

PERMIT BOOK

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **052007-013** Project Number: 2007-03-052

Parent Company: Cargill, Inc.

Parent Company Address: P.O. Box 9300, Minneapolis, MN 55440

Installation Name: Cargill New Madrid Bunker (Grain Storage Pile)

Installation Address: NW of Cargill New Madrid Elevator on Bloomfield Road,
New Madrid, MO 63869

Location Information: New Madrid County, S22, T4, R14E

Application for Authority to Construct was made for:
Installation of a new grain storage facility about 0.52 miles from the existing
Cargill New Madrid Elevator. This review was conducted in accordance with
Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits
Required*.

-
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

MAY 31 2007

EFFECTIVE DATE


DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located with 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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Permit No.	
Project No.	2007-03-052

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Cargill New Madrid Bunker (Grain Storage Pile)
New Madrid County, S22, T4, R14E

1. Emission Limitation
 - A. Cargill New Madrid Bunker shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM₁₀) in any consecutive 12 month period from the new project equipment listed in Table 1.
 - B. Cargill New Madrid Bunker shall maintain an accurate record of PM₁₀ emitted into the atmosphere from the new project equipment listed in Table 1. Attachment A or an equivalent form shall be used for this purpose. Cargill New Madrid Bunker shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
 - C. Cargill New Madrid Bunker shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1(B) indicate that the source exceeds the limitation of Special Condition Number 1(A).

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2007-03-052
Installation ID Number: 147-0027
Permit Number:

Cargill New Madrid Bunker (Grain Storage Pile)
New Madrid, Missouri 63869

Complete: March 16, 2007
Reviewed: April 30, 2007

Parent Company:
Cargill, Inc.
P.O. Box 9300
Minneapolis, MN 55440

New Madrid County, S22, T4, R14E

REVIEW SUMMARY

- Cargill, Inc. has applied for authority to install a new grain storage facility about 0.52 miles from the existing Cargill New Madrid Elevator.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- Subpart DD of the New Source Performance Standards (NSPS), *Standards of Performance for Grain Elevators*, do not apply to the new Cargill New Madrid Bunker since this project is a installation of permanent storage capacity with no increase in hourly grain handling capacity.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned at de minimis levels.
- This installation is located in New Madrid County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was not performed since potential emissions of the application are conditioned at de minimis levels.
- Emissions testing is not required for the equipment.
- A revision to the Intermediate Operating Permit is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Cargill New Madrid Elevator operates a grain elevator in New Madrid, Missouri. The current facility consist of three dump pits, thirteen grain tanks, and associated conveyors and legs. They currently operate under an Intermediate Operating Permit (Project Number: AP200208146).

The following construction permits have been issued to Cargill New Madrid Elevator from the Air Pollution Control Program.

Permit Number	Description
0284-004	Construction of 2 new enclosed belt conveyors, leg, and distributor
0990-008	Addition of new continuous flow grain dryer
0990-008A	Increase production through dryer
0798-022	Addition of enclosed river belt for grain handling
072001-001	Replacement of conveyors
052003-006	Installation of new 6,000 bushel/hr enclosed drag conveyor
082004-017	Replacement of open conveyor system with enclosed conveyor system
052005-002	Addition of a 20,000-bushel per hour dump pit, three (3) storage bins, and associated conveyors.

PROJECT DESCRIPTION

Cargill New Madrid Elevator proposes to install a grain storage facility (Cargill New Madrid Bunker) approximately 0.52 miles from the current grain elevator operation. This new facility will have a storage capacity of 2,500,000 bushels. The grain will be loaded onto the trucks at Cargill elevator and hauled to the storage bunkers. The bunkers will be operated by personnel from the Cargill New Madrid Elevator. No proposed increase in production capacity is planned for the installation at this time. The following emission points are associated with this project.

Table 1: Project Equipment(s)

Emission Points	Description	Max. Design Rate	Unit
EP-1	Straight Truck Dump (Unloading)	15,000	Bushels/hr
EP-2a	Portable Conveyor	15,000	Bushels/hr
EP-2b	Drop into pile	15,000	Bushels/hr
EP-3	Covered Grain Storage Pile	15,000	Bushels/hr
EP-4a	Front Loader	3.9	VMT/hr
EP-4b	Truck Loading	15,000	Bushels/hr
EP-5	Haul Road	3.15	VMT/hr

As requested by the applicant, potential emissions of PM₁₀ are conditioned to de minimis levels (15 tons/year) for the above equipment.

EMISSIONS/CONTROLS EVALUATION

The main air pollutant of concern is PM₁₀. PM₁₀ emissions arise from handling and processing grain. The emission factors used in this review were obtained from the U.S. Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Section 9.9.1, *Grain Elevators and Processes* (5/03). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	Project Conditioned Potential
PM ₁₀	15.0	<100**	32.05	297.67	< 15.0
SO _x	40.0	N/A	0.0016	N/A	N/A
NO _x	40.0	N/A	2.8	N/A	N/A
VOC	40.0	N/A	0.45	N/A	N/A
CO	100.0	N/A	2.36	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

**as limited in the Intermediate Operating Permit

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned at de minimis levels.

APPLICABLE REQUIREMENTS

Cargill New Madrid Bunker (Grain Storage Pile) shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Fuad Wadud
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated March 15, 2007, received March 16, 2007, designating Cargill, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey, dated March 29, 2007.

Mr. Greg Hall
Manager
Cargill New Madrid Bunker
300 Levee Road
New Madrid, MO 63869

RE: New Source Review Permit - Project Number: 2007-03-052

Dear Mr. Hall:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Fuad Wadud at (573) 751-4817, or you may write to the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH: fwl

Enclosures

c: Southeast Regional Office
PAMS File 2007-03-052
Permit Number: