

County of Forsyth



PUBLIC NOTICE OF INTENT TO ISSUE A TITLE V AIR QUALITY PERMIT

FORSYTH COUNTY
OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION
WINSTON-SALEM, NORTH CAROLINA

January 23, 2019

Notice is hereby given by the Forsyth County Office of Environmental Assistance and Protection (EAP) of an opportunity for the public to review and comment on a draft Title V air quality permit for:

**R.J. Reynolds Tobacco Company
Whitaker Park Facility
Winston-Salem, NC
Permit #00339-TV-36**

This facility has applied for renewal of its Title V Air Quality operation permit. The draft permit meets the Title V requirements as specified in Forsyth County Air Quality Technical Code (FCAQTC) Section 3Q-0500.

The United States Environmental Protection Agency (EPA) will process this draft permit as a proposed permit and perform its 45-day review provided by FCAQTC Sec. 3Q-0522 *Review by EPA and Affected States* concurrently with the public notice period. If public comments are received that result in a change to the permit, EPA's 45-day review period will cease to be performed concurrently with the public notice period. The deadline for citizen's petitions to the EPA Administrator will be determined based on EPA's 45-day review period beginning after the public comment period has ended. The status regarding EPA's 45-day review of this project and the deadline for citizen's petitions can be found at the following website address:

<https://www.epa.gov/caa-permitting/north-carolina-proposed-title-v-permits>

The EAP will issue a final Air Quality Permit, in accordance with the conditions of the draft/proposed Air Quality Permit, unless there are public comments which result in a different decision or significant change in the permit.

A copy of the draft permit and statement of basis is available at the EAP's website:

http://www.forsyth.cc/EAP/public_notices.aspx

Additional information regarding the draft permit may be obtained from the Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120; telephone (336) 703-2440. The public may submit written comments on these proceedings to the address above or by e-mail to lloydpb@forsyth.cc on or before **February 22, 2019**, the close of the public comment period.

A handwritten signature in black ink, appearing to read "Peter B. Lloyd".

Peter B. Lloyd, Ph.D., P.E., Manager
Compliance Assistance & Permitting Division

OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION

FORSYTH COUNTY GOVERNMENT CENTER
201 NORTH CHESTNUT STREET
WINSTON-SALEM, NC 27101-4120

PERMIT TO OPERATE
AIR QUALITY CONTROL
CLASS: Title V

PERMIT NUMBER	EFFECTIVE DATE	EXPIRATION DATE	RENEWAL DUE
00339-TV-36	TBD	December 11, 2023	March 11, 2023

Facility Name: R.J. Reynolds Tobacco Company

Mailing Address: P.O. Box 2959
City, State, ZIP Code: Winston-Salem, NC 27102

Facility Location: Whitaker Park Facilities
City: Winston-Salem, NC

In accordance with the provisions set forth in the Forsyth County Air Quality Technical Code and Chapter 3 of the Forsyth County Code, "Air Quality Control", the facility identified above is authorized to operate, as outlined in Part I, "Air Quality Title V Operation Permit", the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations contained within this permit.

The permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete air quality permit application to the Forsyth County Office of Environmental Assistance and Protection and received an Air Quality Permit, except as provided in this permit or in accordance with applicable provisions of the Forsyth County Air Quality Technical Code.

This permit supersedes all previous permits issued to the permittee by the Forsyth County Environmental Affairs Department or Forsyth County Office of Environmental Assistance and Protection.

Peter B. Lloyd, Ph.D., P.E., Manager
Compliance Assistance & Permitting Division

DATE:

R. J. Reynolds Tobacco Company

Air Quality Permit # 00339-TV-36

Zzzz XX, 2019

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Part I AIR QUALITY OPERATING PERMIT

In Part I of this permit, all references to permit conditions are for permit conditions in Part I unless otherwise specified.

SECTION 1 PERMITTED EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

1.1 Equipment List and Applicable Conditions

Applicable Permit Condition	Applicable Standards						CAM		non-CAM	Visible Emissions		Source Specific Limits	
	PM	PM		SO2		VOC	Fabric Filter	Visual Observ.	Fabric Filter	40%	20%		
		3.3(A)	3.3(B)	max. lb/hr	3.4(A)					3.4(B)	3.7		3.6(B) (1,3,4)
ES#	Emission Source						CD#	Controls		EP#	Emission Point		
Building 603-1 Processing													
ES-1	Tobacco Scrap Feed Broke Recovery System						1			X	14		X
ES-2	Tobacco Stem Feed						1			X	14		X
							2			X	15		X
ES-3	Dust Infeed & Extraction						1			X	14		X
ES-4	Dryer #6						None				1, 6, 7		X A, B
ES-5	Dryer #7						None				16, 17, 18		X A, B
ES-6	Tobacco Mills						5	X	X		27		X

