

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

[www.dnr.mo.gov](http://www.dnr.mo.gov)

Mr. Bob LaPlaca  
Consulting Environmental Scientist  
Ameren Missouri Labadie Energy Center  
226 Labadie Power Plant Road  
Labadie, MO 63055

RE: New Source Review Temporary Permit Request - Project Number: 2013-09-007  
Installation ID Number: 071-0003  
Temporary Permit Number: **092013-015**  
Expiration Date: November 1, 2013

Dear Mr. LaPlaca:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to conduct powdered activated carbon (PAC) injection testing on Boiler 3 at Ameren Missouri Labadie Energy Center, located in Labadie, Missouri. The Air Pollution Control Program is hereby granting your request to conduct this temporary operation at this location in accordance with Missouri State Rule 10 CSR 10-6.060(3). Potential emissions associated with the testing project are expected to be less than de minimis levels for all pollutants. Testing of PAC injection at this site shall not continue beyond November 1, 2013.

The purpose of the testing is to determine the effectiveness of PAC injection in order to meet the emission standards for mercury (Hg) and particulate matter (PM) in 40 CFR Part 63, Subpart UUUUU – *National Emission Standards for Hazardous Air Pollutants From Coal and Oil-Fired Electric Utility Steam Generating Units*. PAC will be injected into the flue gas prior to the electrostatic precipitator (ESP) at various rates up to 4 lb/mm<sup>3</sup> of flue gas. The PAC will be supplied through a portable bulk bag unloading and injection system. Mercury continuous emissions monitoring systems will be employed to measure mercury levels, one will be placed prior to the PAC injection point and one will be placed after the ESP. All process equipment needed for the testing (hoses, flow splitters, sorbent injection lances, blowers, and auxiliary equipment) will be supplied by the PAC injection system manufacturer and will be disassembled upon completion of testing.

No later than 90 days following the expiration of this permit, Ameren Missouri Labadie Energy Center shall submit a testing report to the Air Pollution Control Program. At a minimum, the report shall include:

1. Identification of the emission unit (Boiler 3)
2. Identification of the control devices operated during each trial (ESP and/or SO<sub>3</sub> injection)

Mr. Bob LaPlaca  
Page Two

3. Locations of the injection and sampling sites
4. PAC type (SO<sub>3</sub> tolerant or not), injection rates (in lb/hr), and concentrations (in lb/mm<sup>3</sup>) for each trial
5. Unit load (in mmBtu/hr) for each trial
6. The date, time, and duration of each trial
7. Emissions rates of PM, PM<sub>10</sub>, PM<sub>2.5</sub>, PM CON, Hg, and SO<sub>2</sub> during each trial
8. Higher heating value, sulfur, Hg, and ash content of the coal combusted during the testing
9. The six-minute average opacity during each trial and for a 24-hour period prior to and after each trial obtained from Boiler 3's existing continuous opacity monitoring system

You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations. Specifically, you should avoid violating:

- ◆ 10 CSR 10-6.165 *Restriction of Emission of Odors*
- ◆ 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*
- ◆ 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*
- ◆ 10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds*
- ◆ 10 CSR 10-6.366 *CAIR SO<sub>2</sub> Trading Program*
- ◆ 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes*
- ◆ 10 CSR 10-6.405 *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating* and 40 CFR Part 64 – *Compliance Assurance Monitoring*
- ◆ 40 CFR Parts 73 and 75 *Acid Rain Program*

A copy of this letter should be kept with the unit and be made available to Department of Natural Resources' personnel upon verbal request. If you have any questions regarding this determination, please do not hesitate to contact Alana Rugen at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 75 1-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kyra L. Moore  
Director

KLM:arl

c: PAMS File: 2013-09-007  
St. Louis Regional Office