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: 082014-004
Project Number: 2014-04-069
Installation Number: 215-0003

Parent Company: Packaging Service Co., Inc.
Parent Company Address: 1904 Mykawa Road, Pearland, TX 77581
Installation Name: Packaging Service Co., Inc. - Raymondville Facility
Installation Address: 7903 Sumpter Road, Raymondville, MO 65555
Location Information: Texas County, S01, T30N, R9W

Application for Authority to Construct was made for:
Construction of seven new kilns and a new #3 Afterburner. 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.

AUG 11 2014

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.”

Packaging Service Co., Inc. - Raymondville Facility
Texas County, S01, T30N, R9W

1. Phased Construction and Operation
   A. Phase I consists of the construction and commercial operation of three new kilns #17, #18 and #19. The kilns and afterburner systems shall be operated in accordance with Special Condition 2.A through 2.C and 4.A through 4.G upon the date in which commercial operation of any one of the new kiln begins.
   B. Phase II consists of the construction and operation of four new kilns (Kiln #20, #21, #22, and #23) and Afterburner #3. The kilns and afterburner systems shall be operated in accordance with Special Condition 3.A through 3.C and 5.A through 5.K upon the date in which commercial operation of any one of the new kilns or afterburner begins.

2. Charcoal Kiln Processing Requirements- Phase I
   A. Packaging Service Co., Inc. - Raymondville shall not simultaneously burn more than three (3) kilns in the bank of eight kilns known as Kiln #7, #8, #9, #10, #11, #12, and new kilns #18 and #19 to Afterburner #1 during Phase I of this project.
   B. Packaging Service Co., Inc. - Raymondville shall not simultaneously burn more than three (3) kilns in the bank of ten kilns known as Kiln #2, #3, #4, #5, #6, #13, #14, #15, #16, and new kiln #17 to Afterburner #2 during Phase I of this project.
   C. Packaging Service Co., Inc. - Raymondville shall maintain a daily log for each charcoal kiln that includes start-up time, cool-down time, and re-light time to demonstrate compliance with Special Conditions 1.A. and 1.B.

3. Charcoal Kiln Processing Requirements- Phase II
   A. Packaging Service Co., Inc. - Raymondville shall not simultaneously burn more than three (3) kilns in the bank of seven kilns known as Kiln #7, #8, #9, #10, #11, #12, and new kiln #18 to Afterburner #1 during Phase II of this project.
   B. Packaging Service Co., Inc. - Raymondville shall not simultaneously burn more than three (3) kilns in the bank of seven kilns known as Kiln #2, #3, #4,
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

#5, #6, #13, and #17 to Afterburner #2 during Phase II of this project.

C. Packaging Service Co., Inc. - Raymondville shall not simultaneously burn more than four (4) kilns in the bank of eight kilns known as Kiln #14, #15, #16, #19, #20, #21, #22 and #23 to Afterburner #3 during Phase II of this project.

D. Packaging Service Co., Inc. - Raymondville shall maintain a daily log for each charcoal kiln that includes start-up time, cool-down time, and re-light time to demonstrate compliance with Special Conditions 2.A., 2B. and 2.C.

4. Control Device Requirements-Phase I
A. Packaging Service Co., Inc. - Raymondville shall control emissions from the charcoal kilns #7, #8, #9, #10 #11, #12, #18, and #19 using Afterburner #1 as specified in the permit application during Phase I. The afterburner shall be operated and maintained in accordance with the manufacturer's specifications.

B. Packaging Service Co., Inc. - Raymondville shall control emissions from the charcoal kilns #2, #3, #4, #5, #6, #13, #14, #15, #16, and #17 using Afterburner #2 as specified in the permit application during Phase I. The afterburner shall be operated and maintained in accordance with the manufacturer's specifications.

C. Packaging Service Co., Inc. - Raymondville shall continuously monitor and record the temperature of the Afterburner #1 any time the charcoal kilns #7, #8, #9, #10, #11, #12, #18, or #19 are in operation during Phase I.

D. Packaging Service Co., Inc. - Raymondville shall continuously monitor and record the temperature of the Afterburner #2 any time the charcoal kilns #2, #3, #4, #5, #6, #13, #14, #15, #16, or #17 are in operation during Phase I.

E. Packaging Service Co., Inc. - Raymondville shall ensure that the temperature of the Afterburner #1 and Afterburner #2 is maintained within the normal operating range established in the emissions test reports that were provided with the application. Emission test reports indicate that a minimum temperature of 1604°F must be maintained for Afterburner #1 and 1554°F must be maintained for Afterburner #2 to ensure continued compliance.

F. Packaging Service Co., Inc. - Raymondville has the option of submitting an afterburner temperature control analysis and proposing an alternate temperature control plan to the Director of the Air Pollution Control Program. Upon approval by the Director, an alternate temperature control plan can be implemented.

G. Packaging Service Co., Inc. - Raymondville Facility shall maintain an operating and maintenance log for Afterburner #1 and #2 which shall include the following:
1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5. Control Device Requirements-Phase II
A. Packaging Service Co., Inc. - Raymondville shall control emissions from the charcoal kilns #7, #8, #9, #10 #11, #12, and #18 using Afterburner #1 as specified in the permit application during Phase II. The afterburner shall be operated and maintained in accordance with the manufacturer's specifications.

B. Packaging Service Co., Inc. - Raymondville shall control emissions from the charcoal kilns #2, #3, #4, #5, #6, #13, and #17 using Afterburner #2 as specified in the permit application during Phase II. The afterburner shall be operated and maintained in accordance with the manufacturer's specifications.

C. Packaging Service Co., Inc. - Raymondville shall control emissions from the charcoal kilns #14, #15, #16, #19, #20, #21, #22 and #23 using Afterburner #3 as specified in the permit application during Phase II. The afterburner shall be operated and maintained in accordance with the manufacturer's specifications.

D. Packaging Service Co., Inc. - Raymondville shall continuously monitor and record the temperature of the Afterburner #1 any time the charcoal kilns #7, #8, #9, #10, #11, #12, or #18 are in operation during Phase II.

E. Packaging Service Co., Inc. - Raymondville shall continuously monitor and record the temperature of the Afterburner #2 any time the charcoal kilns #2, #3, #4, #5, #6, #13, and #17 are in operation during Phase II.

F. Packaging Service Co., Inc. - Raymondville shall continuously monitor and record the temperature of the Afterburner #3 any time the charcoal kilns #14, #15, #16, #19, #20, #21, #22 or #23 are in operation during Phase II.

G. Packaging Service Co., Inc. - Raymondville shall ensure that the temperature of the Afterburner #1, Afterburner #2 and Afterburner #3 is maintained within the normal operating range established in the emissions test reports that were provided with the application. Emission test reports indicate that a minimum temperature of 1604°F must be maintained for Afterburner #1 and 1554°F must be maintained for Afterburner #2 to ensure continued compliance. The minimum temperature required for Afterburner #3 will be established when the stack test is performed on Afterburner #3.

H. Packaging Service Co., Inc. - Raymondville has the option of submitting an afterburner temperature control analysis and proposing an alternate temperature control plan to the Director of the Air Pollution Control Program. Upon approval by the Director, an alternate temperature control plan can be implemented.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

I. Packaging Service Co., Inc. - Raymondville shall maintain an operating and maintenance log for Afterburner #1, #2, and #3 which shall include the following:

J. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and

K. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

6. Performance Testing

A. Packaging Services Co., Inc. - Raymondville shall conduct performance tests on Afterburner #3 with four kilns burning simultaneously sufficient to demonstrate compliance with the emission rates of Particulate Matter (PM), Volatile Organic Compounds (VOCs) and Carbon Monoxide (CO) set forth in 10 CSR 10-6.330. VOC emissions shall be calculated as pounds of VOC per hour, not reported on a carbon or propane basis. In conjunction with the performance test, Packaging Service Co., Inc.– Raymondville shall also establish a MHDR for charcoal production of the new kiln system. The MHDR of the new kiln system shall be equal to or less than 0.69 tons per hour.

B. 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 for commercial operation and shall be conducted in accordance with the proposed stack test plan outlined in this Special Condition and performance testing and compliance procedures in 10 CSR 10-6.330 (3)(F).

C. Packaging Service Co., Inc. - Raymondville shall test the kiln system between 90 and 100% of the maximum process/production rate, which equates to 0.62 and 0.69 tons per hour for the Afterburner #3 kiln system. If the kiln system is tested at a rate less than 90% of the maximum production rate, then 110% of the tested rate shall become the maximum allowable production rate. Packaging Service Co., Inc. - Raymondville has the option of conducting future testing in order to increase the maximum allowable production rate under the authority of this permit, not to exceed 0.69 tons per hour. The process/production rate shall be the average production rate conducted during compliance testing.

D. Testing shall be conducted during periods of representative conditions at the maximum process/production rates, not to include periods of startup, shutdown, or malfunction. A description of the representative conditions for the performance tests is listed in 10 CSR 10-6.330 (3)(F).

E. A completed Proposed Test Plan Form (enclosed) must be submitted to 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, and assure that the test date is acceptable for an observer to be
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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.

F. Two copies of a written report of the performance test results shall be submitted to the Director 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.

G. 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.

H. Actual conditions under which performance testing is conducted shall be recorded as stipulated in 10 CSR 10-6.330 (3)(F) and this Special Condition throughout each of the test runs. These conditions are to include all relevant process/production parameters, all parameters relating to the status of emission controls, and all parameters set forth in 10 CSR 10-6.330 (3)(F). This data is to be included in the emissions test report. In addition, the report shall include emission factors for PM, VOCs and CO which shall be determined using emission rates and recorded charcoal production rates that have occurred during testing. No maintenance or upgrade of emission control efficiency shall be undertaken during emission testing.

I. Emission testing results, in “mass of pollutant/volume of air,” shall be reported for the pollution source airstream, free from any extraneous source of dilution air. Potential dilution air streams shall either be sealed off prior to testing or else be measured by appropriate EPA test methods and subtracted from the total airflow at the sampling location. Failure to account for dilution air can lead to cancellation of testing and/or a violation notice for “circumvention”.

J. Packaging Service Co., Inc. - Raymondville shall receive approval from the Air Pollution Control Program prior to any changes in the process or throughput allowed at this installation other than that which is tested at the time of performance test.

7. Fuel Requirements
Afterburner #3 shall be fueled exclusively by propane.

8. Packaging Services Co., Inc. – Raymondville shall submit a revised calculations of the potential to emit to the Permitting Unit of the Air Pollution Control Program, within 30 days of submitting the test results report, if the emissions tested exceed any of the emission rates stated in Table 2.
SPECIAL CONDITIONS:

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

9. Record Keeping and Reporting Requirements
   A. Packaging Service Co., Inc. – Raymondville shall maintain all records demonstrating the date and procedure of the transition between Phase I and Phase II. These records shall be maintained for not less than five years and shall make them available to any Missouri Department of Natural Resources’ personnel upon request.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2014-04-069
Installation ID Number: 215-0003
Permit Number:

Packaging Service Co., Inc. - Raymondville Facility  Complete: April 29, 2014
7903 Sumpter Road
Raymondville, MO  65555

Parent Company:
Packaging Service Co., Inc.
1904 Mykawa Road
Pearland, TX   77581

Texas County, S01, T30N, R9W

REVIEW SUMMARY

- Packaging Service Co., Inc. - Raymondville Facility has applied for authority to construct seven new kilns (Kiln #17 through #23), and a new #3 Afterburner.

- HAPs of concern from this process are expected from the proposed equipment. HAPs of concern from this process are below major source level and individual SMALS.

