

STATE OF MISSOURI Matt Blunt, Governor • Doyle Childers, Director
DEPARTMENT OF NATURAL RESOURCES

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SEP 12 2006

PERMIT BOOK

Mr. Michael Stieffermann
 Environmental and Operations Engineer
 Central Electric Power Cooperative
 PO Box 127, 9321 Hwy 100
 Chamois, MO 65024

RE: New Source Review Application for a Temporary Permit
 Project Number: 2006-08-002, Installation ID Number 151-0002
 Temporary Permit Number **092006-002**
 Expiration Date: **MAR 15 2007**

Dear Mr. Stieffermann:

The Missouri Department of Natural Resources' Air Pollution Control Program completed a review of your request to temporarily evaluate the feasibility of using corn cobs as a biomass fuel. The Air Pollution Control Program is hereby granting your request to burn up to 150 tons of corn cobs in your existing boilers at the Chamois Power Plant according to Missouri State Rule 10 CSR 10-6.060(3).

Central Electric Power Cooperative would like to burn approximately 150 tons of corncob, as a biomass fuel, over the course of a few days. The biomass material would comprise a maximum of 15% of the fuel being burnt at any one time. No additional storage facilities or material handling equipment will be required. Central Electric Cooperative will start by burning the biomass material in Unit 2. Emissions will be monitored with the existing Continuous Emissions Monitoring System for sulfur dioxide (SO₂), nitrogen oxides (NO_x) and carbon dioxide (CO₂).

No emission factors are available for the combustion of corn cobs. Potential emissions are therefore estimated from representative biomass and coal properties (Table 1).

Table 1. Representative Biomass (corn cobs) and Coal Properties*

Composition		Corn cobs	Coal
Carbon	Wt % Dry	45	68.39
Hydrogen		5.8	4.64
Nitrogen		2.4	0.99
Sulfur		0	0.79
Ash		4	9.16
HHV, Dry, Btu/lb		7,340	11,684

*NREL – National Renewable Energy Laboratory

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150 tons of corn cobs have the same calorific value as 94.2 tons of coal. Burning corn cobs will result in lower emissions of all criteria pollutants except NO_x and CO, based on the properties above. Potential uncontrolled NO_x and CO emissions increase are estimated at 2.92 tons and 0.001 tons respectively for the combustion of 150 tons of corn cobs.

As the potential emissions for the project are well below 100 tons and the ambient air quality standards should not be threatened, the proposed temporary permit is being granted according to provisions of Missouri State Rule 10 CSR 10-6.060(3).

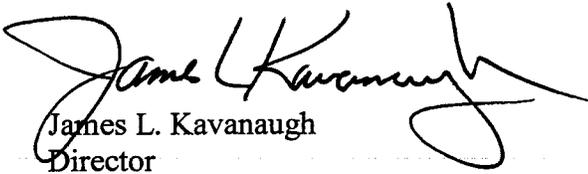
You are still obligated to meet all applicable air pollution control rules and any other applicable federal, state, or local agency regulations. Please pay particular attention to 10 CSR 10-3.030, Open Burning Restrictions, 10 CSR 10-3.060, Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.090, Restriction of Emission of Odors, 10 CSR 10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, and 10 CSR 10-6.220, Restriction of Emissions of Visible Air Contaminants.

A copy of this letter should be kept with the unit and be made available to Department of Natural Resources' personnel upon request.

Should you have further questions or need additional information regarding this temporary permit, please contact Maurice Chemweno with the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or you may telephone (573) 751-4817. Thank you for your time and cooperation.

Sincerely,

AIR POLLUTION CONTROL PROGRAM


James L. Kavanaugh
Director

JLK: mck

c: Mr. Steve Feeler, Compliance/Enforcement Section
Northeast Regional Office
PAMS File: 2006-08-002