



## 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: 112012-002

Project Number: 2012-09-008  
Installation Number: 201-8001

Parent Company: Consolidated Grain and Barge Company

Parent Company Address: 2133 East Highway AB, Scott City, MO 63780

Installation Name: Consolidated Grain and Barge Company

Installation Address: 2133 East Highway AB, Scott City, MO 63780

Location Information: Scott County, S21, T 30N, R 14E

Application for Authority to Construct was made for:  
Installation of a new conveyance system (EP-07) routed from the second receiving pit (EP-02) to the storage conveyor. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

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NOV 02 2012  
EFFECTIVE DATE

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Kyril L. Moore  
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 these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

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 sources(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.	2012-09-008

**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."*

Consolidated Grain and Barge Company  
Scott County, S21, T 30N, R 14E

1. **PM<sub>10</sub> Emission Limitation**
  - A. Consolidated Grain and Barge Company (herein referred to as CGB) shall emit less than 15.0 tons of PM<sub>10</sub> in any consecutive 12-month period from the conveyance leg (EP-07) routed from the second receiving pit (EP-02) to the storage conveyor.
  - B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 1.A.
  
2. **Record Keeping and Reporting Requirements**
  - A. Consolidated Grain and Barge Company shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
  - B. Consolidated Grain and Barge Company shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (6) REVIEW

Project Number: 2012-09-008  
Installation ID Number: 201-8001  
Permit Number:

Consolidated Grain and Barge Company  
2133 East Highway AB  
Scott City, MO 63780

Complete: September 4, 2012

Parent Company:  
Consolidated Grain and Barge Company  
2133 East Highway AB  
Scott City, MO 63780

Scott County, S21, T 30N, R 14E

REVIEW SUMMARY

- Consolidated Grain and Barge Company has applied for authority to install a new conveyance system (EP-07) routed from the second receiving pit (EP-02) to the storage conveyor.
- HAP emissions are not expected from the proposed equipment.
- 40 CFR 60 Subpart DD, "Standards of Performance for Grain Elevators" does not apply to the equipment and installation because the storage capacity of the facility is 1,369,000 bushels.
- None of the NESHAPs apply to this installation. None of the currently promulgated 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 (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> are conditioned below de minimis levels, but emissions of PM remain above de minimis levels and below major source levels.
- This installation is located in Scott County, an attainment area for all criteria pollutants. Therefore, the installations major source level is 250 tons per year.
- Ambient air quality modeling was not performed since potential emissions for PM<sub>10</sub> of the application are conditioned below de minimis levels. The PTE of PM remains above de minimis levels but below major source levels. Ambient air quality modeling was not performed because there are no modeling standards for PM.

- Emission testing is not required for the equipment.
- An Intermediate Operating Permit is required for this installation within 90 days of equipment startup.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

CGB is an existing grain elevator. CGB has the ability to receive grain by truck and rail. The facility has the ability to ship by barge or truck. The facility consists of a one million bushel storage pile and 369,000 bushels of storage in the form of storage bins. Emission points include haul roads, two receiving pits, conveyance system, storage bin vents, grain dryer, barge loadout and truck loadout points. CGB has previously received two section (5) construction permits. CGB operates under an intermediate operating permit. The facility is located in Scott City, Missouri.

The following New Source Review permits have been issued to Consolidated Grain and Barge Company from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
0797-027	New Grain Elevator
082008-011	New Storage Pile

### PROJECT DESCRIPTION

CGB proposes to install a new conveyance leg at the existing facility in Scott City, Missouri. The facility currently has the ability to receive grain at two different receiving pits. One receiving pit (EP-01) can convey grain to the dryer/storage bin conveyance system. The second receiving pit (EP-02) can only receive grain that will be immediately conveyed to be shipped by barge. The proposed conveyance leg (EP-07) will allow material received at EP-02 to be conveyed to the dryer/storage bin conveyance system, in addition to being shipped by barge. The dryer/storage bin conveyance system is rated at 522 tons per hour which is the facility bottleneck. The dryer/storage bin conveyance system can only receive material from one leg at a time. The receiving leg from EP-01, as well as the new proposed conveyance leg (EP-07), is rated at 522 tons per hour. Although the EP-02 conveyance system is rated at 1044 tons per hour when conveying to a barge, the proposed conveyance leg, EP-07, will serve as a bottleneck for grain storage from EP-02 with an MHDR equal to 522 tons per hour. There will be no increase in amount of material received, shipped, or dried with the addition of the new leg. Therefore, the proposed project will not debottleneck any processes as the dryer/storage bin conveyance system will remain the facility wide bottleneck. The purpose of the project is for CGB to have the ability to unload two different materials at the same time without shipping one of the products by barge. Emissions for this project are not controlled.

## EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1, *Grain Elevators and Processes*, May 2003. Headhouse and Grain Handling Emission Factors were used for PTE calculations.

The following table (Table 2) provides an emissions summary for this project. Existing potential emissions were taken from permit number 082008-011. Existing actual emissions were taken from the installation's 2011 EIQ. Potential emissions of the application represent the potential of EP-07, the new conveyance leg, assuming continuous operation (8760 hours per year).

Particulate emissions are the only potential pollutants associated with this project. No control devices will be used to control emissions.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2011 EIQ)	Unconditioned Potential Emissions of the Application	Conditioned Potential Emissions of the Application
PM	25.0	N/D	N/D	139.47	26.91
PM <sub>10</sub>	15.0	<30.0	1.59	77.74	<15.0
PM <sub>2.5</sub>	10.0	N/D	N/D	13.26	2.56
SO <sub>x</sub>	40.0	N/A	0.009	N/A	N/A
NO <sub>x</sub>	40.0	N/A	1.5	N/A	N/A
VOC	40.0	N/A	0.08	N/A	N/A
CO	100.0	N/A	0.32	N/A	N/A
GHG (CO <sub>2</sub> e)	75,000 / 100,000	N/A	N/D	N/A	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/D	N/A	N/A
HAPs	10.0/25.0	N/A	N/D	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

## PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> are conditioned below de minimis levels, and PM emissions are above de minimis but below major source levels.

## APPLICABLE REQUIREMENTS

Consolidated Grain and Barge Company 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
- *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 10-6.165

## STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

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J Luebbert  
New Source Review Unit

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Date

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 29, 2012, received September 4, 2012, designating Consolidated Grain and Barge Company as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.



## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>m/s</b> .....	meters per second
<b>°F</b> .....	degrees Fahrenheit	<b>Mgal</b> .....	1,000 gallons
<b>acfm</b> .....	actual cubic feet per minute	<b>MW</b> .....	megawatt
<b>BACT</b> .....	Best Available Control Technology	<b>MHDR</b> .....	maximum hourly design rate
<b>BMPs</b> .....	Best Management Practices	<b>MMBtu</b> ....	Million British thermal units
<b>Btu</b> .....	British thermal unit	<b>MMCF</b> .....	million cubic feet
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>MSDS</b> .....	Material Safety Data Sheet
<b>CAS</b> .....	Chemical Abstracts Service	<b>NAAQS</b> ...	National Ambient Air Quality Standards
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>NESHAPs</b>	
<b>CFR</b> .....	Code of Federal Regulations	.....	National Emissions Standards for Hazardous Air Pollutants
<b>CO</b> .....	carbon monoxide	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>NSPS</b> .....	New Source Performance Standards
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>NSR</b> .....	New Source Review
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PM</b> .....	particulate matter
<b>CSR</b> .....	Code of State Regulations	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>dscf</b> .....	dry standard cubic feet	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>EQ</b> .....	Emission Inventory Questionnaire	<b>ppm</b> .....	parts per million
<b>EP</b> .....	Emission Point	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>EPA</b> .....	Environmental Protection Agency	<b>PTE</b> .....	potential to emit
<b>EU</b> .....	Emission Unit	<b>RACT</b> .....	Reasonable Available Control Technology
<b>fps</b> .....	feet per second	<b>RAL</b> .....	Risk Assessment Level
<b>ft</b> .....	feet	<b>SCC</b> .....	Source Classification Code
<b>GACT</b> .....	Generally Available Control Technology	<b>scfm</b> .....	standard cubic feet per minute
<b>GHG</b> .....	Greenhouse Gas	<b>SIC</b> .....	Standard Industrial Classification
<b>gpm</b> .....	gallons per minute	<b>SIP</b> .....	State Implementation Plan
<b>gr</b> .....	grains	<b>SMAL</b> .....	Screening Model Action Levels
<b>GWP</b> .....	Global Warming Potential	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>HAP</b> .....	Hazardous Air Pollutant	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>hr</b> .....	hour	<b>tph</b> .....	tons per hour
<b>hp</b> .....	horsepower	<b>tpy</b> .....	tons per year
<b>lb</b> .....	pound	<b>VMT</b> .....	vehicle miles traveled
<b>lbs/hr</b> .....	pounds per hour	<b>VOC</b> .....	Volatile Organic Compound
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		

Mr. David Coomer  
Facility Manager  
Consolidated Grain and Barge Company  
2133 East Highway AB  
Scott City, MO 63780

RE: New Source Review Permit - Project Number: 2012-09-008

Dear Mr. Coomer:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions 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 J Luebbert, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:jl

Enclosures

c: Southeast Regional Office  
PAMS File: 2012-09-008

Permit Number: