AIR EMISSION SOURCE
CONSTRUCTION PERMIT

Source ID No.:	1110046
Effective Date:	Draft
Source Name:	Westar Energy – Emporia Energy Center
NAICS:	221112, Fossil fuel power generation
Site Location:	1685 Road 200th Emporia, Kansas 66801
Site Owner/Operator Name:	Westar Energy, Inc.
Site Owner's/Operator's Mailing Address:	818 South Kansas Ave., Topeka, KS 66612
Contact Person for Site Owner/ Operator:	Mr. Daniel R Wilkus, P.E., Manager, Air Programs Telephone Number (785) 575-1614

This permit is issued pursuant to K.S.A. 65-3008 as amended.

Description of Activity Subject to Air Pollution Control Regulations

Westar Energy, Inc. is proposing to install and operate seven (7) combustion turbine generators, one (1) emergency black start diesel generator, and one (1) emergency diesel fire pump at their new Emporia Energy Center.

The proposed facility will be subject to the requirements of 40 CFR 52.21, Prevention of Significant Deterioration (PSD) as adopted under K.A.R. 28-19-350 as a result of being a major new stationary source for at least one regulated pollutant emitted in excess of the PSD trigger level of 250 tpy. The turbines will be subject to the requirements of 40 CFR Part 60, Subpart KKKK, *Standards of Performance for Stationary Combustion Turbines* for which construction, modification, or reconstruction commenced after February 18, 2005. The emergency black start diesel generator and the emergency diesel fire pump will be subject to the requirements of 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

The combustion turbine units are affected sources subject to Title IV of the Federal Clean Air Act, Acid Deposition Control. The monitoring system required by Title IV and other applicable regulations may be used to satisfy the monitoring requirements of 40 CFR Part 60 Subpart KKKK.

Emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), volatile organic compounds (VOC), particulate matter less than 10 microns in diameter (PM_{10}), and sulfuric acid mist (H_2SO_4), were evaluated for this permit review. This project is subject to the provision of K.A.R. 28-19-300 (Construction permits and approvals; applicability) because the potential-to-emit of NO_x, CO, SO_2, VOC, and PM_{10} exceed 40, 100, 40, 40, and 15 tons per year, respectively.

An air dispersion modeling impact analysis, an additional impact analysis, and a Best Available Control Technology (BACT) determination were conducted as a part of the construction permit application process.

Significant Applicable Air Pollution Control Regulations

The combustion turbines as proposed are subject to Kansas Administrative Regulations relating to air pollution control. The following significant Kansas air quality regulations were determined to be applicable to this source:

K.A.R. 28-19-275 Special Provisions; Acid Rain Deposition

K.A.R. 28-19-300 Construction permits and approvals; applicability

K.A.R. 28-19-350 Prevention of significant deterioration of air quality

K.A.R. 28-19-650 Opacity Requirements

K.A.R. 28-19-720 New Source Performance Standards, which adopts 40 CFR Part 60, Subpart KKKK and 40 CFR 60, Subpart IIII

Air Emission Unit Technical Specifications

The following equipment or equivalent is approved.

1. Four (4) General Electric Model LM6000PC SPRINT simple cycle combustion turbine generators, known as emission Units EEC1, EEC2, EEC3, and EEC4, equipped with water injection for control of NO_x emissions while burning pipeline quality natural gas. The manufacturer's estimated performance at 54^o F is 405.3 mmBtu/hr (LHV) input, per unit.

2. Three (3) General Electric Model 7FA simple cycle combustion turbine generators, known as emission Units EEC5, EEC6, and EEC7, equipped with dry low NO_x burners for control of NO_x emissions while burning pipeline quality natural gas. The manufacturer's estimated performance at -24^o F is 1,780 mmBtu/hr (LHV) input, per unit.

3. One (1) Caterpillar Model C18DITA (or equivalent) diesel engine generator, known as

emission Unit EEC8, equipped with timing retardation for control of NO_x emissions burning No. 2 distillate fuel oil. The manufacturer's estimated performance at 1,800 rpm is 900 brake-horsepower.

4. One (1) Cummins Model 6BTA 5.9F-1 (or equivalent) diesel engine driven fire pump, known as emission Unit EEC9, equipped with timing retardation for control of NO_x emissions burning No. 2 fuel oil. The manufacturer's estimated performance at 1,760 rpm is 182 brake-horsepower.

Air Emissions Estimates from the Proposed Activity

Pollutant Type	Estimated Operating Emissions (Tons per Year)
Nitrogen Oxides (NO_x)	1,019[1]
Carbon Monoxide (CO)	692[1]
Sulfur Dioxide (SO_2)	147[2]
Volatile Organic Compounds (VOC)	48[1]
Particulate Matter (PM/PM_{10})	250[1]
Sulfuric Acid Mist (H_2SO_4)	45[2]

1. Estimated controlled emissions are based on the maximum emission rates at 54 ^{o} F associated with the technologies installed on the actual emission units operating in accordance with the conditions authorized in the permit.

2. Based on maximum sulfur content for pipeline quality natural gas of 2 grains per 100 dry standard cubic feet (for combustion turbines) and 0.05 percent sulfur for No. 2 distillate fuel oil (for diesel engines).

Air Emission Limitations

The limitations of this section do not apply to periods of startup, shutdown, or malfunction. Startup and shutdown are defined in **Permit Conditions** below.

1. K.A.R. 28-19-650 (a)(3): Opacity of visible emissions shall not exceed 20 percent from the combustion turbines, black start generator, and diesel fire pump.

2. LM6000PC Combustion Turbine Generators

a. NO_x emissions from each combustion turbine shall not exceed 25 parts per million by dry volume (ppmdv), corrected to 15 percent oxygen (O_2), 24 hour rolling average[3].
b. Total combined annual NO_x emissions from all four (4) LM6000PC combustion turbines shall not exceed 269.3 tons (approximately 13,200 total hours for all four turbines operating at full load and 54°F), 12 month calendar basis[4].
c. CO emissions from each combustion turbine shall not exceed 63.8 lb per hour at full load when the ambient temperature is less than or equal to 54 °F and shall not exceed 36.0 lb per hour at full load when the ambient temperature is greater than 54 °F.
d. VOC emissions from each combustion turbine shall not exceed 5.8 lb per hour at full load.
e. PM_{10} emissions from each combustion turbine shall not exceed 6.0 lb per hour at full load, including both filterable and condensable PM_{10}.

3. GE 7FA Combustion Turbine Generators

a. NO_x emissions from each combustion turbine shall not exceed 9 parts per million by dry volume (ppmdv), corrected to 15 percent oxygen (O_2), 24 hour rolling average[3].
b. CO emissions from each combustion turbine shall not exceed 39.0 lb per hour at full load.
c. VOC emissions from each combustion turbine shall not exceed 3.2 lb per hour at full load.
d. PM_{10} emissions from each combustion turbine shall not exceed 18 lb per hour at full load, including both filterable and condensable PM_{10}.

4. Emergency Diesel Black Start Generator

a. NO_x emissions from the black start generator shall not exceed 14.0 lb per hour at full load.
b. CO emissions from the black start generator shall not exceed 1.8 lb per hour at full load.

c. PM_{10} emissions from the black start generator shall not exceed 0.066 $^{g}/_{bhp\text{-}h}$.

d. VOC emissions from the black start generator shall not exceed 0.015 $^{g}/_{bhp\text{-}h}$.

5. Emergency Diesel Fire Pump

a. NO_x emissions from the diesel fire pump shall not exceed 2.0 lb per hour at full load.

[3] 24 hour rolling average is defined as 24 hours of cumulative unit operation excluding startup, shutdown and malfunction and only valid data will be used in the average.

[4] 12 month calendar basis is defined as the total calculated by emissions software from January 1 through December 31st of each year excluding startup, shutdown and malfunction.

b. CO emissions from each diesel fire pump shall not exceed 0.53 lb per hour at full load.

c. PM_{10} emissions from the diesel fire pump shall not exceed 0.25 $^{g}/_{bhp\text{-}h}$.

d. VOC emissions from the diesel fire pump shall not exceed 0.77 $^{g}/_{bhp\text{-}h}$.

Permit Conditions

1. Startup and shutdown of the GE LM6000PC combustion turbines are defined as follows:

   (a) Startup: The period from when a combustion turbine is started until it reaches 25% load. The startup periods will be readily identifiable by the monitoring system. Such periods shall not exceed 2 hours without approval by KDHE.

   (b) Shutdown: The period when the combustion turbines are shutting down from 25% load to 0% load. The shutdown periods shall be readily identifiable by the monitoring system. Such periods shall not exceed 2 hours without approval by KDHE.

2. Startup and shutdown of the GE 7FA combustion turbines are defined as follows:

   (a) Startup: The period from when a combustion turbine is started until it reaches 50% load. The startup periods will be readily identifiable by the monitoring system. Such periods shall not exceed 2 hours without approval by KDHE.

   (b) Shutdown: The period when the combustion turbines are shutting down from 50% load to 0% load. The shutdown periods shall be readily identifiable by the monitoring system. Such periods shall not exceed 2 hours without approval by KDHE.

3. The GE LM6000PC combustion turbines shall operate at load conditions between 25% and 100% of capacity except during startup, shutdown and malfunction.

4. The GE 7FA combustion turbines shall operate at load conditions between 50% and 100% of capacity except during startup, shutdown and malfunction.

5. The combustion turbines shall be limited to firing pipeline quality natural gas only.

6. The total sulfur content of the pipeline quality natural gas shall not exceed 2 grains per 100 scf.

7. This permit and the PSD review shall be reopened if any of the simple cycle combustion turbines is retrofitted as a combined cycle unit within seven years of the effective date of this permit.

8. The black start generator is limited to operating a maximum of 100 hours per year, 12

month calendar year basis[5].

9. The black start generator is limited to operating a maximum of 12 hours per calendar day[6].

10. The diesel fire pump is limited to operating a maximum of 100 hours per year, 12 month calendar year basis[7].

11. The diesel fire pump is limited to operating a maximum of 3 hours per calendar day[8].

12. The black start generator and diesel fire pump shall be limited to firing No. 2 distillate fuel oil only.

13. The total sulfur content of the No. 2 distillate fuel oil shall not exceed 0.05 percent determined on a weight basis.

Performance Testing and Compliance

1. For each combustion turbine, performance testing to demonstrate compliance with the applicable conditions and limitations set forth in this permit shall be conducted within 60 days after achieving the maximum production rate at which the turbine will be operated, but not later than 180 days after initial start-up of the turbine. A written report of the results of the performance test(s) shall be furnished to KDHE

2. In accordance with 40 CFR Part 60, Subpart KKKK, all continuous monitoring systems and monitoring devices required shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status, at a minimum, shall include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device as required by 40 CFR 60.13.

3. In conducting the performance tests and other stack testing required by this permit, the reference test methods and procedures outlined in K.A.R. 28-19-212 and 40 CFR Part 60 shall be used to demonstrate compliance with the limitation and conditions set forth in this permit.

4. Compliance with VOC and PM_{10} emission limits shall be demonstrated through an initial performance test at steady state, full load operation.

[5] 12-month calendar basis is defined as the total hours tracked from January 1 through December 31st of each year.
[6] Calendar day is defined as the total hours tracked from midnight to 11:59 p.m. on a given day.
[7] 12-month calendar basis is defined as the total hours tracked from January 1 through December 31st of each year.
[8] Calendar day is defined as the total hours tracked from midnight to 11:59 p.m. on a given day.

5. Compliance with CO emission limits for each combustion turbine shall be demonstrated through an initial performance test and shall also be demonstrated on an ongoing basis by conducting a performance test at the same frequency as and in conjunction with the Relative Accuracy Test (RATA) testing of the NO_x continuous emissions monitor as required for Acid Rain program compliance. All CO performance testing shall be conducted at steady state, full load operation.

6. A one-time formaldehyde stack test shall be performed on one GE LM6000PC Combustion Turbine Generator and one GE 7FA Combustion Turbine Generator. If the tests demonstrate that the source will be a major source (> 10 tpy) of formaldehyde, the combustion turbines will be subject to the initial notification requirements presented in 40 CFR 63 Subpart YYYY.

Monitoring Requirements

1. Compliance with NO_x emission limits shall be demonstrated with a NO_x continuous emission monitor (CEM) that follows the requirements listed in 40 CFR Subpart KKKK.

2. The NO_x CEM shall be installed, certified, operated, maintained, and quality assured in accordance with 40 CFR Subpart KKKK.