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

- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.

- Afterburner #1, #2, and #3 are being used to control the PM, PM$_{10}$, PM$_{2.5}$, CO, Polycyclic Organic Matter (POM), HAPs, and VOC 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 all pollutants are below de minimis levels.

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

- This installation is on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation is classified as item number 25. Charcoal production facilities. The installation’s major source level is 100 tons per year and fugitive emissions are counted toward major source applicability.
• Ambient air quality modeling was not performed since potential emissions of the application are de minimis.

• Emissions testing is required for the Afterburner #3.

• A Basic Operating Permit application is not required for this installation since the conditioned potential emissions of the facility is below de minimis.

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Packaging Service Co., Inc. is an existing charcoal production facility located in Raymondville, Missouri in Texas County. This site was formerly owned by Thomason Charcoal and operated by Royal Oak Enterprises, Incorporated (Royal Oak). Royal Oak received permit number 072002-006 for the installation of 3 new charcoal kilns and two sawdust-fired afterburner controls. As a result of that project, the facility’s potential emissions were reduced from major source levels to minor source levels, and Royal Oak requested that their Part 70 operating permit be terminated. The sawdust-fired afterburners did not pass performance testing requirements, and on February 15, 2005 Royal Oak shut down all operating kilns at the Raymondville site in compliance with a 1997 Consolidated Consent Agreement and Consent Order between Royal Oak and the Environmental Protection Agency (EPA).

GoldStar Charcoal purchased the facility in 2006 and replaced the sawdust-fired afterburners with propane-fired afterburners. Afterburner #1 (CD01), which controls emissions from kilns #7-12 passed the performance test requirements on February 13, 2007. Kilns #1-6 have not operated since being shut down in 2005, and therefore afterburner #2 (CD02), which controls emissions from these kilns, was not tested before GoldStar Charcoal ceased operations in 2008.

GoldStar Charcoal also planned to install a natural lump charcoal screening and bagging operation. GoldStar Charcoal was issued a permit applicability determination for this project from the Air Pollution Control Program on August 14, 2006. At that time, controlled potential emissions of criteria pollutants were used to determine permit applicability, and a construction permit was not required for the proposed screening and bagging operation. However, this project was not installed as planned. Renewable Energies purchased the site in 2009 from Mid America Bank and planned to finish the construction of the screening and bagging operation. Since the original determination for this project, the Air Pollution Control Program has changed its policy and no longer considered controls in determining permit applicability. Therefore, a construction permit was required for the installation of a screening and bagging operation for natural lump charcoal (Permit # 122009-004).

In the fall of 2010, Packaging Service Co., Inc. purchased the Raymondville facility from Renewable Carbon Energies.
A stack test was performed on Afterburner # 1 on February 13, 2007, when GoldStar Charcoal owned the facility. Afterburner #2 and the pre-heater were tested October 4, 2011 after Packaging Service Co., Inc. purchased the facility.

In Permit #022014-0085, an additional four new kilns (#13, #14, #15, and #16) were added in 2013 and are controlled by Afterburner #2. Kiln #1 was dismantled at this time.

The following New Source Review permits have been issued to Packaging Service Co., Inc. - Raymondville Facility (and prior owners) from the Air Pollution Control Program.

Table 1: Previously Issued Construction Permits

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>072002-006</td>
<td>Project number 2001-06-023 was reviewed for the construction of 3 new charcoal kilns and 2 afterburner controls</td>
</tr>
<tr>
<td>122009-004</td>
<td>Project number 2009-08-057 was reviewed for the installation of a natural lump charcoal screening and bagging operations.</td>
</tr>
<tr>
<td>022014-008</td>
<td>Project number 2013-11-054 was reviewed for the construction of 4 new kilns but no increase in PTE; limit 3 kilns burning in a phase per afterburner.</td>
</tr>
</tbody>
</table>

An operating permit has not been issued to this facility since its Part 70 operating permit was terminated in 2005. An operating permit is not required since the conditioned potential emission of the facility is below de minimis.

PROJECT DESCRIPTION

Packaging Service Co., Inc. – Raymondville Facility plans to construct seven new charcoal kilns to be connected on the existing two afterburners and a new Afterburner #3. The first phase of construction consists of the addition of two new kilns (Kiln #18 and #19) added to Afterburner #1 kiln system and one new kiln (Kiln #17) added to the Afterburner #2 kiln system. However, the new kilns will not result in any increase in emissions because each kilns system is limited to burning only three kilns at one time, which is the same number of kilns previously allowed in Permit #022014-008. The second phase of construction will add four new kilns (Kilns #20, 21, 22, and #23) and the new Afterburner #3. During that construction two kilns from each of the other two afterburners will be detached and connected to Afterburner #3. The final configuration will be three burning kilns of seven kilns connected to Afterburner #1; three burning kilns of seven kilns connected to Afterburner #2; and four burning kilns of eight kilns connected to Afterburner #3.

The production of the charcoal kiln systems will increase from 9,000 tons per year to 15,000 tons per year, potentially. Since the charcoal kilns originally bottlenecked the bagging operation and the throughput of the kilns is increasing with this project, the facility’s material handling and bagging operation will also increase in production to handle 15,000 tons per year. The new MHDR of the screening and bagging system corresponds to the MHDR of 1.72 tons per hour for ten operating (of a total of 22 kilns) charcoal kilns.
The emissions for this project, the addition of a third afterburner with associated kilns, were evaluated as four-thirds (4 kilns burning in a series compared to 3 kilns burning) of the emissions as stated for three operating kilns in Permit #022014-008. For Phase I of this project, there will be no increase in emissions because Afterburner #1 and #2 are restricted to burning three kilns at one time, the same requirements as in Permit #022014-008. In Phase II of this project, Afterburner #3 will be stack tested and those results will be used to determine the potential to emit with four kilns burning at one time.

Packaging Service Co., Inc. – Raymondville Facility may have to amend this permit to reflect the results of the test if emission rates are higher than what is stated in this permit. Potential emissions associated with the packaging operation at 15,000 tons per year have been included as well as the emission increase associated with the haul roads and storage piles. Emission factor and calculation method for the bagging operation can be found in Permit # 0122009-004. Wind erosion of the storage pile remains unchanged due to same storage area and therefore was not included.

The following table provides an emissions summary for this project. Existing potential emissions are from Construction Permit #122009-004 and 022014-008. Afterburner emissions have been updated to reflect recent testing performed on Afterburner #2. Existing actual emissions are from the installation’s 2013 EIQ.

Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>N/D</td>
<td>N/D</td>
<td>0.753</td>
<td>2.343</td>
<td>4.12</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>2.17</td>
<td>0.5829</td>
<td>0.753</td>
<td>2.343</td>
<td>4.12</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>N/D</td>
<td>0.3318</td>
<td>0.753</td>
<td>2.343</td>
<td>4.12</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/D</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>6.701</td>
<td>1.6054</td>
<td>4.47</td>
<td>4.47</td>
<td>11.17</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>0.114</td>
<td>0.3366</td>
<td>0.076</td>
<td>0.076</td>
<td>0.19</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>3.54</td>
<td>0.8474</td>
<td>2.36</td>
<td>2.36</td>
<td>5.90</td>
</tr>
<tr>
<td>POM$^2$</td>
<td>10.0/0.01</td>
<td>N/D</td>
<td>N/D</td>
<td>6.100E-06</td>
<td>6.100E-06</td>
<td>1.53E-05</td>
</tr>
<tr>
<td>Methanol$^3$</td>
<td>10.0/10.0</td>
<td>N/D</td>
<td>N/D</td>
<td>0.02</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Methane</td>
<td>N/A</td>
<td>N/D</td>
<td>N/D</td>
<td>0.01</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>CO$_2$</td>
<td>N/A</td>
<td>N/D</td>
<td>N/D</td>
<td>5840.83</td>
<td>5840.83</td>
<td>14,602.08</td>
</tr>
<tr>
<td>GHG (CO$_2$e)</td>
<td>75,000 / 100,000</td>
<td>N/D</td>
<td>N/D</td>
<td>5840.84</td>
<td>5840.84</td>
<td>14,602.11</td>
</tr>
<tr>
<td>GHG (mass)</td>
<td>0.0 / 100.0 / 250.0</td>
<td>N/D</td>
<td>N/D</td>
<td>5841.08</td>
<td>N/D</td>
<td>14,602.71</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/D</td>
<td>N/D</td>
<td>0.013</td>
<td>N/D</td>
<td>0.04</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined
1Existing Potential emissions were updated from Permit # 122009-004 (Project 2009-08-057)#022014-008 (Project 2013-11-054) to reflect test results completed on Afterburner #2. Results for Afterburner #2 were used for emission estimates of Afterburner #1.

2Major source level is 10 tons per year; SMAL for POM is 0.01 tons per year.

3Major source level is 10 tons per year; SMAL for Methanol is 10.0 tons per year.

4This estimated emission is 4/3 of the charcoal emission determined in Permit #020214-008, and is used as a place holder until test results are submitted.

5The Total Project Potential Emissions reflect the emissions after completion of Phase II and include the potential emissions from Afterburner #3, pre-heater and associated kilns, the emission increase from haul roads and storage pile, as well as the potential emissions from the entire bagging operation (at 15,000 tons per yr). The potential minus actual calculation for the bagging operation was not conducted since this calculation will not affect the permit type.

10 CSR 10-6.330, Restriction of Emissions from Batch-Type Charcoal Kilns, has a minimum temperature requirement of 1520°F; however, Afterburner #2 temperature was recorded at three different locations with the highest readings, ranging from 1549°F to 1707°F and averaging 1636°, recorded by the “Zone” thermocouple. The temperature may not fall below 95% of this average (1554°F) to assure continued compliance. In the memo dated January 27, 2012, the Air Pollution Control Program’s Testing and Emission Unit determined that a minimum temperature of 1554°F is needed to achieve destruction efficiencies exceeding 99% for this afterburner design. Likewise, the average temperature for Afterburner #1 was 1688°F, as stated in a APCP memo dated June 15, 2007, and the temperature may not fall below 95% of this average (1603.6°F) to assure continued compliance.

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 all pollutants are at de minimis levels.

APPLICABLE REQUIREMENTS

Packaging Service Co., Inc. - Raymondville Facility 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

- Operating Permits, 10 CSR 10-6.065 is not required since the conditioned potential emission of the facility is below de minimis.

- 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
SPECIFIC REQUIREMENTS

- Restriction of Emission of From Batch-Type Charcoal Kilns, 10 CSR 10-6.330

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.

Kathy Kolb
New Source Review Unit

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated April 25, 2014, received April 29, 2014, designating Packaging Service Co., Inc. as the owner and operator of the installation.

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
SAC......... Source Classification Code
scfm........ standard cubic feet per minute
SIC.......... Standard Industrial Classification
SIP.......... State Implementation Plan
SMAL ....... Screening Model Action Levels
SOₓ......... sulfur oxides
SO₂......... sulfur dioxide
tph......... tons per hour
tpy......... tons per year
VMT......... vehicle miles traveled
VOC.......... Volatile Organic Compound
Mr. Stephen J. Craig  
EH & S Manager  
Packaging Service Co., Inc. - Raymondville Facility  
1904 Mykawa Road  
Pearland, TX  77581


Dear Mr. Craig:

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 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 Kathy Kolb, 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:kkl

Enclosures

c: Southeast Regional Office  
PAMS File: 2014-04-069

Permit Number:

Celebrating 40 years of taking care of Missouri’s natural resources.  
To learn more about the Missouri Department of Natural Resources visit dnr.mo.gov.