

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: **052012-006**

Project Number: 2012-02-025
Installation Number: 147-0027

Parent Company: Consumer Oil Company

Parent Company Address: P.O. Box 130, Maryville, MO 64468

Installation Name: Consumer Oil Company

Installation Address: 101 North Depot Street, Maryville, MO 64468

Location Information: Nodaway County, S17, T64N, R35W

Application for Authority to Construct was made for:
The installation of new 79,000 bushel grain bin with an enclosed grain auger and unloading system. This review was conducted in accordance with Section (6), 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 10 2012

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "Ryan 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 Departments' Air Pollution Control Program of the anticipated date of startup 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 startup 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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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."

Consumer Oil Company
Nodaway County, S17, T64N, R35W

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in the previously issued construction permits 062011-009 issued by the Air Pollution Control Program.
2. **Emission Limitation**
 - A. Consumer Oil Company shall emit less than 15.0 tons of particulate matter less than ten microns in diameter (PM₁₀) in any consecutive 12-month period from the entire installation. Table 1 below shows the emission points included in the entire installation.

Table 1: Emission Points for the Entire Installation (147-0027)

Emission Point	Description
EP-01	Straight Truck Grain Receiving
EP-02	Internal Handling
EP-03	Storage Bin Vent
EP-04	Grain Dryer
EP-05	Truck Shipping
EP-06	Fertilizer Receiving
EP-07	Front End Loader
EP-08	Weigh Hopper/Mixer
EP-09	Fertilizer Loadout
EP-10	Received In Bags
EP-11	Grain Milling/Cracking
EP-12	Storage Bin Vent
EP-13	Handling, Conveying
EP-14	Weigh Hopper
EP-15	Treatment
EP-16	Shipping
EP-17	Straight Truck Grain Receiving (Bin 1)
EP-18	Storage Bin Vent (Bin 1)
EP-19	Truck Shipping (Bin 1)
EP-20	Straight Truck Grain Receiving (Bin 2)
EP-21	Storage Bin Vent (Bin 2)
EP-22	Truck Shipping (Bin 2)
EP-23	Fertilizer Shipping/Receiving Road
EP-24a	Grain Elevator Shipping/Receiving 140' Gravel Road
EP-24b	Grain Elevator Shipping/Receiving 675' Paved Road
EP-25	Seed Shipping/Receiving Road
EP-26	Grain Bin Shipping/Receiving Road
EP-28	Storage Bin Vent (Bin 3)
EP-29	Truck Shipping (Bin 3)
EP-30	Straight Truck Grain Receiving (Bin 3)

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SPECIAL CONDITIONS:

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

- 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 Conditions 2.A.
3. Record Keeping and Reporting Requirements
- A. Consumer Oil 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. These records shall include Material Safety Data Sheets (MSDS) for all materials used
 - B. Consumer Oil 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: 2012-02-025
Installation ID Number: 147-0027
Permit Number:

Consumer Oil Company
101 North Depot Street
Maryville, MO 64468

Complete: February 15, 2012

Parent Company:
Consumer Oil Company
P.O. Box 130
Maryville, MO 64468

Nodaway County, S17, T64N, R35W

REVIEW SUMMARY

- Consumer Oil Company has applied for authority to install a new 79,000 bushel grain bin with an enclosed grain auger and Harvest Time Bin Unloading System.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart DD, *Standards of Performance for Grain Elevators* does not apply to the installation because the storage capacity at this facility is below 2.5 million bushels of grain.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation. None of the 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 (6) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of particulate matter less than 10 microns in aerodynamic diameter (PM₁₀) are conditioned below de minimis levels. Potential emissions of particulate matter (PM) remain at minor source levels. Other pollutants are proportionately reduced to de minimis levels.
- This installation is located in Nodaway County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

- Ambient air quality modeling for PM₁₀ and particulate matter less than 2.5 microns in diameter (PM_{2.5}) was not performed since potential emissions of the application for these pollutants are below de minimis levels. Modeling is not required for PM.
- Emissions testing are not required for the equipment.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Consumers Oil Company located in Maryville, Missouri is an agriculture cooperative that handles fertilizer, feed, grain, fuels, tires and other farming needs. All equipment at the facility is considered grandfathered except for two grain bins and their respective loading and unloading equipment. The grandfathered equipment was installed prior to 1982 and therefore did not require a construction permit. Consumers Oil Company applied for an intermediate operating permit in 2002 and eventually that application was replaced by a new application in 2007. During the review of the 2007 application it was determined in January, 2010 that Consumer Oil Company could downgrade to a basic operating permit. A letter was sent to the company but Consumer Oil Company has never submitted a basic operating permit application. This permit limits PM₁₀ emissions from the entire facility to below de minimis and an operating permit will no longer be required.

The following permits have been issued to Consumer Oil Company from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
032010-012	New Grain Bin
062011-009	New Grain Bin

PROJECT DESCRIPTION

Consumers Oil Company is installing a third grain bin (EP-28 thru 30) that is equipped with a portable auger and Harvest Time Bin Unloading System with power sweep. The Harvest Time Bin Unloading System uses a screw auger at the bottom of the bin that draws grain to the unloading tube at the center of the grain bin. The power sweep function allows the operator to pivot the screw auger in a complete circle around the grain bin. This maximizes the function of the unloading system allowing the auger to reach all points of the grain bin. The grain bin has a 79,000 bushel capacity. The maximum hourly design rate (MHDR) of the auger is 270 tons per hour and the load-out system has a MHDR of 105 tons per hour. There are no control devices being used to control emissions from this equipment. This permit will limit the entire installation to less than 15.0 tons of PM₁₀. The potential emissions of all other criteria pollutants will be below the de minimis levels as a result of this limit therefore Consumers Oil Company (147-0027) will no longer need an operating permit.

EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1 *Grain Elevators & Processes* (May 2003). Emissions from the haul roads associated with the third grain bin were calculated according to the procedures in AP-42, Section 13.2.1 "Paved Roads" (January, 2011). 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 <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2011 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM _{2.5}	10.0	N/A	0.00	15.68	2.47
PM ₁₀	15.0	<15.0	0.53	93.52	<15.0
PM	25.0	N/A	N/A	288.91	45.63
SO _x	40.0	N/A	N/A	N/A	N/A
NO _x	40.0	N/A	N/A	N/A	N/A
VOC	40.0	20.53	0.69	N/A	20.53
CO	100.0	N/A	N/A	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

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 PM₁₀ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

Consumer Oil 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.

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 a hard copy submittal or May 1 for online submittal for the previous year's

emissions.

- *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.

Gerad Fox
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 6, 2012, received February 15, 2012, designating Consumer Oil Company as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Mr. Harold Spire
General Manager
Consumer Oil Company
P.O. Box 130
Maryville, MO 64468

RE: New Source Review Permit - Project Number: 2012-02-025

Dear Mr. Spire:

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 and your new source review permit application 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 Gerad Fox, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:gfl

Enclosures

c: Kansas City Regional Office
PAMS File: 2012-02-025
Permit Number: