

## State of Kansas

### **Kansas Department of Health and Environment** 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. Mid-Kansas Electric Company, LLC (Mid-Kansas) located at 301 West 13<sup>th</sup> Street, Hays, Kansas 67601, has applied for an air quality construction permit in accordance with the provisions of K.A.R. 28-19-300 to install 24 new spark ignition Caterpillar four stroke lean burn reciprocating internal combustion engine (Caterpillar 4SLB RICE) electricity generating units using pipeline quality natural gas. Each engine will be nominally rated at 10 megawatts (MW) of electricity for a combined power output of approximately 240 MW. The facility will also include two 450-kW pipeline quality natural gas fired emergency AC generators, a 190-HP diesel-fueled emergency fire pump, and a 2 mmBtu/hr natural gas fired indirect fuel gas heater. The proposed facility, known as Rubart Station, will be located in the Northwest Quarter of Section 1, Township 29 South, Range 35 West, Grant County, Kansas, approximately 14 miles east of Ulysses, Kansas.

Emissions of particulate matter (PM), PM equal to or less than 10 microns in diameter (PM<sub>10</sub>), PM equal to or less than 2.5 microns in diameter (PM<sub>2.5</sub>), volatile organic compounds (VOCs), oxides of nitrogen (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>), hazardous air pollutants (HAPs) and greenhouse gases (GHGs) 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 adopts 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 regulated pollutant, including GHGs, 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 regulated pollutant under review. Evaluation of the estimated emissions for the proposed Rubart Station project indicates that the emission rates of NO<sub>x</sub>, CO, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, VOCs and GHGs all exceed the significance levels. Mid-Kansas conducted the required BACT analyses. The department has reviewed Mid-Kansas' BACT analyses for the Rubart Station Project and concurs with its findings as follows:

- For the Caterpillar 4SLB RICE, selective catalytic reduction (SCR) is BACT for NO<sub>x</sub>, oxidation catalyst and good combustion practices are BACT for CO and VOC, combustion controls and low ash fuels are BACT for PM, PM<sub>10</sub> and PM<sub>2.5</sub>, use of efficient lean burn engines and use of natural gas fuel are BACT for GHGs;
- For the emergency AC generators, combustion control is BACT for NO<sub>x</sub>, CO, VOC, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and GHGs;
- For the emergency fire pump, combustion control is BACT for NO<sub>x</sub>, CO, and VOC, combustion controls and low ash fuels are BACT for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and selection of the most efficient engines that meet the project needs is BACT for GHGs; and
- For the fuel gas heater, low NO<sub>x</sub> burners and combustion control is BACT for NO<sub>x</sub>, good combustion practices is BACT for CO and VOC, combustion control is BACT for PM, PM<sub>10</sub>, and PM<sub>2.5</sub>, and use of clean fuels, maintaining and tuning the heater, and recordkeeping are BACT for GHGs.

An ambient impact analysis was performed on the potential air emissions of NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and CO from the Rubart Station project.

- Detailed modeling for the 1-hour and annual NO<sub>2</sub> demonstrated that the proposed Rubart Station will not cause or significantly contribute to any violation of the 1-hour and annual NO<sub>2</sub> NAAQS. It also demonstrated that 6.0% of the annual NO<sub>2</sub> Class II area maximum allowable increment is expected to be consumed by the proposed project. EPA has not established a Class II area maximum allowable increment for 1-hour NO<sub>2</sub>. Accordingly, no calculation of the potential consumption of such increment is possible.
- Detailed modeling for PM<sub>10</sub> demonstrated that the proposed Rubart Station will not cause or significantly contribute to any violation of the 24-hour PM<sub>10</sub> NAAQS. It also demonstrated that 28.4% of the 24-hour PM<sub>10</sub> Class II area maximum allowable increment is expected to be consumed by the proposed project. A screening modeling analysis for PM<sub>10</sub> demonstrated that the proposed Rubart Station will not cause or significantly contribute to a violation of the annual PM<sub>10</sub> NAAQS.
- Detailed modeling for PM<sub>2.5</sub> demonstrated the proposed Rubart Station will not cause or significantly contribute to any violation of the 24-hour and annual PM<sub>2.5</sub> NAAQS. It also demonstrated that 94.8% of the 24-hour PM<sub>2.5</sub> and 21.0 % of the annual PM<sub>2.5</sub> Class II area maximum allowable increments for PM<sub>2.5</sub> are expected to be consumed.
- An analysis of visibility was conducted for Meade State Park and Ulysses Airport. The VISCREEN model results indicate no exceedances of the screening criteria at either location. No adverse impacts on soils and vegetation in the area are 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 December 20,

2012, and will end on January 22, 2013 at noon. All comments should be submitted in writing to Mindy Bowman, Bureau of Air, 1000 SW Jackson, Suite 310, Topeka, KS 66612-1366.

Any member of the public may request to hold a public hearing to provide comments on the proposed issuance of the draft air quality construction permit. A written request to hold a public hearing should be sent to the attention of Mindy Bowman at the address listed above or by FAX to (785) 291-3953 and must be received by noon on January 22, 2013. *If a pertinent request is received, a public hearing is tentatively scheduled by the Kansas Department of Health and Environment (KDHE), on Thursday, January 24, 2013, beginning at 5:00 p.m. and continuing until audience members have an opportunity to submit comments. The hearing is tentatively scheduled to be held at the Grant County Civic Center, Lawson Room, located at 108 S. Glen, Ulysses, Kansas.* **If no pertinent requests to hold the public hearing are received by noon January 22, 2013, the public hearing will be cancelled. A notice of the cancellation will be posted at the KDHE website at <http://www.kdheks.gov/bar/publicnotice.html>**

If a hearing is conducted, all interested parties will be given a reasonable opportunity to present their views orally or by submission of written materials during the hearing. In order to give all parties an opportunity to present their views, it may be necessary to limit oral presentations to a specific time limit.

Any individual with a disability may request accommodation in order to participate in the public hearing and may request the proposed materials in an accessible format. Requests for accommodation must be made no later than Friday, January 11, 2013 by contacting *the Bureau of Air* at (785) 296-0297.

A copy of the proposed permit, permit application, all supporting documentation, and all information relied upon during the permit application review process for the PSD permit 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 (BOA), 1000 SW Jackson, Suite 310, Topeka, KS 66612-1366. A copy of the proposed permit and all supporting documentation can also be reviewed at the KDHE Southwest District Office, 302

West McArtor Road, Dodge City, KS 67801-6014. To obtain or review the proposed permit and supporting documentation, contact Mindy Bowman, (785) 296-6421, at the KDHE central office, or the KDHE Southwest District Office, (620) 225-0596. The standard departmental cost will be assessed for any copies requested.

These same materials are available, free of charge, at the KDHE Bureau of Air website,  
<http://www.kdheks.gov/bar/index.html>.

**Robert Moser, MD, Secretary**  
**Kansas Department of Health and Environment**