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: 102013-007
Project Number: 2012-04-005
Installation Number: 047-0132

Parent Company: Ralcorp
Parent Company Address: 800 Market Street, St. Louis, MO 63101
Installation Name: American Italian Pasta Company
Installation Address: 1000 Italian Way, Excelsior Springs, MO 64024
Location Information: Clay County, S25, T53N, R30W

Application for Authority to Construct was made for:
Construction of a new debranning 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.

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 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.
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.”

American Italian Pasta Company
Clay County, S25, T53N, R30W

1. Control Device Requirement-Baghouse
   A. American Italian Pasta Company shall control particulate emissions from the emission units in Table 2 which are stated as having baghouses by enclosing and venting each particulate emission source listed in Table 2 to a baghouse. The enclosures of the emissions units shall be constructed and maintained such that no visible emissions are allowed to occur from these sources except through the gases exiting from the baghouse.

   B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them.

   C. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

   D. On the days when the equipment is running, American Italian Pasta Company shall conduct a daily examination on the baghouses listed in Table 2. This shall be completed during the daily workplace examinations. During the examination, the person completing the workplace exam shall visually inspect and record that all emission control devices are working as per manufacturer's guidelines.

   E. American Italian Pasta Company shall monitor and record the operating pressure drop across the baghouses listed in Table 2 at least once per week. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

F. American Italian Pasta Company shall submit the fan curves for the fans associated with the baghouses listed in Table 2 within 30 days of equipment start-up.

G. American Italian Pasta Company shall maintain an operating and maintenance log for the baghouses which shall include the following:
   1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

2. Control Measure – Capture Efficiency (100%)
   A. Emission units listed in Table 2 as having control devices shall be totally enclosed, maintained under negative pressure, and vented to its respective baghouse.

   B. If any openings or holes should appear on emission units listed in Table 2 as having baghouse control due to wear or maintenance activities these openings or holes shall maintain negative pressure.

   C. American Italian Pasta Company shall demonstrate negative pressure at all emission unit openings listed in Table 2 as having baghouse or custom process filter control by using visual indicators such as streamers, talc puff test, negative pressure gauges, flags, etc. at openings that are not closed during normal operations. These openings shall include but are not limited to head boxes, drop point opening, etc. All openings, when operating, must indicate the presence of negative pressure for compliance.

   D. American Italian Pasta Company shall maintain an operating and maintenance log for the capture devices which shall include the following:
      1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions.
      2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
      3) A record of regular inspection schedule, the date and results of all inspections, including any actions or maintenance activities that result from the inspections. Either paper copy or electronic formats are acceptable.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

3. Record Keeping and Reporting Requirements
   A. American Italian Pasta 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 MSDS for all materials used.

   B. American Italian Pasta 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.

4. Performance Testing
   A. American Italian Pasta Company shall conduct performance testing on the baghouses listed in Table 2 in order to verify that the emission rates for each emission unit in Table 2 are not exceeded.

   B. The following conditions shall be measured and recorded during the performance testing:
      1) The baghouse' filterable PM emission factor in grains per standard cubic feet (gr/dscf) using the U.S. EPA Method 201, 201A, 17, or 5. Other Air Pollution Control Program approved methods may be substituted for any of the above EPA test methods.
      2) The baghouse respective flowrate in DSCFM using methods approved by the Air Pollution Control Program
      3) The baghouses respective pressure drop in inches of water column
      4) The baghouse respective emission rate, lbs/hr
      5) Process material throughput, tph

   C. These tests shall be performed within 60 days after achieving the maximum production rate of the installation, but not later than 180 days after initial start-up of the debranning system for commercial operation. These tests shall be conducted at the MHDR listed in Table 2 or within 10 percent of the MHDR. If the tests are conducted below 90 percent of the MHDR, then the tested production rate plus 10 percent is the new MHDR. In order to be allowed to operate at a higher rate, the emission unit(s) will have to be retested. These tests shall be conducted in accordance with the approved Proposed Test Plan outlined in Special Condition 4.D.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

D. A completed Proposed Test Plan Form (enclosed) must be submitted to the Enforcement/Compliance Unit of the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, to review the Proposed Test Plan and to ensure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing.

E. Two copies of a written report of the performance test results shall be submitted to the Director at P.O. Box 176, Jefferson City, MO 65102 within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run.

F. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations.

G. If the results of the performance testing show that the tested emission rates are greater than the stack emission rates listed in Table 2, then American Italian Pasta Company shall evaluate what effects these higher emission rates would have had on the permit applicability, modeling applicability, and emission factors for compliance and emission inventory. American Italian Pasta Company shall submit to the Air Pollution Control Program the results of any such evaluation in a completed Application for Authority to Construct within 30 days of submitting the Performance Test Results report required in Special Condition 4.D of this permit.
American Italian Pasta Company
1000 Italian Way
Excelsior Springs, MO  64024

Parent Company:
Ralcorp
800 Market Street
St. Louis, MO  63101

Clay County, S25, T53N, R30W

REVIEW SUMMARY

- American Italian Pasta Company has applied for authority to construct a new debranning system.

- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.

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

- 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.

- Baghouses is being used to control the PM$_{10}$ emissions from the equipment in this permit.

- 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 below de minimis levels.

- This installation is located in Clay County, a maintenance area for ozone and an attainment area for all other 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 was not performed since potential emissions of the application are below de minimis levels.
Emissions testing are required for the new equipment.

Submittal of a Basic Operating Permit application is required for this installation within 30 days of equipment startup.

Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

American Italian Pasta Company operates a durum wheat mill and pasta production facility in Excelsior Springs, Missouri. Durham wheat enters the facility and is processed through a series of roller mills, screens, cleaners and conditioners to separate the semolina that is used in pasta production. About 75 percent of the input weight is recovered as semolina, with the remainder recovered as bran, flour and waste. This installation is a minor source under construction Permit No. 112001-025. American Italian Pasta Company has applied for a Basic Operation permit (Project No. 2012-03-052) that is under technical review by Air Pollution Control Program.

The following permits have been issued to American Italian Pasta Company from the Air Pollution Control Program.

Table 1: Permit History

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0793-020</td>
<td>Installation of a new semolina mill, six (6) new wheat storage silos, and new bran and semolina storage facilities.</td>
</tr>
<tr>
<td>1297-029</td>
<td>Addition to existing pasta plant of a new long goods pasta line, a new short goods pasta line, and associated support equipment.</td>
</tr>
<tr>
<td>112001-025</td>
<td>Increase of the throughput capacity of the existing “B” durum wheat mill by installing additional raw wheat cleaning equipment, pneumatic conveying equipment, and purifiers.</td>
</tr>
<tr>
<td>112001-025A</td>
<td>Correction to the existing potential emissions listed in the Emissions Summary Table</td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

American Italian Pasta Company is seeking authority to add a debranning system in order to more efficiently process the durum wheat. The addition of the debranning system will allow capture of more of the wheat kernel for human consumption.

The debranning system equipment consists of debranners, cyclones, feeders, product bins, blowers, mixers, pneumatic conveying systems and baghouses. The new equipment will be installed on several levels of the existing mill.

The uncontrolled potential emissions exceed respective de minimis levels, requiring a permit. This project is expected to have controlled potential emissions for PM, PM$_{10}$ and PM$_{2.5}$ under their respective de minimis levels.
Table 2: New Debranning System Equipment

<table>
<thead>
<tr>
<th>Emission Point No.</th>
<th>Description</th>
<th>Control Device</th>
<th>Maximum Hourly Design Rate</th>
<th>Flowrate (cfm)</th>
<th>PM Emission Rate (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Wheat Transport</td>
<td>Cyclone/Baghouse</td>
<td>22.5</td>
<td>4,238</td>
<td>0.046</td>
</tr>
<tr>
<td>31</td>
<td>Debranning First Step</td>
<td>Cyclone/Baghouse</td>
<td>22.5</td>
<td>8,829</td>
<td>0.094</td>
</tr>
<tr>
<td>32</td>
<td>Debranning Second Step</td>
<td>Cyclone/Baghouse</td>
<td>22.5</td>
<td>8,829</td>
<td>0.094</td>
</tr>
<tr>
<td>33</td>
<td>Debranning Third Step</td>
<td>Cyclone/Baghouse</td>
<td>22.5</td>
<td>8,829</td>
<td>0.094</td>
</tr>
<tr>
<td>34</td>
<td>Bran Fractionation Mix</td>
<td>Cyclone/Baghouse</td>
<td>24.1</td>
<td>4,238</td>
<td>0.046</td>
</tr>
<tr>
<td>35</td>
<td>Bran Fractionation Micronization</td>
<td>Cyclone/Baghouse</td>
<td>1.0</td>
<td>3,814</td>
<td>0.041</td>
</tr>
<tr>
<td>36</td>
<td>Bran Fractionation Turboseparation</td>
<td>Cyclone/Baghouse</td>
<td>1.0</td>
<td>3,814</td>
<td>0.041</td>
</tr>
</tbody>
</table>

cfm = cubic feet per minute

EMISSIONS/CONTROLS EVALUATION

The potential emissions of particulate matter was derived from the exhaust air flowrate through the cyclone/baghouse combination (as listed in Table 2) and a grain loading of 0.00124 grains per cubic foot. The particle size distribution of the particulate is unknown so all particulate matter is assumed to equal PM$_{2.5}$ and PM$_{10}$.

The following table provides an emissions summary for this project. Existing potential emissions were taken from Permit No. 112001-025A. Existing actual emissions were taken from the installation’s 2011 Emission Inventory Questionnaire (EIQ). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 3: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>N/D</td>
<td>N/D</td>
<td>1.99</td>
<td>N/A</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>74.01</td>
<td>7.96</td>
<td>1.99</td>
<td>N/A</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>N/D</td>
<td>0.23</td>
<td>1.99</td>
<td>N/A</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>31.10</td>
<td>0.08</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>39.27</td>
<td>12.19</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>1.52</td>
<td>0.67</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>9.81</td>
<td>10.24</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/D</td>
<td>N/D</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, PM\textsubscript{10} and PM\textsubscript{2.5} are below their respective de minimis levels.

APPLICABLE REQUIREMENTS

American Italian Pasta 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 (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required, I recommend this permit be granted with special conditions.

Susan Heckenkamp
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, 2012, received March 29, 2012, designating Ralcorp as the owner and operator of the installation.
Mr. Todd Lewis  
Capital Projects Manager  
American Italian Pasta Company  
1000 Italian Way  
Excelsior Springs, MO  64024  

RE: New Source Review Permit - Project Number: 2012-04-005  

Dear Mr. Lewis:  

Enclosed with this letter is your permit to construct. Please study it carefully. 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 revised 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 Susan Heckenkamp, 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:shl  

Enclosures  

Permit Number: