



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

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Molly Joseph Ward  
Secretary of Natural Resources

David K. Paylor  
Director

Michael P. Murphy  
Regional Director

### STATIONARY SOURCE PERMIT TO OPERATE

#### **This permit implements the requirements for Reasonably Available Control Technology (RACT) for Volatile Organic Compounds (VOC) in the Richmond, Virginia Emissions Control Area.**

This permit (i) is for the purpose of implementing the "reasonably available control technology" (RACT) requirements of 9 VAC 5-40-7390 of the Regulations of the Board and (ii) establishes control technology and other requirements for the control of volatile organic compound (VOC) emissions from the Mondelēz Global, LLC – Richmond Bakery in the Richmond, Virginia Ozone Maintenance Area. These RACT requirements shall be the legal and regulatory basis for control of VOC emissions from this facility. This permit shall be effective upon approval by the U. S. Environmental Protection Agency following the requirements of 40 CFR Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans) and upon such approval this permit shall supersede your permit dated December 11, 2012.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Mondelēz Global LLC  
Richmond Bakery  
6002 South Laburnum Avenue  
Richmond, VA 23231  
Registration No.: 50703  
State-County-Plant ID No.: 51-087-0083

is authorized to operate

a commercial bakery

located at

6002 South Laburnum Avenue  
Richmond, VA 23231

in accordance with the Conditions of this permit.

Approved on **February 11, 2014.**

Kyle Ivar Winter, P.E.  
Deputy Regional Director

Permit consists of 5 pages.

**PERMIT CONDITIONS** - The regulatory reference or authority for each condition is listed in parentheses after each condition.

**PROCESS REQUIREMENTS - VOC Equipment List**

1. **Equipment List** – In accordance with 9 VAC 5-40-7370, the facility shall meet either the presumptive RACT requirements of 9 VAC 5-40-7390 or the RACT requirements determined by a RACT determination in accordance with 9 VAC 5-40-7370 for the following equipment which are sources of VOC emissions and implemented through the remaining conditions of this permit:

Unit Ref. No.	Equipment / Operation Description
Oven #1	Dough Oven
Oven #2	Dough Oven
Oven #3	Dough Oven
Oven #4	Dough Oven
Oven #5	Dough Oven
Oven #6	Dough Oven
Oven #8	Dough Oven
Oven #9	Dough Oven

(9 VAC 5-80-850)

**PROCESS REQUIREMENTS – VOC Emission Controls**

2. **Emission Controls** – Volatile organic compound (VOC) emissions from the Oven #1, when baking yeast dough, shall be controlled by design and proper operation of Oven #1, a permanent total enclosure (PTE) and a Regenerative Thermal Oxidizer (RTO) or equivalent control device as approved by DEQ, having a destruction efficiency of at least 95 percent on a mass basis. The RTO and/or equivalent control device shall be provided with adequate access for inspection and shall be in operation when the Oven #1 is operating.  
(9 VAC 5-40-7370 and 9 VAC 5-80-850)
3. **Total Enclosure** – The (PTE) shall meet the following criteria:
  - a. Any natural draft openings shall be at least 4 equivalent opening diameters from each VOC emitting point;
  - b. The total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;
  - c. The average facial velocity of air through the natural draft openings shall be at least 200 feet per minute and the direction of flow shall be into the enclosure.
  - d. All access doors and windows shall be closed during routine operation of the Oven #1.
  - e. All of the exhaust gases from the enclosure shall be directed to the RTO or equivalent control device.(9 VAC 5-40-7370 and 9 VAC 5-80-850)
4. **Monitoring Devices** – The RTO or equivalent control device shall be equipped with a device to continuously measure and record the combustion zone temperature on a 5-minute interval. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when Oven #1 is operating.  
(9 VAC 5-40-7370 and 9 VAC 5-80-850)

