

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 042009-009 Project Number: 2009-01-038

Parent Company: Dogwood Energy, LLC

Parent Company Address: 6700 Alexander Bell Drive, Suite 360,
Columbia, MD 21046

Installation Name: Dogwood Energy Facility

Installation Address: 25111 E 175th Street, Pleasant Hill, MO 64080

Location Information: Cass County, S13, T46N, R31W

Application for Authority to Construct was made for:
Modification to the existing combustion turbine generator and steam turbine generator to increase power output. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

-
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

APR 16 2009

EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Dogwood Energy Facility
Cass County, S13, T46N, R31W

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 0899-030) and amendments from the Air Pollution Control Program.
2. Except during periods of start-up and shutdown, Dogwood Energy, LLC shall limit nitrogen oxide (NO_x) emissions from the Siemens-Westinghouse Model 501F turbine generators and from the duct burners (EP -1 and EP - 2) to four (4) parts per million by volume (ppmv) corrected to 15 percent (%) oxygen on a dry basis and expressed as a 30 day rolling average. This limit shall not apply when the turbines are operated in simple cycle mode during the period from May through September of the year 2001.
3. Dogwood Energy, LLC may operate the Siemens-Westinghouse turbines in simple cycle mode only during the period from May through September of the year 2001. During this time NO_x emissions shall be limited to 25 ppmv corrected to 15% oxygen on a dry basis.
4. Dogwood Energy, LLC shall limit carbon monoxide (CO) emissions from the Siemens-Westinghouse Model 501F turbine generators (EP -1 and EP - 2) to the following levels:
 - A. 10 ppmv corrected to 15% oxygen on a dry basis during normal operation from 70 to 100% load.
 - B. 15 ppmv corrected to 15% oxygen on a dry basis in power augmentation mode (only applicable during combined cycle operation).
 - C. 50 ppmv corrected to 15% oxygen on a dry basis during periods of operation from 40 to 70% load.
5. Dogwood Energy, LLC shall limit volatile organic compound (VOC) emissions from the Siemens-Westinghouse Model 501F turbine generators (EP -1 and EP - 2) to 3 ppmv corrected to 15% oxygen on a dry basis.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

6. Dogwood Energy, LLC shall limit emissions of particulate matter less than ten (10) microns in aerodynamic diameter (PM₁₀) from the Siemens-Westinghouse Model 501F turbine generators (EP – 1 and EP – 2) to 0.013 pounds per million BTU (lb/MMBTU) of heat input.
7. Dogwood Energy, LLC shall achieve the following limits for the combined emissions from the turbines and duct burners (EP – 1 and EP – 2) based on the higher heating value of the fuel:
 - A. CO: 17.1 ppmv corrected to 15% oxygen on a dry basis during normal operation from 70 to 100% load.
 - B. CO: 24.2 ppmv corrected to 15% oxygen on a dry basis in power augmentation mode
 - C. VOC: 0.012 lb/MMBTU heat input
 - D. PM₁₀: 0.015 lb/MMBTU heat input
8. Dogwood Energy, LLC shall emit less than 100 tons of VOC from the Siemens-Westinghouse Model 501F turbine generators and from the duct burners (EP – 1 and EP – 2) in any consecutive 12-month period.
9. Dogwood Energy, LLC shall use Attachment A, “Monthly VOC Emissions Tracking Record” or an equivalent form to verify compliance with the emission limitation of Special Condition No. 8. The most recent 60 months records shall be maintained on site and shall be made available to Missouri Department of Natural Resources’ (DNR) personnel immediately upon request.
10. Dogwood Energy, LLC shall report to the Air Pollution Control Program (APCP) Enforcement Section, P. O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of each month, if the 12-month cumulative total (Special Condition No. 9) records show that the source exceeded the limitation of Special Condition No. 8 (100 tons of VOC).
11. Stack tests shall be performed on each turbine in the simple cycle mode to verify that the emission limitations set in Special Conditions No. 3 through No. 6 are not exceeded; to develop the emission factor used to demonstrate compliance with Special Condition No. 8; and to demonstrate compliance with Subpart GG of the New Source Performance Standards (NSPS). These tests shall be performed within 60 days after achieving the maximum production rate at which the turbines will be operated, but not later than 180 days after initial start-up modified equipment for commercial operation and shall be conducted in accordance with the Stack Test Procedures outlined Special Conditions No. 14 through No.17.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

12. Stack tests shall be performed on each combustion turbine and heat recovery boiler train operating in the combined cycle mode to verify that the emission limitations set in Special Conditions No. 2 and No. 7 are not exceeded; to develop the emission factor used to demonstrate compliance with Special Condition No. 8; and to demonstrate compliance with Subpart Da of the NSPS. These tests shall be performed within 60 days after achieving the maximum production rate at which the duct burners will be operated, but not later than 180 days after initial start-up of modified equipment for commercial operation and shall be conducted in accordance with the Stack Test Procedures outlined in Special Conditions No. 13 through No. 17.
13. The emission tests required by this permit for the duct burners shall be conducted according to the test methods specified in 40 CFR §60.48a, *Compliance determination procedures and methods*.
14. The emission tests required by this permit for the turbines shall be conducted in accordance with the following methods and procedures.
 - A. The test methods and procedures outlined in 40 CFR §60.335, *Test methods and procedures*, shall be adhered to by the applicant in testing for NO_x from the combustion turbines. This section mandates that EPA Method 20 be used to determine the NO_x emission rate.
 - B. The test methods and procedures outlined in 40 CFR Part 60, Appendix A, Method 10, shall be adhered to by the applicant in testing for CO.
 - C. The test methods and procedures outlined in EPA Method 5 and 202, shall be adhered to by the applicant in testing for PM₁₀.
 - D. The test methods and procedures outlined in 40 CFR Part 60 Appendix A, Method 25A and Method 18 shall be adhered to by the applicant in testing for VOC.
15. The date on which performance tests are conducted must be pre-arranged with the APCP a minimum of 30-days prior to the proposed test date so that this Program may arrange a pretest meeting, if necessary, to assure that the test date is acceptable for an observer to be present. A completed Proposed Test Plan form (copy enclosed) may serve the purpose of notification and must be approved by the APCP prior to conducting the required emission testing.
16. Two (2) copies of a written report of the performance test results shall be submitted to the Director of the APCP within 30-days of completion of any

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one sample run.

17. The test report is to fully account for all operational and emission parameters addressed by these permit conditions as well as Subparts Da and GG of the NSPS.
18. Dogwood Energy, LLC shall install, calibrate, maintain, and operate continuous monitoring systems, and record the output of the system, for measuring NO_x emissions discharged to the atmosphere. These systems shall be located after the heat recovery steam generators (HRSG) in a position to monitor the combined flue gas of the turbines and duct burners.
19. Dogwood Energy, LLC shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide (CO₂) content of the flue gases at each location where NO_x emissions are monitored.
20. The continuous emission monitoring systems required by Special Condition No. 18 shall be installed and operated according to the guidelines in 40 CFR §60.13, *Monitoring requirements*; in 40 CFR Appendix B, Performance Specification 2 – *Specifications and test procedures for SO₂ and NO_x continuous emission monitoring systems in stationary sources*; and in 40 CFR Appendix F, *Quality Assurance Procedures*. As an alternative, the requirements of 40 CFR Part 75 Appendix A, *Specifications and Test Procedures* and 40 CFR Part 75 Appendix B, *Quality Assurance and Quality Control Procedures*, may be followed by the permittee for certification and quality assurance, respectively, for the NO_x CEMS required by Special Condition 18 upon approval of the Director.
21. The continuous emission monitoring systems required by Special Condition No. 19 shall be installed and operated according to the guidelines in 40 CFR §60.13, *Monitoring requirements*; in 40 CFR Appendix B, Performance Specification 3 – *Specifications and test procedures of O₂ and CO₂ continuous emission monitoring systems in stationary sources*; and in 40 CFR Appendix F, *Quality Assurance Procedures*. As an alternative, the requirements of 40 CFR Part 75 Appendix A, *Specifications and Test Procedures* and 40 CFR Part 75 Appendix B, *Quality Assurance and Quality Control Procedures*, may be followed by the permittee for certification and quality assurance, respectively, for the O₂ CEMS required by Special Condition 19 upon approval of the Director.
22. Dogwood Energy, LLC shall report to the APCP Enforcement Section, P. O. Box

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

176, Jefferson City, MO 65102, no later than ten (10) days after the end of each month during which the continuous emission monitoring system required by Special Condition No. 18 indicates that the source exceeded the emission limitation of Special Condition No. 2 or No. 3. This report shall include the probable cause of the exceedence of the limitation, with impact on emissions, date and time of the event, duration of the event, and corrective actions taken.

- 23. Natural gas shall be the only fuel fired in these turbines and duct burners.
- 24. Dogwood Energy, LLC shall maintain records during periods of start-up and shut down that include the amount of time required for each cycle and time that the turbines are operated at less than 40 percent load.
- 25. Dogwood Energy, LLC shall not exceed the future actual emissions used to determine the projected actual emissions of this project as follows:

Pollutant	Future Actual Emissions (tpy)
PM ₁₀	312.9
SO _x	11.9
NO _x	303.3
VOC	100
CO	773.6

- 26. Dogwood Energy, LLC shall maintain records of actual emissions to demonstrate that the future actual emissions listed in Special Condition 25 are not exceeded pursuant to 40 CFR 52.21(b)(41).
- 27. Dogwood Energy, LLC shall report to the Air Pollution Control Program (APCP) Enforcement Section, P. O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the year, if the records of Special Condition 26 show that the source exceeded the future actual emissions of Special Condition 25.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2009-01-038
Installation ID Number: 037-0056
Permit Number:

Dogwood Energy Facility
25111 E 175th Street
P.O. Box 110
Pleasant Hill, MO 64080

Complete: January 26, 2009

Parent Company:
Dogwood Energy, LLC
6700 Alexander Bell Drive, Suite 360
Columbia, MD 21046

Cass County, S13, T46N, R31W

REVIEW SUMMARY

- Dogwood Energy Facility has applied for authority to modify the existing combustion turbine generator and steam turbine generator to increase power output.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment in insignificant amounts from the combustion equipment.
- Subpart GG of the New Source Performance Standards (NSPS) applies to the existing turbines. Subpart Da of the NSPS applies to the existing duct burners.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- No new air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Projected actual emissions of all criteria air pollutants are below de minimis levels.
- This installation is located in Cass County, an attainment area for all criteria air pollutants.
- This installation is on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2, Number 26]. This is a fossil fuel fired steam electric plant of more than 250 million British thermal units per hour heat. Therefore, the major source threshold for all criteria pollutants is 100 tons per year.

- Ambient air quality modeling was not performed since projected actual emissions of the application are below de minimis levels.
- Emissions testing is required for the equipment.
- Revision to the installation's Part 70 Operating Permit application is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Dogwood Energy Facility (Dogwood) is an existing combined cycle steam electric generating plant located in Pleasant Hill, Missouri. This plant is currently owned by Dogwood Energy LLC but was previously permitted under the name of Merchant Energy Partners Pleasant Hill, LLC in Permit Number 0899-030. That construction permit was issued for the construction of two (2) natural gas fired turbines equipped with a heat recovery steam generator (HSRG) and duct burners. A selective catalytic reduction (SCR) system was installed on the HRSG for NO_x control. These equipment are the only equipment currently on site. Since then, three amendments have been issued to this construction permit (Project Numbers 2000-12-079, 2003-08-034, and 2005-11-035).

