes operations that convert regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>F. Subpart P - National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities</b>	
1. The application area is located at a metallic arsenic production plant or at an arsenic trioxide plant that processes low-grade arsenic bearing materials by a roasting condensation process.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>G. Subpart BB - National Emission Standard for Benzene Emissions from Benzene Transfer Operations</b>	
1. The application area is located at a benzene production facility and/or bulk terminal. <i>If the response to Question VII.G.1 is "NO," go to Section VII.H.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area includes benzene transfer operations at marine vessel loading racks.	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area includes benzene transfer operations at railcar loading racks.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area includes benzene transfer operations at tank-truck loading racks.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>H. Subpart FF - National Emission Standard for Benzene Waste Operations</b>	
<b>Applicability</b>	
1. The application area includes a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery facility as defined in § 61.341.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area is located at a hazardous waste treatment, storage, and disposal (TSD) facility site as described in 40 CFR § 61.340(b). <i>If the responses to Questions VII.H.1 and VII.H.2 are both "NO," go to Section VIII.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 28)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (continued)</b>	
<b>H. Subpart FF - National Emission Standard for Benzene Waste Operations (continued)</b>	
<b>Applicability (continued)</b>	
3. The application area is located at a site that has no benzene onsite in wastes, products, byproducts, or intermediates. <i>If the response to Question VII.H.3 is "YES," go to Section VIII.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area is located at a site having a total annual benzene quantity from facility waste less than 1 megagrams per year (Mg/yr). <i>If the response to Question VII.H.4 is "YES", go to Section VIII</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area is located at a site having a total annual benzene quantity from facility waste greater than or equal to 1 Mg/yr but less than 10 Mg/yr. <i>If the response to Question VII.H.5 is "YES," go to Section VIII.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The flow-weighted annual average benzene concentration of each waste stream at the site is based on documentation.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area has waste streams with flow-weighted annual average water content of 10% or greater.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>Waste Stream Exemptions</b>	
8. The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(2) (the flow-weighted annual average benzene concentration is less than 10 ppmw).	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(3) because process wastewater has a flow rate less than 0.02 liters per minute or an annual wastewater quantity less than 10 Mg/yr.	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(3) because the total annual benzene quantity is less than or equal to 2 Mg/yr.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 29)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.  
 ♦ For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (continued)</b>	
<b>H. Subpart FF - National Emission Standard for Benzene Waste Operations (continued)</b>	
<b>Waste Stream Exemptions (continued)</b>	
11. The application area transfers waste off-site for treatment by another facility.	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. The application area is complying with 40 CFR § 61.342(d).	<input type="checkbox"/> YES <input type="checkbox"/> NO
13. The application area is complying with 40 CFR § 61.342(e). <i>If the response to Question VII.H.13. is "NO," go to Question VII.H.15.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
14. The application area has facility waste with a flow weighted annual average water content of less than 10%.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Container Requirements</b>	
15. The application area has containers, as defined in 40 CFR § 61.341, that receive non-exempt benzene waste. <i>If the response to Question VII.H.15 is "NO," go to Question VII.H.18.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
16. The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. <i>If the response to Question VII.H.16 is "YES," go to Question VII.H.18.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
17. Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Individual Drain Systems</b>	
18. The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage non-exempt benzene waste. <i>If the response to Question VII.H.18 is "NO," go to Question VII.H.25.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 30)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 61 (40 CFR PART 61) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (continued)</b>	
<b>H. Subpart FF - National Emission Standard for Benzene Waste Operations (continued)</b>	
<b>Individual Drain Systems (continued)</b>	
19. The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. <i>If the response to Question VII.H.19 is "YES," go to Question VII.H.25.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
20. The application area has individual drain systems complying with 40 CFR § 61.346(a). <i>If the response to Question VII.H.20 is "NO," go to Question VII.H.22.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
21. Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	<input type="checkbox"/> YES <input type="checkbox"/> NO
22. The application area has individual drain systems complying with 40 CFR § 61.346(b). <i>If the response to Question VII.H.22 is "NO," go to Question VII.H.25.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
23. Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	<input type="checkbox"/> YES <input type="checkbox"/> NO
24. Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Remediation Activities</b>	
25. Remediation activities take place at the application area subject to NESHAP FF.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 31)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES</b>	
<b>A. Applicability</b>	
◆ 1. The application area includes a unit(s) that is subject to one or more 40 CFR Part 63 subparts other than subparts made applicable by reference under subparts in 40 CFR Part 60, 61 or 63. <i>See instructions for 40 CFR Part 63 subparts made applicable only by reference.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>B. Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry</b>	
1. The application area is located at a site that includes process units that manufacture as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area is located at a plant site that is a major source as defined in the Federal Clean Air Act § 112(a).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area is located at a site that includes chemical manufacturing process units that use as a reactant or manufacture as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F. <i>If the response to Question VIII.B.1, .B.2, or .B.3 is "NO," go to Section VIII.D.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
4. The application area includes chemical manufacturing process units that use as a reactant or manufacture as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 32)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES) (continued)	
C. Subpart C - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater	
Applicability	
1. The application area is located at a site that is subject to 40 CFR 63, Subpart F and the application area includes process vents, storage vessels, transfer racks, or waste streams associated with a chemical manufacturing process subject to 40 CFR 63, Subpart F. <i>If the response to Question VIII.C.1 is "NO," go to Section VIII.D.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
2. The application area includes fixed roofs, covers, and/or enclosures that are required to comply with 40 CFR § 63.148.	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area includes vapor collection systems or closed-vent systems that are required to comply with 40 CFR § 63.148. <i>If the response to Question VIII.C.3 is "NO," go to Question VIII.C.8.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area includes vapor collection systems or closed-vent systems that are constructed of hard-piping.	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area includes vapor collection systems or closed-vent systems that contain by-pass lines that could divert a vent stream away from a control device and to the atmosphere. <i>If the response to Question VIII.C.5 is "NO," go to Question VIII.C.8.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Vapor Collection and Closed Vent Systems	
6. Flow indicators are installed, calibrated, maintained, and operated at the entrances to by-pass lines in the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. By-pass lines in the application area are secured in the closed position with a car-seal or a lock-and-key type configuration.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 33)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES) (continued)</b>	
<b>C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)</b>	
<b>Transfer Racks</b>	
8. The application area includes Group 1 transfer racks that load organic HAPs.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Process Wastewater Streams</b>	
9. The application area includes process wastewater streams. <i>If the response to Question VIII.C.9 is "NO," go to Question VIII.C.31.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Part 61, Subpart FF. <i>If the response to Question VIII.C.10 is "NO," go to Question VIII.C.12.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
11. The application area includes process wastewater streams that are complying with 40 CFR §§ 63.110(e)(1)(i) and (e)(1)(ii).	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Part 61, Subpart F. <i>If the response to Question VIII.C.12 is "NO," go to Question VIII.C.14.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
13. The application area includes process wastewater streams utilizing the compliance option specified in 40 CFR § 63.110(f)(4)(ii).	<input type="checkbox"/> YES <input type="checkbox"/> NO
14. The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Parts 260 through 272. <i>If the response to Question VIII.C.14 is "NO," go to Question VIII.C.17.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 34)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)</b>	
<b>Process Wastewater Streams</b>	
15. The application area includes process wastewater streams complying with 40 CFR § 63.110(e)(2)(i).	<input type="checkbox"/> YES <input type="checkbox"/> NO
16. The application are includes process wastewater streams complying with 40 CFR § 63.110(e)(2)(ii).	<input type="checkbox"/> YES <input type="checkbox"/> NO
17. The application area includes process wastewater streams, located at existing sources, that are designated as Group 1; are required to be treated as Group 1 under 40 CFR § 63.110; or are determined to be Group 1 for Table 9 compounds.	<input type="checkbox"/> YES <input type="checkbox"/> NO
18. The application area includes process wastewater streams, located at existing sources that are Group 2.	<input type="checkbox"/> YES <input type="checkbox"/> NO
19. The application area includes process wastewater streams, located at new sources, that are designated as Group 1; required to be treated as Group 1 under 40 CFR § 63.110; or are determined to be Group 1 for Table 8 or Table 9 compounds.	<input type="checkbox"/> YES <input type="checkbox"/> NO
20. The application area includes process wastewater streams, located at new sources that are Group 2 for both Table 8 and Table 9 compounds.	<input type="checkbox"/> YES <input type="checkbox"/> NO
21. All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. <i>If the response to Question VIII.C.21. is "YES," go to Question VIII.C.31.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
22. The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. <i>If the response to Question VIII.C.22. is "NO," go to Question VIII.C.24.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 35)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)</b>	
<b>Process Wastewater Streams (continued)</b>	
23. The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	<input type="checkbox"/> YES <input type="checkbox"/> NO
24. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	<input type="checkbox"/> YES <input type="checkbox"/> NO
25. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. <i>If the response to Question VIII.C.24 - VIII.C.25 is both "NO," go to Question VIII.C.27.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
26. The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport. <i>If the response to Question VIII.C.24 - VIII.C.25 is both "NO," go to Question VIII.C.27.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
27. The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Drains</b>	
28. The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. <i>If the response to Question VIII.C.28 is "NO," go to Question VIII.C.31.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 36)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)</b>	
<b>Drains (continued)</b>	
29. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices	<input type="checkbox"/> YES <input type="checkbox"/> NO
30. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	<input type="checkbox"/> YES <input type="checkbox"/> NO
31. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of a chemical manufacturing process unit that meets the criteria of 40 CFR § 63.100(b). <i>If the response to Question VIII.C.31 is "NO," go to Question VIII.C.36.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
32. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes (that are part of a chemical manufacturing process unit) that meet the criteria listed in 40 CFR § 63.149(d). <i>If the response to Question VIII.C.32 is "NO," go to Question VIII.C.36.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
33. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 9, at any flow rate.	<input type="checkbox"/> YES <input type="checkbox"/> NO
34. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 9, at an annual average flow rate greater than or equal to 10 liters per minute.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 37)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)</b>	
<b>Drains (continued)</b>	
35. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of a chemical manufacturing process unit that is subject to the new source requirements of 40 CFR § 63.100(l)(1) or (l)(2); and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 8, at an average annual flow rate greater than or equal to 0.02 liter per minute.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Gas Streams</b>	
36. The application area includes gas streams meeting the characteristics of 40 CFR § 63.107(b) - (h) or the criteria of 40 CFR § 63.113(i) and are transferred to a control device not owned or operated by the applicant.	<input type="checkbox"/> YES <input type="checkbox"/> NO
37. The applicant is unable to comply with 40 CFR §§ 63.113 - 63.118 for one or more reasons described in 40 CFR § 63.100(q)(1), (3), or (5).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>D. Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks</b>	
1. The application area includes chromium electroplating or chromium anodizing tanks located at hard chromium electroplating, decorative chromium electroplating, and/or chromium anodizing operations.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 38)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>E. Subpart O - Ethylene Oxide Emissions Standards for Sterilization Facilities</b>	
1. The application area includes sterilization facilities where ethylene oxide is used in the sterilization or fumigation of materials. <i>If the response to Question VIII.E.1 is "NO," go to Section VIII.F.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. Sterilization facilities located in the application area are subject to 40 CFR Part 63, Subpart O. <i>If the response to Question VIII.E.2 is "NO," go to Section VIII.F.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The sterilization source has used less than 1 ton (907 kg) of ethylene oxide within all consecutive 12-month periods after December 6, 1996.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The sterilization source has used less than 10 tons (9070 kg) of ethylene oxide within all consecutive 12-month periods after December 6, 1996	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>F. Subpart Q - National Emission Standards for Industrial Process Cooling Towers</b>	
1. The application area includes industrial process cooling towers. <i>If the response to Question VIII.F.1 is "NO," go to Section VIII.G.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. Chromium-based water treatment chemicals have been used on or after September 8, 1994.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>G. Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)</b>	
1. The application area includes a bulk gasoline terminal.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area includes a pipeline breakout station. <i>If the responses to Questions VIII.G.1 and VIII.G.2 are both "NO," go to Section VIII.H.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 39)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>G. Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (continued)</b>	
<p>3. The bulk gasoline terminal or pipeline breakout station is located within a contiguous area and under common control with another bulk gasoline terminal or a pipeline breakout station. <i>If the response to Question VIII.G.3 is "YES," go to Question VIII.G.9.</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<p>4. The bulk gasoline terminal or pipeline breakout station is located within a contiguous area and under common control with sources, other than bulk gasoline terminals or pipeline breakout stations that emit or have the potential to emit HAPs. <i>If the response to Question VIII.G.4 is "YES," go to Question VIII.G.9.</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<p>5. The value 0.04(OE) is less than 5% of the value of the bulk gasoline terminal emissions screening factor (ET) or the pipeline breakout station emissions screening factor (Ep). <i>If the response to Question VIII.G.5 is "NO," go to Question VIII.G.9.</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<p>6. Emissions screening factor less than 0.5 (ET or EP &lt; 0.5). <i>If the response to Question VIII.G.6 is "YES," go to Section VIII.H.</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<p>7. Emissions screening factor greater than or equal to 0.5, but less than 1.0 (0.5 ≤ ET or EP &lt; 1.0). <i>If the response to Question VIII.G.7 is "YES", go to Section VIII.H</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<p>8. Emissions screening factor greater than or equal to 1.0 (ET or EP ≥ 1.0). <i>If the response to Question VIII.G.8 is "YES," go to Question VIII.G.10.</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 40)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>G. Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (continued)</b>	
9. The site at which the application area is located is a major source of HAP. <i>If the response to Question VIII.G.9 is "NO", go to Section VIII.H</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. The application area is using an alternative leak monitoring program as described in 40 CFR § 63.424(f).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>H. Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry</b>	
1. The application area includes processes that produce pulp, paper, or paperboard and are located at a plant site that is a major source of HAPs as defined in 40 CFR § 63.2. <i>If the response to Question VIII.H.1 is "NO," go to Section VIII.I.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area uses processes and materials specified in 40 CFR § 63.440(a)(1) - (3). <i>If the response to Question VIII.H.2 is "NO," go to Section VIII.I.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area includes one or more sources subject to 40 CFR Part 63, Subpart S that are existing sources. <i>If the response to Question VIII.H.3 is "NO," go to Section VIII.I.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area includes one or more kraft pulping systems that are existing sources.	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area includes one or more dissolving-grade bleaching systems that are existing sources at a kraft or sulfite pulping mill.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 41)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>H. Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry (continued)</b>	
6. The application area includes bleaching systems that are existing sources and are complying with the Voluntary Advanced Technology Incentives Program for Effluent Limitation Guidelines in 40 CFR § 430.24. <i>If the response to Question VIII.H.6 is "NO," go to Section VIII.I.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area includes bleaching systems that are complying with 40 CFR § 63.440(d)(3)(i).	<input type="checkbox"/> YES <input type="checkbox"/> NO
8. The application area includes bleaching systems that are complying with 40 CFR § 63.440(d)(3)(ii).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>I. Subpart T - National Emission Standards for Halogenated Solvent Cleaning</b>	
1. The application area includes an individual batch vapor, in-line vapor, in-line cold, and/or batch cold solvent cleaning machine that uses a hazardous air pollutant (HAP) solvent, or any combination of halogenated HAP solvents, in a total concentration greater than 5% by weight, as a cleaning and/or drying agent.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area is located at a major source and includes solvent cleaning machines, qualifying as affected facilities, that use perchloroethylene, trichloroethylene or methylene chloride.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area is located at an area source and includes solvent cleaning machines, other than cold batch cleaning machines, that use perchloroethylene, trichloroethylene or methylene chloride.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>J. Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins</b>	
1. The application area includes elastomer product process units and/or wastewater streams and wastewater operations that are associated with elastomer product process units. <i>If the response to Question VIII.J.1 is "NO," go to Section VIII.K.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 42)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>		
<b>J. Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)</b>		
2.	Elastomer product process units and/or wastewater streams and wastewater operations located in the application area are subject to 40 CFR Part 63, Subpart U. <i>If the response to Question VIII.J.2 is "NO," go to Section VIII.K.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for organic HAPs as defined in 40 CFR § 63.482.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4.	The application area includes process wastewater streams that are Group 2 for organic HAPs as defined in 40 CFR § 63.482.	<input type="checkbox"/> YES <input type="checkbox"/> NO
5.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flowrate of less than 1 MG/yr. <i>If the response to Question VIII.J.5. is "YES," go to Question VIII.J.15.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
6.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flowrate of less than 1 MG/yr. <i>If the response to Question VIII.J.6. is "NO," go to Question VIII.J.8.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
7.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	<input type="checkbox"/> YES <input type="checkbox"/> NO
8.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	<input type="checkbox"/> YES <input type="checkbox"/> NO
9.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. <i>If the response to Question VIII.J.8 - VIII.J.9 are both "NO," go to Question VIII.J.11.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 43)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.  
 ♦ For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>J. Subpart U- National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)</b>	
10. The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Containers</b>	
11. The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Drains</b>	
12. The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. <i>If the response to Question VIII.J.12. is "NO," go to Question VIII.J.15.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
13. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	<input type="checkbox"/> YES <input type="checkbox"/> NO
14. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	<input type="checkbox"/> YES <input type="checkbox"/> NO
15. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an elastomer product process unit. <i>If the response to Question VIII.J.15 is "NO," go to Section VIII.K.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
16. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.149(d) and § 63.501(a)(12). <i>If the response to Question VIII.J.16 is "NO," go to Section VIII.K.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 44)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>J. Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins (continued)</b>	
<b>Drains (continued)</b>	
17. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at any flow rate.	<input type="checkbox"/> YES <input type="checkbox"/> NO
18. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at an annual average flow rate greater than or equal to 10 liters per minute.	<input type="checkbox"/> YES <input type="checkbox"/> NO
19. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an elastomer product process unit that is a new affected source or part of a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at an average annual flow rate greater than or equal to 0.02 liter per minute.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>K. Subpart W - National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-nylon Polyamides Production</b>	
1. The manufacture of basic liquid epoxy resins (BLR) and/or manufacture of wet strength resins (WSR) is conducted in the application area. <i>If the response to Question VIII.K.1 is "NO" or "N/A," go to Section VIII.L.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
2. The application area includes a BLR and/or WSR research and development facility.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 45)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>L. Subpart X - National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting</b>	
1. The application area includes one or more of the affected sources in 40 CFR § 63.541(a) that are located at a secondary lead smelter. <i>If the response to Question VIII.L.1 is "NO" or "N/A," go to Section VIII.M.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
2. The application area is using and approved alternate to the requirements of § 63.545(c)(1)-(5) for control of fugitive dust emission sources.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>M. Subpart Y - National Emission Standards for Marine Tank Vessel Loading Operations</b>	
1. The application area includes marine tank vessel loading operations that are specified in 40 CFR § 63.560 and located at an affected source as defined in 40 CFR § 63.561.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>N. Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries</b>	
<b>Applicability</b>	
1. The application area includes petroleum refining process units and/or related emission points that are specified in 40 CFR § 63.640(c)(1) - (c)(7). <i>If the response to Question VIII.N.1 is "NO," go to Section VIII.O.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. All petroleum refining process units/and or related emission points within the application area are specified in 40 CFR § 63.640(g)(1) - (g)(7). <i>If the response to Question VIII.N.2 is "YES," go to Section VIII.O.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 46)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES <i>(continued)</i>	
N. Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries <i>(continued)</i>	
Applicability	
3. The application area is located at a plant site that is a major source as defined in the Federal Clean Air Act § 112(a). <i>If the response to Question VIII.N.3 is "NO," go to Section VIII.O.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area is located at a plant site which emits or has equipment containing/contacting one or more of the HAPs listed in table 1 of 40 CFR Part 63, Subpart CC. <i>If the response to Question VIII.N.4 is "NO," go to Section VIII.O.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area includes Group 1 wastewater streams that are not conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section.	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The application area includes Group 2 wastewater streams that are not conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area includes Group 1 or Group 2 wastewater streams that are conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section. <i>If the response to Question VIII.N.7 is "NO," go to Section VIII.O.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 47)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>N. Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (continued)</b>	
<b>Applicability (continued)</b>	
8. The application area includes Group 1 or Group 2 wastewater streams that are complying with 40 CFR § 63.640(o)(2)(i).	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. The application area includes Group 1 or Group 2 wastewater streams that are complying with 40 CFR § 63.640(o)(2)(ii). <i>If the response to Question VIII.N.9 is "NO", go to Section VIII.O.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. The application area includes Group 2 wastewater streams or organic streams whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR Part 61, Subpart FF on or after December 31, 1992.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Containers, Drains, and other Appurtenances</b>	
11. The application area includes containers that are subject to the requirements of 40 CFR § 63.135 as a result of complying with 40 CFR § 63.640(o)(2)(ii).	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. The application area includes individual drain systems that are subject to the requirements of 40 CFR § 63.136 as a result of complying with 40 CFR § 63.640(o)(2)(ii).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>O. Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations</b>	
1. The application area is located at a plant site receiving material that meets the criteria for off-site material as specified in 40 CFR § 63.680(b)(1). <i>If the response to Question VIII.O.1 is "NO" or "N/A," go to Section VIII.P</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 48)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>		
<b>O. Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations (continued)</b>		
2.	Materials specified in 40 CFR § 63.68o(b)(2) are received at the application area.	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.	The application area has a waste management operation receiving off-site material and is regulated under 40 CFR Part 264 or Part 265.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4.	The application area has a waste management operation treating wastewater which is an off-site material and is exempted under 40 CFR §§ 264.1(g)(6) or 265.1(c)(10).	<input type="checkbox"/> YES <input type="checkbox"/> NO
5.	The application area has an operation subject to Clean Water Act, § 402 or § 307(b) but is not owned by a "state" or "municipality."	<input type="checkbox"/> YES <input type="checkbox"/> NO
6.	The predominant activity in the application area is the treatment of wastewater received from off-site.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7.	The application area has a recovery operation that recycles or reprocesses hazardous waste which is an off-site material and is exempted under 40 CFR §§ 264.1(g)(2) or 265.1(c)(6).	<input type="checkbox"/> YES <input type="checkbox"/> NO
8.	The application area has a recovery operation that recycles or reprocesses used solvent which is an off-site material and is not part of a chemical, petroleum, or other manufacturing process that is required to use air emission controls by another subpart of 40 CFR Part 63 or Part 61.	<input type="checkbox"/> YES <input type="checkbox"/> NO
9.	The application area has a recovery operation that re-refines or reprocesses used oil which is an off-site material and is regulated under 40 CFR Part 279, Subpart F (Standards for Used Oil Processors and Refiners).	<input type="checkbox"/> YES <input type="checkbox"/> NO
10.	The application area is located at a site where the total annual quantity of HAPs in the off-site material is less than 1 megagram per year. <i>If the response to Question VIII.O.10 is "YES," go to Section VIII.P.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 49)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES <i>(continued)</i>	
O. Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations <i>(continued)</i>	
11. The application area receives offsite materials with average VOHAP concentration less than 500 ppmw at the point of delivery that are not combined with materials having a VOHAP concentration of 500 ppmw or greater. <i>If the response to Question VIII.O.11 is "NO," go to Question VIII.O.14.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. VOHAP concentration is determined by direct measurement.	<input type="checkbox"/> YES <input type="checkbox"/> NO
13. VOHAP concentration is based on knowledge of the offsite material.	<input type="checkbox"/> YES <input type="checkbox"/> NO
14. The application area includes an equipment component that is a pump, compressor, and agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector or instrumentation system. <i>If the response to Question VIII.O.14 is "NO," go to Question VIII.O.17.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
15. An equipment component in the application area contains or contacts off-site material with a HAP concentration greater than or equal to 10% by weight.	<input type="checkbox"/> YES <input type="checkbox"/> NO
16. An equipment component in the application area is intended to operate 300 hours or more during a 12-month period.	<input type="checkbox"/> YES <input type="checkbox"/> NO
17. The application area includes containers that manage non-exempt off-site material.	<input type="checkbox"/> YES <input type="checkbox"/> NO
18. The application area includes individual drain systems that manage non-exempt off-site materials.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 50)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>P. Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities</b>	
1. The application area includes facilities that manufacture or rework commercial, civil, or military aerospace vehicles or components. <i>If the response to Question VIII.P.1 is "NO" or "N/A," go to Section VIII.Q.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
2. The application area includes one or more of the affected sources specified in 40 CFR § 63.741(c)(1) - (7).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Q. Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities</b>	
◆ 1. The application area is subject to 40 CFR Part 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. <i>For GOP applications, go to Section VIII.Y</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>R. Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)</b>	
1. The application area includes shipbuilding or ship repair operations. <i>If the response to Question VIII.R.1 is "NO," go to Section VIII.S.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. Shipbuilding or ship repair operations located in the application area are subject to 40 CFR Part 63, Subpart II.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>S. Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations</b>	
1. The application area includes wood furniture manufacturing operations and/or wood furniture component manufacturing operations. <i>If the response to Question VIII.S.1 is "NO" or "N/A," go to Section VIII.T.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 51)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>S. Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations (continued)</b>	
2. The application area meets the definition of an "incidental wood manufacturer" as defined in 40 CFR § 63.801.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>T. Subpart KK - National Emission Standards for the Printing and Publishing Industry</b>	
1. The application area includes publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
<b>U. Subpart PP - National Emission Standards for Containers</b>	
1. The application area includes containers for which another 40 CFR Part 60, 61, or 63 subpart references the use of 40 CFR Part 63, Subpart PP for the control of air emissions. <i>If the response to Question VIII.U.1 is "NO," go to Section VIII.V.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area includes containers using Container Level 1 controls.	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. The application area includes containers using Container Level 2 controls.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area includes containers using Container Level 3 controls.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>V. Subpart RR - National Emission Standards for Individual Drain Systems</b>	
1. The application area includes individual drain systems for which another 40 CFR Part 60, 61, or 63 subpart references the use of 40 CFR Part 63, Subpart RR for the control of air emissions.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 52)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards</b>	
1. The application area includes an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area includes process wastewater streams generated from an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process. <i>If the response to Questions VIII.W.1. and VIII.W.2. are both "NO," go to Question VIII.W.20</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 under the requirements of 40 CFR § 63.132(c).	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area includes process wastewater streams that are determined to be Group 2 under the requirements of 40 CFR § 63.132(c).	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. All Group 1 wastewater streams at the site are determined to have a total source mass flow rate of less than 1 MG/yr.	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flowrate of less than 1 MG/yr. <i>If the response to Question VIII.W.6. is "NO," go to Question VIII.W.8.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 53)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards</b>	
8. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. <i>If the response to Question VIII.W.8. and W.9. are both "NO," go to Question VIII.W.11.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	<input type="checkbox"/> YES <input type="checkbox"/> NO
11. The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. The application area includes individual drain systems that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. <i>If the response to Question VIII.W.12. is "NO," go to Question VIII.W.15.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
13. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of covers and, if vented, closed vent systems and control devices.	<input type="checkbox"/> YES <input type="checkbox"/> NO
14. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General**  
**Information**  
**Form OP-REQ1 (Page 54)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards</b>	
<p>15. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process unit. <i>If the response to Question VIII.W.15, is "NO," go to Question VIII.W.20.</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<p>16. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.1106(c)(1) - (3). <i>If the response to Question VIII.W.16. Is "NO," go to Question VIII.W.20.</i></p>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<p>17. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at any flow rate.</p>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<p>18. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at an annual average flow rate greater than or equal to 10 liters per minute.</p>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 55)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)</b>	
19. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an acrylic resins or acrylic and modacrylic fiber production process unit that is part of a new affected source or is a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 ppmw of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at an average annual flow rate greater than or equal to 0.02 liter per minute.	<input type="checkbox"/> YES <input type="checkbox"/> NO
20. The application area includes an ethylene production process unit.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
21. The application area includes waste streams generated from an ethylene production process unit. <i>If the response to Questions VIII.W.20. and VIII.W.21. are both "NO" or "N/A," go to Question VIII.W.53.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
22. The waste stream(s) contains at least one of the chemicals listed in 40 CFR § 63.1103(e), Table 7(g)(1). <i>If the response to Question VIII.W.22. is "NO," go to Question VIII.W.53.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
23. Waste stream(s) are transferred off-site for treatment. <i>If the response to Question VIII.W.23. is "NO," go to Question VIII.W.25.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
24. The application area has waste management units that treat or manage waste stream(s) prior to transfer off-site for treatment. <i>If the response to Question VIII.W.24. is "NO," go to Question VIII.W.54</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 56)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES <i>(continued)</i>	
W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards	
25. The total annual benzene quantity from waste at the site is less than 10 Mg/yr as determined according to 40 CFR § 61.342(a).	<input type="checkbox"/> YES <input type="checkbox"/> NO
26. The application area contains at least one waste stream that is a continuous butadiene waste stream as defined in 40 CFR § 63.1082(b). <i>If the response to Question VIII.W.26. is "NO," go to Question VIII.W.43.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
27. The waste stream(s) contains at least 10 ppmw 1,3-butadiene at a flow rate of 0.02 liters per minute or is designated for control. <i>If the response to Question VIII.W.27. is "NO," go to Question VIII.W.43.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
28. The control requirements of 40 CFR Part 63, Subpart G for process wastewater as specified in 40 CFR § 63.1095(a)(2) are selected for control of the waste stream(s). <i>If the response to Question VIII.W.28. is "NO," go to Question VIII.W.33</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
29. The application area includes containers that receive, manage, or treat a continuous butadiene waste stream.	<input type="checkbox"/> YES <input type="checkbox"/> NO
30. The application area includes individual drain systems that receive, manage, or treat a continuous butadiene waste stream. <i>If the response to Question VIII.W.30. is "NO," go to Question VIII.W.43.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
31. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of covers and, if vented, closed vent systems and control devices.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 57)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES ( <i>continued</i> )	
W. Subpart YY- National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards	
32. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs. <i>If a response to Question VIII.W.32. is required, go to Question VIII.W.43.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
33. The application area has containers, as defined in 40 CFR § 61.341, that receive a continuous butadiene waste stream. <i>If the response to Question VIII.W.33. is "NO," go to Question VIII.W.36.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
34. The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. <i>If the response to Question VIII.W.34 is "YES," go to Question VIII.W.36.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
35. Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	<input type="checkbox"/> YES <input type="checkbox"/> NO
36. The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage a continuous butadiene waste stream. <i>If the response to Question VIII.W.36. is "NO," go to Question VIII.W.43.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
37. The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. <i>If the response to Question VIII.W.37 is "YES," go to Question VIII.W.43.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 58)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.  
 ♦ For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards</b>	
38. The application area has individual drain systems complying with 40 CFR § 61.346(a). <i>If the response to Question VIII.W.38 is "NO," go to Question VIII.W.40.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
39. Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	<input type="checkbox"/> YES <input type="checkbox"/> NO
40. The application area has individual drain systems complying with 40 CFR § 61.346(b). <i>If the response to Question VIII.W.40. is "NO," go to Question VIII.W.43.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
41. Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	<input type="checkbox"/> YES <input type="checkbox"/> NO
42. Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	<input type="checkbox"/> YES <input type="checkbox"/> NO
43. The application area has at least one waste stream that contains benzene. <i>If the response to Question VIII.W.43 is "NO," go to Question VIII.W.54.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
44. The application area has containers, as defined in 40 CFR § 61.341, that receive a waste stream containing benzene. <i>If the response to Question VIII.W.44. is "NO," go to Question VIII.W.47.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
45. The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. <i>If the response to Question VIII.W.45 is "YES," go to Question VIII.W.47.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 59)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards</b>	
46. Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	<input type="checkbox"/> YES <input type="checkbox"/> NO
47. The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage a waste stream containing benzene. <i>If the response to Question VIII.W.47. is "NO," go to Question VIII.W.54.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
48. The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. <i>If the response to Question VIII.W.48 is "YES," go to Question VIII.W.54.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
49. The application area has individual drain systems complying with 40 CFR § 61.346(a). <i>If the response to Question VIII.W.49 is "NO," go to Question VIII.W.51.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
50. Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	<input type="checkbox"/> YES <input type="checkbox"/> NO
51. The application area has individual drain systems complying with 40 CFR § 61.346(b). <i>If the response to Question VIII.W.51. is "NO," go to Question VIII.W.54.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
52. Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 60)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards</b>	
53. Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
54. The application area contains a cyanide chemicals manufacturing process. <i>If the response to Question VIII.W.54 is "NO," go to Section VIII.X.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
55. The cyanide chemicals manufacturing process generates maintenance wastewater containing hydrogen cyanide or acetonitrile.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)</b>	
1. The application area includes thermoplastic product process units, and/or their associated affected sources specified in 40 CFR § 63.1310(a)(1) - (5), that are subject to 40 CFR Part 63, Subpart JJJ. <i>If the response to Question VIII.X.1. is "NO," go to Section VIII.Y.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area includes thermoplastic product process units and/or wastewater streams and wastewater operations that are associated with thermoplastic product process units. <i>If the response to Question VIII.X.2 is "NO," go to Section VIII.Y.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. All process wastewater streams generated or managed in the application area are from sources producing polystyrene. <i>If the response to Question VIII.X.3. is "YES," go to Section VIII.Y.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. All process wastewater streams generated or managed in the application area are from sources producing ASA/AMSAN. <i>If the response to Question VIII.X.4. is "YES," go to Section VIII.Y.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 61)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)</b>	
5. The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for organic HAPs as defined in 40 CFR § 63.1312.	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The application area includes process wastewater streams, located at existing sources, that are Group 2 for organic HAPs as defined in 40 CFR § 63.1312.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area includes process wastewater streams, located at new sources, that are Group 2 for organic HAPs as defined in 40 CFR § 63.1312.	<input type="checkbox"/> YES <input type="checkbox"/> NO
8. All Group 1 wastewater streams at the site are demonstrated to have a total source mass flowrate of less than 1 MG/yr. <i>If the response to Question VIII.X.8. is "YES," go to Question VIII.X.18.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flowrate of less than 1 MG/yr. <i>If the response to Question VIII.X.9. is "NO," go to Question VIII.X.11.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	<input type="checkbox"/> YES <input type="checkbox"/> NO
11. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. <i>If the response to Question VIII.X.11. - VIII.X.12. are both "NO," go to Question VIII.X.14.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 62)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)</b>	
13. The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Containers</b>	
14. The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>Drains</b>	
15. The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. <i>If the response to Question VIII.X.15. is "NO," go to Question VIII.X.18.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
16. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of covers and, if vented, closed vent systems and control devices.	<input type="checkbox"/> YES <input type="checkbox"/> NO
17. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	<input type="checkbox"/> YES <input type="checkbox"/> NO
18. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an thermoplastic product process unit. <i>If the response to Question VIII.X.18. is "NO," go to Section VIII.Y.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 63)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)</b>	
<b>Drains (continued)</b>	
19. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.149(d) and § 63.1330(b)(12). <i>If the response to Question VIII.X.19. is "NO," go to Section VIII.Y.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
20. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at any flow rate.	<input type="checkbox"/> YES <input type="checkbox"/> NO
21. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at an annual average flow rate greater than or equal to 10 liters per minute.	<input type="checkbox"/> YES <input type="checkbox"/> NO
22. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an thermoplastic product process unit that is a new affected source or part of a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at an average annual flow rate greater than or equal to 0.02 liter per minute	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General**  
**Information**  
**Form OP-REQ1 (Page 64)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>Y. Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic reforming Units, and Sulfur Recovery Units.</b>	
1. The application area is subject to 40 CFR Part 63, Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic reforming Units, and Sulfur Recovery Units.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>Z. Subpart AAAA - National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste (MSW) Landfills.</b>	
◆ 1. The application area is subject to 40 CFR Part 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON)</b>	
1. The application area is located at a site that includes process units that manufacture as a primary product one or more of the chemicals listed in 40 CFR § 63.2435(b)(1).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area is located at a plant site that is a major source as defined in FCAA § 112(a).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area is located at a site that includes miscellaneous chemical manufacturing process units (MCPU) that process, use or generate one or more of the organic hazardous air pollutants listed in § 112(b) of the Clean Air Act or hydrogen halide and halogen HAP. <i>If the response to Question VIII.AA.1, AA.2 or AA.3 is "NO," go to Section VIII.BB.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 65)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)	
AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON)	
4. The application area includes process vents, storage vessels, transfer racks, or waste streams associated with a miscellaneous chemical manufacturing process subject to 40 CFR 63, Subpart FFFF. <i>If the response to Question VIII.AA.4 is "NO," go to Section VIII.BB.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area includes process wastewater streams. <i>If the response to Question VIII.AA.5 is "NO," go to Question VIII.AA.17.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for compounds listed in Table 8 or Table 8 and Table 9, as appropriate, of 40 CFR Part 63, Subpart FFFF.	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. All Group 1 wastewater streams at the site are demonstrated to have a total source mass flowrate of less than 1 MG/yr. <i>If the response to Question VIII.AA.7. is "YES," go to Section VIII.BB.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
8. The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flowrate of less than 1 MG/yr. <i>If the response to Question VIII.AA.8. is "NO," go to Question VIII.AA.10.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 66)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)	
AA. Subpart EFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON)	
11. Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. <i>If the response to Question VIII.AA.10. and VIII.AA.11. are both "NO," go to Question VIII.AA.13.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	<input type="checkbox"/> YES <input type="checkbox"/> NO
13. The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	<input type="checkbox"/> YES <input type="checkbox"/> NO
14. The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. <i>If the response to Question VIII.AA.14. is "NO," go to Question VIII.AA.17.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
15. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of covers and, if vented, closed vent systems and control devices.	<input type="checkbox"/> YES <input type="checkbox"/> NO
16. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	<input type="checkbox"/> YES <input type="checkbox"/> NO
17. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of a chemical manufacturing process unit that meets the criteria of 40 CFR § 63.100(b). <i>If the response to Question VIII.AA.17. is "NO," go to Section VIII.BB.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 67)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON)</b>	
18. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes (that are part of a miscellaneous chemical manufacturing process unit) that meet the criteria listed in 40 CFR § 63.149(d). <i>If the response to Question VIII.AA.18 is "NO," go to Section VIII.BB.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
19. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 200 lb/yr.	<input type="checkbox"/> YES <input type="checkbox"/> NO
20. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 liter per minute.	<input type="checkbox"/> YES <input type="checkbox"/> NO
21. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of a chemical manufacturing process unit that is subject to the new source requirements of 40 CFR § 63.2445(a); and the equipment conveys water with a combined total annual average concentration of compounds in tables 8 and 9 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 68)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>BB. Subpart GGGG - National Emission Standards for Hazardous Air Pollutants for: Solvent Extractions for Vegetable Oil Production.</b>	
1. The application area includes a vegetable oil production process that: is by itself a major source of HAP emissions or, is collocated within a plant site with other sources that are individually or collectively a major source of HAP emissions.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>CC. Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation</b>	
1. The application area includes a facility at which a site remediation is conducted. <i>If the answer to Question .CC.1. is "NO," go to Section VIII.DD.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. All site remediations qualify for one of the exemptions contained in 40 CFR § 63.7881(b)(1) through (6). <i>If the answer to Question .CC.2. is "YES," go to Section VIII.DD.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
3. Prior to beginning site remediation activities it was determined that the total quantity of HAP listed in Table 1 of Subpart GGGGG that will be removed during all site remediations will be less than 1 Mg/yr.	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. The site remediation will be completed within 30 consecutive calendar days.	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. The application area includes containers that manage site remediation materials subject to 40 CFR Part 63, Subpart GGGGG. <i>If the response to Question VIII.CC.5 is "NO," go to Section VIII.DD.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The application area includes containers using Container Level 1 controls as specified in 40 CFR § 63.922(b).	<input type="checkbox"/> YES <input type="checkbox"/> NO
7. The application area includes containers with a capacity greater than 0.46 m <sup>3</sup> that meet the requirements of 40 CFR § 63.7900(b)(3)(i) and (ii).	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 69)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>CC. Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation (continued)</b>	
8. The application area includes containers using Container Level 2 controls as specified in 40 CFR § 63.923(b).	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. The application area includes containers using Container Level 3 controls as specified in 40 CFR § 63.924(b).	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>DD. Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities</b>	
1. The application area is located at a site that is an area source of hazardous air pollutants. <i>If the answer to Question DD.1. is "NO," go to Section VIII.FF.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2. The application area includes a pipeline breakout station, as defined in 40 CFR Part 63, Subpart BBBBBB, not subject to the control requirements of 40 CFR Part 63, Subpart R.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area includes a pipeline pumping station as defined in 40 CFR Part 63, Subpart BBBBBB.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
4. The application area includes a bulk gasoline plant as defined in 40 CFR Part 63, Subpart BBBBBB. <i>If the answer to Question VIII.DD.4. is "NO," go to Question VIII.DD.6.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
5. The bulk gasoline plant was operating, prior to January 10, 2010, in compliance with an enforceable State, local or tribal rule or permit that requires submerged fill as specified in 40 CFR § 63.11086(a).	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. The application area includes a bulk gasoline terminal, as defined in 40 CFR Part 63, Subpart BBBBBB, not subject to the control requirements of 40 CFR Part 63, Subpart R or Subpart CC. <i>If the answer to Question VIII.DD.6. is "NO," go to Section VIII.EE.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 70)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>DD. Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities (continued)</b>	
7. The bulk gasoline terminal has a throughput of less than 250,000 gallons per day. <i>If the answer to Question VIII.DD.7. is "YES," go to Section VIII.EE.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
8. The bulk gasoline terminal loads gasoline into gasoline cargo tanks other than railcar cargo tanks.	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. The bulk gasoline terminal loads gasoline into railcar cargo tanks. <i>If the answer to Question VIII.DD.9. is "NO," go to Section VIII.EE.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. The bulk gasoline terminal loads gasoline into railcar cargo tanks which do not collect vapors from a vapor balance system.	<input type="checkbox"/> YES <input type="checkbox"/> NO
11. The bulk gasoline terminal loads gasoline into railcar cargo tanks which collect vapors from a vapor balance system and that system complies with a Federal, State, local, or tribal rule or permit.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>EE. Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities</b>	
1. The application area is located at a site that is an area source of hazardous air pollutants. <i>Note: If the answer to Question EE.1. is "NO," go to Section VIII.FF.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2. The application area includes at least one gasoline dispensing facility as defined in 40 CFR § 63.11132. <i>Note: If the answer to Question VIII.EE.2. is "NO," go to Section VIII.FF.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 71)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>VIII. TITLE 40 CODE OF FEDERAL REGULATIONS PART 63 (40 CFR PART 63) - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (continued)</b>	
<b>EE. Subpart CCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities</b>	
3. The application area includes at least one gasoline dispensing facility with a monthly throughput of less than 10,000 gallons.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
4. The application area includes at least one gasoline dispensing facility with a monthly throughput greater than 10,000 gallons, but less than 100,000 gallons.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
5. The application area includes at least one gasoline dispensing facility with a monthly throughput of 100,000 gallons or more.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>FF. Recently Promulgated 40 CFR Part 63 Subparts</b>	
◆ 1. The application area is subject to one or more promulgated 40 CFR Part 63 subparts not addressed on this form. <i>If the response to Question VIII.EE.1. is "NO," go to Section IX. A list of promulgated 40 CFR Part 63 subparts not otherwise addressed on OP-REQ1 is included in the instructions</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆ 2. Provide the Subpart designation (i.e. Subpart EEE) in the space provided below.	
<b>IX. TITLE 40 CODE OF FEDERAL REGULATIONS PART 68 (40 CFR PART 68) - CHEMICAL ACCIDENT PREVENTION PROVISIONS</b>	
<b>A. Applicability</b>	
◆ 1. The application area contains processes subject to 40 CFR Part 68, Chemical Accident Prevention Provisions, and specified in 40 CFR § 68.10.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 72)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>X. TITLE 40 CODE OF FEDERAL REGULATIONS PART 82 (40 CFR PART 82) - PROTECTION OF STRATOSPHERIC OZONE</b>		
<b>A. Subpart A - Production and Consumption Controls</b>		
◆	1. The application area is located at a site that produces, transforms, destroys, imports, or exports a controlled substance or product.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
<b>B. Subpart B - Servicing of Motor Vehicle Air Conditioners</b>		
◆	1. Servicing, maintenance, and/or repair of fleet vehicle air conditioning systems using ozone-depleting refrigerants is conducted in the application area.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>C. Subpart C - Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances</b>		
◆	1. The application area sells or distributes one or more nonessential products (which release a Class I or Class II substance) that are subject to 40 CFR Part 82, Subpart C.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
<b>D. Subpart D - Federal Procurement</b>		
◆	1. The application area is owned/operated by a department, agency, or instrumentality of the United States.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
<b>E. Subpart E - The Labeling of Products Using Ozone Depleting Substances</b>		
◆	1. The application area includes containers in which a Class I or Class II substance is stored or transported prior to the sale of the Class I or Class II substance to the ultimate consumer.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆	2. The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products containing a Class I or Class II substance.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆	3. The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products manufactured with a process that uses a Class I or Class II substance.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 73)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>X. TITLE 40 CODE OF FEDERAL REGULATIONS PART 82 (40 CFR PART 82) - PROTECTION OF STRATOSPHERIC OZONE (continued)</b>		
<b>F. Subpart F - Recycling and Emissions Reduction (continued)</b>		
◆	1. Servicing, maintenance, and/or repair on refrigeration and nonmotor vehicle air condition appliances using ozone-depleting refrigerants or non-exempt substitutes is conducted in the application area.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	2. Disposal of appliances (including motor vehicle air conditioners) or refrigerant or non-exempt substitute reclamation occurs in the application area.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆	3. The application area manufactures appliances or refrigerant recycling and recovery equipment.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
<b>G. Subpart G - Significant New Alternatives Policy Program</b>		
◆	1. The application area manufactures, formulates, or creates chemicals, product substitutes, or alternative manufacturing processes that are intended for use as a replacement for a Class I or Class II compound. <i>If the response to Question X.G.1 is "NO", go to Section X.H.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆	2. All substitutes produced by the application area meet one or more of the exemptions in 40 CFR § 82.176(b)(1) - (7).	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>H. Subpart H - Halon Emissions Reduction</b>		
◆	1. Testing, servicing, maintaining, repairing, or disposing of equipment containing halons is conducted in the application area.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆	2. Disposal of halons or manufacturing of halon blends is conducted in the application area.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
<b>XI. MISCELLANEOUS</b>		
<b>A. Requirements Reference Tables (RRT) and Flowcharts</b>		
	1. The application area contains units that are potentially subject to a regulation for which the TCEQ has not developed an RRT and flowchart.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 74)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>XI. MISCELLANEOUS (continued)</b>	
<b>B. Forms</b>	
◆ 1. The application area contains units that are potentially subject to a regulation for which the TCEQ has not developed a unit attribute form. <i>If the response to Question XI.B.1 is "NO" or "N/A," go to Section XI.C.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆ 2. Provide the Part and Subpart designation for the federal rule(s) or the Chapter, Subchapter and Division designation for the State regulation(s) in the space provided below.  40 CFR 75; 40 CFR 98 Subpart D	
<b>C. Emission Limitation Certifications</b>	
◆ 1. The application area includes units for which federally enforceable emission limitations have been established by certification.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>D. Alternative Means of Control, Alternative Emission Limitation or Standard, or Equivalent Requirements</b>	
1. The application area is located at a site that is subject to a site specific requirement of the state implementation plan (SIP).	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2. The application area includes units located at the site that are subject to a site specific requirement of the SIP.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area includes units which demonstrate compliance by using an alternative means of control, alternative emission limitation or standard or equivalent requirements approved by the EPA Administrator.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>E. Title IV - Acid Rain Program</b>	
1. The application area includes emission units subject to the Acid Rain Program (ARP), including the Opt-In Program.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2. The application area includes emission units qualifying for the new unit exemption under 40 CFR § 72.7.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. The application area includes emission units qualifying for the retired unit exemption under 40 CFR § 72.8.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 75)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>XI. MISCELLANEOUS (continued)</b>		
<b>F. Clean Air Interstate Rule (CAIR NO<sub>x</sub> and CAIR SO<sub>2</sub> Permit)</b>		
1.	The application area includes emission units subject to the requirements of the Clean Air Interstate Rule. <i>If the response to Question XI.F.1. is "NO," go to Section XI.G.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2.	The application area includes emission units qualifying for the retired unit exemptions under 40 CFR §§ 96.105 and 96.205.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>G. Permit Shield (SOP Applicants Only)</b>		
1.	A permit shield for negative applicability entries on Form OP-REQ2 (Negative Applicable Requirement Determinations) is being requested or already exists in the permit.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>H. GOP Type (Complete this section for GOP applications only)</b>		
◆ 1.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under 511 - Oil and Gas General Operating Permit for Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Orange, Parker, Rockwall, Tarrant, and Waller Counties.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 2.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under 512 - Oil and Gas General Operating Permit for Gregg, Nueces, and Victoria Counties.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 3.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under 513 - Oil and Gas General Operating Permit for Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties.	<input type="checkbox"/> YES <input type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 76)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>XI. MISCELLANEOUS (continued)</b>		
<b>H. GOP Type (Complete this section for GOP applications only) (continued)</b>		
◆	4. The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under 514 - Oil and Gas General Operating Permit for All Texas Counties Except Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Matagorda, Montgomery, Nueces, Orange, Parker, Rockwall, San Patricio, Tarrant, Travis, Victoria, and Waller County.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	5. The application area is applying for initial issuance, revision, or renewal of a solid waste landfill general operating permit under 517 Municipal Solid Waste Landfill general operating permit.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>I. Title 30 TAC Chapter 101, Subchapter H</b>		
◆	1. The application area is located in a nonattainment area. <i>If the response to Question XI.I.1. is "NO," go to question XI.I.3.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	2. The applicant has or will generate emission reductions to be credited in the TCEQ Emissions Banking and Trading Program.	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
◆	3. The applicant has or will generate discrete emission reductions to be credited in the TCEQ Emissions Banking and Trading Program.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
◆	4. The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area where the facilities have a collective uncontrolled design capacity to emit 10 tpy or more of NO <sub>x</sub> .	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	5. The application area includes an electric generating facility permitted under 30 TAC Chapter 116, Subchapter I.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	6. The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area and the site has a potential to emit more than 10 tpy of highly-reactive volatile organic compounds (HRVOC) from facilities covered under 30 TAC Chapter 115, Subchapter H, Divisions 1 and 2.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 77)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>XI. MISCELLANEOUS (continued)</b>	
<b>I. Title 30 TAC Chapter 101, Subchapter H (continued)</b>	
◆	7. The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area, the site has a potential to emit 10 tpy or less of HRVOC from covered facilities and the applicant is opting to comply with the requirements of 30 TAC Chapter 101, Subchapter H, Division 6, Highly Reactive VOC Emissions Cap and Trade Program.
	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>J. Periodic Monitoring</b>	
◆	1. The applicant or permit holder is submitting or has previously submitted at least one periodic monitoring proposal described on Form OP-MON.
	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<b>K. Compliance Assurance Monitoring</b>	
◆	1. The application area includes at least one unit with a pre-control device potential to emit greater than or equal to the amount in tons per year required in a site classified as a major source. <i>If the response to Question XI.K.1. is "NO," go to Section XII.</i>
	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆	2. The unit or units defined by XI.K.1 are using a control device to comply with an applicable requirement. <i>If the response to Question XI.K.2. is "NO," go to Section XII.</i>
	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆	3. The permit holder has submitted a CAM proposal on Form OP-MON in a previous application.
	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆	4. The owner/operator or permit holder is submitting a CAM proposal on Form OP-MON according to the deadlines for submittals in 40 CFR § 64.5 in this application. <i>If the response to Questions XI.K.3. and XI.K.4. are both "NO," go to Section XII.A.</i>
	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	5. The owner/operator or permit holder is submitting a CAM implementation plan and schedule to be incorporated as enforceable conditions in the permit.
	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 78)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>XI. MISCELLANEOUS (continued)</b>	
<b>K. Compliance Assurance Monitoring (continued)</b>	
6. Provide the unit identification numbers for the units for which the applicant is submitting a CAM implementation plan and schedule in the space below.	
CAM is currently in place for Unit ID: GRP-GT and no there is no submittal with this application.	
◆ 7. At least one unit defined by XI.K.1. and XI.K.2. is using a CEMS, COMS or PEMS meeting the requirements of 40 CFR § 64.3(d)(2).	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆ 8. All units defined by XI.K.1. and XI.K.2. are using a CEMS, COMS or PEMS meeting the requirements of 40 CFR § 64.3(d)(2). <i>If the response to Question XI.K.8. is "YES," go to Section XII.</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
◆ 9. The CAM proposal as described by question XI.K.3. or XI.K.4. addresses particulate matter or opacity.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 10. The CAM proposal as described by question XI.K.3. or XI.K.4. addresses VOC.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆ 11. The control device in the CAM proposal as described by question XI.K.3. or XI.K.4. has a bypass.	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>XII. NEW SOURCE REVIEW (NSR) AUTHORIZATIONS</b>	
<b>A. Waste Permits with Air Addendum</b>	
◆ 1. The application area includes a Municipal Solid Waste Permit or an Industrial Hazardous Waste with an Air Addendum. <i>If the response to XII.A.1. is "YES," include the waste permit numbers and issuance date in Section XII.J.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>B. Air Quality Standard Permits</b>	
◆ 1. The application area includes at least one Air Quality Standard Permit NSR authorization. <i>If the response to XII.B.1 is "NO," go to Section XII.C. If the response to XII.B.1 is "YES," be sure to include the standard permit's registration numbers in Section XII.H, and answer XII.B.2 - B.13 as appropriate.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 79)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