ES#	Emission Source	Applicable Standards						CAM			non-CAM	Visible Emissions		Source Specific Limits	
		PM	PM		SO2		VOC	Fabric Filter	Visual Observ.	Fabric Filter	40%	20%	3.2		
			3.3(A)	3.3(B)	max. lb/hr	3.4(A)								3.4(B)	3.7
Applicable Permit Condition	CD#	Controls			EP#	Emission Point									
Building 603-5 Recovery															
ES-1	Thresher Line		X	3.47				3	X	X		3		X	
ES-2	Carton Cutting Line		X	3.40				1			X	1		X	
								2	X	X		2		X	
ES-3	TPO Line		X	5.59				1			X	1		X	
								3	X	X		3		X	
ES-4	Greasy Mill 1st		X	6.68				1			X	1		X	
								2	X	X		2		X	
ES-5	Greasy Mill 3rd		X	8.07				2	X	X		2		X	
Building 611-2															
ES-5	Cigarette Making						X	<i>Fugitive</i>							C, D
Building 611-3															
ES-3	Casing & Cutting		X	8.17				1			X	10		X	C, D
								2 (611-4)			X	9 (611-4)		X	
								None				7		X	
								None				8		X	
								None				11		X	
								None				12		X	
								Fugitive							

		Applicable Standards					CAM		non-CAM	Visible Emissions		Source Specific Limits	
		PM	PM		SO2		VOC	Fabric Filter	Visual Observ.	Fabric Filter	40%	20%	3.2
Applicable Permit Condition		3.3(A)	3.3(B)	max. lb/hr	3.4(A)	3.4(B)	3.7	3.6(B) (1,3,4)	3.6(B) (2,3,4)	3.6(A)	3.5(A)	3.5(B)	
ES#	Emission Source	CD#					Controls			EP#	Emission Point		
Building 611-4													
ES-1	Blending & Conditioning		X	3.82				None			6	X	C
								Fugitive					
ES-2	Casing & Drying		X	5.38				4	X	X	5	X	C, D
								None			2, 3, 4	X	
								Fugitive					
ES-3	Tobacco Milling		X	4.76				10	X	X	10	X	C
Building 611-16													
ES-2	Smokeless Processing		X	0.587				None			1	X	C
Shed 181													
ES-1	Reconstituted Tobacco		X	1.54				None			1, 2, 3	X	

ES#	Emission Source	Applicable Standards						CAM			non-CAM	Visible Emissions		Source Specific Limits			
		3.3(A)	PM		SO2		3.7	Fabric Filter 3.6(B) (1,3,4)	Visual Observ. 3.6(B) (2,3,4)	Fabric Filter 3.6(A)	40%	20%	3.2				
			3.3(B)	max. lb/hr	3.4(A)	3.4(B)					3.5(A)	3.5(B)					
Applicable Permit Condition																	
ES#	Emission Source	CD#	Controls			EP#	Emission Point										
Building 602-1 Utilities																	
ES-1	Union Ironworks Boiler: 135 mmBtu/hr No. 2 fuel oil 140 mmBtu/hr Natural Gas	X				X				N/A				1	X		
ES-2	Union Ironworks Boiler: 135 mmBtu/hr No. 2 fuel oil 140 mmBtu/hr Natural Gas	X				X				N/A				2	X		
ES-5	Erie City Boiler: 120.8 mmBtu/hr No. 2 fuel oil 125.5 mmBtu/hr Natural Gas	X				X				N/A				5	X		
ES-6	Erie City Boiler: 124.1 mmBtu/hr No. 2 fuel oil 129 mmBtu/hr Natural Gas	X				X				N/A				6		X	
Temporary Boiler(s)																	
ES-TEMP	One or two temporary boilers with low-NOx burners fired with diesel fuel with a sulfur content not to exceed 0.05% sulfur and with a combined maximum firing rate not to exceed 40.824 mmBtu/hr. OR One, two, or three temporary boilers with low-NOx burners fired with natural gas, each with a maximum firing rate not to exceed 93 mmBtu/hr.	X				X				N/A				EP-T1 (plus EP-T2, and EP-T3, if applicable)		X	

- Note: 1. The "X" denotes the applicable conditions in Sections 3.3 - 3.7.
 2. The four boilers in Building 602-1 may use propane to start fuel oil combustion if natural gas is unavailable.

