

## Air Permit Review

Permit Issue Date: **DRAFT**

**Region:** Raleigh Regional Office  
**County:** Nash  
**NC Facility ID:** 6400006  
**Inspector's Name:** Will Wike  
**Date of Last Inspection:** 06/06/2006  
**Compliance Code:** 3/In Compliance - Inspection

Facility Data			Permit Applicability (this application only)
<b>Applicant (Facility's Name):</b> Interstate Brands - Merita  <b>Facility Address:</b> Interstate Brands - Merita 2551 North Church Street Rocky Mount, NC 27802  <b>SIC:</b> 2051 / Bread Cake And Related Product <b>NAICS:</b> 311812 / Commercial Bakeries  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V			<b>SIP:</b> 15A NCAC 2D .0515, .0516, .0521, and .1806 <b>NSPS:</b> n/a <b>NESHAP:</b> n/a <b>PSD:</b> n/a <b>PSD Avoidance:</b> 15A NCAC 2Q .0317 <b>NC Toxics:</b> n/a <b>112(r):</b> n/a <b>Other:</b>
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	<b>Application Number:</b> 6400006.06A <b>Date Received:</b> 07/06/2006 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 04521/T07 <b>Existing Permit Issue Date:</b> 04/04/2002 <b>Existing Permit Expiration Date:</b> 03/31/2007
Robert Ray Chief Engineer (252) 450-6039 P.O. Box 591 Rocky Mount NC, 27802	Phillip Bain Plant Manager (252) 977-3400 P.O. Box 591 Rocky Mount NC, 27802	J.C. Goins, Jr. Field Env. Coordinator (901) 251-1060 400 Monroe Avenue Memphis TN, 38103	
<b>Review Engineer:</b> Steve Hall  <b>Review Engineer's Signature:</b> <b>Date:</b>		<b>Comments / Recommendations:</b> Issue 04521/T08 <b>Permit Issue Date:</b> <b>DRAFT</b> <b>Permit Expiration Date:</b> <b>DRAFT</b>	

### I. Purpose of Application

Interstate Brands - Merita Bakery's Rocky Mount, NC plant (IBC - Merita Bakery) is currently operating under permit 04521T07. This permit is set to expire on March 31, 2007. On June 29, 2006, the company submitted a request for Title V permit renewal, which was received in the Raleigh Regional Office on July 6, 2006. After initial review of the renewal request, an additional information request was sent to the company on November 1, 2006. The company then completed the renewal application with their additional information submittal, which was received by DAQ on December 4, 2006.

### II. Facility Description

IBC - Merita Bakery is a bakery that began operating in 1950. The facility produces approximately 2 million pounds of Merita brand (and various store brand) sliced sandwich breads and dinner rolls per week. The flour from the silos is transferred into the bakery and is sifted with 30-holes/inch mesh. Flour and additives (salt, enrichment tablets, sugar, honey, yeast, gluten, etc.) are weighed and water added. The first step is the sponge dough mixer after which the sponge dough is put into tubs and sent to the fermentation room. The next step is either to the roll mixer or the bread mixer. The rotary divider separates the dough into proper weights for breads or rolls, then to the "proof box" where it is conditioned with high heat and humidity. The next step is sending the proofed dough to the baking lines in either the bread tunnel oven or the roll shelf oven. Bread is then cooled in the plant's elevated series of conveyor lines, and then is cut, packed, and shipped. [A portion of this facility description was taken from Will Wike's June 6, 2006 compliance inspection report.]

### III. Title V Permit History

IBC - Merita Bakery was issued their initial Title V permit on April 4, 2002 with an effective date of June 19, 2002. Since then, there have been no revisions to the original Title V permit.

#### IV. Permit Modifications/Changes

The following table describes the modifications to the current permit as part of this renewal action.

Page(s)	Section	Description of Change(s)
Attachments	-	<ul style="list-style-type: none"> <li>- Added attachment summarizing changes to permit.</li> <li>- Reformatted insignificant activities list to improve readability.</li> <li>- Added an "I" to the beginning of each source ID number to designate as "insignificant".</li> </ul>
1	Cover Page	<ul style="list-style-type: none"> <li>- Updated permit revision numbers, effective date, and expiration date.</li> <li>- Deleted reference to "Operation Permit" for Part I and "Construction Permit" for Part II to clarify DAQ policy that Part I and Part II are not two separate permits but two parts of one permit.</li> <li>- Updated permit application number, completeness date, and renewal application due date.</li> <li>- Updated Raleigh Regional Office address.</li> <li>- Updated permit issuance date.</li> <li>- Updated signature line to reflect current Air Permits Section Chief.</li> </ul>
2	Table of Contents	<ul style="list-style-type: none"> <li>- Deleted "Air Quality Permit" from title for Part I.</li> </ul>
3 - 16	All, Header	<ul style="list-style-type: none"> <li>- Updated permit revision number.</li> </ul>
3	Part I, Title	<ul style="list-style-type: none"> <li>- Deleted "Air Quality Permit" from title for Part I.</li> </ul>
3	Part I, Section 1, permitted equipment table	<ul style="list-style-type: none"> <li>- Added maximum heat input descriptor to the four natural gas-fired ovens (ID Nos. ES-L1 through ES-L4) and reordered numerically by permit ID number.</li> <li>- Updated description for the four bagfilters (ID Nos. ES-S1 through ES-S4) to clarify that each bagfilter serve one silo.</li> </ul>
3	Part I, Section 2.1 A, equipment listing	<ul style="list-style-type: none"> <li>- Corrected the maximum heat input descriptors for natural gas-fired ovens ES-L2, ES-L3, and ES-L4 to 2.6, 3.0, and 9.0 million Btu per hour, respectively.</li> </ul>
4	Part I, Section 2.1 A, regulations table	<ul style="list-style-type: none"> <li>- Changed reference to 15A NCAC 2D .0530 to 15A NCAC 2Q .0317 avoidance condition.</li> <li>- Corrected reference to Section 2.2 for 15A NCAC 2Q .0317 requirements.</li> </ul>
4	Part I, Section 2.1 A.1.a.	<ul style="list-style-type: none"> <li>- Changed reference to singular "this source" to plural "these sources".</li> </ul>
4	Part I, Section 2.1 A.1.c.	<ul style="list-style-type: none"> <li>- Combined monitoring, recordkeeping, and reporting requirements into one paragraph and deleted former paragraph "d".</li> </ul>
4	Part I, Section 2.1 A.2.a.	<ul style="list-style-type: none"> <li>- Changed reference to singular "this source" to plural "these sources".</li> </ul>
4	Part I, Section 2.1 A.2.c.	<ul style="list-style-type: none"> <li>- Combined monitoring, recordkeeping, and reporting requirements into one paragraph and deleted former paragraph "d".</li> </ul>
5	Part I, Section 2.1 A.3.c.	<ul style="list-style-type: none"> <li>- Deleted previous requirements to conduct weekly visible emission monitoring on the natural gas-fired ovens, record results observations, and report any deviations semiannually.</li> <li>- Combined monitoring, recordkeeping, and reporting requirements into one paragraph and deleted former paragraphs "d" and "e".</li> </ul>
5	Part I, Section 2.1 B, regulations table	<ul style="list-style-type: none"> <li>- Corrected equation for calculating 15A NCAC 2D .0515 emission limit for particulate matter.</li> </ul>
6	Part I, Section 2.1 B.2.a(i) and a(ii)	<ul style="list-style-type: none"> <li>- Changed reference to singular "this source" to plural "these sources".</li> </ul>
6	Part I, Section 2.1 B.2.c.	<ul style="list-style-type: none"> <li>- Changed weekly monitoring requirement to monthly while silos are being loaded.</li> <li>- Added reference to specific sources that need to be monitored.</li> <li>- Deleted reference to establishing "normal" for visible emissions from the flour silos within the first 30 days following permit issuance.</li> <li>- Revised monitoring language to be consistent with current DAQ protocol.</li> </ul>
7	Part I, Section 2.2 A, regulations table	<ul style="list-style-type: none"> <li>- Changed reference to 15A NCAC 2D .0530 to 15A NCAC 2Q .0317 avoidance condition.</li> </ul>
7	Part I, Section 2.2 A.1.	<ul style="list-style-type: none"> <li>- Added reference to 15A NCAC 2Q .0317 in paragraph heading.</li> </ul>
7	Part I, Section 2.2 A.1.c.	<ul style="list-style-type: none"> <li>- Reworded statement of noncompliance for clarity.</li> </ul>
8 -15	Part I, Section 3	<ul style="list-style-type: none"> <li>- Updated general conditions with latest standard language common to all Title V permits.</li> </ul>

The following table describes the modifications to the emission source module in I-Beam as a result of this renewal action.

<b>ID No. in Permit</b>	<b>Description in Permit</b>	<b>Description of Change(s) to ESM</b>
ES-L1	natural gas-fired bread line oven #1 (4.4 million Btu per hour maximum heat input)	- Updated ESM description to match current permit.
ES-L2	natural gas-fired roll line oven #1 (2.6 million Btu per hour maximum heat input)	- Updated ESM description to match current permit.
ES-L3	natural gas-fired bread line oven #2 (3.0 million Btu per hour maximum heat input)	- Updated ESM description to match current permit.
ES-L4	natural gas-fired roll line oven #2 (9.0 million Btu per hour maximum heat input)	- Updated ESM description to match current permit.

## V. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes  
 15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources  
 15A NCAC 2D .0521, Control of Visible Emissions  
 15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions  
 15A NCAC 2Q .0317, Avoidance Conditions (Avoidance of 15A NCAC 2D .0530, Prevention of Significant Deterioration)

No regulatory review is required for these existing permit conditions as part of the renewal action.

## VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

**NSPS** – IBC - Merita Bakery does not have any sources that are subject to any subpart of 40 CFR 60 - New Source Performance Standards (NSPS).

**NESHAPS/MACT** – In their December 4, 2006 response to DAQ’s additional information request, IBC - Merita Bakery confirmed that the company has evaluated the applicability of all subparts of 40 CFR 61 and 63 - National Emission Standards for Hazardous Air Pollutants (NESHAP) to the emission sources at their Rocky Mount facility and has determined that none of the MACT standards apply. Specifically, the facility is not subject to NESHAP - Subpart CCCC (Manufacturing Nutritional Yeast MACT) because they do not manufacture any variety of yeast.

**PSD** – IBC - Merita Bakery is a potential major source for Prevention of Significant Deterioration (PSD) due to the VOC emissions from several emission sources at the facility including the four natural gas-fired baking ovens (ID Nos. ES-L1, ES-L2, ES-L3, and ES-L4). The facility’s permit currently has a PSD avoidance condition that limits facility-wide VOC emissions to 250 tons per consecutive 12-month period. To ensure compliance with this limit, the quantity of bread baked in any 12-month period is limited to 121,757 tons. No changes to the PSD avoidance requirements are necessary as part of the renewal action.

**112(r)** – In their December 4, 2006 response to DAQ’s additional information request, IBC - Merita Bakery confirmed that the Rocky Mount facility is not subject to 112(r) requirements because it does not store any of the affected chemicals. This renewal action does not affect this status.

**CAM** – In order to be subject to the 40 CFR Part 64 - Compliance Assurance Monitoring (CAM) requirements, all three of the following criteria must be satisfied:

- (i) the pollutant specific emission unit shall be subject to an emission limitation or a standard other than the exempt limitations or standards (e.g. post-1990 federal standards such as MACT, NSPS etc.),
- (ii) the pollutant specific emission unit uses an active control device to achieve compliance with the applicable requirement, and
- (iii) the potential precontrol device emission rate for the pollutant specific emission unit for any regulated pollutant shall be greater than the major source threshold.

IBC - Merita Bakery only utilizes four control devices, specifically the four bagfilters (ID Nos. CD-S1, CD-S2, CD-S3, and CD-S4) installed one each on the four flour storage silos (ID Nos. ES-S1, ES-S2, ES-S3, and ES-S4). In their December 4, 2006 response to DAQ’s additional information request, the company provided documentation demonstrating that the total potential precontrol emissions from each of the four storage silos is less than 100 tons per year. Therefore, the Rocky Mount facility is not subject to the CAM requirements.

## VII. Facility Wide Air Toxics

IBC - Merita Bakery has not installed any new emission sources that emit toxic air pollutants since the state air toxics rules became effective in 1993. Therefore, the toxics regulations do not apply to this facility. Additionally, the facility is not required to comply with the last MACT toxics demonstration required under 15A NCAC 2Q .0705 since the facility is not subject to a MACT standard.

## VIII. Stipulation Review

The facility's original Title V permit included the requirement to conduct weekly visible emission (VE) observations on the four natural gas-fired ovens (ID Nos. ES-L1, ES-L2, ES-L3, and ES-L4) to demonstrate ongoing compliance with 15A NCAC 2D .0521 under Section 2.1 A.3 of the permit. In a telephone conversation with Mr. Will Wike of the RRO on January 2, 2007, it was determined that the weekly VE observations were unnecessary to ensure ongoing compliance with the VE standard for the ovens. Since the ovens burn only natural gas, no significant visible emissions are expected, and the facility has not documented any excess emission events for the ovens in five years of conducting the weekly checks. Therefore, the weekly VE monitoring and associated recordkeeping/reporting will be removed from the permit with this renewal action.

Mr. Wike recommended that the requirement to conduct weekly VE observations on the four flour storage silos (ID Nos. ES-S1, ES-S2, ES-S3, and ES-S4) remain in the permit since these sources have a higher potential for visible emissions. However, the reference to establishing "normal" for visible emissions from the flour silos within the first 30 days following permit issuance will be removed from the permit since this requirement should have been met long ago.

Also, the most current version of the Title V permit general conditions will be added to the permit with this renewal action. The changes to the general conditions include the updating of General Conditions I.B., HH, and KK, changing the due date for annual compliance certifications from January 30 to March 1 in General Condition P, changing the number of stack test report copies required from three to two in General Condition P, and the additional of new General Condition LL.

Other than the changes discussed above, some minor typographical corrections, and a couple of attempts to clarify existing permit requirements, there are no additional permit stipulation modifications that are necessary as a result of this permit renewal action. A summary of all changes made to the permit with this renewal action is provided in Section IV of this review.

## IX. Facility Emissions Review

The following table represents the latest year's emission inventory from the IBC - Merita Bakery:

Pollutant(s)	2005 Actual Emissions (tpy)
CO	4.96
NO <sub>x</sub>	5.91
PM <sub>10</sub>	3.16
SO <sub>2</sub>	0.03
VOC	124.81
HAPs	2.23

## X. Facility Compliance Status

The most recent compliance inspection at IBC - Merita Bakery was conducted on June 6, 2006 by Mr. Will Wike of the Raleigh Regional Office (RRO). As a result of this inspection, the facility was found to be in compliance with all applicable requirements. However, in Mr. Wike inspection report, he points out that three of the facility's four natural gas-fired ovens are mislabeled in the permit. Using the plant's oven identification system, the permit should describe the maximum heat input rates for each oven as follows:

- Oven ES-L1 - 4.4 million Btu per hour [correctly listed in current permit]
- Oven ES-L2 - 2.6 million Btu per hour [currently listed as 3.0 million Btu per hour in permit]
- Oven ES-L3 - 3.0 million Btu per hour [currently listed as 9.0 million Btu per hour in permit]
- Oven ES-L4 - 9.0 million Btu per hour [currently listed as 2.6 million Btu per hour in permit]

As requested by the RRO, these oven description changes will be made in the permit with this renewal action.

**XI. Public Notice/EPA and Affected State(s) Review**

Pursuant to 15A NCAC 2Q .0521, a notice of the draft Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. There are no affected States or local programs.

**XII. Conclusions, Comments, and Recommendations**

No local zoning determination was needed for this permit renewal.

A Professional Engineer's Certification was not needed for this renewal.

RRO recommends issuance of the renewed permit and was presented with a draft permit prior to public notice and EPA review.

RCO concurs with this recommendation.