In June 2002, Aquila Cass Country Power, LLC received a construction permit for the construction of three (3) natural gas fired simple cycle combustion turbines, called the Aries II plant, at this existing installation (Permit Number 072002-017). The Aries II plant was considered one installation with the existing installation and permitted as such. However, the Aries II plant was not constructed.

A Part 70 Operating Permit (Project Number 2002-04-116) is currently under review.

PROJECT DESCRIPTION

Dogwood Energy is proposing to upgrade their existing combined cycle combustion turbines through a combination of hardware and control logic changes, intended to increase efficiency and output of the gas and steam turbine generators. The upgrade will include improved compressor seals, improved row 16 compressor blades, improved turbine seals, improved Row 1 turbine blades, and optimization of gas turbine mass flow and combustion temperature through controls modifications. The upgrade will result in an overall power output increase from the plant of approximately 29 MW. These upgrades will result in an increase in potential emissions and are considered modifications under construction permits.

EMISSIONS/CONTROLS EVALUATION

Potential emissions of the application represent the potential of the modified equipment, assuming continuous operation (8760 hours per year). The potential emissions were based on an increase in total exhaust gas flow of 3%. Since the emission concentrations emitted by the combustion turbines will remain the same, Dogwood estimates the total emissions to increase in direct proportion to the 3% increase in exhaust gas flow.

To determine if the proposed modification to the existing equipment will result in a significant emissions increase, Dogwood has proposed the use of the actual-to-projected-actual applicability test as outlined in 40 CFR 52.21(a)(2)(iv)(c). The baseline actual emissions, as defined in paragraphs (b)(48)(i) and (ii) of the same section, were based on the years 2006 and 2007.

In determining the projected actual emissions of this project as defined in 40 CFR 52.21(b)(41), Dogwood has requested to maintain permit limits currently in effect for the existing equipment, to include the new upgrade modification, even though the potential emissions of the equipment will increase as a result of the upgrade. Therefore, the maximum future actual emissions will be the same as the potential emissions found in Permit Number 0899-030.

In addition, Dogwood utilized the exclusion of emissions attributed to demand growth as stated in 40 CFR 52.21(b)(41)(ii)(c) in calculating the emissions increase from the project. Based on the exclusion, Dogwood can exclude emissions that the existing unit could have accommodated prior to the project, including any increased utilization due to product demand growth. In this case, the amount of emissions that the existing equipment could have accommodated prior to the modification (and during the baseline period) is the same as the potential emissions found in Permit Number 0899-030. Although Dogwood has historically operated their facility at 24% of their current capacity due to market conditions, Dogwood contends that the facility is fully capable of operating at their maximum capacity (nominal 625 MW) indicating that operation at maximum capacity has occurred during times of high electricity demand. In addition, Dogwood has stated that transmission equipment at the facility allows for the continuous (8760 hours per year) transmission of electricity generated by Dogwood at its maximum capacity. If market conditions change such that operation at maximum capacity is necessary, Dogwood could meet that demand with their current equipment independent of the proposed upgrade. Therefore, emissions attributed to the original capacity of the facility can be excluded from the maximum future actual emissions in determining the projected actual emissions as outlined in Figure 1.

$$\begin{aligned} \text{Projected Actual Emissions} &= \text{maximum annual rate} - \text{demand growth} \\ \text{Projected Actual Emissions} &= (\text{PTE from Permit 0899-030}) - (\text{PTE from Permit 0899-030}) \\ \text{Projected Actual Emissions} &= 0 \end{aligned}$$

Figure 1: Equation for Projected Actual Emissions

As requested by Dogwood, future actual emissions are based on existing condition limits being applied to the modified equipment. Therefore, the special conditions found in Permit Number 0899-030 are being superceded and re-instated by this construction permit. Special Conditions 2 through 24 are taken from the original permit while Special Conditions 25 through 27 were added specifically for this project. Special Conditions 2 through 10 are emission limits that will apply to the upgraded equipment. Special Conditions 11 through 17 are stack testing requirements for both simple cycle and combined cycle operation.

Although stack testing has been completed for the requirements of the original construction permit, additional stack testing is required for the modification to determine if the modified equipment will meet the emissions limits listed in Special Conditions 2 through 10. To clarify, combustion turbine #1 will be upgraded during the planned outage scheduled for April and May of 2009. An outage for combustion turbine #2 is scheduled for October and November of 2009. Therefore, in order to comply with the conditions of this permit, Dogwood will need to perform stack testing twice, within sixty days of the end of each outage.

Special Conditions 18 through 24 are continuing requirements that will also apply to the modification. The conditioned potential emissions of the installation represent the re-instatement of special conditions to the existing equipment including the upgrade modifications.

Existing potential emissions of the installation take into account equipment currently located at the installation and do not include the previously permitted Aries II plant which has not been constructed. Existing actual emissions were taken from the installation's 2007 Emissions Inventory Questionnaire (EIQ). The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions*	Existing Actual Emissions (2007 EIQ)	Potential Emissions of the Application	Projected Actual Emissions	New Installation Conditioned Potential
PM ₁₀	15.0	312.9	12.6	322.3	0	312.9
SO _x	40.0	11.9	1.9	12.26	0	23.4
NO _x	40.0	303.3	52.0	312.3	0	379
VOC	40.0	100	2.2	103	0	100
CO	100.0	773.6	34.0	796.8	0	773.6
HAPs	10.0/25.0	1.5	N/D	N/D	0	1.5

N/A = Not Applicable; N/D = Not Determined

*Existing potential emissions do not include the Aries II plant permitted under Permit Number 072002-017.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Projected actual emissions of all criteria air pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Dogwood Energy Facility shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *New Source Performance Regulations*, 10 CSR 10-6.070 – *New Source Performance Standards (NSPS) for Stationary Gas Turbines*, 40 CFR Part 60, Subpart GG.
- *New Source Performance Regulations*, 10 CSR 10-6.070 – *New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978*, 40 CFR Part 60, Subpart Da.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Emily Wilbur
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 23, 2009, received January 26, 2009, designating Dogwood Energy, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Kansas City Regional Office Site Survey.

Attachment A - Emissions Compliance Worksheet

Dogwood Energy Facility
 Cass County, S13, T46N, R31W
 Project Number: 2009-01-038
 Installation ID Number: 037-0056
 Permit Number:

This sheet covers the period from _____ to _____.
(month, year) (month, year)

Copy this sheet as needed

Column A	Column B	Column C	Column D	Column E
Emission Point(s)	Description	Natural Gas Consumption (MMCF)	VOC Emission Factor (lb/MMCF)	(a) VOC Emissions (tons)
(b) Total VOC Emissions Calculated for this Month, in Tons:				
(c) 12-Month VOC Emissions Total From Previous Month's Attachment A, in Tons:				
(d) Monthly VOC Emissions Total (b) from Previous Year's Attachment A, In Tons:				
(e) Current 12-month Total of VOC Emissions in Tons : [(b) + (c) - (d)]				

- (a) [Column E] = [Column C] x [Column D] x 0.0005. Emission factor obtained from performance tests required by this permit
- (b) Summation of [Column E] in Tons;
- (c) 12-Month VOC emissions total (e) from last month's Attachment A, in Tons;
- (d) Monthly VOC emissions total (b) from previous year's Attachment A, in Tons;
- (e) Calculate the new 12-month VOC emissions total.

A 12-Month VOC emissions total (e) of less than 100.0 tons indicates compliance.

Mr Frank Schneider
Vice President, EH&S
Dogwood Energy Facility
P.O. Box 110
Pleasant Hill, MO 64080

RE: New Source Review Permit - Project Number: 2009-01-038

Dear Mr. Schneider:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Emily Wilbur, at the Departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:ewl

Enclosures

c: Kansas City Regional Office
PAMS File: 2009-01-038

Permit Number: