**Facility Data**

**Applicant (Facility’s Name):** Flowers Baking Company of Jamestown, LLC  
**Facility Address:** Flowers Baking Company of Jamestown, LLC  
801 West Main Street  
Jamestown, NC 27282  

SIC: 2051 / Bread Cake And Related Product  
NAICS: 311812 / Commercial Bakeries  

**Facility Classification: Before:** Title V  
**After:** Title V  

**Fee Classification: Before:** Title V  
**After:** Title V  

**Contact Data**

<table>
<thead>
<tr>
<th>Facility Contact</th>
<th>Authorized Contact</th>
<th>Technical Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenny Caviness</td>
<td>Rodney Moore</td>
<td>Matt Doris</td>
</tr>
<tr>
<td>ESS Director</td>
<td>Director of Plant Operations</td>
<td>Chief Engineer</td>
</tr>
<tr>
<td>(336) 819-4224</td>
<td>(336) 819-4213</td>
<td>(336) 841-8840</td>
</tr>
<tr>
<td>PO Box 819</td>
<td>801 W. Main Street</td>
<td>PO Box 819</td>
</tr>
<tr>
<td>Jamestown, NC 27282</td>
<td>Jamestown, NC 27282</td>
<td>Jamestown, NC 27282</td>
</tr>
</tbody>
</table>

**Application Data**

**Application Number:** 4100996.18A  
**Date Received:** 01/30/2018  
**Application Type:** Renewal  
**Application Schedule:** TV-Renewal  
**Existing Permit Data**  
**Existing Permit Number:** 08250/T06  
**Existing Permit Issue Date:** 06/05/2013  
**Existing Permit Expiration Date:** 05/31/2018  

**Total Actual emissions in TONS/YEAR:**

<table>
<thead>
<tr>
<th>CY</th>
<th>SO2</th>
<th>NOX</th>
<th>VOC</th>
<th>CO</th>
<th>PM10</th>
<th>Total HAP</th>
<th>Largest HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.0100</td>
<td>2.57</td>
<td>44.12</td>
<td>3.05</td>
<td>0.2800</td>
<td>0.0482</td>
<td>0.0461 [Hexane, n-]</td>
</tr>
<tr>
<td>2015</td>
<td>0.0100</td>
<td>2.65</td>
<td>47.79</td>
<td>3.19</td>
<td>0.2900</td>
<td>0.0497</td>
<td>0.0475 [Hexane, n-]</td>
</tr>
<tr>
<td>2014</td>
<td>0.0100</td>
<td>2.76</td>
<td>47.38</td>
<td>3.27</td>
<td>0.3000</td>
<td>0.0517</td>
<td>0.0494 [Hexane, n-]</td>
</tr>
<tr>
<td>2013</td>
<td>0.0100</td>
<td>2.58</td>
<td>49.34</td>
<td>3.15</td>
<td>0.2900</td>
<td>0.0482</td>
<td>0.0461 [Hexane, n-]</td>
</tr>
<tr>
<td>2012</td>
<td>0.0100</td>
<td>2.98</td>
<td>42.72</td>
<td>2.51</td>
<td>0.2200</td>
<td>0.0572</td>
<td>0.0548 [Hexane, n-]</td>
</tr>
</tbody>
</table>

**Review Engineer:** Richard Simpson  
**Review Engineer’s Signature:** Date: April ##, 2018  

**Comments / Recommendations:**  
**Issue:** 08250/T07  
**Permit Issue Date:** April ##, 2018  
**Permit Expiration Date:** March 31, 2023
I. **Introduction:**
Flowers Baking Company of Jamestown, LLC (Flowers) currently holds Title V Permit No. 08250T06 with an expiration date of May 31, 2018 for a commercial bakery facility in Jamestown, Guilford County, North Carolina. The primary purpose of this application is for permit renewal. The renewal application 4100996.18A was received on January 30, 2018, which was late and less than nine months prior to the expiration date. The application was considered complete on that date. The existing permit will expire May 31, 2018 unless this permit (T07) is issued prior to that date.

II. **Description of Facility:**
Flowers is a commercial bakery that produces loaf bread and buns. White and wheat flour are delivered to this facility via truck and pumped into three split silos (six total compartments). Flour is pneumatically blown into the building where it is temporarily stored before being sifted, and sent to each line’s respective mixers to make dough. There are two lines at this facility. The bun line uses one large mixer while the bread line uses two smaller mixers. Dough on each line is dispensed to pans prior to baking and travels through electrically heated proofers to help the bread rise quicker. After proofing, the breads are cooked in two natural gas-fired ovens.

The bread dough has flour, sugar, and yeast. Combining these ingredients causes fermentation to occur, and ethanol is released. Ethanol is a volatile organic compound but is neither a hazardous air pollutant (HAP) nor a toxic air pollutant (TAP). The other emissions from the facility come primarily from combustion and flour handling. The facility operates 24 hours per day, 7 days per week, and 52 weeks per year. The facility has approximately 275 employees.

III. **History/Background/Application Chronology**

**February 8, 2017** - The facility was inspected by WSRO engineer Davis Murphy. The facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of the inspection.

**January 30, 2018** - Permit application 4100996.18A was received for a Title V renewal and a permit acknowledgement letter was sent to the facility.

**February 5-7, 2018** – Phone conversations between facility representatives Kenny Caviness, Matt Doris and permit engineer Richard Simpson were held and several updates and suggestions were discussed.

**February 14-##, 2018** – The facility, Winston-Salem Regional Office, and Stationary Compliance Section were requested by the Permitting Section to comment on the renewal. Comments were received and included in the permit.

**February ##, 2018** – DRAFT permit sent to public notice and EPA for review prior to issuance. The 30-day public comment period ended **March ##, 2018** with the receipt of no comments. The 45-day EPA review period ended **April ##, 2018** with the receipt of no comments.
4. Permit Modifications/Changes and TVEE Discussion

The following table lists all changes made from previous permit 08250T06:

<table>
<thead>
<tr>
<th>Page(s)</th>
<th>Section</th>
<th>Description of Change(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover and throughout</td>
<td>Throughout</td>
<td>Updated all tables, dates, and permit revision numbers.</td>
</tr>
<tr>
<td>Throughout</td>
<td>Throughout</td>
<td>Corrected the regulatory reference from 2D and 2Q to 02D and 02Q.</td>
</tr>
<tr>
<td>Throughout</td>
<td>Throughout</td>
<td>Corrected wording change from assure to ensure.</td>
</tr>
<tr>
<td>Attachment</td>
<td>Insignificant Activities</td>
<td>Added one natural gas-fired emergency generator (133 hp, 80 kW) with I.D. No. I-EG5. The source is subject to NSPS IIII and GACT ZZZZ.</td>
</tr>
<tr>
<td>4, 5</td>
<td>Section 1 and Section 2.1 A.</td>
<td>Deleted the one natural gas-fired bun oven (1.7 million Btu per hour maximum heat input capacity) with ID No. ES-02 since the source will no longer be operational.</td>
</tr>
<tr>
<td>5, 7</td>
<td>Section 2.1 A.3.a., Section 2.1 B.2.a.</td>
<td>Added 02D 15A NCAC .0521(d) to the end of the regulation.</td>
</tr>
<tr>
<td>5, 6</td>
<td>Section 2.1 A.1., Section 2.1 B.1.</td>
<td>Updated language with the DAQ shell Title V permit conditions for 15A 02D .0515: Particulates from Fuel Miscellaneous Industrial Processes.</td>
</tr>
<tr>
<td>5</td>
<td>Section 2.1 A.2.</td>
<td>Updated language with the DAQ shell Title V permit conditions for 15A 02D .0516: Sulfur Dioxide Emissions from Combustion Sources.</td>
</tr>
<tr>
<td>5, 7</td>
<td>Section 2.1 A.3., Section 2.1 B.2.</td>
<td>Updated language with the DAQ shell Title V permit conditions for 15A 02D .0521: Control of Visible Emissions.</td>
</tr>
<tr>
<td>3, 8</td>
<td>Table of Contents, Section 2.2</td>
<td>Deleted the Permit Shield for Nonapplicable Requirements since the shield is not necessary for nonapplicability of CAM. The source made the appropriate calculations in 2004 to prove the silo’s bagfilters are below the thresholds.</td>
</tr>
<tr>
<td>15-25</td>
<td>General Conditions</td>
<td>Updated to latest version of DAQ shell version 5.1 08/03/2017.</td>
</tr>
</tbody>
</table>

There were changes made to the Title V Equipment Editor (TVEE) under this permit renewal.

V. Regulatory Review/Equipment Changes

The facility is currently subject to the following regulations:

a. 15A NCAC 02D .0515 “Particulates from Miscellaneous Industrial Processes”
b. 15A NCAC 02D .0516, “Sulfur Dioxide Emissions from Combustion Sources”
c. 15A NCAC 02D .0521, “Control of Visible Emissions”
d. 15A NCAC 02D .0524, “New Source Performance Standards (40 CFR Part 60 Subpart III)”
e. 15A NCAC 02D .1111, “Maximum Achievable Control Technology (40 CFR 63, Subpart ZZZZ)”

An extensive review for each applicable regulation is not included in this document. For a discussion of MACT, CAM, and PSD requirements, see Section 6. The permit will be updated to reflect the most current stipulations for all applicable regulations. Detail changes are noted in the above Table of Changes.
VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS
Flowers will have a natural gas-fired emergency generator (ID No. I-EG5) subject to “NSPS for Stationary Compression Ignition Internal Combustion Engines,” 40 CFR 60, Subpart III. No other emission sources at the facility are subject to New Source Performance Standards (NSPS). No other emission sources at the facility are subject to any other rules under 40 CFR Part 60.

NESHAPS/MACT
Flowers is not a major source of HAP emissions. The proposed natural gas-fired emergency generator (ID No. I-EG5) is subject to the “NESHAP for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63,” GACT Subpart ZZZZ. 40 CFR 63 Subpart 6J (National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers) is not applicable to the natural gas-fired boilers (ID Nos. IA-B1 and IA-B2) because they only fire on natural gas and are exempt per 40 CFR 63.11195(e). No other emission sources at the facility are subject to any other rules under 40 CFR Part 63.

PSD
The facility is a minor facility under Prevention of Significant Deterioration (PSD) and is not currently subject to any PSD regulations. This permit renewal does not affect this status.

112(r)
The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the rule. This permit renewal does not affect this status.

CAM
40 CFR Part 64 is applicable to any pollutant-specific emission unit, if the following three conditions are met:
- the unit is subject to any (non-exempt: e.g. pre November 15, 1990, Section 111 or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- the unit uses any control device to achieve compliance with any such emission limitation or standard.
- the unit’s pre-control potential emission rate exceeds either 100 tons/yr (for criteria pollutants) or 10/25 tons/yr (for HAPs).

In the review for a prior permit renewal, the bagfilters (ID Nos. CD-SL3FFS1, CD-SL3FFS2, CD-SL4FFS1, and CD-SL4FFS2) on the flour silos were shown to have pre-controlled emissions of less than 100 tons/yr. Emissions from the silos were estimated using the uncontrolled emission factor of 0.46 pounds PM$_{10}$ per ton cement in AP-42 Chapter 11.12, considering that cement and flour have similar properties. Each flour silo has an uncontrolled emission rate (i.e., pre-controlled) of 67.5 tons per year, based on a maximum throughput of 33.5 tons per hour at 8760 hours per year of operation. Therefore, CAM is not applicable to this facility. Per permit renewal request from the facility, the “Permit Shield for Non-Applicable Requirements” for 15A NCAC 02D.0614: CAM was removed since it is not necessary. This permit renewal does not affect the status of this condition.
VII. Facility Wide Air Toxics (State Enforceable Only)

The Permittee is not currently subject to NC Air Toxics. This renewal of the permit does not affect this status.

VIII. Facility Emissions Review

There are slight changes in Title V potential emissions for this renewal. A proposed emergency generator (133 horsepower) was added and a natural gas-fired bun oven (1.7 million Btu/hour) was removed. Actual emissions from previous years are listed on Page 1.

IX. Compliance Status

Five year compliance history
On November 8, 2015, this facility was sent a Notice of Deficiency (NOD) after it was found that they failed to maintain records of weekly visible emissions observations for Silos ES-SL3 and ES-SL4 during a couple of weeks of calendar year 2015, thus making them deficient in fulfilling the requirements of Condition 2.1.B.2.d of Air Quality Permit 08250T06. The facility responded to the deficiency, in writing, on December 18, 2105 stating they had implemented procedural changes to prevent future issues of this nature.

During the most recent inspection conducted on February 8, 2017, Davis Murphy of the WSRO indicated Flowers appeared to be in compliance with all applicable requirements.

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

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. There is no affected state/local program within 50 miles of the facility.

EPA’s 45 Day Review period
Ms. Heather Ceron (U.S. EPA, Region IV) was provided a PROPOSED permit for review on February ##, 2018. EPA 45-day review period ended on April ##, 2018. No comments were offered or received.

Public Notice
The 30-day public notice of the proposed permit was posted on the NCDAQ website on February ##, 2018. No comments were offered or received.
XI. **Other Regulatory Considerations**

- A P.E. seal is NOT required for this application.
- A consistency determination is NOT required for this renewal.
- An application fee is NOT required for this renewal.
- Guilford County has been triggered for increment tracking under PSD for particulate matter 10, (PM$_{10}$) and sulfur dioxide (SO$_2$). However, no changes in actual emissions of PM$_{10}$ and SO$_2$ are associated with this permit Renewal.

XII. **Recommendations**

The permit renewal application for Flowers Baking Company of Jamestown, LLC located in Jamestown, Guilford County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. The DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 08250T07.