

PERMIT BOOK

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

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

www.dnr.mo.gov

MAY 04 2012

CERTIFIED MAIL: 70093410000193528484  
RETURN RECEIPT REQUESTED

Mr. Dave Jennings  
Superintendent of Environmental Affairs  
BioKyowa Inc.  
P.O. Box 1550  
Cape Girardeau, MO 63701

RE: New Source Review Temporary Permit Request - Project Number: 2012-05-002  
Installation ID Number: 031-0064  
Temporary Permit Number: **052012-002**  
Expiration Date: May 15, 2012

Dear Mr. Jennings:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to install a temporary diesel fired generator at BioKyowa Inc., located in Cape Girardeau, 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).

BioKyowa, Inc. is located on 5469 Nash Road in Cape Girardeau, Missouri. Due to an emergency situation at their facility BioKyowa has requested to install a temporary 615 horsepower Model 3406 Caterpillar diesel fired generator. The diesel generator will provided power to two production wells while an underground power cable is being relocated.

BioKyowa estimates they will need the diesel generator for seven days while the underground cable is being replaced. This temporary permit will allow BioKyowa to operate the diesel generator until May 15, 2012, in order to accommodate for any unexpected delays.

The potential emissions for the diesel generator were calculated using emission factors from the United States Environmental Protection Agency (EPA) document AP-42 *Compilation of Air Pollutant Emission Factors*, Volume 1: Stationary Point and Area Sources, Fifth Edition (AP-42) Section 3.4 Large Stationary Diesel and All Stationary Dual-fuel Engines. The sulfur oxides potential emissions were calculated using an ultra-low sulfur content diesel fuel. Therefore BioKyowa shall only burn diesel fuel with a sulfur content of 15 ppm by weight in this

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temporary generator. Based on 8,760 hours of operation the diesel engine would require a construction permit with emission limits or modeling, however, since BioKyowa only plans to use the generator for a short period of time no emission limits are required. The table below summarizes the potential emissions of the temporary diesel generator.

**Table 1: Potential of Temporary Diesel Generator**

Pollutant	Potential Emissions @ 8760 hours (tons per year)	Potential Emissions @ 336 hours (tons per year)
PM	1.08	0.041
PM <sub>10</sub>	1.08	0.041
PM <sub>2.5</sub>	1.05	0.040
SO <sub>x</sub>	0.0033	0.00013
NO <sub>x</sub>	64.65	2.48
VOC	14.82	0.57
CO	1.73	0.07
Total HAPs	0.030	0.0011

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 10-6.045 *Open Burning Requirements*, 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.165 *Restriction of Emission of Odors*, and 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*.

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 Gerad Fox at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 75 1-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

  
Kyra L. Moore  
Director

KLM:gfk

c: Southeast Regional Office  
PAMS File: 2012-05-002