XII. NEW SOURCE REVIEW (NSR) AUTHORIZATIONS <i>(continued)</i>		
B. Air Quality Standard Permits		
◆	2. The application area includes at least one "Pollution Control Project" Air Quality Standard Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	3. The application area includes at least one "Modification of Oil and Gas Facilities" Air Quality Standard Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	4. The application area includes at least one "Municipal Solid Waste Landfill" Air Quality Standard Permit NSR authorization under 30 TAC § 116.621.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	5. The application area includes at least one "Municipal Solid Waste Landfill Facilities and Transfer Stations" Standard Permit authorization under 30 TAC Chapter 330, Subchapter U.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	6. The application area includes at least one "Concrete Batch Plant" Air Quality Standard Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	7. The application area includes at least one "Concrete Batch Plant with Enhanced Controls" Air Quality Standard Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	8. The application area includes at least one "Hot Mix Asphalt Plant" Air Quality Standard Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	9. The application area includes at least one "Rock Crusher" Air Quality Standard Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	10. The application area includes at least one "Electric Generating Unit" Air Quality Standard Permit NSR authorization. <i>If the response to XII.B.10 is "NO," go to Question XII.B.13.</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	11. For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the East Texas Region.	<input type="checkbox"/> YES <input type="checkbox"/> NO
◆	12. For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the West Texas Region.	<input type="checkbox"/> YES <input type="checkbox"/> NO



**Texas Commission on Environmental Quality**  
**Application Area-Wide Applicability Determinations and General Information**  
**Form OP-REQ1 (Page 80)**  
**Federal Operating Permit Program**

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

<b>XII. NEW SOURCE REVIEW (NSR) AUTHORIZATIONS (continued)</b>		
<b>B. Air Quality Standard Permits (continued)</b>		
◆	13. The application area includes at least one "Boiler" Air Quality Standard Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	14. The application area includes at least one non-rule Air Quality Standard Permit for Pollution Control Projects NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
◆	15. The application area includes at least one non-rule Air Quality Standard Permit for Oil and Gas Handling and Production Facilities NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>C. Flexible Permits</b>		
◆	1. The application area includes at least one Flexible Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>D. Multiple Plant Permits</b>		
◆	1. The application area includes at least one Multi-Plant Permit NSR authorization.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 81)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.*

◆ *For GOP applications, answer ONLY these questions unless otherwise directed.*

**XII. NEW SOURCE REVIEW (NSR) AUTHORIZATIONS**  
 (Attach additional sheets if necessary for sections E-J)

◆ **E. PSD Permits and PSD Major Pollutants**

PSD Permit No.:	Issuance Date:	Pollutant(s)	VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	CO
PSD-TX-867	10/19/2006						
PSD Permit No.:	Issuance Date:	Pollutant(s)					
PSD Permit No.:	Issuance Date:	Pollutant(s)					
PSD Permit No.:	Issuance Date:	Pollutant(s)					

*If PSD Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: [www.tceq.texas.gov/permitting/air/titlev/site/site\\_experts.html](http://www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html)*

◆ **F. Nonattainment (NA) Permits and NA Major Pollutants**

NA Permit No.:	Issuance Date:	Pollutant(s)	VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	CO
NA Permit No.:	Issuance Date:	Pollutant(s)					
NA Permit No.:	Issuance Date:	Pollutant(s)					
NA Permit No.:	Issuance Date:	Pollutant(s)					

*If NA Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: [www.tceq.texas.gov/permitting/air/titlev/site/site\\_experts.html](http://www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html)*

◆ **G. NSR Authorizations with FCAA § 112(g) Requirements**

NSR Permit No.: 32096	Issuance Date: 10/19/2006	NSR Permit No.:	Issuance Date:
NSR Permit No.:	Issuance Date:	NSR Permit No.:	Issuance Date:
NSR Permit No.:	Issuance Date:	NSR Permit No.:	Issuance Date:

◆ **H Title 30 TAC Chapter 116 Permits, Special Permits, Standard Permits, Other Authorizations (Other Than Permits By Rule, PSD Permits, NA Permits) for the Application Area.**

Authorization No.:	Issuance Date:	Authorization No.:	Issuance Date:
Authorization No.:	Issuance Date:	Authorization No.:	Issuance Date:
Authorization No.:	Issuance Date:	Authorization No.:	Issuance Date:



Texas Commission on Environmental Quality  
 Application Area-Wide Applicability Determinations and General Information  
 Form OP-REQ1 (Page 82)  
 Federal Operating Permit Program

Date: March 25, 2013	RN No.: RN100217298	Permit No.: O1753
Area Name: Blackhawk Power Plant		

*For SOP applications, answer ALL questions unless otherwise directed.  
 For GOP applications, answer ONLY these questions unless otherwise directed.*

**XII. NEW SOURCE REVIEW (NSR) AUTHORIZATIONS**  
 (Attach additional sheets if necessary for sections E-J)

**I. Permits by Rule (30 TAC Chapter 106) for the Application Area**

*A list of selected Permits by Rule (previously referred to as standard exemptions) that are required to be listed in the FOP application is available in the instructions.*

PBR No.: SE 61 (Waste Water Treatment)	Version No./Date: 09/01/1999
PBR No.: SE 91 (Hydrated Lime)	Version No./Date: 09/01/1999
PBR No.: 106.102 (Comfort Heating)	Version No./Date: 09/04/2000
PBR No.: 106.183 (Heaters)	Version No./Date: 09/04/2000
PBR No.: 106.227 (Welding)	Version No./Date: 09/04/2000
PBR No.: 106.263 (Routine MSS)	Version No./Date: 11/01/2001
PBR No.: 106.371 (Cooling-Water Units)	Version No./Date: 09/04/2000
PBR No.: 106.412 (Fuel Dispensing)	Version No./Date: 09/04/2000
PBR No.: 106.454 (Degreaser)	Version No./Date: 11/01/2001
PBR No.: 106.472 (Tanks)	Version No./Date: 09/04/2000
PBR No.: 106.473 (Tanks)	Version No./Date: 09/04/2000
PBR No.: 106.511 (Emergency Diesel Fire Pump)	Version No./Date: 09/04/2000

**J. Municipal Solid Waste and Industrial Hazardous Waste Permits With an Air Addendum**

Permit No.:	Permit No.:

## **Appendix F**

### **TCEQ Form OP-REQ2 Negative Applicable Requirement Determination**



Texas Commission on Environmental Quality  
Form OP-REQ2  
Negative Applicable Requirement Determinations  
Federal Operating Permit Program

Date: March 25, 2013	Regulated Entity No.: RNI00217298	Permit No.: O-1753
Company Name: Borger Energy Associates, L.P.		
Area Name: Blackhawk Power Plant		

Unit A1 Revision No.	Unit/Group/Process		Potentially Applicable Regulatory Name	Negative Applicable Citation	Negative Applicability Reason
	ID No.	Applicable Form			
A 1	GRP-HRSG	OP-UA6	40 CFR 60 Subpart Db	§60.40b(e)	The HRSG duct burners will comply with 40 CFR Part 60 Subpart Da; therefore, the HRSG duct burners are not subject to 40 CFR Part 60 Subpart Db.
A 1	EMENG1	OP-UA2	40 CFR 60 Subpart III	§60.4200(a)(4)	The emergency fire water-pump engine was constructed, modified and/or reconstructed prior to July 11, 2005; therefore Subpart III does not
A 1	EMENG1	OP-UA2	40 CFR 60 Subpart JJJJ	§60.4230(a)(4), (a)(5)	Subpart JJJJ does not apply to the emergency water pump engine because it is not a stationary spark ignition internal combustion engine that commenced construction or modified/reconstruction after 6/12/2006.
A 1	GRP-GT	OP-UA11	40 CFR 60 Subpart KKKK	§60.4300	Subpart KKKK is not applicable since the two turbines commenced construction, and/or modification prior to February 18, 2005.
A 1	GRP-GT	OP-UA11	40 CFR 63 Subpart YYYY	§63.6085(b)	Subpart YYYY is not applicable since this facility is not a major source of HAP.

## **Appendix G**

### **TCEQ Form OP-REQ3 Applicable Requirements Summary**



Applicable Requirements Summary  
Form OP-REQ3 (Page 1)  
Federal Operating Permit Program

Table 1a: Additions

Date: March 25, 2013	Regulated Entity No.: RN100217298	Permit No.: O-1753
Company Name: Borger Energy Associates, L.P.		
Area Name: Blackhawk Power Plant		

Revision No.	Unit/Group/Process		SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement	
	ID No.	Applicable Form			Name	Standard(s)
1	GRP-HRSG	OP-UA6	60DA-0001	NOx	NSPS Subpart Da	§60.44Da(d)(1), §60.48Da(a), §60.48Da(b), §60.44Da(d), §60.44Da(k)(2)(iv)
1	GRP-HRSG	OP-UA6	60DA-0001	SO2	NSPS Subpart Da	§60.43Da(b)(2), §60.43Da(a), §60.43Da(b), §60.43Da(d), §60.43Da(g)
1	GRP-HRSG	OP-UA6	60DA-0001	PM	NSPS Subpart Da	§60.42Da(a), §60.48Da(a), §60.48Da(f)
1	GRP-HRSG	OP-UA6	60DA-0001	Opacity	NSPS Subpart Da	§60.42Da(b), §60.48Da(a), §60.48Da(q)
1	GRP-HRSG	OP-UA6	60DA-0001	CO	NSPS Subpart Da	§60.49Da(a)(2)(iii), §60.49Da(u)(2)

1	GRP-HRSG	OP-UA6	60DA-0002	NOx	NSPS Subpart Da	§60.44Da(d)(1), §60.48Da(a), §60.48Da(b), §60.44Da(d), §60.44Da(k)(2)(iv)
1	GRP-HRSG	OP-UA6	60DA-0002	SO2	NSPS Subpart Da	§60.43Da(b)(2), §60.43Da(a), §60.43Da(b), §60.43Da(d), §60.43Da(g)
1	GRP-HRSG	OP-UA6	60DA-0002	PM	NSPS Subpart Da	§60.42Da(a), §60.48Da(a), §60.48Da(f)
1	GRP-HRSG	OP-UA6	60DA-0002	Opacity	NSPS Subpart Da	§60.42Da(b), §60.48Da(a), §60.48Da(q)
1	GRP-HRSG	OP-UA6	60DA-0002	CO	NSPS Subpart Da	§60.49Da(a)(2)(iii), §60.49Da(u)(2)
1	EMENG1	OP-UA2	63ZZZZ-01	HAPS	MACT Subpart ZZZZ	§63.6625(e)(3), §63.6625(f), §63.6640(f)(1)(i) – (iii)



Applicable Requirements Summary  
Form OP-REQ3 (Page 2)  
Federal Operating Permit Program

Table 1b: Additions

Date: March 25, 2013	Regulated Entity No.: RN100217298	Permit No.: O-1753
Company Name: Borger Energy Associates, L.P.		Area Name: Blackhawk Power Plant