**PROCESS REQUIREMENTS - Operational Limitations**

5. **Regulations of the Board** – Mondelēz Global LLC (Mondelēz) shall comply with all applicable Regulations of the Board including the requirements for monitoring, notification, recordkeeping, reporting, maintenance, and malfunction. Mondelēz agrees that this permit is not construed to mean that its operation is automatically in compliance with all aspects of the Regulations of the Board. Compliance with all air pollution regulations must be a continuing, full time effort.  
(9 VAC 5-80-850)
6. **Oil Type** – The type of oil used in the oil treatment facilities shall be limited to only vegetable oils.  
(9 VAC 5-40-7370 and 9 VAC 5-80-850)
7. **Dough Type** – The feed to Oven Numbers 2, 3, 4, 5, 6, 8, and 9 shall not contain any yeast dough.  
(9 VAC 5-40-7370 and 9 VAC 5-80-850)
8. **Temperature** - When baking yeast dough in Oven #1, Mondelēz shall demonstrate continued compliance with the destruction efficiency specified in Condition 2 by maintaining the control device minimum combustion zone temperature and residence time, established during the initial or most recently DEQ approved performance test.  
(9 VAC 5-80-850)
9. **Monitoring Device Observation** - The device used to measure the combustion zone temperature from the RTO shall be observed by the permittee with a frequency sufficient to ensure good performance of the RTO. The permittee shall keep a log of the observations of the combustion-monitoring device.  
(9 VAC 5-80-850)

**TESTING**

10. **Emissions Testing** - The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.  
(9 VAC 5-50-30 F and 9 VAC 5-80-850)

**RECORDS**

11. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
  - a. Log of observations of the combustion temperature monitoring device on the RTO.
  - b. Results of all stack tests, visible emission evaluations and performance evaluations.

The records required by this permit shall be maintained by Mondelēz for a minimum of the most recent three year period and made available for review and inspection by representatives of the Department.  
(9 VAC 5-80-850)

## NOTIFICATIONS

12. **Initial Notifications** - The permittee shall furnish written notification to the Piedmont Regional Office of the intention to replace the current control device with an equivalent control device. The notification shall include information documenting the emissions from Oven #1 as a result of the control device replacement.

A copy of the written notification shall be sent to:

Associate Director  
Office of Air Enforcement and Compliance Assistance (3AP20)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

(9 VAC 5-50-50 and 9 VAC 5-80-850)

13. **Monitoring Notification** - Mondelēz shall record and notify Director, Piedmont Region in writing within ten days of the date and time for each period during which any monitoring system is inoperative (except for calibration), the nature of the system problems, and the repairs or adjustments that were made.  
(9 VAC 5-80-850)

## GENERAL CONDITIONS

14. **Relationship to Other Permit Requirements** - Except to the extent that conditions in this permit may be more stringent, this permit does not supersede or replace any other valid permit, regulatory or statutory requirement. Furthermore, this approval to operate shall not relieve Mondelēz of the responsibility to comply with all other local, state and federal regulations, including permit regulations.  
(9 VAC 5-80-800 D and 9 VAC 5-80-820 F)
15. **Federal Enforceability** - Once this permit is approved by the U.S. Environmental Protection Agency into the Commonwealth of Virginia State Implementation Plan, the permit is enforceable by EPA and citizens under the federal Clean Air Act.  
(9 VAC 5-80-800 C.2 and 9 VAC 5-80-820 F)
16. **Permit Modification** - The Board may revise (modify, rewrite, change or amend) or repeal this permit with the consent of Mondelēz, for good cause shown by Mondelēz, or on its own motion provided approval of the revision or repeal is accomplished in accordance with Regulations of the Board and the Administrative Process Act (§ 2.2-4000 et seq.). Such revision or repeal shall not be effective until the revision or repeal is approved by the U.S. Environmental Protection Agency following the requirements of 40 CFR Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans).  
(9 VAC 5-80-960 and 9 VAC 5-80-1000)
17. **Failure to Comply** - Failure by Mondelēz to comply with any of the conditions of this permit shall constitute a violation of a Permit of the Board. Failure to comply may result in a Notice of Violation and civil penalty. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of orders as appropriate by the Board as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.  
(9 VAC 5-80-820 F, 9 VAC 5-80-910, and 9 VAC 5-80-1010)
18. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.  
(9 VAC 5-170-130 and 9 VAC 5-80-850)

- 19. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Piedmont Region of the change of ownership within 30 days of the transfer.  
(9 VAC 5-80-940)
- 20. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.  
(9 VAC 5-80-860 D)

**DEMONSTRATION OF COMPLIANCE WITH  
REASONABLY AVAILABLE CONTROL TECHNOLOGY REQUIREMENTS FOR**

Mondelēz Global LLC, Inc.  
(formerly Kraft Foods)  
Henrico County, Virginia  
Registration No. 50703