3. Compliance with SO_2 emission limits shall be demonstrated in accordance with the requirements in 40 CFR Subpart KKKK, with the addition that the total sulfur content of the pipeline quality natural gas not exceed 2 grains per 100 dry standard cubic feet.

In lieu of these requirements, alternatives to monitoring procedures or requirements may be approved, on a case-specific basis, by the Administrator of the U.S. EPA pursuant to 40 CFR 60.13(i).

Recordkeeping

1. The owner or operator of the combustion turbines shall maintain records of the occurrence and duration of any start-up, shut-down, or malfunction in the operation of the turbines; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. These requirements are described in 40 CFR 60.7(b).

2. As required under 40 CFR 60.7(f), the owner or operator shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The

file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, with certain exceptions specified under 40 CFR 60.7(f).

3. In compliance with Permit Conditions Items 9 and 11, the owner or operator shall record the number of hours that the black start generator and diesel fire pump operate during any calendar day.

4. In compliance with Permit Conditions Items 8 and 10, the owner or operator shall record the number of hours that the black start generator and diesel fire pump operate during any calendar year.

Reporting

Reports demonstrating compliance shall be submitted to the KDHE in the same units as stated in the applicable requirements.

1. Items required to be reported semi-annually shall be submitted to KDHE and postmarked by the 30th day following the end of each calendar half.

2. Items required to be reported annually shall be submitted to KDHE and postmarked by the 30th day following the end of each calendar year.

3. The combustion turbine excess emissions and monitoring systems performance report and/or a summary report shall be submitted to the KDHE as required by 40 CFR 60.7(c) on a semi-annual basis. The summary report form shall contain the information and be in the format as specified in 40 CFR 60.7(d). One summary report form for NO_x and one summary report form for the sulfur content of the fuel shall be submitted. Written reports of excess emissions shall include the following information:

   (a) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

   (b) Specific identification of each period of excess emissions that occurs during start-ups, shut-downs, and malfunctions, the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   (c) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero span checks and the nature of the system repairs and adjustments.

   (d) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. Reports required under Reporting Item 3, periods of excess emissions as defined in 40 CFR 60 Subpart KKKK shall be reported accordingly.

5. The compliance demonstration for Permit Conditions Items 8 and 10 and the Air Emission Limitations Item 2b shall be reported on an annual basis. During the initial 12 months of operation, the Permit Conditions Items 8 and 10 and the Air Emission Limitations Item 2b shall be tracked on a monthly basis and should an exceedance occur, the owner or operator shall contact the Department immediately.

Notification

1. The Air Quality Representative in the Northeast District Office shall be notified when installation of the equipment is complete so an evaluation may be conducted to verify compliance with applicable regulations.

2. K.A.R. 28-19-720 (40 CFR 60.7(a) and 60.8(d)) requires that written notifications of the following be submitted to KDHE: (These apply to the combustion turbines, black start generator, and diesel fire pump):

   (a) The date construction of each source is commenced. The notification is to be postmarked no less than 30 days after such date.

   (b) The actual date of initial startup of each applicable source. The notification is to be postmarked within 15 days after such date.

   (c) The date when the initial performance testing is to commence. The notification is to be postmarked no less than 30 days prior to such date.

   (d) The date upon which demonstration of the continuous monitoring system performance commences in accordance with 60.13(c). Notification shall be postmarked no less than 30 days prior to such date.

3. Notification of the performance test shall include a performance test protocol, which includes a description of the test and applicable test methods.

Acid Rain Requirements

The combustion turbine is subject to certain Acid Rain Requirements. A complete Acid Rain permit application shall be submitted in accordance with the deadlines specified in 40 CFR Part 72.

Title V Requirements

The facility is subject to Title V Requirements. A complete application for an initial Title V (Class I) permit shall be submitted in accordance with the deadlines specified in K.A.R. 28-19-510.

General Provisions

1. This document shall become void if construction, installation or modification of the simple cycle combustion turbines have not commenced within 18 months of the effective date of this permit, or if the construction, installation or modification of the simple cycle combustion turbines is interrupted for a period of 18 months or longer.

2. A construction permit or approval must be issued by KDHE prior to commencing any construction or modification of equipment or processes which result in an increase in potential-to-emit equal to or greater than the thresholds specified at K.A.R. 28-19-300.

3. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow a representative of the KDHE (including authorized contractors of the KDHE) to:

   (a) enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under conditions of this document;

   (b) have access to and copy, at reasonable times, any records that must be kept under conditions of this document;

   (c) inspect at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this document; and

   (d) sample or monitor, at reasonable times, for the purposes of assuring compliance with this document or as otherwise authorized by the Secretary of the KDHE, any substances or parameters at any location.

4. The emission unit or stationary source, which is the subject of this document, shall be operated in compliance with all applicable requirements of the Kansas Air Quality Act and the Federal Clean Air Act.

5. This document is subject to periodic review and amendment as deemed necessary to fulfill the intent and purpose of the Kansas Air Quality Statutes and Regulations and rules promulgated in accordance therewith.

6. This document does not relieve the permittee of the obligation to obtain other approvals, permits, licenses or documents of sanction, which may be required by other federal, state or local government agencies.

7. Issuance of this document does not relieve the owner or operator of any requirement to obtain an air quality operating permit under any applicable provision of K.A.R. 28-19-500.

Permit Engineer

_____ _____

Jason Heitman
Permit Engineer
Air Permitting Section

Date Signed

c: NEDO
C-7072

PREVENTION OF SIGNIFICANT DETERIORATION (PSD)

PERMIT SUMMARY SHEET

Permit No. 1110046

Source Name Westar Energy – Emporia Energy Center

Source Location 1685 Road 200th
Emporia, Kansas 66801

Area Designation

K.A.R. 28-19-350, et seq., Prevention of Significant Deterioration of Air Quality, affects new major sources and major modifications to major sources in areas designated as "attainment" or "unclassifiable" under section 107 of the Clean Air Act (CAA) for any criteria pollutant. The State of Kansas is classified as attainment for the National Ambient Air Quality Standards (NAAQS) for all the criteria pollutants.

Lyon County, Kansas, where this modification is taking place, is in attainment for all the criteria pollutants.

Project Description

Westar Energy, Inc. (Westar) is proposing to install and operate seven (7) combustion turbine generators, one (1) emergency black start diesel generator, and one (1) emergency diesel fire pump at their new Emporia Energy Center (EEC).

