

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Application Review**

**Issue Date: June ##, 2018**

**Region:** Winston-Salem Regional Office  
**County:** Alamance  
**NC Facility ID:** 0100276  
**Inspector's Name:** Maria Aloyo  
**Date of Last Inspection:** 08/17/2017  
**Compliance Code:** 3 / Compliance - inspection

<p style="text-align: center;"><b>Facility Data</b></p> <p><b>Applicant (Facility's Name):</b> Liggett Group LLC</p> <p><b>Facility Address:</b>  Liggett Group LLC  100 Maple Lane  Mebane, NC 27302</p> <p><b>SIC:</b> 2111 / Cigarettes  <b>NAICS:</b> 312221 / Cigarette Manufacturing</p> <p><b>Facility Classification: Before:</b> Title V <b>After:</b> Title V  <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V</p>	<p style="text-align: center;"><b>Permit Applicability (this application only)</b></p> <p><b>SIP:</b> 15A NCAC 2Q .0513 (Renewal)  <b>NSPS:</b> N/A  <b>NESHAP:</b> N/A  <b>PSD:</b> N/A  <b>PSD Avoidance:</b> N/A  <b>NC Toxics:</b> N/A  <b>112(r):</b> N/A  <b>Other:</b> N/A</p>
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Contact Data			Application Data
<p style="text-align: center;"><b>Facility Contact</b></p> <p>Vince Fallon  Mach. Dev./Env.  Engineer  (919) 304-7793  100 Maple Lane  Mebane, NC 27302</p>	<p style="text-align: center;"><b>Authorized Contact</b></p> <p>Frank Wall  Senior V.P. - Manuf. &amp;  Finance  (919) 304-7704  100 Maple Lane  Mebane, NC 27302</p>	<p style="text-align: center;"><b>Technical Contact</b></p> <p>Vince Fallon  Mach. Dev./Env.  Engineer  (919) 304-7793  100 Maple Lane  Mebane, NC 27302</p>	<p><b>Application Number:</b> 0100276.17A  <b>Date Received:</b> 08/29/2017  <b>Application Type:</b> Renewal  <b>Application Schedule:</b> TV-Renewal</p> <p style="text-align: center;"><b>Existing Permit Data</b></p> <p><b>Existing Permit Number:</b> 08823/T13  <b>Existing Permit Issue Date:</b> 05/06/2016  <b>Existing Permit Expiration Date:</b> 05/31/2018</p>

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

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2016	0.0227	3.73	99.32	2.93	1.43	0.1315	0.0582 [Hexane, n-]
2015	0.0100	3.02	97.23	2.37	1.18	0.1188	0.0482 [Hexane, n-]
2014	0.0100	2.97	102.03	2.24	1.24	0.0724	0.0481 [Acetaldehyde]
2013	0.0100	2.31	108.40	1.80	1.45	0.0733	0.0492 [Acetaldehyde]
2012	0.0100	2.17	118.69	1.69	1.01	0.1179	0.0540 [Acetaldehyde]

<p><b>Review Engineer:</b> Richard Simpson</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> June ##, 2018</p>	<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue:</b> 08823/T14  <b>Permit Issue Date:</b> June ##, 2018  <b>Permit Expiration Date:</b> May 31, 2023</p>
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## **I. Introduction:**

Liggett Group LLC (Liggett) currently holds Title V Permit No. 08823T13 with an expiration date of May 31, 2018 for a cigarette manufacturing facility in Mebane, Alamance County, North Carolina. The primary purpose of this application is for permit renewal. The renewal application 0100276.17A was received on August 29, 2017, which was at least nine months prior to the expiration date, as required by General Permit Condition 3.K. The application was considered complete on that date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

The primary purpose of this application is for a permit renewal. The renewal application 2600106.17A was received on June 30, 2017, which was at least nine months prior to the expiration date, as required by General Permit Condition 3.K. The application was considered complete on that date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

## **II. Facility Description**

Liggett operates a cigarette manufacturing facility at its Mebane site. The facility is internally divided into two areas. One side of the facility is the primary tobacco processing operation, which consists of initial tobacco processing and flavoring. The other side of the facility comprises the cigarette making operation, where the processed tobacco is formed into cigarettes and the cigarettes are packaged. A process description, as provided in a previous permit revision and inspections, is presented below. This facility currently operates 24 hours per day, 5 days per week, 50 weeks per year.

### **Tobacco Processing Operation**

The facility receives tobacco already de-stemmed and in bales. The bales are fed into the direct cylinder conditioner that introduces steam from one of the facility's boilers to raise the moisture content. The tobacco is then conveyed to the casing steamer, where some flavoring is added. Ingredients added to the tobacco include propylene glycol, glycerin, and invert sugar where steam is utilized in this process as well. Different tobaccos are blended and then dried in the steam expansion tobacco dryer, which incorporates a closed loop cyclone as part of the drying process. The final step is in the top flavoring system where alcohol is used as a carrier for various flavorings. The alcohol/flavoring mixture is injected at a metered rate for the amount of tobacco present. The tobacco is then conveyed to a holding area until it is needed on the manufacturing side.

### **Cigarette Manufacturing Operation**

The cigarette making operation consists of eleven cigarette-making machines and a menthol applicator. Processed and finished tobacco is conveyed to each cigarette-making machine as needed. The machines assemble tobacco, paper, and filter material into finished cigarettes. The menthol applicator applies menthol/ethyl alcohol solution to the tissue side of foil used as the inner lining for the cigarette packs. Equipment also packs the cigarettes into packs, then cartons, then cases, which are the finished products that are shipped out of the facility.

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

**August 17, 2017** - The facility was inspected by Winston Salem Regional Office engineer Maria Aloyo. At the time of the inspection, the facility appeared to operate in compliance with all applicable regulations and permit conditions.

**August 29, 2017** - Permit application **0100276.17A** was received for a Title V renewal and a permit acknowledgement was sent to the facility.

**March 1-9, 2018** – Phone conversations and emails were made between facility engineer Vince Falton, and DAQ permit engineer Richard Simpson for recommendations and any potential updates since the renewal application.

**March 14-April 13, 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 from DAQ

**April 12, 2018** – A CAM Plan Revision was sent dated April 11, 2018 for updating the pressure drop low range in inches of mercury for control devices: CD-HDT001a; CD-CM001-A1, and CD-CM001-B1.

**April 23, 2018** – A second CAM Plan Revision was sent dated April 18, 2018 for updating the pressure drop low range in inches of mercury for control devices: CD-HDT001a; CD-CM001-A1, and CD-CM001-B1 with comments for the permit renewal

**April ##, 2018** – DRAFT permit sent to public notice and EPA for review prior to issuance. The 30-day public comment period ended **May ##, 2018** with the receipt of no comments. The 45-day EPA review period ended **June ##, 2018** with the receipt of no comments.

#### IV. Permit Modifications/Changes and ESM Discussion

The following table describes all changes made from previous permit 08823T14 as part of the renewal.

Page(s)	Section	Description of Change(s)
Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers.
Throughout	Throughout	Corrected wording change from assure to ensure.
3	Section 1	Deleted ‘*’ and ‘**’ references and footnotes from a previous permit minor modification T13.
6, 10, 16, and 17	Section 2.1 Tables and Section 2.2 A.2.	In the previous permit, there were requirements for 15A NCAC 02D .0958: Work Practices for Sources of Volatile Organic Compounds in Section 2.1 Tables and Section 2.2 A. Per applicability of 15A NCAC 02D .0902 (e) and (f) as amended November 1, 2016, the facility’s regulatory requirement for 15A NCAC 02D .0958 no longer applies to Alamance County.
10	Section 2.1 A.1.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0503: Particulates from Fuel Burning Indirect Heat Exchangers
6, and 10	Section 2.1 A.1., Section 2.1 B.1	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0515: Particulates from Fuel Miscellaneous Industrial Processes.
7	Section 2.1 A.3.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0516: Sulfur Dioxide Emissions from Combustion Sources.
7, 11, and 12	Section 2.1 A.4., Section 2.1 B.2., Section 2.1 C.2.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0521: Control of Visible Emissions.
7, 11, and 12	Section 2.1 A.4.a., Section 2.1 B.2.a., Section 2.1 C.2.a.	Added 02D 15A NCAC .0521(d) to the end of the regulation.
8	Section 2.1 A.5.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0524: New Source Performance Standards Subpart Dc.

Page(s)	Section	Description of Change(s)
8	Section 1 and Section 2.1 C.	Updated equipment description to “A diesel/natural gas-fired emergency generator set consisting of two 375kW engines.”
12	Section 2.1 C.5.	Updated language permit conditions for 15A 02D .0524: New Source Performance Standards Subpart IIII and 15A NCAC 02D .1111 MACT Subpart ZZZZ.
19	Section 2.2 C.1.c.	Based on CAM Plan Revision dated April 18, 2018, updated the pressure drop low range in inches of mercury for control devices: CD-HDT001A from 0.2 to 5.0; CD-CM001-A1 from 0.5 to 4.0; CD-CM001-B1 from 0.5 to 6.0. Updated the CAM Table by deleting “for a period of more than 30 minutes” and foot note about normal ranges-
20	Section 2.2 C.1.e.	Updated the reporting requirements for CAM based on compliance section recommendations for consistency purposes.
20	Section 2.2 D. 2.	Updated language with the DAQ shell Title V permit conditions for 15A 02Q .0711: Emission Rates Requiring a Permit..
15-25	General Conditions	Updated to latest version of DAQ shell version 5.2 04/03/2018.

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 2D .0503, “Particulates from Fuel Burning Indirect Heat Exchangers”
- b. 15A NCAC 02D .0515, “Particulates from Miscellaneous Industrial Processes”
- c. 15A NCAC 02D .0516, “Sulfur Dioxide Emissions from Combustion Sources”
- d. 15A NCAC 02D .0521, “Control of Visible Emissions”
- e. 15A NCAC 02D .0524, “New Source Performance Standards (40 CFR Part 60 Subpart Dc)”
- f. 15A NCAC 02D .0524, “New Source Performance Standards (40 CFR Part 60 Subpart IIII)”
- g. 15 A NCAC 02D .0614, “Compliance Assurance Monitoring”
- h. 15A NCAC 02D .1100, “Control of Toxic Air Pollutants”
- i. 15A NCAC 02D .1111, “Maximum Achievable Control Technology (40 CFR 63, Subpart ZZZZ)”
- j. 15A NCAC 02D .1111, “Maximum Achievable Control Technology (40 CFR 63, Subpart JJJJJ)”
- k. 15A NCAC 02D .1806, “Control and Prohibition of Odorous Emissions”
- l. 15A NCAC 02Q .0317, “Avoidance Conditions” (for 40 CFR Part 63 Subpart JJJJJ, NESHAP for Boilers at Area Sources)
- m. 15A NCAC 02Q .0317, “Avoidance Conditions” (for 15A NCAC 2D .0530, Prevention of Significant Deterioration)
- n. 15A NCAC 02Q .0711, “Emission Rates Requiring a Permit”

An extensive review for each applicable regulation is not included in this document. Per applicability of 15A NCAC 02D .0902 (e) and (f) as amended November 1, 2016, the facility’s regulatory requirement for 15A NCAC 02D .0958 no longer applies to Alamance County. The facility’s status with respect to all regulations has not changed. 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.

Per Addendum 1 submitted April 12, 2018, the facility requested to update the normal pressure drop operation range in Section 2.2 C.1.c. The Addendum was revised on April 18, 2018. The previous range was based on manufacturers recommendation before the control devices were installed and the

updated range is based on actual historical data. The pressure drop ranges were too low especially after the bagfilters were cleaned and the upper ranges will reflect the value already listed in the CAM Table.

Per August 17, 2017 facility inspection by Maria Aloyo from the W-SRO, the facility operated sources that were not on the permit which needed further review. There is a cyclone that is used for collecting paper waste and vents to the inside of the building with particulate matter greater than 100 µm. The cigarette filter making machines also vents inside the building.

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

### **NSPS**

The facility is subject to the New Source Performance Standards (NSPS) listed below. This renewal does not affect the NSPS status of the facility

#### *NSPS Subpart Dc*

The two natural gas/No. 2 fuel oil-fired boilers (ES-PB001A and ES-PB002) are subject to the “NSPS for Small Industrial, Commercial, Institutional Steam Generating Units,” 40 CFR Part 60 Subpart Dc. The maximum sulfur content of any fuel oil received and fired in the boiler shall not exceed 0.5 percent by weight. This renewal does not affect the NSPS status of the facility.

#### *NSPS Subpart IIII*

Liggett has a diesel/natural gas-fired emergency generator set consisting of two 375kW engines (ES-EG001) and diesel engine fire protection booster pump (IES-FP001) subject to “NSPS for Stationary Compression Ignition Internal Combustion Engines,” 40 CFR 60, Subpart IIII. This renewal does not affect the NSPS status of the facility.

### **NESHAPS/MACT**

Liggett is not a major source of HAP emissions. The diesel/natural gas-fired emergency generator set consisting of two 375kW engines (ES-EG001) and diesel engine fire protection booster pump (IES-FP001) are subject to the “NESHAP for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63,” GACT Subpart ZZZZ. The two natural gas/No. 2 fuel oil-fired boilers (ES-PB001A and ES-PB002)) have an avoidance condition for “NESHAP for Industrial, Commercial, and Institutional Boilers at Area Sources,” 40 CFR Part 63, Subpart JJJJJ. This renewal does not affect the MACT status of the facility.

**PSD** – – The facility is a minor source of VOCs for PSD purposes. The Permittee is subject to the following avoidance condition for Prevention of Significant Deterioration:

1. 15A NCAC 2Q .0317, Avoidance Conditions (for 15A NCAC 2D .0530, Prevention of Significant Deterioration).

This 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 64 (CAM) applies to a control device if the following criteria are met:

1. The unit being controlled is subject to a non-exempt emission standard
2. The control device is being used to comply with the emission standard
3. The unit being controlled has potential emissions of the pollutant subject to the emission standard of greater than major source thresholds.

Liggett complies with their CAM plan for sources ID No. ES-HDT001, ES-CM001-A, ES-CM001-B with associated bagfilters ID No. CD-HDT001, CD-CM001A1, CM-001-B1 respectively. The specific CAM plans can be found in Sections 2.2 C in the permit. In general, Liggett must perform daily monitoring for pressure drop from the subject control devices and also perform the maintenance and monitoring.

## **VII. Facility Wide Air Toxics (State Enforceable Only)**

The Toxic Air Pollutants emissions shall not exceed rates which cause acceptable ambient levels to be exceeded per 15A NCAC 2D .1100 and 15A NCAC 2Q .0711. This permit renewal does not affect this status.

## **VIII. Facility Emissions Review**

The actual emissions of the last five years are listed in the first page of this review. Based on the emissions inventory, the actual emissions of all HAPs are below the Title V applicability thresholds.

## **IX. Compliance Status**

On August 6, 2013, the facility was sent a Notice of Deficiency for submitting a late semiannual report. The report was due July 30, 2013 and the report was received August 1, 2013. Corrective actions were initiated by the facility in a timely manner.

During the most recent inspection, conducted on August 17, 2017 by Maria Aloyo of the WSRO, the facility appeared to be in compliance with most of the applicable requirements. On September 5, 2017, a Notice of Violation was issued for not submitting the notification of construction and initial start-up for their new boiler per 40 CFR Part 60, Subpart Dc and permit condition 2.1.A.5. Corrective actions were initiated by the facility in a timely manner.

## **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 **April XX**, 2018. EPA 45 day review period ended on **June ##, 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 **April ##**, 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.
- Alamance County has been triggered for increment tracking under PSD for particulate matter 10, (PM<sub>10</sub>) and sulfur dioxide (SO<sub>2</sub>). However, no changes in actual emissions of PM<sub>10</sub> and SO<sub>2</sub> are associated with this permit Renewal.

## **XII. Recommendations**

The permit renewal application for Liggett Group LLC in Alamance 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. 08823T14.