NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date:

Region: Winston-Salem Regional Office
County: Guilford
NC Facility ID: 4100198
Inspector's Name: Andrew Kormos
Date of Last Inspection: 09/15/2021
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): ITG Brands, LLC

Facility Address:
ITG Brands, LLC
2525 East Market Street
Greensboro, NC 27401

SIC: 2111 / Cigarettes
NAICS: 312221 / Cigarette Manufacturing

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

Permit Applicability (this application only)

SIP: 02D .0503, .0515, .0516, .0521, .0614
NSPS: IIII
NESHAP: ZZZZ, JJJJJJ
PSD: NA
PSD Avoidance: 02Q .0317
NC Toxics: 02D .1100
112(r): NA
Other: 02Q .0317 (CAM Avoidance)

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Angela Davis Industrial Hygienist (336) 335-3267 2525 East Market Street Greensboro, NC 27401	Ronald Ervin Factory Manager, Greensboro Operations (336) 335-6980 2525 East Market Street Greensboro, NC 27401	Angela Davis Industrial Hygienist (336) 335-3267 2525 East Market Street Greensboro, NC 27401

Application Data

Application Number: 4100198.21B
Date Received: 10/26/2021
Application Type: Renewal
Application Schedule: TV-Renewal

Existing Permit Data
Existing Permit Number: 04398/T26
Existing Permit Issue Date: 03/14/2022
Existing Permit Expiration Date: 04/30/2022

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2020	0.1500	12.69	57.56	24.26	5.28	2.07	1.40 [Methanol (methyl alcohol)]
2019	0.1300	11.64	51.60	20.34	4.38	1.91	1.28 [Methanol (methyl alcohol)]
2018	0.0700	12.26	53.20	21.21	9.27	1.93	1.28 [Methanol (methyl alcohol)]
2017	0.0600	11.67	53.52	22.08	9.61	2.06	1.34 [Methanol (methyl alcohol)]
2016	0.0800	14.40	95.67	28.26	11.55	2.56	1.57 [Methanol (methyl alcohol)]

Review Engineer: Eric L. Crump, P.E.

Review Engineer's Signature: **Date:**

Comments / Recommendations:
Issue 04398/T27
Permit Issue Date:
Permit Expiration Date:

1. Purpose of Application

ITG Brands, LLC (hereinafter referred to as ITG) is a cigarette manufacturing facility located in Greensboro, Guilford County, North Carolina. The facility currently operates under Title V Permit No. 04398T26 with an expiration date of April 30, 2022. ITG has applied for renewal of their Title V air quality permit. The renewal application was received on October 26, 2021, or at least six months prior to the expiration date as required by General Condition 3.K of the current permit. 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.

Through permit application No. 4100198.21B, ITG did not indicate any sources to be added to, removed from, or modified within the existing permit.

A list of common acronyms used is provided on the last page of this review.

2. Facility Description

ITG manufactures cigarettes and other tobacco products. Some of the brands include Winston, Kool, Salem, Maverick, USA Gold, Dutch Masters, and others. The facility operates 24 hours/day, 7 days/week, and 50 weeks/year.

Three types of cured tobacco—Turkish, Virginia, and Burley—are delivered to the facility in boxed bales. Each type is stored and processed separately. The facility adds moisture to the tobacco in one of four Direct Conditioning and Casing Cylinder (DCCC) lines (ES-02-02 through ES-02-04 and ES-03-03). After moistening, some tobacco goes to the Dry Ice Expanded Tobacco (DIET) process (ES-03-01), where the tobacco is pressurized and injected with CO_2 and water. The liquid CO_2 is drained, and the frozen tobacco is released into a mechanism that separates the frozen mixture, then moved via conveyor to the Tobacco Processing Plant (TPP) conditioner, where it is reheated with steam and indirect air by the natural gas-fired process heater (ES-03-02). This causes the tobacco to thaw and expand. The DIET process is controlled by one bagfilter (CD-03-01). However, this bagfilter is optional and not used to demonstrate compliance with any applicable standard.

After conditioning, the tobacco goes to the tobacco cutting and blending process (ES-02-1), which is controlled by three bagfilters (CD-02-01, CD-02-02, and CD-02-03). There are two Hauni steam dryers (ES-02-07 and ES-02-09), each of which is controlled by a bagfilter (CD-02-04 and CD-02-05, respectively).[1] The facility has installed a central vacuum cleaning system (ES-08) for tobacco cutting, fishburne, cut tobacco storage, and pre-menthol areas. The central vacuum system, which is used intermittently, is controlled by a cyclone (CD-08-01) and a bagfilter (CD-08-02).

The facility has two top flavoring lines (ES-04-1 and ES-04-2) for adding different flavors to the tobacco. Each flavoring line is controlled by a bagfilter (CD-04-01 and CD-04-02, respectively).[2] The flavorings are "cooked" in a kitchen and are trade secret recipes. A third flavoring line involves menthol addition (ES-04-3), where menthol crystals are dissolved in alcohol and applied to the tobacco. The alcohol evaporates, leaving the menthol on the tobacco. After flavoring, the tobacco undergoes a final casing process (ES-02-06) where moisture is added to the tobacco in two tumblers.

[1] In addition, there are two Hauni steaming tunnels (ES-02-08 and ES-02-10) which are currently not in use. There are also two burley tobacco steam dryers (ES-02-05A and ES-02-05B) which are not currently in operation.
[2] In addition, the flavoring lines have two wet scrubbers (CD-04-06 and CD-04-09) that can be used to control emissions. Use of the wet scrubbers is optional and is not required by the permit. The wet scrubbers have not been used since approximately 2003.

The ITG facility has eleven cigarette making operations lines—Lines 2 through 11 (ES-05.2 though ES-05.11) and Line JTI (ES-05.JTI)—which consist of several machines. The machines roll the tobacco in paper and add filters to make complete cigarettes. The cigarettes are then packaged into packs, cartons, and boxes for shipping. Cigarettes not meeting quality control specifications are sent to the cigarette reclamation area (ES-07) in the basement of the facility. Emissions from this process are controlled by three bagfilters (CD-07-01, CD-07-02, and CD-07-03—currently, the facility is only using CD-07-01, and the other two bagfilters are not in use). In cigarette reclamation, vibrating screens separate the tobacco from the paper and filters. Tobacco dust collected in various parts of the manufacturing process goes to tobacco reclamation (ES-06). This process is controlled by three bagfilters (CD-06-01, CD-06-02, and CD-06-04). Two pneumatically loaded silos discharge to screens and a separator.

The ITG permit was just revised earlier this year to add a deep freeze operation consisting of up to 14 diesel-fired refrigerated trailers (ES-DFJTI). This operation is for storage of tobacco products prior to shipment overseas.

3. Application Chronology

May 30, 2017	Division of Air Quality (DAQ) issues Permit 04398T21 to ITG as a renewal/minor modification of a Title V permit. Modifications included: (a) removal of ten bagfilters from nine cigarette making lines, (2) removal of one Tobacco Processing Plant (TPP) and bagfilter (ID No. CD-03-02), replacement of two existing 10,000-gallon underground ethanol storage tanks (ID Nos. ES-T-1 and ES-T-2) with one above ground rum storage tank (ES-T-4), (4) replacement of a rum tank (ID No. ES-T-3) with a 300-gallon tote (ID No. IRUMTOTE), and revision of all emission source and control device IDs.
July 31, 2017	DAQ receives Permit Application 4100198.17A from ITG as a Title V permit minor modification to add a bagfilter (ID No. CD-05-22) to cigarette making Line 11.
August 23, 2017	DAQ receives Permit Application 4100198.17B from ITG as a Title V permit minor modification to add five bagfilters (ID Nos. CD-05-28, CD-05-12, CD-05-34, CD-05-15, and CD-05-17) to cigarette making Lines 5 through 9 respectively).
November 14, 2017	DAQ issues Permit No. 04398T22 to ITG as a Title V minor modification to add a bagfilter (ID No. CD-05-22) to cigarette making Line 11).
January 9, 2018	DAQ issues Permit No. 04398T23 to ITG as a Title V minor modification to add five bagfilters (ID Nos. CD-05-28, CD-05-12, CD-05-34, CD-05-15, and CD-05-17) to cigarette making Lines 5 through 9 respectively).
July 1, 2019	DAQ receives Permit Application 4100198.19A from ITG as a Title V permit minor modification application to add cigarette making Line 2 (ID No. ES-05.2) back into production along with associated bagfilter (ID No. CD-05-26).
October 10, 2019	DAQ issues Permit No. 04398T24 to ITG as a Title V permit minor modification to add cigarette making Line 2 (ID No. ES-05.2) back into production along with associated bagfilter (ID No. CD-05-26).

December 7, 2020	DAQ receives letter from ITG requesting an applicability determination on using a 300 hp, 12.5 million Btu per hour temporary natural gas-fired boiler (ID No. ES-1) instead of the permitted 100 hp, 4.5 million Btu per hour temporary boiler (ID No. IBOILER) during scheduled maintenance on the three main natural gas-fired boilers (ID Nos. ES-01-A, ES-01-B, and ES-01-C).
December 16, 2020	DAQ issues Permit Applicability Determination No. 3604 that ITG's use of a larger temporary natural gas-fired boiler during the limited scheduled maintenance period qualifies as an insignificant activity under 15A NCAC 02Q .0503(8), and is therefore acceptable. No permit application is required for the addition of the source.
April 1, 2021	DAQ receives Permit Application 4100198.21A from ITG as a Title V permit minor modification to add cigarette making Line JTI (ID No. ES-05.JTI) with rerouted associated bagfilters (ID Nos. CD-05-19 and CD-05-22) from Line 10 and Line 11 respectively. Additionally, two bagfilters (ID Nos. CD-05-20 and CD-05-23) will be returned to service, replacing the rerouted bagfilters on Lines 10 and 11 respectively.
June 22, 2021	DAQ issues Permit No. 04398T25 to ITG as a Title V permit minor modification to add cigarette making Line JTI (ID No. ES-05.JTI) with rerouted associated bagfilters (ID Nos. CD-05-19 and CD-05-22) from Line 10 and Line 11 respectively. Additionally, two bagfilters (ID Nos. CD-05-20 and CD-05-23) will be returned to service, replacing the rerouted bagfilters on Lines 10 and 11 respectively.
September 8, 2021	DAQ receives 502(b)(10) notification from ITG to replace two emergency generators (ID Nos. IEG3 and IEG5) with like equipment because they have reached the end of their useful lives and require significant repairs.
September 14, 2021	DAQ emails Permit Applicability Determination No. 3722 to ITG in response to their September 8, 2021 502(b)(10) notification. Upon review, DAQ has determined that no permit revision or 502(b)(10) notification is required for this change.
October 26, 2021	DAQ receives permit renewal application No. 4100198.21B from ITG.
January 31, 2022	Davis Murphy, Compliance Supervisor, Winston-Salem Regional Office (WSRO) email to DAQ conveying ITG request for an applicability determination regarding addition of up to 18 diesel-fired refrigerated trailers for storage of outgoing tobacco products.
January 31, 2022	DAQ issues Permit Applicability Determination No. 3767 to ITG in response to their request regarding addition of diesel-fired refrigerated trailers. Upon review, DAQ has determined no more than 14 trailers could be used on site without triggering prevention of significant deterioration (PSD) requirements. ITG can submit a minor modification application with fee (i.e., 10-day letter) allowing them to bring 14 trailers on site for use while a permit modification is being processed for the trailers. The trailers would not be insignificant activities, and due to the length of time they would be on site they cannot be classified as mobile sources. A PSD avoidance condition would not be required.

February 3, 2022	DAQ receives permit application No. 4100198.22A from ITG as a minor modification to add a new deep freeze operation consisting of a yard with room for up to 14 refrigerated trailers for temporary storage of product before shipment overseas.
March 14, 2022	DAQ issues Permit No. 04398T26 to ITG as a Title V permit minor modification to add a new deep freeze operation consisting of a yard with room for up to 14 refrigerated trailers for temporary storage of product before shipment overseas.
July 7, 2022	Draft permit sent to Stationary Source Compliance Branch (SSCB) for review and comment.
July 12, 2022	DAQ receives comments on draft permit from SSCB.
August 12, 2022	Draft permit and review sent for DAQ supervisory review.
September 13, 2022	DAQ supervisor provides comments on draft permit and review
November 9, 2022	DAQ sends draft permit to ITG and WSRO for review and comment.
November 14, 2022	DAQ receives comments on draft permit from WSRO.
December 5, 2022	DAQ receives comments on draft permit from ITG.
xxx	Permit renewal notice published, 30-day public notice and comment period begins, and 45-day EPA comment period begins.
xxx	30-day public notice and comment period ends.
xxx	45-day EPA comment period ends.

