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: 062020-014  Project Number: 2020-02-030
Installation Number: 147-0027

Parent Company: Consumers Oil Company Inc. of Maryville

Parent Company Address: PO Box 130, Maryville, MO 64468

Installation Name: Consumers Oil Company Inc. Maryville

Installation Address: 100 N Depot St, Maryville, MO 64468

Location Information: Nodaway County, S20, T64N, R35W

Application for Authority to Construct was made for:
Construction of 4 grain bins with a 20,000 bu/hr receiving leg and a 6,000 bu/hr reclaim system. 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.

Director or Designee
Department of Natural Resources

June 18, 2020
Effective Date
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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of 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 within 30 days of actual startup. Also, you must notify the Department’s regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department’s 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 using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
http://dnr.mo.gov/regions/
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 to 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 (3)(E). “Conditions required by permitting authority.”

Consumers Oil Company Inc. Maryville
Nodaway County, S20, T64N, R35W

1. PM\textsubscript{10} Emission Limitation
   A. Consumers Oil Company Inc. Maryville shall emit less than 15.0 tons of PM\textsubscript{10} in any consecutive 12-month period from emission points listed below in Table 1. The SSM emissions as reported to the Air Pollution Control Program’s Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 Start-Up, Shutdown, and Malfunction Conditions shall be included in the limit.

   Table 1: Emission Points for the Entire Installation (147-0027)
   \begin{tabular}{|l|l|}
   \hline
   Emission Point & Description \\
   \hline
   EP-33 & Hopper Truck Grain Receiving for set of four 60’ 13-ring grain bins \\
   EP-34 & Internal Handling \\
   EP-35 & Storage Bin Vent \\
   EP-36 & Truck Loadout for set of four 60’ 13-ring grain bins \\
   EP-37a & Haul Road for set of four 60’ 13-ring grain bins Shipping/Receiving 650’ \\
   EP-37b & Haul Road for set of four 60’ 13-ring grain bins Shipping/Receiving 505’ \\
   \hline
   \end{tabular}

   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 1.A.

2. Haul Road Undocumented Watering
   A. Consumers Oil Company Inc. Maryville shall water haul roads whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary.

   B. Watering may be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

3. Operational Limitation
   Consumers Oil Company Inc. Maryville shall only receive grain via hopper trucks for the set of four 60’ 13-ring grain bins described in Table 1.

4. Record Keeping and Reporting Requirements
   A. Consumers Oil Company Inc. Maryville 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. Consumers Oil Company Inc. Maryville shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.
Installation Address: Consumers Oil Company Inc. Maryville
100 N Depot St
Maryville, MO 64468

Nodaway County, S20, T64N, R35W

REVIEW SUMMARY

- Consumers Oil Company Inc. Maryville has applied for authority to construct four grain bins with a 20,000 bu/hr receiving leg and a 6,000 bu/hr reclaim system.

- The application was deemed complete on March 13, 2020.

- HAP emissions are not expected from the proposed equipment.

- None of the New Source Performance Standards (NSPS) apply to the installation. 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 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 (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of PM$_{10}$ are conditioned below de minimis levels. Potential emissions of PM$_{2.5}$ are indirectly conditioned below de minimis levels by the limit on PM$_{10}$. Potential emissions of PM are indirectly conditioned below major levels by the limit on PM$_{10}$.

- This installation is located in Nodaway County, an attainment/unclassifiable area for all criteria pollutants.

- None of the New Source Performance Standards (NSPS) apply to the installation.

- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.
Emissions testing is not required for the equipment as a part of this permit. Testing may be required as part of other state, federal or applicable rules.

No Operating Permit is required for this installation.

Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Consumers Oil Company Inc. Maryville 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 three 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 Inc. Maryville 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 Consumers Oil Company Inc. Maryville could downgrade to a basic operating permit.

In 2012, construction permit 052012-006 limited PM$_{10}$ emissions from the entire facility to below de minimis and an operating permit was no longer required. Permit 052012-006A recalculated the potential to emit and kept the installation wide PM$_{10}$ limit of 15 tons per year. Permit 052012-006A superseded all special conditions found in permit 052012-016.

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

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>032010-012</td>
<td>New Grain Bin</td>
</tr>
<tr>
<td>062011-009</td>
<td>New Grain Bin</td>
</tr>
<tr>
<td>052012-006</td>
<td>New Grain Bin</td>
</tr>
<tr>
<td>052012-006A</td>
<td>Update PTE</td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

Consumers Oil Company Inc. Maryville is installing four new 60’ 13-ring grain bins that are equipped with a 20,000 bushel per hour receiving leg and 6,000 bushel per hour reclaim system through the same leg. The reclaim system will be the bottleneck for this project at 6,000 bushels per hour (180 tons per hour). There are no control devices being used to control emissions from this equipment. Haul road emissions will be controlled by undocumented watering.
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.

Emissions from the grain handling:

Emissions from the haul roads associated with the grain bins:
- Calculated according to the procedures in AP-42, Section 13.2.2 “Unpaved Roads” (November, 2006).

The following table provides an emissions summary for this project. Existing potential emissions were taken from permit 052012-006A. Existing actual emissions were taken from the installation’s 2019 EIQ. Potential emissions of the project represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Conditioned potential emissions of the project represent a voluntary limit to avoid PM$_{10}$ dispersion modeling at the time of permitting. Attachment A contains composite emission factors for tracking emissions from all emission units that are evaluated towards the voluntary limit.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regulatory De Minimis Levels</th>
<th>Existing Potential Emissions</th>
<th>Existing Actual Emissions (2019 EIQ)</th>
<th>Unconditioned Potential Emissions of the Project</th>
<th>Project Conditioned Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>41.44</td>
<td>N/D</td>
<td>250.16</td>
<td>43.88</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>&lt;15.0</td>
<td>5.23</td>
<td>85.51</td>
<td>&lt;15.0</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>2.61</td>
<td>0.29</td>
<td>13.24</td>
<td>2.32</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>20.53</td>
<td>3.55</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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

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 PM$_{10}$ are conditioned below de minimis levels. Potential emissions of PM$_{2.5}$ are indirectly conditioned below de minimis levels by the limit on PM$_{10}$. Potential emissions of PM are indirectly conditioned below major levels by the limit on PM$_{10}$.
APPLICABLE REQUIREMENTS

Consumers Oil Company Inc. Maryville 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

- **Start-Up, Shutdown, and Malfunction Conditions**, 10 CSR 10-6.050

- **Submission of Emission Data, Emission Fees and Process Information**, 10 CSR 10-6.110
  - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.

- **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 (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 17, 2020, received February 20, 2020, designating Consumers Oil Company Inc. of Maryville as the owner and operator of the installation.
### Attachment A – PM$_{10}$ Compliance Worksheet

For Set of Four 60’13-Ring Grain Bins

Consumers Oil Company Inc. Maryville  
Nodaway County, S20, T64N, R35W  
Project Number: 2020-02-030  
Installation ID Number: 147-0027  
Permit Number: 062020-014  

This sheet covers the period from ___ to ___ . (Copy sheet as needed.)

<table>
<thead>
<tr>
<th>Step Description</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Throughput (tons)</td>
<td></td>
<td>Composite Emission Factor (lb/ton)</td>
<td>Total Monthly PM$_{10}$ Emissions (lbs)</td>
</tr>
<tr>
<td>Grain Received for set of four 60’ 13 ring grain bins</td>
<td></td>
<td>0.1085</td>
<td></td>
</tr>
</tbody>
</table>

(d) Monthly Startup, Shutdown and Malfunction PM$_{10}$ Emissions (lbs)  
(e) Total Monthly PM$_{10}$ Emissions (lbs)  
(f) Total Monthly PM$_{10}$ Emissions (tons)  
(g) 12-Month PM$_{10}$ Emissions (h) from Previous Month’s Attachment A (tons)  
(h) Total Monthly PM$_{10}$ Emissions (e) from Previous Year’s Attachment A (tons)  
(i) Current 12-Month PM$_{10}$ Emissions (tons) \( (i) = (f) + (g) - (h) \)

(a) Record this month’s throughput.  
(b) Multiply the Monthly Throughput (a) by the respective Composite Emission Factor (b).  
(d) As reported to the Air Pollution Control Program’s Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050  
(e) Add the total monthly PM$_{10}$ emissions (lbs) and the monthly startup, shutdown and malfunction PM$_{10}$ emissions (d)  
(f) Divide the Total Monthly PM$_{10}$ Emissions (d) by 2,000.  
(g) Record the 12-Month PM$_{10}$ Emissions (h) from the Previous Month’s Attachment A.  
(h) Record the Total Monthly PM$_{10}$ Emissions (e) from the Previous Year’s Attachment A.  
(i) Calculate the Current 12-Month PM$_{10}$ Emissions. A total less than 15.0 tons of PM$_{10}$ indicates compliance.
APPENDIX A

Abbreviations and Acronyms

% ............ percent
°F ............ degrees Fahrenheit
acfm ........ actual cubic feet per minute
BACT ......... Best Available Control Technology
BMPs ........ Best Management Practices
Btu .......... British thermal unit
CAM ........ Compliance Assurance Monitoring
CAS .......... Chemical Abstracts Service
CEMS ...... Continuous Emission Monitor System
CFR .......... Code of Federal Regulations
CO ............ carbon monoxide
CO₂ .......... carbon dioxide
CO₂e .......... carbon dioxide equivalent
COMS ...... Continuous Opacity Monitoring System
CSR .......... Code of State Regulations
dscf ........ dry standard cubic feet
EIQ .......... Emission Inventory Questionnaire
EP .......... Emission Point
EPA .......... Environmental Protection Agency
EU ............ Emission Unit
fps .......... feet per second
ft ............ feet
GACT ......... Generally Available Control Technology
GHG ........ Greenhouse Gas
gpm .......... gallons per minute
gr ............ grains
GWP ........ Global Warming Potential
HAP .......... Hazardous Air Pollutant
hr .......... hour
hp .......... horsepower
lb .......... pound
lbs/hr ........ pounds per hour
MACT ...... Maximum Achievable Control Technology
µg/m³ ........ micrograms per cubic meter
m/s .......... meters per second
Mgal ........ 1,000 gallons
MW .......... megawatt
MHDR ...... maximum hourly design rate
MMBtu .... Million British thermal units
MMCF ...... million cubic feet
MSDS ........ Material Safety Data Sheet
NAAQS .... National Ambient Air Quality Standards
NESHAPs National Emissions Standards for Hazardous Air Pollutants
NOₓ ........ nitrogen oxides
NSPS .......... New Source Performance Standards
NSR .......... New Source Review
PM .......... particulate matter
PM₂.₅ ........ particulate matter less than 2.5 microns in aerodynamic diameter
PM₁₀ .......... particulate matter less than 10 microns in aerodynamic diameter
ppm .......... parts per million
PSD .......... Prevention of Significant Deterioration
PTE .......... potential to emit
RACT ...... Reasonable Available Control Technology
RAL .......... Risk Assessment Level
SCC .......... Source Classification Code
scfm .......... standard cubic feet per minute
SDS .......... Safety Data Sheet
SIC .......... Standard Industrial Classification
SIP .......... State Implementation Plan
SMAL ...... Screening Model Action Levels
SOₓ .......... sulfur oxides
SO₂ .......... sulfur dioxide
SSM .......... Startup, Shutdown & Malfunction
tph .......... tons per hour
tpy .......... tons per year
VMT .......... vehicle miles traveled
VOC .......... Volatile Organic Compound
June 18, 2020

Harold Spire
General Manager
Consumers Oil Company Inc. Maryville
PO Box 130
Maryville, MO 64468

RE: New Source Review Permit - Project Number: 2020-02-030

Dear Harold Spire:

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 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty 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 administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.
If you have any questions regarding this permit, please do not hesitate to contact Chad Stephenson, 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

[Signature]

Susan Heckenkamp
New Source Review Unit Chief

SH:sha

Enclosures

c: Kansas City Regional Office
   PAMS File: 2020-02-030

Permit Number: 062020-014