The EEC would be located near Emporia, Kansas, in Lyon County. At the new site, Westar proposes to install four (4) new General Electric (GE) Model LM6000 SPRINT simple cycle combustion turbines and three (3) new GE Model 7FA simple cycle combustion turbines. All seven combustion turbines will fire pipeline quality natural gas exclusively.

Significant Applicable Air Emission Regulations

This proposed source will be subject to Kansas Administrative Regulations relating to air pollution control. The application for this permit was reviewed and will be evaluated for compliance with the following applicable regulations:

1. K.A.R. 28-19-300 Construction Permits and Approvals. Requires any person who proposes to construct or modify a stationary source or emissions unit shall obtain a construction permit before commencing such construction or modification.

2. K.A.R. 28-19-350 Prevention of significant deterioration of air quality. The provisions of K.A.R. 28-19-350(a) through 28-19-350(k) shall apply to the construction of major stationary sources and major modifications of major stationary sources in the areas of the state designated as attainment areas or unclassified areas for any pollutant under the procedures prescribed by section 107(d) of the federal clean air act (42 U.S.C. 7407 (d)).

3. K.A.R. 28-19-720 New Source Performance Standards. The turbines are subject to 40 CFR Part 60, Subpart KKKK: Standards of Performance for Stationary Gas Turbines. The emergency black start diesel generator and emergency diesel fire pump are subject to 40 CFR Part 60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

4. K.A.R. 28-19-275 Special Provisions; Acid Rain Deposition. K.A.R. 28-19-275 adopts by reference 40 CFR Part 72 as applicable to Phase II of the Federal Acid Rain Program.

Air Emissions From the Project

The potential-to-emit from the new combustion turbines is listed in Table 2-1 and detailed in Appendix 3 of the application. Proposed potential-to-emit of NO_x, SO_2, CO, PM/ PM_{10}, VOC, and Sulfuric Acid Mist (H_2SO_4) were compared with the Significant Emission Rates for PSD applicability for the criteria and non-criteria pollutants. The potential-to-emit of NO_x, SO_2, CO, PM/ PM_{10}, VOC, and H_2SO_4 are above the PSD significance levels and will be reviewed under the PSD regulations.

Therefore, this project will be classified as a major stationary source. This project will be subject to the various aspects of K.A.R. 28-19-350, such as the use of best available control technology, ambient air quality analysis, and additional impacts upon soils, vegetation and visibility.

Best Available Control Technology (BACT)

The BACT requirement applies to each new affected emissions unit and pollutant emitting activity. Also, individual BACT determinations are performed for each pollutant emitted from the same emission unit. Consequently, the BACT determination must separately address, for each regulated pollutant with a significant emissions increase at the source, air pollution controls for each emissions unit or pollutant emitting activity subject to review. Westar was required to prepare a BACT analysis for KDHE's review according to the process described in Attachment A. KDHE's evaluation of the BACT for the proposed turbines is presented in Attachment B.

KDHE has concurred with Westar for the following:

LM6000 SPRINT Combustion Turbines

BACT for Nitrogen dioxide is 25 ppmdv (parts per million dry volume), 24 hour rolling average, corrected to 15 percent O_2 (oxygen) for each proposed LM6000 turbine. Total combined annual NO_x emissions from all four (4) LM6000 turbines shall not exceed 269.3 tons, 12 month calendar basis. The turbines will use water injection and fire only pipeline quality natural gas. The turbines shall operate at load conditions between 25% and 100% of capacity except during startup and shutdown.

BACT for SO_2 and H_2SO_4 is 2 $^{grS}/_{100\ scf}$. The turbines will fire only pipeline quality natural gas.

BACT for CO is 63.8 $^{lb}/_{hr}$ at full load when the ambient temperature is less than or equal to 54°F and shall not exceed 36.0 $^{lb}/_{hr}$ at full load when the ambient temperature is greater than 54°F. The turbines will utilize efficient combustion/design technology.

BACT for PM/PM_{10} is 6 $^{lb}/_{hr}$ at full load. The turbines will fire only pipeline quality natural gas.

BACT for VOC is 5.8 $^{lb}/_{hr}$ at full load. The turbines will utilize efficient combustion/design technology.

7FA Combustion Turbines

BACT for Nitrogen dioxide is 9 ppmdv (parts per million dry volume), 24 hour rolling average, corrected to 15 percent O_2 (oxygen) for each proposed 7FA turbine. The turbines will use dry low NO_x burners and fire only pipeline quality natural gas. The turbines shall operate at load conditions between 50% and 100% of capacity except during startup and shutdown.

BACT for SO_2 and H_2SO_4 is 2 $^{grS}/_{100\ scf}$. The turbines will fire only pipeline quality natural gas.

BACT for CO is 39.0 $^{lb}/_{hr}$ at full load. The turbines will utilize efficient combustion/design technology.

BACT for PM/PM_{10} is 18 $^{lb}/_{hr}$. The turbines will fire only pipeline quality natural gas.

BACT for VOC is 3.2 $^{lb}/_{hr}$ at full load. The turbines will utilize efficient combustion/design technology.

Emergency Diesel Black Start Generator

The black start generator is limited to operating a maximum of 100 hours per year, 12 month calendar basis.

BACT for Nitrogen dioxide is 14 $^{lb}/_{hr}$ at full load. The generator will utilize efficient combustion/design technology.

BACT for SO_2 and H_2SO_4 is 0.05% S. The generator will use low sulfur fuel oil, which contains less than 0.05% sulfur.

BACT for CO is 1.8 $^{lb}/_{hr}$ at full load. The generator will utilize efficient combustion/design technology.

BACT for PM/PM_{10} is 0.066 $^{g}/_{bhp\text{-}h}$. The generator will utilize efficient combustion/design technology.

BACT for VOC is 0.015 $^{g}/_{bhp\text{-}h}$. The generator will utilize efficient combustion/design technology.

Emergency Diesel Fire Pump

The diesel fire pump is limited to operating a maximum of 100 hours per year, 12 month calendar basis.

BACT for Nitrogen dioxide is 2.0 $^{lb}/_{hr}$ at full load. The generator will utilize efficient combustion/design technology.

BACT for SO_2 and H_2SO_4 is 0.05% S. The generator will use low sulfur fuel oil, which contains less than 0.05% sulfur.

BACT for CO is 0.53 $^{lb}/_{hr}$ at full load. The generator will utilize efficient combustion/design technology.

BACT for PM/PM_{10} is 0.25 $^{g}/_{bhp\text{-}h}$. The generator will utilize efficient combustion/design technology.

BACT for VOC is 0.77 $^{g}/_{bhp\text{-}h}$. The generator will utilize efficient combustion/design

technology..

Ambient Air Impact Analysis

The owner or operator of a proposed source must demonstrate that allowable emission increases from the proposed source would not cause or contribute to air pollution in violation of:

1) any national ambient air quality standard in any air quality control region; or
2) any applicable maximum allowable increase over the baseline concentration in any area.

Westar used EPA-approved dispersion modeling guidelines to predict the ambient air impacts. The Air Quality Impact Analysis is summarized in Section 4 of the permit application. The Additional Impacts Analyses are included in Section 5 of the permit application. Appendices 8 and 9 of the permit application contain the Electronic Modeling Files and contour maps of the air dispersion modeling results, respectively.

In accordance with the Appendix W *Guideline on Air Quality Models*, the AMS/EPA Regulatory Model (AERMOD), version 04300, was used to determine the maximum predicted ground-level concentration for each pollutant. Conservative pollutant emission rates were selected from the turbine performance data contained in Appendix 4 of the application to produce worst-case dispersion conditions and highest model predicted concentrations (i.e. lowest exhaust temperature and exit velocity and the highest emission rate).

The Guideline on Air Quality Models states that modeling should contain sufficient detail to determine the maximum ambient concentration of the pollutant under consideration, and that this will likely involve modeling several operational loads or production rates. Upon startup, the LM6000 turbine output is gradually increased until greater than 25 percent of base load is reached. Likewise, the 7FA turbine output is gradually increased until greater than 50 percent of base load is attained. The turbine output is maintained between 25 and 100 percent, and 50 and 100 percent of base load for the LM6000 and 7FA, respectively. Loads of 25, 50, 75 and 100 percent were modeled for the LM6000 turbine, and loads of 50, 75, and 100 percent were modeled for the 7FA. At each load level, each turbine was also modeled at three ambient temperatures—116, 54 and –24 ^{o}F. Modeling of the emergency black start generator and fire pump, each at 100 percent load, was also included. Meteorological data for use in AERMOD was processed using AERMET for the years 2000 through 2004. The raw meteorological data for use in AERMET includes surface meteorological data from the Emporia, Kansas, surface station and upper air meteorological data from the Topeka, Kansas, upper air station.

The permit application Table 4-2 lists the maximum modeled concentrations for NO_x, SO_2, PM/PM_{10}, and CO, respectively. Although the PTE for VOC and H_2SO_4 is greater than the respective PSD significant emission rates, modeling was not required as there are no PSD modeling

thresholds for these pollutants. The table also shows that the proposed project will not cause ambient impacts of NO_x, SO_2, PM/PM_{10}, or CO above the modeling significance threshold for any applicable averaging period. Because the emissions increases from the proposed project result in ambient impacts less than the applicable modeling significance levels for all averaging periods, neither PSD increment nor NAAQS analysis were conducted.

Additonal Impact Analysis

Visibility Impairment Analysis

Westar was required to provide an analysis of the impairment to visibility, and impacts on plants, soils, and vegetation that would occur as a result of this project and to what extent the emissions from the proposed modification impacts the general commercial, residential, industrial and other growth.

Westar conducted a visibility degradation analysis for the NO_x and PM/ PM_{10} emissions from the proposed facility. The analysis was performed in accordance with the USEPA's "Workbook for Plume Visual Impact Screening and Analysis" (EPA-450/4-88-015, September 1988) using the VISCREEN model. Generally, a visibility analysis is performed for Class I (visibility-sensitive) areas located within 100 kilometers of a proposed facility. However, there are no Class I areas within 100 km of the proposed site near Emporia. Hercules Glades Wilderness area is the closest Class I area; located approximately 335 km southeast of the proposed Westar facility. Since EEC will not be located near any Class I area, a visibility analysis was conducted using Class II areas. The areas considered were Eisenhower State Park and Tallgrass Prairie National Preserve.

A Level 2 VISCREEN analysis was performed for Eisenhower State Park and Tallgrass Prairie National Preserve. The results are shown in Tables 5-3 and 5-4 of the application. The Level 2 VISCREEN results indicate no visibility impacts at Eisenhower State Park or Tallgrass Prairie National Preserve.

Impacts on Vegetation and Soils

In accordance with the guidance memorandum, an impact analysis on plants and soils is required for pollutants exceeding the PSD significance levels. The criteria pollutants that triggered an additional impact are NO_x, SO_2, CO, and PM/PM_{10}.

To begin with, Westar compared the modeled impacts of the pollutants requiring additional analysis to the secondary NAAQS. The modeled levels of these pollutants were below the NAAQS and even came in below the more stringent significant impact level thresholds. As the "Draft New Source Review Workshop Manual" (EPA, 1990) indicates, ambient concentrations of NO_2, SO_2, CO and PM/PM_{10} below the secondary NAAQS will not result in harmful effects for most types of soils and vegetation. Therefore, Westar concluded that emissions from the proposed facility would not have

adverse effects on soils and vegetation.

To provide further assurance, Westar derived 1-hour maximum levels of NO_x and compared them to data provided in "Relative Sensitivities of Plants to Nitrogen Dioxide," a document distributed by Jon Knodel of EPA Region 7. The maximum estimated 1-hour NO_x impact, 0.105 ppm, was much lower than the minimum 2 ppm needed to cause 5% foliar injury to "susceptible" plants. This analyses provided further evidence that the impact of emissions from the proposed facility on soil and vegetation would be minimal at best.

Growth In Commercial, Residential and Industrial Activity

The elements of a growth impact analysis include 1) a projection of the associated industrial, commercial, and residential source growth that will occur in the area due to the source; and 2) an estimate of the air emissions generated by the above associated industrial, commercial, and residential growth.

The Emporia Energy Center will only require 4 to 6 permanent employees after construction of the facility is completed. Compared to the population of the surrounding area, 35,935 in Lyon County as of the 2000 census, the increase in population due to the proposed facility will be very small. Therefore, the growth impacts on commercial, residential or industrial aspects will be indistinguishable.

Attachment A
KEY STEPS IN THE "TOP-DOWN" BACT ANALYSIS

STEP 1: **IDENTIFY ALL POTENTIAL AVAILABLE CONTROL TECHNOLOGIES**.

The first step in a "Top-Down" analysis is to identify, for the emission unit in question, "all available" control options. Available control options are those air pollution control technologies or techniques with a PRACTICAL POTENTIAL FOR APPLICATION to the emissions unit and the regulated pollutant under review. This includes technologies employed outside of the United States. Air pollution control technologies and techniques include the application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the affected pollutant.

STEP 2: **ELIMINATE TECHNICALLY INFEASIBLE OPTIONS**.

The technical feasibility of the control options identified in Step 1 is evaluated with respect to the source-specific (or emissions unit specific) factors. In general, a demonstration of technical infeasibility should be clearly documented and should show, based on physical, chemical, and engineering principles, that difficulties would preclude the successful use of the control option on the emissions unit under review. Technically infeasible control options are then eliminated from further consideration in the BACT analysis.

STEP 3: **RANK REMAINING CONTROL TECHNOLOGIES BY CONTROL EFFECTIVENESS.**

All remaining control alternatives not eliminated in Step 2 are ranked and then listed in order of over-all control effectiveness for the pollutant under review, with the most effective control alternative at the top. A list should be prepared for each pollutant and for each emissions unit subject to a BACT analysis. The list should present the array of control technology alternatives and should include the following types of information:

1) control efficiencies;
2) expected emission rate;
3) expected emission reduction;
4) environmental impacts;
5) energy impacts; and
6) economic impacts.

STEP 4: **EVALUATE MOST EFFECTIVE CONTROLS AND DOCUMENT RESULTS**.

The applicant presents the analysis of the associated impacts of the control option in the listing. For each option, the applicant is responsible for presenting an objective evaluation of each impact. Both beneficial and adverse impacts should be discussed and, where possible, quantified. In general, the BACT analysis should focus on the direct impact of the control alternative. The

applicant proceeds to consider whether impacts of unregulated air pollutants or impacts in other media would justify selection of an alternative control option. In the event the top candidate is shown to be inappropriate, due to energy, environmental, or economic impacts, the rationale for this finding should be fully documented for the public record. Then the next most stringent alternative in the listing becomes the new control candidate and is similarly evaluated. This process continues until the technology cannot be eliminated.

STEP 5: **SELECT BACT**.

The most effective control option not eliminated in Step 4 is proposed as BACT for the emission unit to control the pollutant under review.

Attachment B
KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT'S EVALUATION OF WESTAR ENERGY EMPORIA ENERGY CENTER PROPOSED BACT OPTIONS

Westar Energy, Inc. (Westar) conducted a BACT analysis to determine the appropriate control of emissions from the proposed Emporia Energy Center. This facility will consist of the following emissions sources: three new General Electric model 7FA combustion turbines, four new General Electric model LM6000 combustion turbines, one emergency diesel black start generator and one emergency diesel fire pump. All combustion turbines will operate as simple cycle units and fire pipeline quality natural gas without a back-up fuel. The proposed operating scenario for each 7FA unit includes the firing of natural gas for 8760 hours per year. An annual NOx cap will limit the operation of the LM6000 units. The diesel black start generator and emergency diesel fire pump will each be limited to 100 hours of annual operation.

The following represents the KDHE's proposals for BACT supported by a summary of the analysis done for each control option. Please refer to the BACT analysis in Section 3.5 of the application for a more thorough evaluation of possible BACT.

Combustion Turbines

NO_x BACT

Nitrogen oxide control methods were divided into two categories: post-combustion control and in-combustor NO_x formation control. The different types of emission controls reviewed by Westar are as follows:

Post Combustion type:

- $SCONO_x$
- Selective Catalytic Reduction (SCR)
- Selective Non-Catalytic Reduction (SNCR)

In Combustor type:

- XONON
- Power Systems Mfg. Low Emission Combustion Burner
- Dry Low NO_x (DLN)
- Water Injection

$SCONO_x$ uses an oxidation catalyst to control both NO_x and CO. However, to date $SCONO_x$ has only been successfully implemented on a small (<30 MW) combined cycle combustion turbine. This technology has yet to be placed on a commercial simple cycle turbine comparable to the units proposed by Westar. The operating temperature range for $SCONO_x$, 300°F to 700°F, is too low to

handle the 950°F and 1200°F heat from the exhaust of the LM6000 and 7FA units, respectively. Therefore, SCONO$_x$ is eliminated from further consideration as BACT for both the LM6000 and 7FA turbines.

SCR is generally considered the top level of control that is commercially available for combustion turbines—especially combined cycle units. SCR uses a reaction with ammonia in the presence of a catalyst to form N_2 and H_2O. A standard catalyst can be used on a simple cycle turbine if dilution/cooling air fans are placed in the exhaust stream to cool the exhaust before it reaches the catalyst unit. A zeolite-based catalyst can be implemented on a simple cycle turbine without the use of dilution/cooling air fans. However, zeolite costs more while achieving approximately the same amount of NO_x reduction. For this reason, the BACT analysis only examines the standard catalyst with the use of dilution/cooling fans as a possible SCR setup. The total capital and annual costs associated with an SCR system for the 7FA and LM6000 units are provided in Table 3-2 and Table 3-5 of the permit application, respectively. These tables also present the incremental cost effectiveness of applying an SCR to each respective turbine. The SCR costs associated with each turbine model exceed the amount that would be considered cost effective for a simple cycle combustion turbine in this area. Thus, SCR is eliminated from consideration as BACT for the 7FA and LM6000 units.

SNCR uses ammonia injection, similar to SCR, but it operates at a higher temperature range (1,700°F to 2,000°F). However, this required temperature range is much higher than the exhaust temperatures of the 7FA and LM6000 turbines. Furthermore, this control technology has yet to be applied to any combustion turbines according to the RBLC database. Therefore, SNCR is considered to be technically infeasible for the proposed combustion turbines.

XONON utilizes flameless catalytic combustion to limit NO_x formation by reducing the combustion temperature. This technology has been proven to be effective on small turbines (<1.5 MW), but has never been successfully applied to larger combustion turbines. For this reason, XONON is considered technically infeasible for controlling NO_x emissions from large combustion turbines, such as the 7FA and LM6000.

Power Systems Manufacturing (PSM) recently began offering a burner to reduce NO_x emissions. This burner is essentially a redesigned version of the standard low NO_x burner that is capable of producing less NO_x. To date, the PSM burner has only been used as a retrofit. Currently, GE will not warrant their turbines for use with a non Original Equipment Manufacturer. As a result, the PSM burner ei ruled out as a viable option for NO_x control on either turbine model.

Dry low NO_x (DLN) burners reduce flame temperature, thus reducing NO_x emissions, by use of two-stage combustor technology. This technology is commercially available and reliable for use as a NO_x emissions control on the 7FA turbine. The 7FA units will be supplied with DLN burners, which are capable of achieving long-term NO_x emissions of 9 parts per million dry volume (ppmdv) at 15 percent oxygen while firing natural gas.

Water injection reduces flame temperature, and subsequently lowers NO_x, by injecting water or

steam into the combustion chamber. Water injection is commercially available and proven consistent for use as a NO_x control on the LM6000 turbine. The LM6000 units will be supplied with water injection NO_x controls, which are capable of achieving long-term NO_x emissions of 25 parts per million dry volume (ppmdv) at 15 percent oxygen while firing natural gas.

CO BACT

Two types of carbon monoxide control techniques have been identified as applicable to the 7FA and LM6000 simple cycle turbines—catalytic oxidation and good combustion practices. The highest level of CO control is catalytic oxidation.

A catalytic oxidation system utilizes a passive reactor system that consists of a grid coated with a catalyst. Exhaust from the turbine passes over the catalyst and the CO is oxidized to CO_2. Catalytic oxidation has been technically proven as an effective control alternative for simple cycle combustion turbines. However, its primary use has been to meet LAER requirements in CO non-attainment areas. The proposed Emporia Energy Center site is in an attainment area for CO; therefore, LAER does not apply. The total capital cost, total annual cost and incremental cost effectiveness pertaining to implementing catalytic oxidation on the 7FA and LM6000 turbines are shown in Table 3-3 and Table 3-6, respectively. The incremental cost effectiveness associated with catalytic oxidation for CO control is $6,700 per ton on the 7FA and $5,100 per ton on the LM6000. These cost impacts are considered excessive for the location in question. As a result, catalytic oxidation is rejected as BACT for CO control on the 7FA and LM6000 combustion turbines.

While utilizing good combustion practices, the GE 7FA and LM6000 turbines can achieve sustained CO emission levels below 9 ppmdv and 36.1 ppmdv, respectively, corrected to 15 percent O_2. A review of EPA's RBLC database indicates that other combustion turbines that utilize natural gas have been issued permits with BACT-based full load CO emissions in the 10 to 50 ppmvd range. Given that this is a CO attainment area and the fact that the predicted maximum impact of CO emissions on the surrounding environment will not be significant, good combustion practices is proposed as BACT for CO emissions from the 7FA and LM6000 combustion turbines.

VOC BACT

The two identified VOC control options for both the 7FA and LM6000 turbines are catalytic oxidation and good combustion practices. Catalytic oxidation is the highest level of technically feasible VOC control.

The amount of VOC conversion by an oxidation catalyst is compound specific and a function of available oxygen and operating temperature. Assuming 30% removal efficiency, catalytic oxidation would result in VOC emissions of 0.9 ppmdv and 2.1 ppmdv from the 7FA and LM6000 turbines, respectively. The incremental cost effectiveness associated with the VOC emissions reduction is $226,500 per ton for the 7FA and $327,600 per ton for the LM6000. These costs are considered

excessive for the proposed location. Therefore, catalytice oxidation is rejected as BACT for VOC control on the 7FA and LM6000 combustion turbines.

With good combustion practices, the GE 7FA and LM6000 turbines can achieve sustained VOC emission levels below 1.3 ppmdv and 3 ppmdv, respectively, corrected to 15 percent O_2. These emission levels correspond with other combustion turbines listed in the RBLC that burn natural gas. Since this site is in an attainment area and the impact of VOC emissions on the surrounding environment will be minimal, the VOC emission levels from good combustion practices are low enough to satisfy BACT. Thus, good combustion practices is proposed as BACT for VOC emissions for the 7FA and LM6000 turbines.

PM/PM_{10} BACT

Inherently low emissions of PM/PM_{10} result from natural gas combustion due to high combustion efficiencies and the clean-burning nature of natural gas. EPA's RBLC database of natural gas fired combustion turbines does not indicate controls for PM/PM_{10} beyond good combustion practices. Therefore, good combustion practices is proposed as BACT for PM/PM_{10} for the 7FA and LM6000 turbines.

SO_2 BACT

SO_2 emission rates from the combustion of natural gas are naturally low due to the very low sulfur content in the fuel. A properly designed and operated turbine using low sulfur natural gas is an effective control technology available for the control of SO_2 emissions. The RBLC lists many combustion turbines that employ a fuel specification of natural gas and good combustion practices in order to limit SO_2. For these reasons, low sulfur fuel is proposed as BACT for SO_2 emissions for the 7FA and LM6000 turbines.

H_2SO_4 BACT

The use of natural gas is itself a superbly efficient method of controlling H_2SO_4 emissions. A review of the RBLC does not indicate controls beyond low sulfur fuel for limiting H_2SO_4. Therefore, low sulfur fuel is proposed as BACT for H_2SO_4 for the 7FA and LM6000 turbines.

Emergency Diesel Black Start Generator

NO_x BACT

According the the RBLC database, emergency diesel generators have not been required to utilize additional NO_x controls due to the intermittent operations of the generators. Compliance with the applicable NSPS can be achieved through good combustion practices. Thus, good combustion practices is proposed as BACT for NO_x control for the emergency diesel black start generator.

CO BACT

Due to the very limited operation of the black start diesel generator, adding catalytic oxidation to control CO would be extremely cost prohibitive. As is, the engine produces low CO emissions and can meet the applicable NSPS without additional controls. For these reasons, the proposed BACT for CO control for the emergency diesel generator is good combustion practices.

VOC BACT

As with CO, adding an oxidation catalyst for VOC control on the emergency black start generator would be prohibitively expensive. Therefore, good combustion practices is proposed as BACT for VOC control for the emergency black start generator.

PM/ PM_{10} BACT

The RBLC database indicates that good combustion practices has been the most stringent particulate control applied to emergency engines. Therefore, good combustion practices is proposed as BACT for PM/PM_{10} control for the emergency black start generator.

SO_2 BACT

The RBLC database indicates that low sulfur fuel oil has been the most stringent SO_2 control applied to emergency engines. For this reason, low sulfur fuel oil is proposed as BACT for SO_2 control for the emergency black start generator.

H_2SO_4 BACT

The RBLC database indicates that low sulfur fuel oil has been the most stringent H_2SO_4 control applied to emergency engines. For this reason, low sulfur fuel oil is proposed as BACT for H_2SO_4 control for the emergency black start generator.

Emergency Diesel Fire Pump

NO_x BACT

According the the RBLC database, emergency diesel fire pump have not been required to utilize additional NO_x controls due to the intermittent operations of the pumps. Compliance with the applicable NSPS can be achieved through good combustion practices. Thus, good combustion practices is proposed as BACT for NO_x control for the emergency diesel fire pump.

CO BACT

Due to the very limited operation of the emergency diesel fire pump, adding catalytic oxidation to control CO would be extremely cost prohibitive. As is, the engine produces low CO emissions and can meet the applicable NSPS without additional controls. For these reasons, the proposed BACT for CO control for the emergency diesel fire pump is good combustion practices.

VOC BACT

As with CO, adding an oxidation catalyst for VOC control on the emergency diesel fire pump would be prohibitively expensive. Therefore, good combustion practices is proposed as BACT for VOC control for the emergency diesel fire pump.

PM/ PM_{10} BACT

The RBLC database indicates that good combustion practices has been the most stringent particulate control applied to emergency engines. Therefore, good combustion practices is proposed as BACT for PM/PM_{10} control for the emergency diesel fire pump.

SO_2 BACT

The RBLC database indicates that low sulfur fuel oil has been the most stringent SO_2 control applied to emergency engines. For this reason, low sulfur fuel oil is proposed as BACT for SO_2 control for the emergency diesel fire pump.

H_2SO_4 BACT

The RBLC database indicates that low sulfur fuel oil has been the most stringent H_2SO_4 control applied to emergency engines. For this reason, low sulfur fuel oil is proposed as BACT for H_2SO_4 control for the emergency diesel fire pump.

Notice Concerning Proposed Kansas Air Quality
Construction Permit and Public Hearing

Notice is hereby given that the Kansas Department of Health and Environment (KDHE) is soliciting comments regarding a proposed air quality construction permit. Westar Energy, Inc. (Westar) has applied for an air quality construction permit in accordance with the provisions of K.A.R. 28-19-300 to construct Emporia Energy Center, a new 600 MW natural gas fired combustion turbine facility in Lyon County, Kansas. Emission of particulate matter (PM), PM equal to or less than 10 microns in diameter (PM_{10}), volatile organic compounds (VOCs), oxides of nitrogen (NOx), sulfur dioxide (SO_2), carbon monoxide (CO), and sulfuric acid mist (H_2SO_4) were evaluated during the permit review process.

The proposed permit is to be issued in accordance with the provisions of K.A.R. 28-19-350, *Prevention of Significant Deterioration* (PSD) which adopt the federal standards, procedures and requirements of 40 CFR 52.21 by reference. These air quality regulations apply to major stationary emission sources located in areas designated as "attainment" under the federal Clean Air Act (CAA). Attainment areas are areas where the air quality meets or is better than the national ambient air quality standards (NAAQS).

The PSD regulations require evaluation of emission reduction techniques to identify the best available control technology (BACT) for each pollutant for which the emission rate exceeds the PSD significant level. The purpose of BACT is to affect the maximum degree of reduction achievable, taking into account energy, environmental and economic impacts for each pollutant under review. Evaluation of the estimated emissions for the proposed Emporia Energy Center indicates that the emission rate of oxides of nitrogen, sulfur dioxide, carbon monoxide, particulate matter, volatile organic compounds, and sulfuric acid mist all exceed the significance levels. Westar conducted the required BACT analyses. The department has reviewed Westar's BACT analyses and concurs with its findings.

An ambient impact analysis was performed on the air emissions of PM/PM_{10}, NOx, SOx, and CO from the Emporia Energy Center project. The analysis demonstrated no significant impact on ambient air quality for each modeled pollutant.

An analysis of visibility was conducted for the two nearest Class II areas: Eisenhower State Park and Tallgrass Prairie National Preserve. The VISCREEN model results indicate no exceedances of the perceptibility or plume contrast within the selected areas. No adverse impacts on soils and vegetation in the area were expected. Any federal land manager who has reason to believe they may have a class I area adversely impacted by the emissions from the proposed project has the opportunity to present KDHE with a demonstration of the adverse impact on the air quality-related values of the federal class I area during the comment period.

A public comment period has been established to allow citizens the opportunity to express any concerns they may have about this proposed permitting action. The public

comment period is to begin on March 1, 2007 and end at 5:00 pm on April 5, 2007. All comments should be submitted in writing to Jason Heitman, Bureau of Air and Radiation, 1000 SW Jackson, Suite 310, Topeka, KS 66612-1366 or presented at the public hearing.

Any member of the public may request to hold a public hearing to receive comments on the proposed issuance of the draft air quality construction permit. Written requests to hold a public hearing should be sent to the attention of Ms. Sherry Walker at the address listed above, or by FAX to (785)291-3953, and must be received by noon on Monday, April 2, 2007. If a request is received, a public hearing is tentatively scheduled by the KDHE in the Jury Assembly Room on the second floor of the Lyon County Courthouse, 430 Commercial, in Emporia, Kansas on Wednesday, April 4, 2007 at 7:00 pm. **If no requests to hold the public hearing are received by this date and time, the public hearing will be cancelled.**

A copy of the proposed permit, permit application, all supporting documentation, and all information relied upon during the permit application review process are available for public review for a period of 30 days from the date of publication during normal business hours (8:00 AM to 5:00 PM) at the KDHE, Bureau of Air and Radiation (BAR), 1000 SW Jackson, Suite 310, Topeka, KS 66612-1366. Also, a copy of the proposed permit only can be reviewed at the KDHE Northeast District Office, 800 W 24th Street, Lawrence, KS 66046. To obtain or review the proposed permit and supporting documentation, contact Jason Heitman, (785)296-1691, at the central office of the KDHE. To review the proposed permit only, contact Pat Simpson, (785)842-4600, in the KDHE Northeast District Office. The standard departmental cost will be assessed for any copies requested.

Roderick L. Bremby, Secretary
Kansas Department of Health and Environment