4. Changes to Permit and Title V Equipment Editor (TVEE) Discussion

The following table summarizes changes made to the ITG permit as a result of this permit renewal:

Page No.	Section	Description of Changes
Cover and throughout	---	Updated all dates and permit revision numbers
Insignificant Activities List	Attachment	Moved to Section 3 of permit
2	Table of Contents	Changed Section 3 from "General Conditions" to "Insignificant Activities per 15A NCAC 02Q .0503(8)" Added new Section 4, "General Conditions"
3	List of Acronyms	Relocated here (formerly last page of permit)
5	1	Removed the phrase "in parallel with optional" in between control device descriptions for Top flavoring line No. 1 (ID No. ES-04-1) and Top flavoring line No. 2 (ID No. ES-04-2)

Page No.	Section	Description of Changes
7	2.1 A	Updated limits/standards table to current format
	2.1 A.2.c, d	Combined paragraphs c and d into one paragraph c
8	2.1 A.3.c, d	Combined paragraphs c and d into one paragraph
	2.1 A.4	Added new Section 2.1 A.4 (02D .0605), and renumbered previous Section 2.1 A.4 (02D .1111) as Section 2.1 A.5
	2.1 A.5	Updated section to reflect the most current stipulations for 15A NCAC 02D .1111 (Subpart JJJJJJ)
11	2.1 B	• Updated summary of 02D .0515 in limits/standards table to current format • Clarifed that uncontrolled emissions rate is for each bagfilter, rather than for all bagfilters
	2.1 B.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
12	2.1 B.1.f	Added “and pressure drop indicators”
13	2.1 B.2.a	Revised to include all sources listed on page 11 of permit
	2.1 B.2.b	Deleted paragraph stating “Until these cigarette machines are replaced, visible emissions from these sources (ID Nos. ES-05.3 through ES-05.11 and ES-05.JTI shall not be more than 40 percent opacity . . .”) and renumbered subsequent paragraphs accordingly
	2.1 B.2.c	Deleted paragraph stating “After each cigarette machine is replaced, visible emissions from these sources (ID Nos. ES-05.3 through ES-05.11 and ES-05.JTI shall not be more than 20 percent opacity . . .”) and renumbered subsequent paragraphs accordingly
	2.1 B.2.e (now c)	Deleted phrases requiring establishment of normal, and defining noncompliance as failure to establish normal
	2.1 B.2.h	Deleted paragraph titled “State Enforceable Only Notification Requirement”
	2.1 B.3.a	Deleted the word “combined”. Changed “the bagfilters” to “each bagfilter”
	2.1 B.3.c, d	Combined both paragraphs into one single paragraph
14	2.1 B.3.e	Reporting paragraph renumbered as Section 2.1 B.3.d
15	2.1 C	Updated limits/standards table to current format
	2.1 C.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .0515

Page No.	Section	Description of Changes
17	2.1 C.2.f 2.1 C.3	Added "recordkeeping" as an activity to be included in the summary reports Updated section to reflect the most current stipulations for 15A NCAC 02D .0317 (including deletion of testing paragraph and renumbering of subsequent paragraphs)
18	2.1 C.3.h.i 2.1 C.3.h.ii	Deleted requirement for calculations for the first report following issuance of the permit Added "The report shall include" to beginning of this sentence
19	2.1 D 2.1 D.1	Updated limits/standards table to current format Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
20	2.1 D.3	• Updated section to reflect the most current stipulations for 15A NCAC 02D .0614 • Included definitions for the acronyms QIP, QA, and QC
23	2.1 E 2.1 E.1	Updated limits/standards table to current format Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
25	2.1 F 2.1 F.1	Updated limits/standards table to current format Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
27	2.1 G 2.1 G.1	Updated limits/standards table to current format Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
29	2.1 H 2.1 H.2	Updated limits/standards table to current format Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
32	2.1 I 2.1 I.1	Updated limits/standards table to current format Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
34	2.1 J	Updated limits/standards table to current format
35	2.1 J.3.h.iii	Inserted "Parts" after "CFR"
37	2.2 A.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .1100 (including permit application number and date of modeling analysis submittal)
38	3	Section 3 is now "Insignificant Activities per 15A NCAC 02Q .0503(8)"
40-48	4	Updated General Conditions to Version 6.0 dated January 7, 2022

No changes regarding equipment were made to the current ITG permit as a result of this permit renewal; therefore no changes to the TVEE were warranted.

5. Description of Changes and Estimated Emissions

No changes have been made to the ITG facility resulting in changes to emissions from the facility since the permit was last modified (Air Permit No. 04398T26, issued March 14, 2022).

6. Regulatory Review

ITG is subject to the following state regulations, in addition to the requirements in the General Conditions:

15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers. This rule applies to particulate matter (PM) emissions from the combustion of fuel in indirect heat exchangers, such as boilers, that are discharged from any stack or chimney into the atmosphere. The regulation provides the following equation for determining the allowable emissions limit as a function of maximum heat input:

$$E = 1.090 \times Q^{-0.2594}$$

Where:

E = allowable emissions limit for PM in pounds per million Btu (lb/MMBtu); and
Q = maximum heat input in million Btu per hour (MMBtu/hr). The maximum heat input is the total heat content of all fuels and is the sum of maximum heat input of all fuel burning indirect heat exchangers at a plant site which are in operation, under construction, or permitted when determining the allowable emission limit for each fuel burning indirect heat exchanger.

The three natural gas/No. 2 ultra-low sulfur fuel oil-fired boilers (ES-01-A, ES-01-B, and ES-01-C) and the natural gas-fired process heater (ID No. ES-03-02) are subject to 02D .0503. The maximum heat input combined from these four sources is 156 MMBtu/hr (Q = 75 + 37.5 + 37.5 + 6), so inputting the combined heat input into the formula yields an allowable PM emissions limit of 0.30 lb/MMBtu heat input. Because both natural gas and No. 2 ultra-low sulfur fuel oil are clean burning fossil fuels, no monitoring, recordkeeping, or reporting is required for PM emissions from firing either of those fuels in these boilers, or from firing natural gas in the process heater. This permit renewal does not change this status. Continued compliance is expected.

15A NCAC 02D .0515: Particulates from Miscellaneous Industrial Processes. This rule addresses emissions of particulate matter from stacks, vents, or outlets for any industrial process for which no other particulate emission control standards apply. For such processes, the allowable emission rates shall not exceed the level calculated using one of the following equations, as appropriate for the process rate of the source:

$E = 4.10(P)^{-0.67}$ *for process rates less than or equal to 30 tons per hour (ton/hr)*

$E = 55.0(P)^{0.11} - 40$ *for process rates greater than 30 ton/hr*

Where:

E = allowable emissions limit for particulate matter in pounds per hour (lb/hr), and
P = process rate in ton/hr (i.e., the total weight per hour of all materials introduced into a specific process that may cause any emission of particulate matter. Liquid and gaseous fuels and combustion air are not included in the process weight).

Many processes at ITG are subject to this regulation; they are listed in the following table, along with associated control devices, and a summary of their monitoring, recordkeeping, and reporting requirements.