Revision No.	Unit/Group/Process		SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
	ID No.						
1	GRP-HRSG		60DA-0001	NOx	§60.49Da(c)(2), §60.49Da(h)(2), §60.49Da(i), §60.49Da(k)(3), §60.49Da(w)	§60.51Da(f), §60.51Da(k)	§60.51Da(f), §60.51Da(k)
1	GRP-HRSG		60DA-0001	SO2	§60.49Da(b)(4), §60.49Da(d), §60.49Da(h)(1), §60.49Da(i)	§60.51Da(k)	§60.51Da(k)
1	GRP-HRSG		60DA-0001	PM	§60.49Da(f)	§60.52Da(b)	§60.51Da(a), §60.51Da(f)
1	GRP-HRSG		60DA-0001	Opacity	§60.49Da(a)(2)(iii), §60.49Da(a)(3)(i), §60.49Da(a)(3)(ii)	§60.52Da(b)	§60.51Da(i), §60.51Da(k)
1	GRP-HRSG		60DA-0001	CO	§60.49Da(u)(1), §60.49Da(w)	§60.49Da(u)(4)	§60.51Da(f)
1	GRP-HRSG		60DA-0002	NOx	§60.49Da(c)(2), §60.49Da(h)(2), §60.49Da(i), §60.49Da(k)(3), §60.49Da(w)	§60.51Da(f), §60.51Da(k)	§60.51Da(f), §60.51Da(k)

1	GRP-HRSG	60DA-0002	SO2	§ 60.49Da(b)(4), § 60.49Da(d), § 60.49Da(h)(1), § 60.49Da(i)	§ 60.51Da(k)	§ 60.51Da(k)
1	GRP-HRSG	60DA-0002	PM	§ 60.49Da(t)	§ 60.52Da(b)	§ 60.51Da(a), § 60.51Da(f)
1	GRP-HRSG	60DA-0002	Opacity	§ 60.49Da(a)(2)(iii), § 60.49Da(a)(3)(i), § 60.49Da(a)(3)(ii)	§ 60.52Da(b)	§ 60.51Da(i), § 60.51Da(k)
1	GRP-HRSG	60DA-0002	CO	§ 60.49Da(u)(1), § 60.49Da(v)	§ 60.49Da(v)(4)	§ 60.51Da(f)
1	EMENG1	63ZZZ-01	HAPS	§ 63.6625(e)(3), § 63.6625(f)	§ 63.6640(f)(1)(i) – (iii)	



**Applicable Requirements Summary**  
**Form OP-REQ3 (Page 3)**  
**Federal Operating Permit Program**

**Table 2a: Deletions**

Date: March 25, 2013	Regulated Entity No.: RN100217298
Company Name: Borger Energy Associates, L.P.	Permit No.: O-1753
Area Name: Blackhawk Power Plant	

Revision No.	Unit/Group/Process		SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement	
	ID No.	Applicable Form			Name	Standard(s)
1	GRP-HRSG	OP-UA6	60Db	NOx	40 CFR Part 60 Subpart Db	§ 60.40b(a)
1	GRP-HRSG	OP-UA6	60Db	SO2	40 CFR Part 60 Subpart Db	§ 60.40b(a)
1	GRP-HRSG	OP-UA6	60Db	PM	40 CFR Part 60 Subpart Db	§ 60.40b(a)
1	GRP-HRSG	OP-UA6	60Db	Opacity	40 CFR Part 60 Subpart Db	§ 60.40b(a)



Applicable Requirements Summary  
Form OP-REQ3 (Page 4)  
Federal Operating Permit Program

Table 2b: Deletions

Date: March 25, 2013	Regulated Entity No.: RN100217298	Permit No.: O-1753
Company Name: Borger Energy Associates, L.P.		
Area Name: Blackhawk Power Plant		

Revision No.	Unit/Group/Process		SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
	ID No.	Applicable Form					
1	GRP-HRSG	OP-UA6	60Db	NOx	None	§60.49b(d) §60.49b(o)	§60.49b(a) §60.49b(a)(1) §60.49b(a)(3)
1	GRP-HRSG	OP-UA6	60Db	SO2	None	§60.49b(d) §60.49b(o)	§60.49b(a) §60.49b(a)(1) §60.49b(a)(3)
1	GRP-HRSG	OP-UA6	60Db	PM	None	§60.49b(d) §60.49b(o)	§60.49b(a) §60.49b(a)(1) §60.49b(a)(3)
1	GRP-HRSG	OP-UA6	60Db	Opacity	None	§60.49b(d) §60.49b(o)	§60.49b(a) §60.49b(a)(1) §60.49b(a)(3)

## **Appendix H**

### **TCEQ Form OP-SUM Individual Unit Summary**



Texas Commission on Environmental Quality  
Federal Operating Permit Program  
Individual Unit Summary  
Form OP-SUM  
Table 1

Date: March 25, 2013	Regulated Entity No.: RN100217298	Permit No.: O-1753
Company Name: Borger Energy Associates, L.P.		
Area Name: Blackhawk Power Plant		

Unit/Process ID No.	Applicable Form	Unit Name/Description	CAM	Preconstruction Authorizations		Group ID No.	Plant ID No.
				30 TAC Chapter 116.30 TAC Chapter 106	Title I		
Unit 1	OP-UA11	Gas Fueled Combustion Turbine 1	X	32096 PSD-TX-867		GRP-GT	
Unit 2	OP-UA11	Gas Fueled Combustion Turbine 2	X	32096 PSD-TX-867		GRP-GT	
HRSG 1	OP-UA6	Heat Recovery Steam Generator 1 (Duct Burner Boiler attached to Unit 1)		32096 PSD-TX-867		GRP-HRSG	
HRSG 2	OP-UA6	Heat Recovery Steam Generator 2 (Duct Burner Boiler attached to Unit 2)		32096 PSD-TX-867		GRP-HRSG	
EPN 1-1	OP-UA15	Stack Associated with Unit 1 and HRSG 1		32096 PSD-TX-867		GRP-STK	
EPN 2-1	OP-UA15	Stack Associated with Unit 2 and HRSG 2		32096 PSD-TX-867		GRP-STK	
EMENG1	OP-UA2	Emergency Fire Pump Engine		106.511/09/04/2000			



## **Appendix I**

**TCEQ Forms OP-UA (2, 4, 6, 11, 15), OP-ACPS, and OP-AR1**































Texas Commission on Environmental Quality  
Form OP-ACPS  
Application Compliance Plan and Schedule

Date: March 25, 2013	Regulated Entity No.: RN100217298	Permit No.: O1753
Company Name: Borger Energy Associates, L.P.		Area Name: Blackhawk Power Plant

- Part 1 of this form must be submitted with all initial FOP applications and renewal applications.
- The Responsible Official must use Form OP-CRO1 (Certification by Responsible Official) to certify information contained in this form in accordance with 30 TAC § 122.132(e)(9).

**Part 1**

<b>A. Compliance Plan — Future Activity Committal Statement</b>
<p>The <i>Responsible Official</i> commits, utilizing reasonable effort, to the following: As the responsible official it is my intent that all emission units shall continue to be in compliance with all applicable requirements they are currently in compliance with, and all emission units shall be in compliance by the compliance dates with any applicable requirements that become effective during the permit term.</p>

<b>B. Compliance Certification — Statement for Units in Compliance*</b> (Indicate response by entering an "X" in the appropriate column)	
1. With the exception of those emission units listed in the Compliance Schedule section of this form (Part 2, below), and based, at minimum, on the compliance method specified in the associated applicable requirements, are all emission units addressed in this application in compliance with all their respective applicable requirements as identified in this application?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
2. Are there any non-compliance situations addressed in the Compliance Schedule Section of this form (Part 2)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3. If the response to Item B.2, above, is "Yes," indicate the total number of Part 2 attachments included in this submittal. <i>(For reference only)</i>	0
<p>* For Site Operating Permits (SOPs), the complete application should be consulted for applicable requirements and their corresponding emission units when assessing compliance status. For General Operating Permits (GOPs), the application documentation, particularly Form OP-REQ1 should be consulted as well as the requirements contained in the appropriate General Permits portion of 30 TAC Chapter 122. Compliance should be assessed based, at a minimum, on the required monitoring, testing, record keeping, and/or reporting requirements, as appropriate, associated with the applicable requirement in question.</p>	



Texas Commission on Environmental Quality  
 Form OP-ARI  
 Acid Rain Permit Application  
 Federal Operating Permit Processes

Date: March 25, 2013	Permit Name: Blackhawk Power Plant (O1753)	ORIS Code: 55064	
Account No.: HW-0081-I	RN: RN100217298	CN: CN600129092	
AIRS No.:	FINDS No.:	Submission: New <input type="checkbox"/> Revised <input type="checkbox"/> Renewal <input checked="" type="checkbox"/>	

Unit ID No.	NADB No.	Unit Will Hold SO <sub>2</sub> Allowances Per 40 CFR § 72.9(c)(1)	NO <sub>x</sub> Limitation*	New Units Commence Operation Date	New Units Monitor Certification Deadline
Unit 1	NA	Yes	NO	NA	NA
Unit 2	NA	Yes	NO	NA	NA

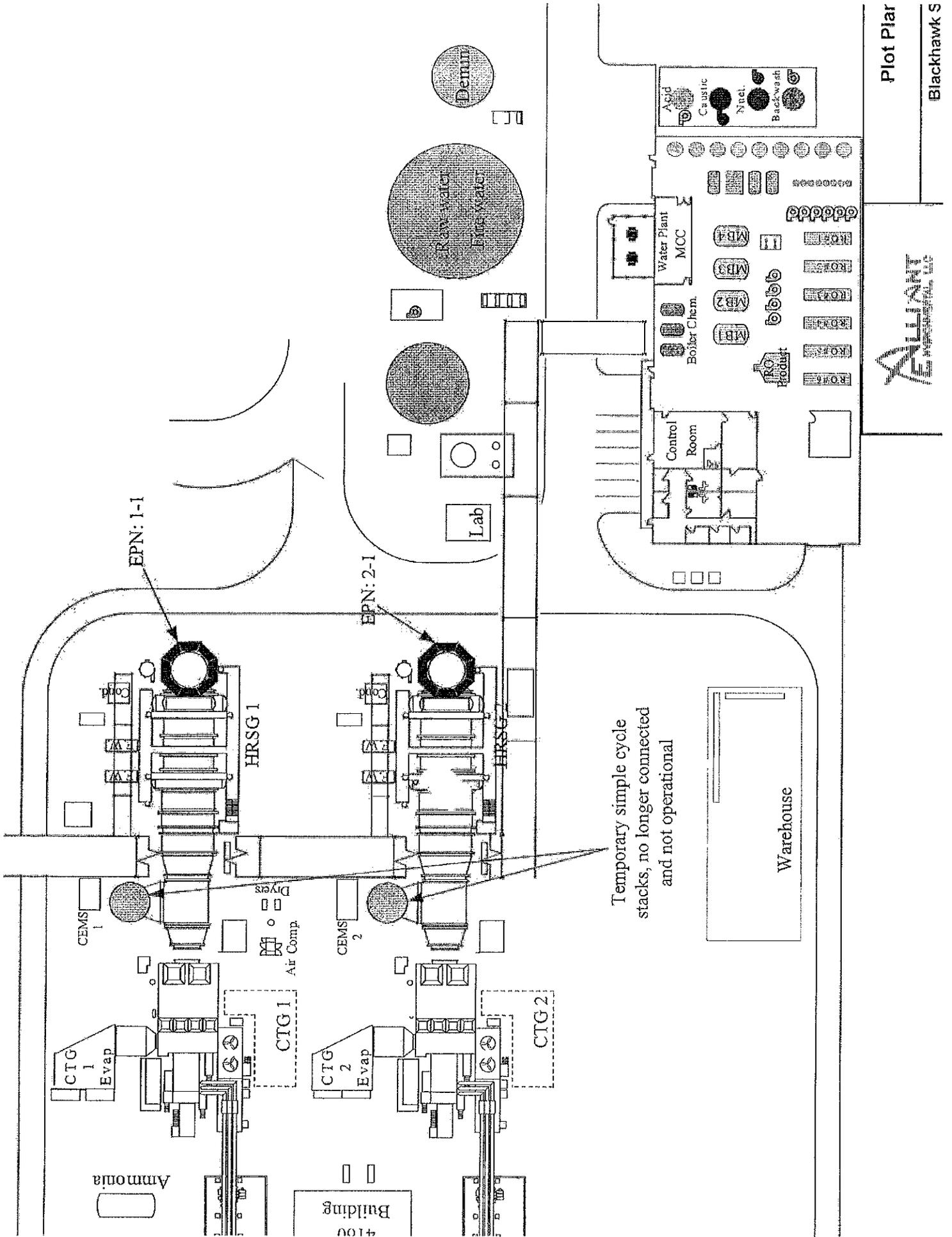
*Note: If NO<sub>x</sub> Limitation is "YES" (this applies to coal-fired units only), the unit is subject to the NO<sub>x</sub> limitations of 40 CFR Part 76 and the Designated Representative must submit an Acid Rain Program Phase II NO<sub>x</sub> Compliance plan (EPA Form 7610-28).*

TCEQ - 10096 (Revised 09/09) OP-ARI Form  
 This form is for use by facilities subject to air quality permit requirements and may be revised periodically. (APDG 5979v3)

Page 1 of 1

## **Appendix J**

### **Facility Plot Plan, Process Flow Diagram, and Area Map**



Temporary simple cycle  
stacks, no longer connected  
and not operational

Plot Plar  
Blackhawk S



EL PASO  
NATURAL  
GAS

DCP  
NATURAL  
GAS

Gas  
Chromatograph  
(GCV)

Gas  
Compressors

Fuel Flow  
Meter  
(Part 75)

Combustion  
Turbine  
Unit 1

Duct  
Burner

HRSG  
SCR

FLOW  
→

STACK

(Stack Sample)

NOx  
O<sub>2</sub>  
CO

CEMS

UNIT 1  
EPN: 1-1

Refinery Gas  
Scrubber

REFINERY  
FUEL GAS

Fuel Flow  
Meter (Part 75)

Fuel Sample  
Port

Lead Acetate  
Spectrometer  
(H<sub>2</sub>S)

Gas  
Chromatograph  
(GCV)

Gas  
Chromatograph  
(Total Sulfur)

DCS



1842 Snake River Rd  
Katy, Texas 77449

Scale: Drawing Not to Scale	Drawn by: MRS	Date: 3/3/13
	Checked by:	Date:

### Process Flow Diagram

Blackhawk Station  
Title V Permit Renewal Application  
Hutchinson County, TX

<b>Borger Energy Associates, L.P.</b>	
Project No.: 043-008	File Name: Blackhawk PFD
	Figure: 2

EI Paso  
NATURAL  
GAS

DCP  
NATURAL  
GAS

Gas  
Chromatograph  
(GCV)

Gas  
Compressors

Fuel Flow  
Meter  
(Part 75)

Combustion  
Turbine  
Unit 1

Duct  
Burner

HRSG  
SCR

FLOW  
→

STACK

(Stack Sample)

NOx
O <sub>2</sub>
CO

CEMS

UNIT 2  
EPN: 2-1

Fuel Flow  
Meter (Part 75)

Refinery Gas  
Scrubber

Refinery  
Fuel Gas

Fuel Sample  
Port

Lead Acetate  
Spectrometer  
(H<sub>2</sub>S)

Gas  
Chromatograph  
(GCV)

Gas  
Chromatograph  
(Total Sulfur)

DCS



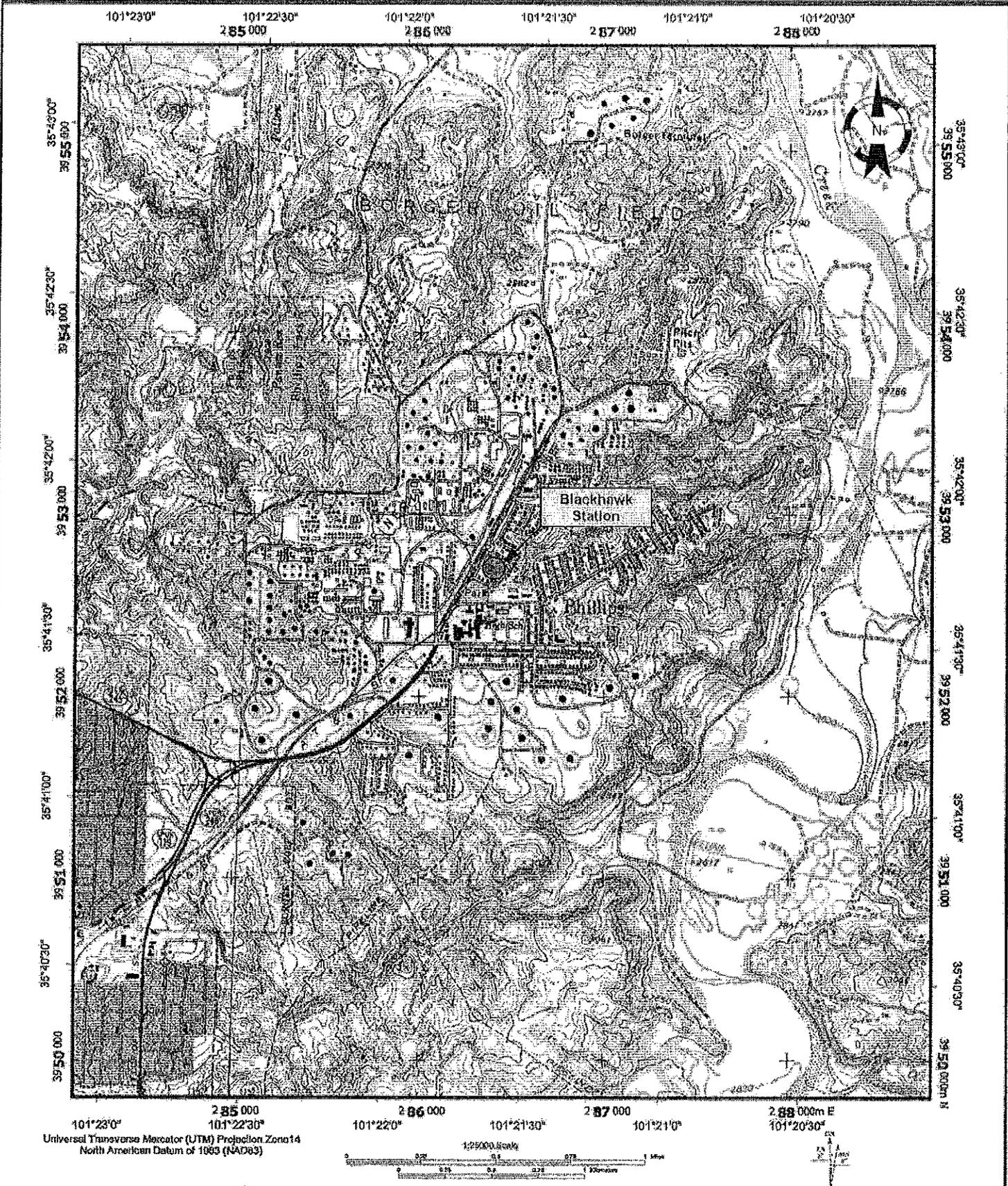
1842 Snake River Rd  
Katy, Texas 77449

Scale:	Drawn by:	Date:
Not to Scale	MRS	3/3/13
	Chk'd by:	Date:

**Process Flow Diagram**

**Blackhawk Station**  
Title V Permit Renewal Application  
Hutchinson County, TX

Project No.:	043-008	File Name:	Blackhawk PFD	Figure:	3
<b>Borger Energy Associates, L.P.</b>					



			<b>Area Map</b>		<b>Borger Energy Associates, L.P.</b>		
Scale:	Drawn by:	Date:	<b>Blackhawk Station</b> N 35° 41' 42" Latitude W 101° 21' 36" Longitude	Project No.:	File Name:	Figure:	
1:25,000	MRS	3/3/13		043-013	Blackhawk Station Area Map	4	
	Chk'd by:	Date:					



# In The Texas Commission on Environmental Quality

## REGARDING BORGER ENERGY ASSOCIATES, LP USE DETERMINATION APPLICATION NO. 07-11971 CONCERNING THE BLACKHAWK COGENERATION FACILITY

### SECOND SUPPLEMENTAL USE DETERMINATION APPLICATION NO. 07-11971

#### INTRODUCTORY STATEMENT

The information in this Second Supplemental Use Determination Application No. 07-11971 ("Second Supplement") is presented in further support and supplementation of Borger Energy Associates, LP's ("Borger") original Use Determination Application No. 07-11971 ("Application"), as previously supplemented, seeking a Positive Use Determination ("PUD") and related *ad valorem* property tax exemption for Borger's heat recovery steam generators ("HRSGs") at the Blackhawk Cogeneration Facility ("Blackhawk"). It is also provided in response to the related February 11, 2014 Notice of Technical Deficiency (the "Second NOD") sent to Borger by the Texas Commission on Environmental Quality ("TCEQ"). This Second Supplement is expressly submitted as part of the Application, without waiver of any part of the original Application or of Borger's Supplemental Use Determination Application No. 07-11971 submitted on or about June 20, 2013 to TCEQ (the "First Supplement") in response to the February 21, 2013 Notice of Technical Deficiency and the March 20, 2013 clarifying correspondence (collectively, the "First NOD").<sup>1</sup> Together, the Application, First Supplement and this Second Supplement shall be collectively referred to as the "Supplemented Application," and all portions of the Supplemented Application are incorporated herein and affirmatively reurged by reference for all purposes. For ease of reference, this Second Supplement will be divided in Sections responsive to the various Issues specified in the Second NOD ("New Issues").

#### PRELIMINARY ISSUE: Proper Application of TEXAS TAX CODE §11.31(k), (l) and (m) and Their Relationship to TEX. CONST. ART. VIII §1-1<sup>2</sup>

<sup>1</sup> Except as specifically supplemented herein, Borger stands on the Application and First Supplement as sufficient responses to the Second NOD.

<sup>2</sup> As an even more preliminary matter, Borger asserts that the Second NOD, in many respects, is not a NOD at all, inasmuch as it simply sets out the ED's present position and opinions and makes no effort to solicit additional information relative thereto. The ED should not be allowed to attempt to use a NOD process just to engage in a "war of attrition" and try to deny Borger a complete administrative process.

The ED's continued assertion that a negative use determination for Borger's HRSGs is possible notwithstanding TEX. TAX CODE §11.31(k), (l) and (m) remains wholly erroneous. In 2007, the Texas Legislature expressly amended Section 11.31 of the TEXAS TAX CODE ("TTC") to add Subsections (k), (l) and (m), *inter alia*, to recognize previously unrecognized pollution control functions and benefits of various, specific equipment. The Texas Legislature literally **mandated** that TCEQ:

**shall** adopt rules establishing a nonexclusive list of facilities, devices, or methods for the control of air, water or land pollution, which **must** include: ... (8) **heat recovery steam generators**.

TEX. TAX CODE Ann. § 11.31(k). ("Subsection (k)", emphasis added.)

The Legislature was equally adamant that items may be "removed from the list only if the Commission **finds compelling evidence** to support the conclusion that the item... **does not** render pollution control benefits." TEX. TAX CODE §11.31(l), emphasis added. In response, TCEQ adopted an Equipment and Categories List ("ECL"), which included HRSGs. See 30 TAC §17.14(a) and Figure: 30 TAC §17.14, #B-8. TCEQ also expressly adopted TEX. TAX CODE §11.31(l) as part of its own regulations. See 30 TAC §17.14(b)(2). Thereafter, although required to revisit the ECL at least once every three years, see TEX. TAX CODE §11.31(l); 30 TAC §17.14(b), to this very day, TCEQ has **never** removed HRSGs from its ECL or its successor, the Expedited Review List ("ERL"). See Figure: 30 TAC §17.14(a) (versions *eff.* 2008 and 2010).<sup>3</sup>

HRSGs are eligible for positive use determinations because they have been expressly defined by statute and regulation as pollution control equipment.<sup>4</sup> TCEQ has never found compelling evidence that HRSGs do **not** render pollution control benefits.<sup>5</sup> *Id.* The ED's interpretation of TEX. TAX CODE §11.31(k), (l) and (m), on its face, is in direct conflict with the ECL, ERL and the Legislature's fundamental mandates in its governing laws, TEX. TAX CODE §11.31(k), (l) and (m). Specifically, but without limitation, the TEXAS TAX CODE completely defeats any assertion that a 100% negative use determination is even legally possible for a HRSG:

Notwithstanding the other provisions of this section, ***if the facility, device or method for the control of air, water, or land pollution described in an application for an exemption under this section is a facility, device, or method included on the list***

<sup>3</sup> For definitional purposes only, Borger notes that HRSGs are actually described by TCEQ itself in its ERL at #B-8 as "[a] counter-flow heat exchanger consisting of a series of super-heater, boiler (or evaporator) and economizer tube sections, arranged from the gas inlet to the gas outlet to maximize heat recovery from the gas turbine exhaust gas."

<sup>4</sup> This is completely appropriate. As discussed in the First Supplement at length, see First Supplement, ISSUE 2 Response, ¶2, Blackhawk's HRSGs both save "input" fuel and reduce "output" air emissions in the form of nitrogen oxide ("NOx"), among other pollutants.

<sup>5</sup> Significantly, TCEQ did not remove HRSGs from the ECL/ERL despite having *had* to reconsider the question, at least, in 2010.

**adopted under Subsection (k), the executive director... SHALL determine that the... facility, device, or method described in the application IS used WHOLLY OR PARTLY as a facility, device or method for the control of air, water, or land pollution ....**

TEX. TAX CODE §11.31(m) (“Subsection (m),” emphasis added).<sup>6</sup>

Neither TCEQ nor the ED has any power inconsistent with that delegated to them by the Legislature. *Public Utilities Commission v. City Public Service Board*, 53 S.W.3d 310, 312 (Tex. 2001); *Tennessee Gas Pipeline Co. v. Rylander*, 80 S.W.3d 200, 203 (Tex. App.-Austin 2002, pet. denied). To understand their relevant power here, one need only look to TEX. TAX CODE §11.31. In so doing, the primary objective must be to give effect to the Legislature's intent. *State v. Shumake*, 199 S.W.3d 279, 284 (Tex. 2006). The ED should give effect to the Legislature's intent “first and foremost” via the statutory text. *Lexington Ins. Co. v. Strayhorn*, 209 S.W.3d 83, 85 (Tex. 2006). The ED must rely on the plain meaning of the text, unless a different meaning is supplied by legislative definition or is apparent from context, or unless a plain meaning leads to absurd or unreasonable results. *City of Rockwall v. Hughes*, 246 S.W.3d 621, 625-26 (Tex. 2008); *see also* TEX. GOV'T CODE § 311.011 (“Words and phrases shall be read in context and construed according to the rules of grammar and common usage,” but “[w]ords and phrases that have acquired a technical or particular meaning, whether by legislative definition or otherwise, shall be construed accordingly.”). These principles even take precedence over the general rule that tax exemptions are strictly construed. *Sharp v. Tyler Pipe Indus., Inc.*, 919 S.W.2d 157, 161 (Tex. App.—Austin 1996, writ denied).

Since the subject statutory and regulatory texts are not ambiguous, it is not even appropriate to resort to rules of construction or extrinsic aids: “Where text is clear, text is determinative of that [legislative] intent.” *Entergy Gulf States, Inc. v. Summers*, 282 S.W.3d 433, 437 (Tex. 2009) (citing *In re Estate of Nash*, 220 S.W.3d 914, 917 (Tex. 2007); *Shumake*, 199 S.W.3d at 284; and *Alex Sheshunoff Management Services v. Johnson*, 209 S.W.3d 644, 651–52 (Tex. 2006)). Also, it is presumed that: 1) the Legislature knew background law and acted with reference to it, *see Acker v. Texas Water Commission*, 790 S.W.2d 299, 301 (Tex. 1990); 2) the Legislature selected statutory words, phrases, and expressions deliberately and purposefully, *see Texas Lottery Commission v. First State Bank of DeQueen*, 325 S.W.3d 628, 635 (Tex. 2010); *Shook v. Walden*, 304 S.W.3d 910, 917 (Tex. App.-Austin 2010, no pet.); and that 3) “the entire statute is intended to be effective” and “a just and reasonable result is intended.” TEX. GOV'T CODE § 311.021(2), (3).

“An administrative agency is said to act arbitrarily or capriciously where, among other things, it fails to consider a factor the Legislature has directed it to consider....” *City of Waco v. Texas Commission on Environmental Quality*, 346 S.W.3d 781, 819 (Tex. App.-Austin 2011,

---

<sup>6</sup> The ED's misguided focus seems to be on the **primary economic motivation of the HRSGs' owners, NOT on the actual function and pollution control benefits of the HRSGs themselves.** This reasoning, carried to its logical conclusion, would eliminate pollution control exemptions for any pollution control devices employed in facilities such as refineries and chemical plants built for any economic gain, which was the exact reason the Legislature negated this reasoning in enacting TEX. TAX CODE §11.31(k), (l) and (m).

pet. denied) (citing *City of El Paso v. Public Utilities Commission*, 883 S.W.2d 179, 184 (Tex. 1994)). Under TEX. TAX CODE §11.31(m), any equipment listed in TEX. TAX CODE §11.31(k) is necessarily entitled to **some** pollution control exemption, and any decision by the ED, if any, which results in a 100% negative use determination for Blackhawk's HRSGs would be arbitrary and capricious and wholly inconsistent with TEX. TAX CODE §11.31(k), (l) and (m). See, e.g., *Rodriguez v. Service Lloyds Ins. Co.*, 997 S.W.2d 248, 254–55 (Tex. 1999) (“If the Commission does not follow the clear, unambiguous language of its own regulation, we reverse its action as arbitrary and capricious.”).<sup>7</sup> Administrative rules are interpreted like statutes because they have the force and effect of statutes. *Rodriguez*, 997 S.W.2d at 254.

In an obvious but very belated effort to bolster his misinterpretation of TEX. TAX CODE §11.31(k) and (m), for the first time since the Application was filed in 2008, the ED now asserts a new argument essentially claiming that TEX. TAX CODE §11.31(m) unconstitutionally disregards TEX. CONST. ART. VIII §1-l's authorization of the pollution control exemption “only for property used to meet or exceed an environmental rule.” See Second NOD, p. 1, ¶3. However, the Executive Director's (“ED”) analysis of the relationship between TEX. CONST. ART. VIII §1-l and TEX. TAX CODE (“TTC”) §11.31(k) and (m) is neither complete nor properly consistent.<sup>8</sup> It is simply incorrect.

Initially, TEX. CONST. ART. VIII §1-l(a) specifically provides:

(a) The legislature by general law may exempt from ad valorem taxation all or part of real and personal property used, constructed, acquired or installed wholly or partly *to meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state or a political subdivision of this state* for the prevention, monitoring, control, or reduction of air, water, or land pollution.

In *Mont Belvieu Caverns, LLC v. Texas Commission on Environmental Quality*, 382 S.W.3d 472, 476 (Tex. App.—Austin 2012, no pet.) (“*Mont Belvieu*”), the Court clearly explained that “a facility, device, or method for the control of air, water, or land pollution” under TEX. TAX CODE §11.31(a) is - **by legislative definition** - in both fact and law, “used, constructed, acquired, or installed wholly or partly to meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution” under TEX. TAX CODE §11.31(b):

<sup>7</sup> Neither the ED nor the TCEQ itself would be entitled to any deference from the Courts of this State if ruling otherwise, because the subject statute and implementing regulations are not ambiguous. *Railroad Commission v. Texas Citizens for a Safe Future & Clean Water*, 336 S.W.3d 619, 624–25 (Tex. 2011); *City of Waco*, 346 S.W.3d at 800 (citing *Texas Citizens*, 336 S.W.3d at 625).

<sup>8</sup> Among other things, TEX. TAX CODE §11.31(k) and (m) do, as the ED admits: 1) exempt an applicant from providing detailed information regarding the anticipated environmental benefit for property on the TEX. TAX CODE §11.31(k) list; and 2) establish an expedited review process. The relevant point to the ED's admission, however, is that the ED has completely ignored his obligation to provide expedited review of the Application, which has been pending since 2008. Borger has provided timely responses (based on agreed or regulatory deadlines) to every inquiry made by the ED. Still, resolution has yet to occur, and this matter literally was pending for years with no action by the ED whatsoever.

Subsection (a) of [TTC] section 11.31 states that “[a] person is entitled to an exemption from taxation of all or part of real and personal property that the person owns and that is used wholly or partly as a facility, device, or method for the control of air, water, or land pollution.” TEX. TAX CODE ANN. § 11.31(a), emphasis added. A “facility, device, or method for the control of air, water, or land pollution” is defined in subsection (b) of section 11.31 as:

land that is acquired after January 1, 1994, or any structure, building, installation, excavation, machinery, equipment, or device, and any attachment or addition to or reconstruction, replacement, or improvement of that property, that is used, constructed, acquired, or installed wholly or partly to meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution.

*Id.* § 11.31(b), emphasis added.

In summary, the Constitutional requirement that pollution control equipment (“PCE”) “meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state or a political subdivision of this state” is expressly, legislatively incorporated into TEX. TAX CODE §11.31(a)’s requirement that PCE be a “facility, device, or method for the control of air, water, or land pollution” through TEX. TAX CODE § 11.31(b)’s definition of “facility, device, or method for the control of air, water, or land pollution.” *See Mont Belvieu Caverns, LLC v. Texas Commission on Environmental Quality*, 382 S.W.3d at 476.

In application, then, Borger’s HRSGs have been legislatively determined to be “a facility, device, or method for the control of air, water, or land pollution” under TEX. TAX CODE §11.31(k) and (m). This means the Texas Legislature has already determined that HRSGs are: 1) “a facility, device or method for the control of air, water, or land pollution,” *see* TEX. TAX CODE §11.31(a), (k), (m); 2) “used, constructed, acquired, or installed wholly or partly to meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution,” *see* TEX. TAX CODE §11.31(b); TEX. CONST. ART. VIII §1-1(a). Given this Legislative predetermination -- which is entirely consistent with and satisfies all Constitutional requirements, *see* TEX. CONST. ART. VIII §1-1(a) – the ED cannot require additional specific citations of Supporting Laws or any so-called “nexus” between those laws and Borger’s HRSGs, *see* Borger’s Response to New Issue 1, below; nor can he legally justify any 100% negative use determination.

In *Mont Belvieu*, the Third Court of Appeals effectively recognized that “variable,” *see* Figure: 30 TAC §17.14(a), Part B, like the “wholly or partly” language in TEX. TAX CODE §11.31 and TEX. CONST. ART. VIII §1-1(a), means that equipment’s involvement in “production,” if any, does not negate its entitlement to a Positive Use Determination and *ad valorem* tax exemption based on its pollution control function. The ED persistently reads the “or partly” out

of the Constitutional and legislative mandates.<sup>9</sup> *Mont Belvieu* recognizes that a pollution-control feature or function should be exempt notwithstanding a device's capacity also to produce goods and services, if any. *See, e.g., Mont Belvieu*, 382 S.W.3d at 476, *citing* 30 TAC §11.31(c). Clearly, the ED's interpretation of TEX. TAX CODE §11.31(k), (l) and (m) cannot stand in light of governing statutory and regulatory requirements.

TEX. TAX CODE §11.31(m) requires the Executive Director to determine the positive percentage of pollution control function associated with §11.31(k)-listed equipment, but that is as far as TEX. TAX CODE §11.31(m) goes. The ED, at least inferentially, seemingly would engraft an additional condition upon the statute which the Legislature clearly did not include or intend (and which, in fact, is precisely contrary to the statute for the reasons set out above): that "partly" in TEX. TAX CODE §11.31(m) can include 0%. Based on the authorities cited above, no rule, regulation, proclamation or other action of an agency can contradict or alter the statute giving rise to it. *See, e.g., Public Utilities Commission v. City Public Service Board*, 53 S.W.3d at 312; *Tennessee Gas Pipeline Co. v. Rylander*, 80 S.W.3d at 203. Consequently, the ED's attempt to engraft any additional condition upon the unconditional mandate of Subsection (m) – especially one which would effectively nullify it – are simply ineffective and void, and the ED's stated "interpretation" of TEX. TAX CODE §11.31(k) and (m) must be reconsidered or disregarded by the TCEQ Commissioners.

#### **ISSUE 1: Review of Environmental Rule Citations.**

For reasons cited above, Borger continues to assert that TEXAS TAX CODE §11.31(m) eliminates the need for any regulatory citation in support of the Supplemented Application. *See also*: First Supplement, Appendix, ISSUE 2: Rule, Regulatory and/or Statutory Support, which is fully incorporated and expressly reurged herein. Also, Subsection (m) *explicitly* does not require any submission of information concerning "the anticipated environmental benefits from the installation of the facility, device or method for the control of air, water, or land pollution" under

---

<sup>9</sup> Texas Attorney General Opinion JC-0372 (2001) agrees that equipment can be involved in production yet still be entitled to a Positive Use Determination for pollution reduction:

Section 11.31 is broadly written, and we believe its plain meaning is clear. It embraces any property, real or personal, "that is used wholly or partly as a facility, device, or method for the control of air, water or land pollution ..." (emphasis added)."

Next, we consider whether section 11.31 excludes from its scope pollution-reducing production equipment. Significantly, the statute applies to property used "wholly or partly" for pollution control. *See id.* § 11.31(a). To qualify for the exemption, property must be used "wholly or partly" to meet or exceed environmental rules. *See id.* § 11.31 (b). The term "wholly" clearly refers to property that is used only for pollution control, such as an add-on device. *See Merriam Webster's Collegiate Dictionary* 1351 (10th ed. 1993) (defining "wholly" to mean "to the full or entire extent: ... to the exclusion of other things"). The term "partly," however, embraces property that has only some pollution-control use. *See id.* at 848 (defining "partly" to mean "in some measure or degree"). This broad formulation clearly embraces more than just add-on devices. Furthermore, that statute clearly embraces not only "facilities" and "devices" but also "methods" that prevent, monitor, control, or reduce pollution. "Methods" is an extremely broad term that clearly embraces means of production designed, at least in part, to reduce pollution. *See id.* at 732 (defining "method" to include "a way, technique, or process of or for doing something").

TEX. TAX CODE §11.31(c)(1), which, of course, would necessarily encompass the environmental rules and regulations being met or exceeded by “the facility, device or method for the control of air, water, or land pollution.”

In the alternative, however, Borger nevertheless further specifically responds to New Issue No. 1 of the Second NOD, as requested, as follows:

1. The ED has already determined HRSGs satisfy various Supporting Laws by granting 19 final 100% Positive Use Determinations based thereon, most notably on 40 CFR §60.44Da, also cited by Borger. Any rejection at this late date of 40 CFR §60.44Da or any of Borger’s Supporting Laws which have been previously accepted and approved by TCEQ as Supporting Laws would run afoul of equal protection principles and the requirements of uniformity, equality and fairness in approach. *See* TEX. TAX CODE § 11.31(g)(2); TEX. CONST. art. VIII, § 1(a); *Reynolds v. Sims*, 377 U.S. 533, 565 (1964). Treating similar properties disparately is the very definition of arbitrary and capricious action. *See, e.g., Contractors Transp. Corp. v. U.S.*, 537 F.2d 1160, 1162 (4th Cir. 1976); *Brennan v. Gilles & Cotting, Inc.*, 504 F.2d 1255, 1264-65 (4th Cir. 1974).

2. Excepting CAIR, Borger reiterates that its HRSGs’ use causes the Blackhawk facility and its pertinent components, as applicable, to meet or actually exceed all the previously cited applicable emissions standards in the Supporting Laws cited in the First Supplement and its Appendices. Regardless of which Supporting Law is considered, Blackhawk’s HRSGs accomplish their related, relevant emissions reductions and resulting regulatory compliance or super-compliance with the Supporting Laws by reducing use of fossil fuel and, hence, all related emissions.<sup>10</sup> As previously discussed, *see, e.g.,* First Supplement, ISSUE 5 §I, Introductory Paragraph, p. 4, Borger’s primary use determination methodology compared, on a lbs-NOx/lb-steam produced basis: a) actual nitrogen oxide (“NOx”) emissions from the Blackhawk Facility’s two natural gas combustion turbines (“CTs”), each with a HRSG; to b) NOx emissions from the boiler (“Boiler”) at the Wood River Borger Refinery (scaled to match the Blackhawk HRSGs’ capacity) which was replaced by the HRSGs. Specifically, the use of Blackhawk’s HRSGs as described in the Supplemented Application results in significantly lower NOx and other relevant emissions for the same amount of steam that could be generated by the Boiler without the HRSGs’ pollution control effects. The HRSGs accomplish this result by capturing/recycling and using heat generated by Blackhawk’s combustion turbines to convert water into additional steam without use of additional fossil fuel and its associated, additional NOx and other relevant emissions addressed in each of the previously cited Supporting Laws. Blackhawk clearly would produce more NOx and other pertinent emissions were it required to function with boilers instead of HRSGs, and in that case, it could or would exceed the emissions standards of various Supporting Laws, and Borger’s HRSGs were, in fact, acquired and used to insure Blackhawk’s emissions were actually less than those allowed under a variety of applicable environmental regulations and laws, including all Supporting Laws.

3. EPA has specifically cited the environmental benefits achieved from HRSGs. According to EPA, the use of such a system “decreases NOx emissions by 14 percent over

---

<sup>10</sup> In addition, of course, the duct burners within Borger’s HRSGs also burn off additional emissions which remain in the exhaust stream that passes through the HRSGs.

simple-cycle combustion turbines (“SCCTs”) and 89 percent over existing coal electricity generation plants. In addition, CO<sub>2</sub> emissions will be 5 percent lower than emissions from SCCTs and 64 percent lower than existing coal plants.” See EPA, Economic Impact Analysis of the Stationary Combustion Turbines NSPS: Final Report, Feb. 2006, pp. 2-3, 2-4. In sum, without HRSGs, more energy would be needed for Blackhawk to produce the same amount of steam; and, as EPA has noted, more emissions would result.

4. The Second NOD suggests the ED’s true focus is not on the practical, mechanical points of emissions reduction and fuel conservation discussed above, but on whether a HRSG is *specifically or uniquely required* to satisfy a Supporting Law. See, e.g., Second NOD, p. 2, lns. 1-5. Borger’s cited Supporting Laws speak for themselves, and some do not expressly require the use of HRSGs. However, to be abundantly clear, again, there is still absolutely nothing in Texas’ jurisprudence or laws governing pollution control exemptions which requires that a Supporting Law be explicitly limited and related to the particular piece of equipment for which an exemption is sought. Beginning with the TEXAS TAX CODE, Section 11.31(b) only requires that:

In this section, "facility, device, or method for the control of air, water, or land pollution" means... any structure, building, installation, excavation, machinery, equipment, or device, and any attachment or addition to or reconstruction, replacement, or improvement of that property, that is used, constructed, acquired, or installed wholly or partly to **meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution.** (Emphasis added.)

Similarly, 30 TAC §17.4(a) merely requires, in pertinent part:

To obtain a positive use determination, the pollution control property must be used, constructed, acquired, or installed wholly or partly to meet or exceed **laws, rules, or regulations adopted by any environmental protection agency of the United States, Texas, or a political subdivision of Texas, for the prevention, monitoring, control, or reduction of air, water, or land pollution.** (Emphasis added.)

Clearly, the focus of any Supporting Law, as such, is only on the actual “**prevention, monitoring, control, or reduction of air, water, or land pollution**” it requires (e.g., emissions standards and limitations), *id.*, and not on specific equipment which could be used to meet or exceed that requirement. By patently *not* restricting Supporting Laws to those aimed at specific equipment, the Texas Legislature obviously intended and recognized that various equipment might well be used to satisfy or exceed the same Supporting Laws. Stated another way, Supporting Laws may function as such even where they contain no guidance concerning the specific equipment which may be used to meet or exceed their standards. This only stands to reason, as the requirement of a Supporting Law was only intended to assure pollution control function, not to limit the ways that control could be accomplished as a practical matter. There simply is no statutory or regulatory requirement that Supporting Laws actually require installation of a HRSG or specify standards that could only be met by a HRSG. It is enough that Supporting Laws (if their citation is needed at all – and here, it is not) be “for the prevention,

monitoring, control, or reduction of air, water, or land pollution,” TEX. TAX CODE §11.31(b), and even the ED cannot deny this test is met: he makes no claim that any of the Supporting Laws are not “for the prevention, monitoring, control, or reduction of air, water, or land pollution.”

a. Any requirement by the ED that a HRSG be specifically or uniquely required to satisfy a Supporting Law would ignore and effectively and illegally rewrite the Legislature’s mandates discussed above, as well as TCEQ’s own implementing regulations, by impermissibly engrafting new conditions upon those unambiguous laws.

b. Such also would ignore and violate formal rulemaking procedures under the Texas Administrative Procedure Act (“APA”) by effectively amending 30 TAC §17.4(a). A “rule” is any “state agency statement of general applicability that ... implements, interprets, or prescribes law or policy,” including “the amendment or repeal of a prior rule.” TEX. GOV'T CODE §2001.003(6). A state agency can only promulgate new rules through formal rulemaking procedures, including prior notice of a proposed new rule and an opportunity for public comment, legislative review, and a formal order adopting it. TEX. GOV'T CODE §§2001.23; 2001.029; 2001.032-.033. The APA also requires the advance notice to contain enough information to allow interested persons to determine if they need to participate to protect their own rights. *Texas Workers' Compensation Commission v. Patient Advocates*, 136 S.W.3d 643, 650 (Tex. 2004).

Chapter 17 of the Texas Administrative Code was created to establish the process by which any owner of pollution control property could obtain a use determination. 30 TAC §17.1. The imposition by the ED of any requirement that a HRSG must be specifically or uniquely required to satisfy a Supporting Law would patently implement new law or describe a new procedure, and its new proclamation necessarily would be one of general applicability. Such changes in administrative law can only be made through the formal notice and comment process discussed above. *See, e.g., El Paso Hospital District v. Texas Health and Human Commission, et al.*, 247 S.W.3d 247, 714 (Tex. 2008).

5. Relative to New Issue 1 of the Second NOD, Borger withdraws its reference to CAIR as a Supporting Law concerning Blackhawk’s HRSGs. Otherwise, however, Borger notes that most of the ED’s specific contentions concerning Borger’s citations of Supporting Laws are simply based on the imposition of the invalid premise that Supporting Laws must actually require installation of a HRSG or specify standards that could only be met by a HRSG. To that extent, the ED’s contentions remain insupportable for the reasons set forth in Paragraphs 1-4, above. However, relative to specific Supporting Laws, Borger further responds to the Second NOD as follows:

a. **BACT:** Even if a BACT analysis was done which did not refer to Blackhawk’s HRSGs specifically as pollution control equipment (which actually is understandable, given the HRSGs’ admitted dual functions of increasing efficiency and controlling/preventing pollution), Blackhawk’s HRSGs were unquestionably part of the facility’s documented overall design, and they clearly impacted Blackhawk’s productive output and emissions which were and are subject to the air permit allowances at issue. Moreover, the fact

that certain equipment was **designated** as specific (or exclusively) pollution control equipment did not prevent other equipment, particularly “dual-function” equipment like HRSGs, from **contributing** their pollution control **effects** to the plant’s overall emissions. Blackhawk’s BACT limits did not have to be specifically tied to its HRSGs’ use for the HRSGs to contribute to the meeting or exceeding (via emissions reduction) of their emissions standards. Borger only needs to establish, as it has done, that its HRSGs have, in fact, contributed to the meeting or exceeding of the emissions standards established under its BACT determinations, regardless of how those standards were determined. Contrary to the ED’s Second NOD, Borger only needs to establish the BACT analysis resulted in emissions standards which the HRSGs help meet or exceed, which it has done.

b. **GHGs:** The fact that the GHG limits do not yet apply to Borger’s facility does not in any way disqualify its HRSGs from eligibility for property tax exemption under the TTC. If anything, it establishes that Borger’s use of its HRSGs exceeds the cited GHG regulations’ requirements by assisting in reducing GHGs (compared to a boiler’s use) even before those regulations become applicable to the facility. Early compliance counts, because early compliance is but another way to exceed regulatory requirements.

c. **NAAQS:** Borger recognizes the NAAQS are “not an emission limit for a particular facility...” (*see* Second NOD, p. 2, fourth full paragraph). They do not have to be to qualify as Supporting Laws. NAAQS **are** “laws, rules, or regulations adopted by any environmental protection agency of the United States, Texas, or a political subdivision of Texas, for the prevention, monitoring, control, or reduction of air, water, or land pollution,” *see* 30 TAC §17.4(a), which Borger’s HRSGs are “used... partly to meet or exceed.” *Id.* That is all that is required for a statute or regulation to qualify as a Supporting Law.

d. **NSPS:** The ED’s counterargument (*see* Second NOD, p. 2, last paragraph) to Borger’s First Supplement, p. 3, and its APPENDIX – ISSUE 2 concerning 40 CFR §60.44Da (“Da”) is undermined by its own premises. Therein, the ED notes, in pertinent part:

**...Da is a standard of performance for electricity steam generating units, i.e., the HRSG, and provides emission limits....**

The ED then states an internally inconsistent and logically erroneous conclusion that:

Given that Da only applies to the HRSG itself, it does not appear that use of the HRSG is required to meet Da or that it helps the facility meet the emission limit for the HRSG itself. [*Id.*]

Again, Supporting Laws do not have to be specifically aimed at HRSGs or actually require the use of HRSGs to meet their emissions limitations. However, the ED concedes Da **does** apply specifically to HRSGs. Further, based on the ED’s premise that Da **only** applies to HRSGs, HRSGs logically must be required to meet Da, or Da would apply to nothing. Consequently, it is patently, and logically, incorrect for the ED to disregard Da as a Supporting

Law by claiming HRSGs are not required to meet Da or that HRSGs do not help meet Da's emissions limits applicable to HRSGs.<sup>11</sup>

The determinative point is that, as discussed above and in the First Supplement, Blackhawk's HRSGs do help meet or exceed the relevant Da required emissions limits<sup>12</sup> by using less fuel – and hence, creating less emissions - than a boiler of similar capacity.

