

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

www.dnr.mo.gov

Mr. Dale Theisen
Division Manager
Cargill, Inc. Buffalo Island
758 Highway N
Charleston, MO 63834

Re: New Source Review Application – Project Number: 2006-09-051
Installation ID Number: 201-0022
Temporary Permit Number: **11 2 0 0 6 - 0 0 1**
Expiration Date: October 31, 2007

Dear Mr. Theisen:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your application to temporarily install a grain storage pile. The Air Pollution Control Program is hereby granting your request to construct the temporary storage pile at this location.

According to the information provided in your application, the Cargill Buffalo Island facility is preparing to install a temporary grain pile for storage of grain during the coming harvest. A mobile grain auger will be used to unload grain onto a pile (150 feet by 245 feet). It is anticipated that the grain will be stored in the pile for approximately six months after which it will be loaded into dump trucks using a front-end loader. The maximum hourly design rate of the auger is 12,000 bushel per hour or approximately 336 tons per hour.

Potential emissions were calculated using the following particulate matter less than 10 microns in diameter (PM₁₀) emission factors from Environmental Protection Agency document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 9.9.1, Grain Elevators and Processes (4/03):

Straight truck unload – 0.059 pound per ton of throughput
Grain shipping truck – 0.029 pound per ton of throughput

The auger will be in use for approximately five days and it will take approximately the same time period to load out for shipping. The expected emissions from loading and unloading of the temporary storage pile is equal to 0.9 tons per year. However, based on the maximum hourly design rate of 336 tons per hour, the potential emissions are equal to 130 tons per year. As stated in 10 CSR 10-6.060(3), the annual pollutant potential emissions must be under 100 tons. Therefore, to ensure that the 100 tons is not exceeded and to avoid modeling requirements, Cargill, Inc. Buffalo Island has agreed to take a 15 ton annual PM₁₀ limit. Cargill, Inc. Buffalo

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Island will be required to perform recordkeeping during the duration of this temporary permit. Attachment A or equivalent form approved by the Air Pollution Control Program shall be used to demonstrate compliance with the 15 ton annual PM₁₀ limit.

Cargill, Inc. Buffalo Island shall maintain all records required by this temporary permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. Cargill, Inc. - Buffalo Island shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten days after the end of the month during which the records from Attachment A or equivalent form indicate that the source exceeds the 100 ton annual PM₁₀ limitation.

As the potential emissions will be conditioned to 15 tons and the ambient air quality standards should not be threatened, the proposed temporary permit is granted according to provisions of Missouri State Rule 10 CSR 10-6.060(3). All monitoring, recordkeeping, and reporting requirements for the storage pile shall be performed during its use.

If the conditions surrounding this approval should change, such as by substantiated citizen complaint, approval to have the temporary storage pile at this site may be revoked. 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 10-6.170, *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*; 10-3.030, *Open Burning Restriction*; and 10 CSR 10-3.090, *Restriction of Emission of Odors*.

A copy of this letter should be kept on-site and be made immediately available to Department of Natural Resources' personnel upon request. If you have any questions regarding this temporary permit, please contact Ms. Susan Heckenkamp at the 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



for
James L. Kavanaugh
Director

JLK:shl

c: Mr. Steve Feeler, Compliance/Enforcement Section
Southeast Regional Office
PAMS File 2006-09-051