Emission Source ID No.	Emission Source Description	Control Device & ID No.	Monitoring, Recordkeeping, and Reporting Requirements
ES-05.1	Tobacco screen material collection	Bagfilter CD-05-01	Inspect & maintain control devices per manufacturer's recommendations (at minimum, monthly inspection of ductwork and material collection units for leaks, and annual internal inspection of bagfilter structural integrity). Check indicator on bagfilter weekly to ensure pressure drop between 0.5-8.0 inches of water. Maintain logbook of inspection and maintenance and pressure drop checks. Semiannual reporting required.
ES-05.2	One cigarette making operation	Bagfilters CD-05-26	
ES-05.3	One cigarette making operation	Parallel Bagfilters CD-05-06 & CD-05-27	
ES-05.4	One cigarette making operation	Parallel bagfilters CD-05-07 & CD-05-31	
ES-05.5	One cigarette making operation	Parallel bagfilters CD-05-09, CD-05-10 & CD-05-28	
ES-05.6	One cigarette making operation	Parallel bagfilters CD-05-011, CD-05-12 & CD-05-32	
ES-05.7	One cigarette making operation	Parallel bagfilters CD-05-013, CD-05-33 & CD-05-34	
ES-05.8	One cigarette making operation	Parallel bagfilters CD-05-014, CD-05-15 & CD-05-29	
ES-05.9	One cigarette making operation	Parallel bagfilters CD-05-016, CD-05-17 & CD-05-18	
ES-05.10	One cigarette making operation	Parallel bagfilters CD-05-20 & CD-05-21	
ES-05.11	One cigarette making operation	Parallel bagfilters CD-05-23 & CD-05-24	
ES-05.JTI	One cigarette making operations	Parallel bagfilters CD-05-19 & CD-05-22	
ES-02-1	Tobacco cutting and blending process	Bagfilters CD-02-01 through CD-02-03	For sources ES-02-02, ES-02-03 ES-02-04, ES-02-08 and ES-02-10, keep production records so that the process rates can be derived. Inspect & maintain control devices per manufacturer's recommendations (at minimum, monthly inspection of ductwork and material collection units for leaks, and annual internal inspection of bagfilter structural integrity). Check indicator on bagfilter weekly to ensure pressure drop
ES-02-07	Hauni Steam dryer no. 1	Bagfilter CD-02-04	
ES-02-08	Associated Hauni Steaming tunnel no. 1	NA	
ES-02-09	Hauni Steam dryer no. 2	Bagfilter CD-02-05	
ES-02-10	Associated Hauni Steaming tunnel no. 2	NA	
ES-04-1	Top flavoring line no. 1	Bagfilter CD-04-01 in parallel w/ OPTIONAL packed tower scrubber CD-04-06[3]	
ES-04-2	Top flavoring line no. 2	Bagfilter CD-04-02 in parallel w/ OPTIONAL packed tower scrubber CD-04-09[4]	
ES-04-3	Menthol addition	NA	

[3] Use of the wet scrubber is optional and is not required by the permit. As noted in a recent inspection report (A. Kormos, WSRO, 9/15/2021), the wet scrubber was last used around the year 2003.
[4]Ibid.

Emission Source ID No.	Emission Source Description	Control Device & ID No.	Monitoring, Recordkeeping, and Reporting Requirements
ES-02-02 through ES-02-04	Three Direct Conditioning and Casing Cylinder (DCCC) lines to add moisture to tobacco	NA	between 0.5-8.0 inches of water. Ensure minimum liquid flow rate to scrubbers CD-04-06 and CD-04-09 is 6 gallons per minute. Check indicator on scrubber weekly to ensure pressure drop between 3-8 inches of water. Maintain logbook of inspection and maintenance and pressure drop checks. Semiannual reporting required.
ES-06	Tobacco Reclamation	Bagfilters CD-06-01, CD-06-02 and CD-06-04	Inspect & maintain control devices per manufacturer's recommendations. Check indicator on bagfilter weekly to ensure pressure drop between 0.5-8.0 inches of water. Maintain logbook of inspection and maintenance and pressure drop checks. Semiannual reporting required.
ES-07	Cigarette Reclamation Operation	Bagfilters CD-07-01 through CD-07-03	
ES-02-05A & ES-02-05B	Burley Tobacco Dryers	NA	Keep records of quantity of tobacco processed plus quantity of casings applied, so that the process rates can be derived. No reporting required.
ES-08	Central Vacuum Cleaning System	Cyclone and bagfilters (CD-08-01 and CD-08-02) in series	Inspect & maintain control devices per manufacturer's recommendations. Check indicator on bagfilter weekly to ensure pressure drop between 0.5-8.0 inches of water. Maintain logbook of inspection and maintenance and pressure drop checks. Semiannual reporting required.
ES-03-01	One DIET Expanded Process	Bagfilter CD-03-01 **(**optional, not used for compliance)	Keep records of quantity of tobacco processed plus quantity of casings applied, so that the process rates can be derived. No reporting required.
ES-03-03	One Direct Conditioning and Casing Cylinder (DCCC) line	NA	
ES-02-06	Final Casing Operation	NA	

This permit renewal does not change the status of these sources with respect to 02D .0515. Continued compliance is expected.

15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources. Under this regulation, emissions of sulfur dioxide (SO_2) from any source of combustion discharged from any vent, stack, or chimney shall not exceed 2.3 pounds of SO_2 per million British thermal units (MMBtu) input. The following sources at ITG are subject to this regulation:

- Three natural gas/No. 2 ultra-low sulfur fuel oil-fired boilers (ES-01-A, ES-01-B, and ES-01-C)
- One natural gas-fired process heater (ES-03-02)
- Deep freeze operation consisting of 14 diesel-fired refrigerated trailers (ES-DFJTI)

Because both natural gas and No. 2 ultra-low sulfur fuel oil tend to emit little sulfur during combustion, no monitoring, recordkeeping, or reporting is required for PM emissions from firing either of those fuels in the boilers (ES-01-A, ES-01-B, and ES-01-C) or natural gas in the process heater (ES-03-02). As for the diesel-fired refrigerator trailers (ES-DFJTI), each trailer has a maximum capacity of 18.5 kilowatts. Referring to the U.S. EPA document "AP-42: Compilation of Air Emission Factors" to calculate SO_2 emissions from the combustion of diesel fuel in these engines, AP-42 Table 3.3-1 shows an emission factor of 0.29 pounds per million Btu for small diesel-fired engines[5], which is less than the limit of 2.3 lb/MMBtu in the rule. Therefore, compliance with this rule is expected.

15A NCAC 02D .0521, Control of Visible Emissions: This regulation establishes opacity limits for visible emissions generated by fuel burning operations and industrial processes where visible emissions are expected to occur (except during startups, shutdowns, and malfunctions approved according to procedures in 15A NCAC 02D .0535). The opacity limits for a given source are based on the date the source was manufactured. The following table lists the sources at the ITG facility subject to this regulation and their respective opacity limits as stated in the current permit.

Date of Manufacture	Sources	Opacity Limit	Additional limitations
As of July 1, 1971	• Three natural gas/No. 2 ultra-low sulfur fuel oil-fired boilers (ES-01-A, ES-01-B, & ES-01-C) • Cigarette Making Operations (ES-05.3 through ES-05.11 and ES-05.JTI) • Tobacco cutting & blending process (ES-02-1) • Top flavoring lines nos. 1 & 2 (ES-04-1 & ES-04-2) • Cigarette Reclamation Operation (ES-07) • Final Casing Operation (ES-02-06)	40 percent opacity averaged over a six-minute period	Six-minute averaging periods may exceed 40 percent not more than: • once in any hour, and • four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity.

[5] The emission factor is for SO_x, not SO_2. The most conservative assumption is that 100% of SO_x is SO_2.

Date of Manufacture	Sources	Opacity Limit	Additional limitations
After July 1, 1971	• Tobacco Screen Material Collection (ES-05.1) • Cigarette Making Operations (ES-05.2) • Hauini Steam dryer nos. 1 & 2 (ES-02-07 & ES-02-09) • Associated Hauni Steaming Tunnel nos. 1 & 2 (ES-02-08 & ES-02-10) • Tobacco Reclamation (ES-06) • Burley Tobacco Dryers (ES-02-05A & ES-02-05B) • Central Vacuum Cleaning System (ES-08) • One DIET Expanded Process (ES-03-01) • One natural gas-fired process heater (ES-03-02) • One Direct Conditioning and Casing Cylinder (DCCC) line (ES-03-03) • Deep freeze operation consisting of 14 diesel-fired refrigerated trailers (ES-DFJTI)	20 percent opacity averaged over a six-minute period	Six-minute averaging periods may exceed 20 percent not more than: • once in any hour, and • four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Section 2.1 B.2 of the current permit states that after each cigarette machine is replaced, visible emissions from cigarette manufacturing lines ES-05.2 through ES-05.11 and ES-05.JTI will be subject to the opacity limit for sources manufactured after July 1, 1971 (i.e., 20 percent opacity). According to the latest facility inspection report (A. Kormos, WSRO, 9/15/2021), ITG has replaced all cigarette machines as of April 21, 2016. The permit will be revised to state that the 20% opacity limit now applies to all the cigarette manufacturing lines.

ITG is required to observe the emission points for nearly all the sources in the preceding table once a week for any visible emissions above normal. If visible emissions are observed to be above normal, ITG must either act appropriately to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken, or demonstrate that the percent opacity is below the established limit in accordance with 15A NCAC 02D .2610 (Method 9). The results of the monitoring, corrective actions, or testing shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The only exception to these monitoring/recordkeeping/reporting requirements is for the refrigerated trailers **(ID No. ES-DFJTI).** No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in the refrigerated trailers.

This permit renewal does not change the status of these sources with respect to 02D .0521. Continued compliance is expected.

15A NCAC 02D .0605, General Recordkeeping and Reporting Requirements: This application review revealed that while the permit limited the three boilers (ES-01-A, ES-01-B, & ES-01-C) to burning natural gas and ultra-low sulfur No.2 diesel (ULSD) oil, the permit did not include recordkeeping requirements to ensure that only ULSD oil was used. To correct this discrepancy, a recordkeeping condition under 02D .0605 is being added to require that ITG maintain fuel certification records onsite that demonstrate the ULSD oil combusted meets the specification for ASTM D975 Grade No. 2-D S15 fuel oil (maximum 15 ppm 90.0015%) sulfur content, by weight.

15A NCAC 02D .1100, Control of Toxic Air Pollutants: The rules in this section of 15A NCAC 02D were established for the control of toxic air pollutants to protect human health. This is discussed in further detail in Section 12 of this review.

15A NCAC 02D .0614: Compliance Assurance Monitoring (40 CFR 64) - see discussion in Section 11 of this review.

15A NCAC 02Q .0317: Avoidance Conditions for 15A NCAC 02D .0530: Prevention of Significant Deterioration (PSD) - see discussion in Section 9 of this review.

15A NCAC 02Q .0317: Avoidance Conditions for 15A NCAC 02D .0614: Compliance Assurance Monitoring (CAM) - see discussion in Section 10 of this review.

The permit has been updated to reflect the most current stipulations for all applicable regulations.

7. National Emission Standards for Hazardous Air Pollutants (NESHAPS): Maximum and/or Generally Achievable Control Technology (MACT/GACT)

ITG is subject to the following NESHAPs under 40 CFR Part 63:

Subpart ZZZZ, "National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. The diesel-fired refrigerated trailers **(**ES-DFJTI) onsite are subject to this NESHAP. ITG is required to meet the requirements of this rule by complying with the requirements of 40 CFR Part 60, Subpart IIII, which are summarized in Section 8 of this review. In addition, the following insignificant activities per 15A NCAC 02Q .0503(8) are subject to this NESHAP:

Emission Source ID No.	Emission Source Description
IEG-1, IEG-3, and IEG-8 **[MACT ZZZZ]**	Three natural gas-fired emergency generators (30.4 kW, 40.77 hp; 49.6 kW, 66.51 hp; 30 kW, 40.77 hp; respectively)
IEG-5, IEG-7, and IEG-9 through IEG-11 **[MACT ZZZZ]**	Five diesel-fired emergency generators (200 kW, 268.2 hp; 200 kW, 268.2 hp; 181.3 hp; 135.2 kW, 181.3 hp; 125 kW, 167.63 hp; respectively)
IEG-12 **[NSPS IIII, MACT ZZZZ]**	Diesel-fired emergency generator (511 kW, 685 hp)
IEG-13 **[NSPS IIII, MACT ZZZZ]**	Diesel-fired Emergency Generator (80 kW, 133 BHP maximum rated power output)

This permit renewal does not affect this status. Continued compliance is expected.

Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers. The natural gas/No. 2 ultra-low sulfur fuel oil-fired boilers ES-01A, ES-01B, and ES-01C are subject to this NESHAP. ITG demonstrated compliance by performing the initial tune- up and one-time energy assessment prior to July 19, 2014. The tune-up requirement for

the boilers was met on January 6, 2012 (ES-01-A), November 9, 2011 (ES-01-B), and November 8, 2011 (ES-01-C), and the energy assessment requirement was met on August 15, 2012.

Under Subpart JJJJJJ, the three boilers are subject to general compliance requirements (operation and maintenance in a manner consistent with safety and good air pollution practices to minimize emissions). Boiler tune-ups are required every five years. ITG is required to maintain copies of all notifications and reports required for compliance, records documenting conformance with required tune-ups, and records of actions taken during malfunctions to minimize emissions—including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. Records must be maintained for five years following the date of each recorded action. This permit renewal does not affect this status. Continued compliance is expected.

8. New Source Performance Standards (NSPS)

ITG is not subject to any NSPS. Under the authority of 15A NCAC 02Q .0512(a)(1)(B), the permit currently shields ITG from the following nonapplicable requirements:

- 15A NCAC 02D .0524, 40 CFR Part 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) is not applicable to these five diesel-fired emergency generators: IEG-5, IEG-7, and IEG-9 through IEG-11. Since these generators existed prior to July 11, 2005, they pre-date this NSPS regulation.
- 15A NCAC 02D .0524, 40 CFR Part 60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) is not applicable to these three natural gas-fired emergency generators: IEG-1, IEG-3, and IEG-8. Since these generators existed prior to June 12, 2006, they pre-date this NSPS regulation.

This permit renewal does not affect this status. Continued compliance is expected.

9. New Source Review (NSR)/Prevention of Significant Deterioration (PSD)

ITG has accepted a condition in their permit under 15A NCAC 02Q .0317, Avoidance Conditions to avoid the applicability of 15A NCAC 02D .0530, Prevention of Significant Deterioration. The avoidance condition establishes two operating scenarios. Whenever making a change from one operating scenario to another, ITG is required to record in a logbook (written or electronic format) the scenario under which it is operating.

Primary operating scenario (POS): Under the POS, also known as Avoidance Condition A, the following emission sources shall discharge less than 530.9 tons of volatile organic compounds (VOC) into the atmosphere in any twelve-month rolling period.

Emission Source ID No.	Emission Source Description
ES-02-1	Tobacco cutting and blending process
ES-04-1	Top flavoring line no. 1
ES-04-2	Top flavoring line no. 2
ES-04-3	Menthol addition
ES-02-02 through ES-02-04	Three Direct Conditioning and Casing Cylinder (DCCC) lines

ITG is required to maintain a logbook of the following measurements and calculations to demonstrate that this emission limit has been met:

- the total quantity of tobacco processed by these sources each month;
- the total amount of alcohol applied in the top flavoring and menthol processes, which results in VOC emissions from these sources (assuming that 100% of the alcohol applied volatilizes.
- The actual VOC emissions will be calculated on a monthly basis for each type of material as applied, and for those VOCs emitted naturally from the tobacco during processing. VOC emissions will be quantified by compound and the calculation method will be based on test results, mass balance, or other engineering assumptions for which supporting documentation is maintained on file.

Alternative operating scenario (AOS): Also known as Avoidance Condition B, the AOS applies when optional scrubbers CD-04-06 and CD-04-09 are not in use. When this situation occurs, these emission sources shall affect an incremental increase of less than 40 tons of VOCs into the atmosphere in any 12-month rolling period. To ensure compliance with this condition, while the scrubbers are not in use, these sources shall be limited to VOC additions through "top flavoring" of less than 172,490 pounds per consecutive twelve months.

ITG is required to calculate VOC additions through “top” flavorings at the end of each month. During the periods when the optional scrubbers are not in use, VOC additions shall be determined by multiplying the total amount of each type of VOC-containing material consumed by the VOC content of the material. The calculations and the total amount of VOC additions shall be recorded in a logbook.

ITG must submit semi-annual summary reports that include:

- the estimated monthly VOC emissions.
- the monthly VOC additions for the period(s) that the scrubbers are not in use.
- any proposed changes to the method or factors used to calculate the monthly emissions (these shall be submitted for approval, to the Regional Supervisor, Winston-Salem Regional Office).
- The monthly VOC emissions for the previous 17 months (these must be calculated for each of the 12-month periods over the previous 17 months).

This permit revision does not affect this status. Continued compliance is expected.

10. Risk Management Plan (RMP) Requirements

40 CFR Part 68 requires stationary sources storing more than threshold quantities of regulated substances to develop a RMP in accordance with Section 112(r) of the Clean Air Act. The RMP lists the potential effects of a chemical accident at the facility, steps the facility is taking to prevent an accident, and emergency response procedures to be followed if an accident should occur.

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

10. Compliance Assurance Monitoring (CAM)

The CAM rule (40 CFR 64) applies to each pollutant specific emissions unit located at a major source that is required to obtain a Title V, Part 70, or Part 71 permit if it meets all of the following criteria:

- It is subject to an emission limitation or standard, and
- It uses a control device to achieve compliance, and
- It has potential pre-control emissions that equal or exceed the major source threshold (i.e., either 100 tpy for criteria pollutants, 10 tpy of any individual HAP, or 25 tpy of any combination of HAP).

The following emission limitations or standards are exempted from the CAM rule:

- NSPS or NESHAP standards proposed after November 15, 1990,
- Stratospheric ozone protection requirements under Title VI of the Clean Air Act,
- Acid rain program requirements,
- Emission limitations or standards or other requirements that apply solely under an approved emissions trading program,
- An emissions cap that meets requirements of 40 CFR Part 70.4(b)(12) or Part 71.6(a)(13),
- Emission limitations/standards for which a Part 70 or Part 71 permit specifies a continuous compliance determination method, as defined in 40 CFR Part 64.1, unless the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (e.g., a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage), and.
- Certain municipally owned utility units, as defined in 40 CFR Part 72.2.

Please note that the emission unit is not exempted from the CAM rule if nonexempt emission limitations or standards (e.g. a state rule or an older NSPS emission limits) apply to the emissions unit.

Upon the issuance of Air Permit 04398T11, a CAM applicability review determined that the tobacco reclamation operation (ID No. ES-06) was subject to CAM[6]. From that time until the issuance of Air Permit 04398T23 in 2017, no additional sources at the ITG facility were identified as being subject to CAM.

Air Permit 04398T23 included a minor modification that returned five existing out-of-service dust collectors (CD-05-28 for Line 5, CD-05-12 for Line 6, CD-05-34 for Line 7, CD-05-15 for Line 8, and CD-05-17 for Line 9) back into service in parallel with in-service dust collectors. As discussed in the permit review for Air Permit 04398T23, ITG Brands requested that DAQ include a CAM avoidance condition limiting cigarette production to 50 billion cigarettes per year (based on 8760 hours per year of operation for Emission Group 5 (Lines 3 through 11 and the 23 associated bagfilters))[7]. The production limit would ensure that the uncontrolled PM_{10} emission rate from the bagfilters remains below 100 tpy—except for bagfilter CD-05-32, which has uncontrolled PM_{10} emission greater than 100 tpy. Because the

[6] Review for Air Permit No. 04398T11, J. Sheppard, 4/28/2006.
[7]The annual 50 billion cigarette limit would limit uncontrolled potential emissions to 3970.49 tons of PM per year from the processing of 74,000 tons of tobacco per year at a rate of 18.5 ton/hr (based on 4000 hours of plant production).

unit is not classified as a large pollutant specific emission unit; e.g., >100 tpy PM_{10} post control), a CAM analysis was determined to not be necessary under 40 CFR Part 64 until the next permit renewal.[8]

Air Permit No. 04398T25 included a minor modification to accomplish the following[9]:

- add a new cigarette-making Line JTI (ES-05.JTI),
- reroute two bagfilters (ID Nos. CD-05-19 and CD-05-22) from Lines 10 and 11 to service the new Line JTI, and
- return two out-of-service bagfilters (CD-05-20 and CD-05-23) to service, replacing the rerouted bagfilters on Lines 10 and 11.

For the same reasons as for the previous minor modification, a CAM analysis was determined to not be necessary under 40 CFR Part 64 until the next permit renewal.

Air Permit No. 04398T26 was a minor modification adding a new deep freeze operation (ES-DFJTI) to include up to 14 refrigerated trailers for temporary storage of product before shipment overseas.[10] While the source would be subject to emission standards that are not exempted from 40 CFR Part 64, the diesel-fired engines for the refrigerated trailers would not require emission controls to meet those standards. In addition, potential emissions for the new source were well below the major source level for criteria pollutants or HAPs. Therefore, ES-DFJTI would not be subject to CAM.

An analysis is therefore warranted to see if the preceding minor modifications in Air Permits No. 04398T23 and 04398T25 resulted in additional emission sources that would be subject to CAM. The modifications would impact the cigarette making operations—Lines 2 through 11 and Line JTI—and the baghouses controlling emissions from those lines.

Source ID No.	Description	Control Device
ES-05.2	Cigarette Making Operations (Line 2):	Bagfilter CD-05-26
ES-05.3	Cigarette Making Operations (Line 3)	Bagfilters CD-05-06, CD-05-27
ES-05.4	Cigarette Making Operations (Line 4)	Bagfilters CD-05-07, CD-05-31
ES-05.5	Cigarette Making Operations (Line 5)	Bagfilters CD-05-09, CD-05-10, CD-05-28
ES-05.6	Cigarette Making Operations (Line 6)	Bagfilters CD-05-11, CD-05-12, CD-05-32
ES-05.7	Cigarette Making Operations (Line 7)	Bagfilters CD-05-13, CD-05-33, CD-05-34
ES-05.8	Cigarette Making Operations (Line 8)	Bagfilters CD-05-14, CD-05-15, CD-05-29
ES-05.9	Cigarette Making Operations (Line 9):	Bagfilters CD-05-16 through CD-05-18
ES-05.10	Cigarette Making Operations (Line 10)	Bagfilters CD-05-20 & CD-05-21
ES-05.11	Cigarette Making Operations (Line 11)	Bagfilters CD-05-23 & CD-05-24
ES-05.JTI	Cigarette Making Operations (Line JTI)	Bagfilters CD-05-19 & CD-05-22

Each of the sources listed above is subject to an emissions standard that is not exempted from CAM requirement—15A NCAC 02D .0515: Particulates from Miscellaneous Industrial Processes. Each of these sources requires an emission control device (i.e., one or more bagfilters) to meet that emissions

[8]Review for Air Permit No. 04398T23, D. Hughes 11/09/2017.
[9]Review for Air Permit No. 04398T25, D. Hughes, 6/22/2021.
[10] Review for Air Permit No. 04398T26, R. Braswell, 3/14/2022.

standard. Therefore, the determining factor for being subject to the CAM regulation is whether these sources have potential pre-control emissions that equal or exceed the major source threshold for a criteria pollutant—in this case, particulates, or more specifically, PM_{10}.

Using the emission estimation methodology in the appendix to this review, potential emissions were estimated for each of the sources listed above. For the majority of the baghouses listed above, PM emissions were well below 100 tons per year. While the estimates demonstrated that potential PM emissions for baghouse CD-05-32 (Line 6) and for baghouses CD-05-33 and CD-05-34 (Line 7) exceeded 100 tons per year, the emissions of PM_{10} for these baghouses was well below the 100 ton per year major source limit. For this reason, CAM is not applicable to these sources. Continued compliance is expected.

11. Facility-wide Air Toxics Review

The sources listed in the following table are subject to the listed emission limits for ammonia and formaldehyde, in accordance with 15A NCAC 02D .1100, "Control of Toxic Air Pollutants":

Stack ID No.	Emission Source ID No.	Stack Description	Ammonia (lb/hr)	Formaldehyde (lb/hr)
02-05B-01	ES-02-05B	Dryer No. 2 Stack 14a	7.04E-01	2.85E-02
02-05B-02	ES-02-05B	Dryer No. 2 Stack 19	2.22E+00	2.55E-02
02-05B-03	ES-02-05B	Dryer No. 2 Stack 23	1.69E+00	5.40E-02
02-05B-04	ES-02-05B	Dryer No. 2 Stack 30	4.12E+00	5.70E-02
02-05A-01	ES-02-05A	Dryer No. 1 Stack 9	8.87E-01	3.15E-02
02-05A-02	ES-02-05A	Dryer No. 1 Stack 18	7.09E-01	1.20E-02
02-05A-03	ES-02-05A	Dryer No. 1 Stack 29a	6.50E+00	6.90E-02
02-05A-04	ES-02-05A	Dryer No. 1 Stack 33a	5.76E-02	2.10E-02
02-09	ES-02-09	Hauni East	7.14E+00	3.75E-02
02-07	ES-02-07	Hauni West	2.08E+00	4.65E-02
02-02	ES-02-02	DCC Unit	2.05E-02	3.20E-02
02-03	ES-02-03	DCC Unit	2.05E-02	3.20E-02
02-04	ES-02-04	DCC Unit	2.05E-02	3.20E-02
02-08	ES-02-08	Steaming Tunnel #1	3.44E-02	5.35E-02
02-10	ES-02-10	Steaming Tunnel #2	3.44E-02	5.35E-02
04-03	ES-04-3	Menthol	4.80E-03	3.00E-03
02-06a	ES-02-06a	Final Casing Stack 2	2.80E-02	9.00E-03
02-06b	ES-02-06b	Final Casing Stack 4	2.32E-02	4.65E-03
03-02	ES-03-02	Process Heater	5.27E+00	1.88E+00
03-01	ES-03-01	TPP Conditioner	6.74E-03	1.52E-03
03-03	ES-03-03	DCC Unit	2.05E-02	3.20E-02

These emission limits were established as a facility-wide worst-case single stack modeling demonstration, which was approved by DAQ on July 3, 2012. As explained in a previous permit review[11], formaldehyde and ammonia were the only two toxic air pollutants (TAPs) approaching the allowable ambient levels (AALs), and were modeled at 12 and 15 times their potential emission rates respectively. Given that the AALs for these two TAPs were still not exceeded, it is believed that the AALs are unlikely to be exceeded during normal operations. For this reason, no monitoring, recordkeeping, or reporting is required. This permit renewal does not affect this status. Continued compliance is expected.

12. Facility Emissions Review

The table in the header page of this review summarizes emissions ITG has reported in the annual emissions inventories from 2016 to 2020 after application of required emission controls. Emissions of SO_2, NO_X, and CO dropped between the years 2016 and 2017, with modest increases in subsequent years. Significant overall reduction of VOC and PM_{10} emissions occurred between 2016 and 2020, with HAP emissions remaining relatively steady over the same time period.

13. Compliance History and Status

The following chronology dates from when the Baxter permit was last renewed on May 30, 2017.

August 1, 2017	Taylor Hartsfield, Winston-Salem Regional Office (WSRO) conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.
August 8, 2018	Taylor Hartsfield, WSRO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.
August 22, 2019	Shannon Leonard, WSRO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.
September 16, 2020	Taylor Hartsfield, WSRO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.
September 15, 2021	Andrew Kormos, WSRO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.
August 16, 2022	Andrew Kormos, WSRO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.

In summary, no compliance issues of concern have been observed since the ITG permit was last renewed. Continued compliance is expected and will continue to be monitored through regular facility inspections.

14. 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

[11] Review for Air Permit No. 04398T16 (J. Voelker, 7/10/2012).

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 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.

Virginia is an affected state within 50 miles of the facility. The Forsyth County Office of Environmental Assistance and Protection is an affected local program.

Notice of the DRAFT Title V Permit to Affected States ran from XXXX, 2022, to XXXX, 2023. ***Discuss any comments received from Affected States or Local Programs.***

Public Notice of the DRAFT Title V Permit ran from XXXX, 2022, to XXXX, 2023. ***Discuss any public comments received.***

EPA's 45-day review period ran concurrent with the 30-day Public Notice, from XXXX, 2022, to XXXX, 2023. ***Discuss any comments received from EPA and U.S. EPA Region 4 regarding the DRAFT Title V Permit.***

15. Other Regulatory Considerations

The following items were not required in Permit Application No. 4100198.21B:

- Professional Engineer's seal
- Zoning consistency determination
- Permit fee.

16. Recommendations

DAQ has reviewed the permit application(s) for ITG Brands, LLC located in Greensboro, Guilford County to determine compliance with all procedures and requirements. 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. DAQ recommends the issuance of Air Permit No. 04398T27.

Appendix

CAM Applicability: Emission Calculation Methodology

(taken from Review for Air Permit No. 04398T17, J. Lee, December 18, 2012)

Baghouse Removal Efficiency: 99.00%
Post-control Emission Rate: 0.005 grains of PM per actual cubic foot per minute (acf/min)

Conversion factors:
1 pound (lb) = 7,000 grains
1 ton = 2,000 lb
1 hour (hr) = 60 minutes (min)

If the flow rate for each bagfilter is known (in actual cubic feet per minute, or acf/min), then for a given bagfilter:

$$\text{Post-control PM Emissions (lb/hr)} = \frac{0.005 \text{ grains}}{\text{acf/min}} \times \frac{1 \text{ lb}}{7{,}000 \text{ grains}} \times (\text{bagfilter flow rate}) \times \frac{60 \text{ min}}{\text{hr}}$$

$$\text{Pre-control PM Emissions (lb/hr)} = \text{Post-control PM emissions} \div [1 - (\text{removal efficiency}/100)]$$

To convert from hourly emissions (lb/hr) to annual emissions (ton/yr), multiply PM emissions by 8,760 hr/yr × 1 ton/2,000 lb

To calculate PM_{10} fraction of total PM emissions, multiply PM emissions by 0.29 (from Farr's Handbook, p. 6.13)

A spreadsheet summarizing the emission calculations above for each source is presented on the next page.

Potential PM/PM_{10} Emission Calculations

Source ID	Source Name	Control Device ID Number	Flow (acfm)	Post Control PM Emissions (lb/hr)	Post Control PM Emissions (ton/yr)	Pre-control PM Emissions (lb/hr)	Pre-control PM Emissions (ton/yr)	Pre-control PM10* Emissions (ton/yr)
ES-05.2	Line 2	CD-05-26	3000	0.13	0.56	12.86	56.31	16.33
ES-05.3	Line 3	CD-05-06	3000	0.13	0.56	12.86	56.31	16.33
		CD-05-27	3000	0.13	0.56	12.86	56.31	16.33
ES-05.4	Line 4	CD-05-07	1600	0.07	0.30	6.86	30.03	8.71
		CD-05-31	4800	0.21	0.90	20.57	90.10	26.13
ES-05.5	Line 5	CD-05-09	3000	0.13	0.56	12.86	56.31	16.33
		CD-05-10	1600	0.07	0.30	6.86	30.03	8.71
		CD-05-28	3000	0.13	0.56	12.86	56.31	16.33
ES-05.6	Line 6	CD-05-11	1600	0.07	0.30	6.86	30.03	8.71
		CD-05-12	3000	0.13	0.56	12.86	56.31	16.33
		CD-05-32	6000	0.26	1.13	25.71	112.63	32.66
ES-05.7	Line 7	CD-05-13	1600	0.07	0.30	6.86	30.03	8.71
		CD-05-33	6000	0.26	1.13	25.71	112.63	32.66
		CD-05-34	6000	0.26	1.13	25.71	112.63	32.66
ES-05.8	Line 8	CD-05-14	1600	0.07	0.30	6.86	30.03	8.71
		CD-05-15	3000	0.13	0.56	12.86	56.31	16.33
		CD-05-29	3000	0.13	0.56	12.86	56.31	16.33
ES-05.9	Line 9	CD-05-16	1600	0.07	0.30	6.86	30.03	8.71
		CD-05-17	2400	0.10	0.45	10.29	45.05	13.06
		CD-05-18	2400	0.10	0.45	10.29	45.05	13.06
ES-05.10	Line 10	CD-05-20	3000	0.13	0.56	12.86	56.31	16.33
		CD-05-21	3000	0.13	0.56	12.86	56.31	16.33
ES-05.11	Line 11	CD-05-23	3000	0.13	0.56	12.86	56.31	16.33
		CD-05-24	3000	0.13	0.56	12.86	56.31	16.33
ES-05.JTI	Line JTI	CD-05-19	1600	0.07	0.30	6.86	30.03	8.71
		CD-05-22	1600	0.07	0.30	6.86	30.03	8.71