## **ISSUE 2: Calculation of an Appropriate Partial Positive Use Determination**

As an initial matter, again, the ED continues to improperly persist in attempting to dictate appropriate methodologies for the calculation of Borger's "Tier IV" positive use determination when he simply does not have such authority. As indicated therein, the Application was specifically filed under "Tier IV." *See* 30 TAC §17.2(16) (2008). Under Tier IV, it is **the Applicant** who has the right to determine the "method and the calculation used to calculate the use percentage." *See* 30 TAC §17.10(d)(6) (2008); *see also* First NOD, Issue 5. Because the Application involves no property which is **not** on the Equipment and Categories List, the ED has no right to require Borger to utilize any particular formula or calculation. *See* 30 TAC §17.10(d)(5) (2008).

Neither does Borger fully accept or agree with the ED's characterization of its Application and First Supplement. [*See, e.g.*, Second NOD, p. 3, New Issue 2.] The Application and First Supplement speak for themselves. However, to the extent New Issue 2 requests additional information, Borger submits the following in further supplementation of the Application and without waiver of anything it has previously provided to the ED or TCEQ.

1. **Amended Avoided NOx Emissions Approach:** As to Borger's Amended Avoided NOx Emissions Approach, *see* First Supplement, Issue 5, Part I, the ED's counter that the comparison between the NOx emissions from the cogeneration unit and the "replaced" boiler "yields different percentages for similar equipment," *see* Second NOD p. 3, second full paragraph, clearly presents no reason to discard the methodology. Clearly, even the ED's current or modified "Tier III" CAP formula will yield different percentages for similar equipment depending on the specific facility and conditions in which the subject equipment is used and the CAP is applied. (Otherwise, there would be no need for a formula at all, and presumably, the ED would have included HRSGs in the "Tier I" Table long ago.)

---

<sup>11</sup> The ED's point that "the absence of a HRSG (that is subject to regulation under Da) would not affect emissions limitations of **other** sources at the plant..." (*see* Second NOD, p. 3, Ins. 1-5, emphasis added) is just another irrelevancy, given that the HRSGs **do** help meet or exceed the Da limitations that **are** relevant to the Application.

<sup>12</sup> To be clear, Subpart Da actually regulates each "electric utility steam generating unit." *See* 40 CFR §60.40Da(a). An "electric utility combined cycle gas turbine" is **part** of such a unit, *see* 40 CFR §60.41Da, and a HRSG is **part** of the "combined cycle gas turbine system" regulated by Subpart Da, *see* 40 CFR. §60.40Da(a)(4). Thus, although not required, there is a connection, or "nexus," between HRSGs and 40 CFR §60.44Da, and HRSGs do, in fact, help meet or exceed the emissions standards of 40 CFR §60.44Da as Borger has explained; it is just that none of this is precisely as the ED describes it.

To illustrate, it is axiomatic that different generating plants will operate at different efficiencies (e.g., different heat rates), even if they are mechanically identical. Even the same (not just similar) pollution control equipment will eliminate differing levels of emissions and generate varying amounts of Byproduct or Marketable Product (if any). Costs of its storage, transport and other Production Costs, as applicable, all will necessarily vary, too, perhaps widely, along with the pollution control equipment's own Capital Costs New and Capital Costs Old. Each of these factors will fluctuate because, among other things: relevant markets; specific environments and other operating conditions; fuel quality; equipment maintenance; plant operating times; and other relevant factors effecting efficiency, emissions, costs and revenues all obviously differ by location. Thus, a lack of uniform percentages across all HRSG Owners' ("Applicants") pending Applications for PUDs based on emissions reductions actually supports the overall results of Borger's analysis. Certainly, Borger's "Tier IV" measurement of actual emissions reduction is far more relevant to Borger's HRSGs' pollution control effects than the "Tier III" CAP which is focused solely on costs and revenue, however modified. While it might be expedient for the ED to seek a single answer, Borger has maintained from the beginning that there simply is, in fact, no precise, "one size fits all" answer, nor does there have to be. See, e.g., page 20 of Borger's October, 2012 Response Brief ("Brief"), which secured the TCEQ Commissioners' ultimate, unanimous reversal and remand of the ED's previous denial of Borger's Application and which is incorporated herein for all purposes by reference.

Similarly, the ED's criticism that a calculation comparing emissions of Blackhawk's HRSGs with a boiler of the same capacity does not "distinguish the proportion of property that is used to control, monitor, prevent, or reduce pollution from the proportion of property that is used to produce goods or services," see Second NOD p. 3, second full paragraph, is flawed in several respects. First, once again, it is completely at odds with the ED's *own* approach in attempting to impose use of a "Tier III" CAP, see Figure: 30 TAC §17.17(b), even as modified by his First and Second NODs. The CAP's use of purely **economic** factors (e.g., costs and revenues), in fact, obviously has *nothing* to do with emissions reduction and patently does **not** measure pollution control or prevention at all. Consequently, it is logically incapable of making any distinction concerning the proportion of property used to control, monitor, prevent, or reduce pollution from the proportion of property used to produce goods or services. The ED's additions of *costs* associated with "a boiler(s) required to produce the same amount of steam produced by the HRSGs," see First NOD p. 2, Issue 4, and the "costs related to the duct burners including fuel costs," see, Second NOD p. 3, fourth full paragraph, do nothing to mitigate this issue with the CAP. As a matter of fact, it is far more logical and rational to focus on actual emissions reductions than *any* costs or revenue differences when determining the percentage of pollution control or prevention provided by HRSGs (or **any** pollution control equipment, for that matter).

Second, and as a matter of law, the ED should recognize that neither the controlling statute nor TCEQ's implementing regulation itself actually require a determination of "production" function as a prerequisite to a valid PUD based on pollution control or prevention;

all that is required is a determination of pollution control or prevention itself. See TEX. TAX CODE §11.31(d), (m); 30 TAC §17.12(3).<sup>13</sup>

Borger's Amended Avoided NOx Emissions Approach does, in fact, calculate a specific emissions reduction/pollution control effect and presents a rational, proper and well supported basis for a 91.4% PUD which should be recognized by Staff and accepted by the ED and Commission.

2. **Executive Director's 61% PUD Calculation:** Except for what it has previously submitted, Borger was not and is not privy to the motivations or considerations that went into the Executive Director's 61% Positive Use Determination calculation discussed in Borger's First Supplement, Issue 5, Part II. Regardless of why the Executive Director made (or later changed) that decision, however, the relevant points are that he did, in fact, make such a determination; and then secured affirmative relief based on it in the form of a remand. The ED then took advantage of that remand granted on other grounds to **completely** reverse and affirmatively revoke all of Borger's previously awarded 100% Positive Use Determination, contrary to the basis for the remand in the first place. Whatever his underlying rationale, the ED should now be estopped from awarding Borger anything less than a 61% Positive Use determination on its Supplemented Application.

Further, the ED's rationale for not utilizing a 61% PUD assumes that the "increased efficiency" and "pollution control" effects of "dual function" equipment such as HRSGs are mutually exclusive and together must equal and be limited to a combined 100%, when neither the governing statutes nor regulations are so limited. There is no conceptual reason, for instance, why equipment could not yield both a 100% improvement in efficiency and a 100% improvement in emissions control at the same time.

3. **Modified "Tier III" CAP Calculations:** The bottom line of the First and Second NODs appears to be that the ED is simply, and arbitrarily, unwilling to accept any Tier IV methodology that is not his regulatory Tier III CAP calculation -- albeit as revised **by him** (the "ED's Modified CAP"). As stated above, the ED's position is completely contrary to applicable "Tier IV" law. Further, by imposing modifications to the regulatory Tier III CAP formula himself, the ED has once more engaged in illegal rulemaking at odds with the authorizing statutes controlling TCEQ's and the ED's actions and decisions concerning the Supplemented Application. See relevant authorities cited concerning NOD 2's Preliminary Issue, above. The ED also has necessarily admitted the CAP as written simply does not work when applied to HRSGs. Tier IV was specifically designed to allow for workable alternatives, but the ED wrongly prefers to try to "fit a square peg in a round hole" by arbitrarily changing the CAP itself.

Nevertheless, **without waiver of any prior objections and solely because it was requested by the ED,** Borger hereby supplements its CAP calculations originally memorialized

<sup>13</sup> TEX. TAX CODE §11.31(g)(3) only provides that Commission rules should "allow for" determinations that distinguish the proportion of property used to control or prevent pollution from that used to produce goods or services. Whether they do or don't simply is not relevant to Borger's entitlement to a PUD here. See TEX. TAX CODE §11.31(d), (m); 30 TAC §17.12(3).

in Exhibit “5” to the First Supplement in the attached Supplemented Exhibit “5.” Supplemented Exhibit “5” incorporates the inclusion of duct burner costs, including fuel costs, allowed by the Second NOD. It clarifies and/or further conforms proposed CAP calculations to what the ED purports to require. It also specifically demonstrates *why* the ED’s Modified CAP still does not work. In that regard, and in addition to the Objections and other statements asserted in Borger’s First Supplement APPENDIX – ISSUE 4: Modified Tier III Cost Analysis Procedure (“CAP”), Borger further responds to the ED’s instructions and directives in New Issue 2 as follows:

a. The ED’s Modified CAP in the First NOD used a formula which illogically and improperly imposed *impossible* factual conditions. Specifically, it quite literally “charged” Borger with almost \$34,000,000 worth of steam production annually hypothetically produced without *any* production costs, most notably without costs related to the fuel necessary to provide the heat or the water system necessary to provide the water from which Borger’s HRSGs actually make their steam Byproduct. *See, e.g.,* Second NOD, p. 3, fourth full paragraph. This, in turn, resulted in completely unrealistic and pragmatically insupportable margins which so poisoned the calculation of Borger’s pollution control exemption as to suggest that its HRSGs were over 25 times more than 100% “productive”!

b. The additional CAP modification (simply adding “costs related to the duct burners including fuel costs,” to allowable Production Costs, *id.*) proposed by the Second NOD makes the ED’s (newly) Modified CAP calculation only slightly less implausible. By allowing costs (including fuel costs) ONLY for the duct burners, it still necessarily, and wrongly, “requires” that the vast majority of Blackhawk’s steam be produced for free — because the duct burners themselves only provide a small fraction of the heat needed to generate the amount of steam Blackhawk actually produces through its HRSGs which the ED’s Modified CAP (or the regulatory CAP, for that matter) then “charges” against Borger’s HRSGs’ PUD. Further, it does absolutely nothing to address how the water necessary to make the steam might be procured without cost. Consequently, the ED’s Modified CAP still generates wholly impossible margins and allows no possibility whatsoever of a fairly calculated or commercially realistic and credible use determination. *See* attached Supplemented Exhibit “5.”<sup>14</sup>

c. Again, realistically, without required water systems, all necessary fuel costs and other “dedicated equipment,” HRSGs would and could help produce no steam Byproduct, marketable or not. In that case, the HRSGs could effectively do nothing but serve as a potential transport or elimination tube. Certainly, no steam would be produced through actual use of the HRSGs. *See* footnote 3, *supra*. Removing the [costs of] sufficient fuel, water systems and other “dedicated equipment” from the CAP equation necessarily must eliminate any [revenue from any] Byproduct (or Marketable Product, where applicable) which might otherwise be generated by or through the use of the HRSG in a productive configuration including that

---

<sup>14</sup> Theoretically, it might be possible to calculate an amount of steam which could reasonably be produced solely from the HRSGs’ duct burners, assuming sufficient water was also made available. However, that steam generation process would be horrendously inefficient (*i.e.,* high heat rate), causing the cost of producing the steam to be greater than even its most optimistically projected sales price (which is set by the market for more efficient steam generation processes). Accordingly, such a calculation would only result in another commercially unrealistic and flawed CAP calculation. *See* subparagraphs c. – d., below.

equipment. The ED must either allow the costs of all necessary fuel, water systems and other dedicated equipment as a deduction in the CAP or forego counting any revenue attributable to their use. The ED cannot “have it both ways” by denying the costs necessary to produce steam Byproduct while still “charging” Borger with its production. Finally, although it was not specifically raised in the Second NOD to Borger, it seems worth mentioning that deducting these costs of Byproduct production is in no way a determination that either the water system or other “dedicated equipment” are themselves pollution control equipment. Indeed, it does no violence whatsoever to (and is entirely consistent with) the ED’s prior determinations that the water system and other “dedicated equipment” are production equipment and taxable in and of themselves. However, the ED’s refusal to recognize this distinction is fatal to his analysis.

d. Were the ED to agree a HRSG generates no Byproduct (or Marketable Product) on its own, the “Production Cost” issue would be moot, as it should be. It is the ED’s flawed premise that HRSGs in isolation can still produce Byproducts which leads to his flawed conclusions regarding Production Costs. The appropriate premise is “no production costs, no Byproduct produced.”

**BORGER ENERGY ASSOCIATES, L.P.**

**By: FULBRIGHT & JAWORSKI  
L.L.P.**



---

*Edward Kliewer III*  
*State Bar No. 11570500*  
*Thomas A. Countryman*  
*State Bar No. 04888100*  
*300 Convent, Suite 2200*  
*San Antonio, Texas 78205*  
*Telephone: 210.224.5575*  
*Telecopier: 210.270.7205*

*Counsel for Applicant, Borger Energy  
Associates, LP*





[http://www.epa.gov/chp/documents/boiler\\_opportunity.pdf](http://www.epa.gov/chp/documents/boiler_opportunity.pdf)

Table 1: Financial Comparison of Natural Gas Boilers and CHP  
Natural Gas Boilers

1 Peak Boiler Capacity, MMBtu/hr input	120
2 Peak Steam Capacity, MMBtu/hr	96
3 Average Steam Production, MMBtu/hr	76.8
4 Boiler Efficiency	80%
5 Steam Production, MMlbs/year	558.6
6 Capital Costs	\$4,200,000
Borger Max Steam Production	
7 Borger Steam Production, klbs/hr	1200
8 Borger Steam Production, converted to klbs/yr	10,512,000 = (7 x 8760)
9 Borger Steam Production, converted to MMlbs/yr	10,512 = (8/1000)
10 ratio:	18.82 = (9/5)
11 Total cost of replacement boilers	\$79,037,594 = (6 x 10)