



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

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MAR 30 2012

CERTIFIED MAIL: 70093410000193528224
RETURN RECEIPT REQUESTED

Mr. James Alfieri
Plant Manager
Cargill, Incorporated
2306 Rochester
Kansas City, MO 64120

RE: New Source Review Temporary Permit Request - Project Number: 2012-01-063
Installation ID Number: 095-2001
Temporary Permit Number **032012-012**
Expiration Date: March 15, 2014

Dear Mr. Alfieri:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to install a 219 Million British thermal unit (Btu) temporary natural gas fired boiler at Cargill, Incorporated, located in Kansas City, 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).

According to your letter Cargill, will continue to fulfill contractual obligations to purchase steam from Trigen, but will use the temporary boiler to supplement their energy needs. Based on the application forms, the manufacturer model has yet to be determined. The emissions are estimated in Table 1 using a maximum hourly design rate of 215,100 standard cubic feet hour with a maximum heat input rate of 219 million Btu per hour.

Potential emissions of the boiler are based on emission data from a manufacturer of an external combustion boiler greater than 100 million Btu using SCC 1-02-006-01. The exception is the sulfur dioxide (SO₂); it is based on AP 42, Fifth Edition, Section 1.4 Natural Gas Combustion, 1998. The values are found in Table 1.4-2 Emissions Factors For Criteria Pollutants And Greenhouse Gases From Natural Gas Combustion. The particulate matter less than 2.5 microns (PM_{2.5}) emission data is from California Emission Inventory and Reporting System (CEIDARS). This is based on conservative industrial boiler profile of particulate matter sizes in percentage (line 20 item 121). HAP emissions are calculated from Table 1.4-3 Emission Factors For Speciated Organic Compounds From Natural Gas Combustion of the same AP -42 section.

Table 1: Summary of Proposed Temporary Boiler Emissions in Tons Per Year.

Emission Unit	NOx	SOx	VOC	CO	PM/PM ₁₀	PM _{2.5}	HAP
Temporary Boiler	35.0	<1.0	4.0	36.0	6.0	6.0	1.78

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40 CFR Part 60 - Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* applies to the temporary boiler. This requires the unit to comply with the 0.1 pound Million Btu Nitrous Oxides (NO_x) emission rate and a 30 day initial performance test to be conducted within 60 days of achieving maximum production but no later than 180 days after initial startup as well as other notification, recordkeeping, and reporting requirements.

According to 10 CSR10-2.040, when Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* applies to a boiler, then the rule *Maximum Allowable Emissions of Particular Matter From Fuel Burning Equipment Used for Indirect Heating*, does not apply.

The boiler is a temporary installation allowed for two years. This authorization expires on March 15, 2014. If Cargill elects to operate this boiler more than two years or install a permanent boiler, they will need to reevaluate the netting analysis conducted in Kansas City Permit 1140.

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 Tim Hines at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM


Kyra L. Moore
Director

KLM:thk

c: Kansas City Regional Office
PAMS File: 2012-01-063