1.2 Operating Conditions Not Covered Under the Permit Shield

The following specific conditions have been revised or added to this permit following procedures other than the Significant Modification procedures in Section 3Q-0500 of the Forsyth County Air Quality Control Ordinance and Technical Code. As required under Sec. 3Q-0512 Permit Shield and Application Shield, a permit shield is not provided for these new or revised permit requirements. During the next Significant Modification as defined in Sec. 3Q-0516 or renewal of this permit, the Title V permit applications for the new and revised permit requirements listed below will also be processed according to the Significant Modification procedures and then a permit shield will be extended at that time.

Source ID	Source Description	Unshielded Operating Conditions	Effective Date

SECTION 2 FACILITY GENERAL ADMINISTRATIVE CONDITIONS

2.1 General Provisions [Sections 3-0100, 3-0200 and Sec. 3Q-0508(i)(16)]

- A. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in Subchapters 3D and 3Q of the Forsyth County Air Quality Technical Code (FCAQTC).
- B. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Sections 3-0100 and 3-0200 of the Forsyth County Air Quality Ordinance (FCAQO), including assessment of civil and/or criminal penalties. This permit is valid only for the specific processes and operations applied for and indicated in the air quality permit application. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and enforcement action by this Office.
- C. This permit is not a waiver of or approval of any other permits that may be required for other aspects of the facility which are not addressed in this permit.
- D. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore. This permit does not allow the permittee to cause pollution in contravention of local laws or rules, unless specifically authorized by an order from the Director, or to cause pollution in contravention of state laws or rules.
- E. Terms and conditions contained herein shall be enforceable by this Office, the U.S. EPA and citizens of the United States as defined in the federal Clean Air Act, except those identified as **Locally Enforceable Only** requirements which are enforceable by this Office.
- F. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained or modified without the appropriate and valid permits issued by this Office, unless the source is exempted by rule. This Office may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the applicable requirements.
- G. In addition to the authority found in Sec. 3D-0501 and 3Q-0508(i)(16), any deviation from the monitoring provisions of this permit may result in a request by this Office to submit data on rates of emissions in order to demonstrate compliance with any applicable regulation.

2.2 Permit Availability [Sec. 3Q-0507(k), 0508(i)(16), 0508(i)(9) and 0110]

The permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of this Office or the U.S. EPA upon request.

2.3 Submissions [Sec. 3Q-0507(c), 0508(i)(16) and 0104]

All documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required to be sent to this Office by this permit shall be submitted to the Forsyth County Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120.

2.4 Severability Clause [Sec. 3Q-0508(i)(2)]

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any specific circumstance, is challenged, the application of the provision in question to other circumstances, as well as the remainder of this permit's provisions, shall not be affected.

2.5 Duty to Comply [Sec. 3Q-0508(i)(3)]

The permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2.6 Need to Halt or Reduce Activity Not a Defense [Sec. 3Q-0508(i)(4)]

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2.7 Permit Shield [Sec. 3Q-0512(a)]

- A. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- B. A permit shield shall not alter or affect:
 1. the power of the Forsyth County Board of Commissioners, Director, or Governor under NCGS 143-215.3(a)(12) or the U.S. EPA under Section 303 of the federal Clean Air Act;
 2. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 3. the applicable requirements under Title IV of the Clean Air Act; or

4. the ability of the Director or the U.S. EPA under Section 114 of the federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- C. A permit shield shall not apply to any change made at a facility that does not require a permit or to any permit revision made under Sec. 3Q-0523.
- D. A permit shield shall not extend to minor permit modifications made under Sec. 3Q-0515.

2.8 **Circumvention [Sec. 3D-0502 and 3Q-0508(i)(16)]**

No person shall circumvent any permitted air pollution control device, or allow the emissions of regulated air pollutants without the applicable air pollution control device operating properly. Unless otherwise specified by this permit, no permitted emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

2.9 **Good Air Pollution Control Practice [Sec. 3D-0502 and 3Q-0508(i)(16)]**

At all times, the equipment listed in *Section 1* shall be operated and maintained in a manner consistent with the design and emissions control as applied for in the application.

2.10 **Reporting Requirements for Excess Emissions and Permit Deviations [Sec. 3D-0535(f), 3Q-0508(f)(2), 3Q-0508(i)(16) and 3Q-0508(g)]**

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections 3D-0500, 0900, 1200 or 1400; or by a permit condition; or that exceeds a Locally Enforceable Only emission limit established in a permit issued under Section 3Q-0700. (Note: This definition applies where the NSPS does not further define excess emissions for an affected NSPS emissions source.)

“Deviation” - means any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions.

- A. Sources subject to Sec. 3D-0524, 1110 or 1111

Excess Emissions and Permit Deviations

1. If the source specific NSPS (Sec. 3D-0524) or NESHAP (Sec. 3D-1110 or 1111) defines "excess emissions", these shall be reported as prescribed in Sec. 3D-0524, 1110 or 1111.
2. If the source specific NSPS (Sec. 3D-0524) or NESHAP (Sec. 3D-1110 or 1111) does NOT define “excess emissions”, the permittee shall report excess emissions as deviations from permit requirements as prescribed in paragraph 3, below.
3. In addition to any specific NSPS or NESHAP reporting requirements the permittee shall upon becoming aware:
 - (a) report to this Office any deviations from permit requirements by the next business day, unless an alternative reporting schedule is specifically provided in the permit, and

- (b) report in writing to this Office all deviations from permit requirements or any excess emissions within two business days, unless an alternative reporting schedule is specifically provided in the permit. The written report shall include the probable cause of such deviations and any corrective actions or preventative actions taken. Reports of all deviations from permit requirements shall be certified by a responsible official.

B. Sources NOT subject to Sec. 3D-0524, 1110 or 1111

1. Excess Emissions Greater than Four Hours in Duration [Sec. 3D-0535(f)]

The permittee shall report excess emissions greater than four hours in duration as prescribed in Sec. 3D-0535(f) including, but not limited to the following:

- (a) Notify this Office of any such occurrence by 9:00 a.m. Eastern time of this Office's next business day of becoming aware of the occurrence as described in Sec. 3D-0535(f)(1);
- (b) Notify this Office immediately when corrective measures have been accomplished; and
- (c) Submit, if requested, to this Office within 15 days after the request, a written report as described in Sec. 3D-0535(f)(3).

2. Excess Emissions Less than Four Hours in Duration and Deviations [Sec. 3Q-0508(f)]

The permittee shall report excess emissions less than four hours in duration and deviations from permit requirements as follows:

- (a) Report to this Office any excess emissions less than four hours in duration and any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit; and
- (b) Report in writing to this Office any excess emission less than four hours in duration or any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit. The written report shall include the probable cause of such excess emissions and deviations and any corrective actions or preventative actions taken. All reports of excess emissions and deviations from permit requirements shall be certified by a responsible official.

- C. Other Requirements under Sec. 3D-0535 (Sec. 3D-0535(g) is Locally Enforceable Only).

The permittee shall comply with all other requirements contained in Sec. 3D-0535.

2.11 **Emergency Provisions <40 CFR 70.6(g)>**

The permittee shall be subject to the following provision with regard to emergencies:

- A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in condition 2.11(C) are met.
- C. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
1. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 2. the permitted facility was at the time being properly operated;
 3. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the standards, or other requirements in the permit; and
 4. the permittee submitted notice of the emergency to this Office within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, and steps taken to mitigate emissions, and corrective actions taken.
- D. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- E. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

2.12 **Permit Fees [Sec. 3Q-0206(b), 0508(i)(10) and 0519(a)(4)]**

If, within 30 days after being billed, the permittee fails to pay an annual permit fee required under Subchapter 3Q-0200 of the FCAQTC, the Director may initiate action to terminate this permit under Sec. 3Q-0519 of the FCAQTC.

2.13 Annual Emission Inventory Requirements [Sec. 3Q-0207]

The permittee shall report to the Director by June 30th of each year the actual emissions of each air pollutant listed in Sec. 3Q-0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form(s) as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

2.14 Compliance Certification <40 CFR 70.6(c)> [Sec. 3Q-0508(n) and 0508(i)(16)]

By March 1st unless another date is established by the Director, the permittee shall submit to this Office and the U.S. EPA (**U.S. EPA Region 4, Air Enforcement Section, Mail Code: 4APT-AEEB, 61 Forsyth Street, S.W., Atlanta, GA 30303**) a compliance certification by a responsible official with all terms and conditions in the permit, including emissions limitations, standards, or work practices. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the federal Clean Air Act. The compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):

- A. the identification of each term or condition of the permit that is the basis of the certification;
- B. the status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the methods or means designated in 40 CFR 70.6(c)(5)(iii)(B). The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 occurred;
- C. whether compliance was continuous or intermittent;
- D. the identification of the method(s) or other means used by the owner and operator for determining the compliance status with each term and condition during the certification period; these methods shall include the methods and means required under 40 CFR Part 70.6(a)(3); and
- E. such other facts as the Director may require to determine the compliance status of the source.

2.15 Retention of Records [Sec. 3Q-0508(f)]

The permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit.

2.16 NESHAP - Recordkeeping Requirement for Applicability Determinations <40 CFR 63.10(b)(3)> [Sec. 3D-1111]

If the permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under 40 CFR Part 63, the permittee shall keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source. This record shall include all of the information required under 40 CFR 63.10(b)(3).

2.17 Duty to Provide Information [Sec. 3Q-0508(i)(9)]

- A. The permittee shall furnish to this Office, in a timely manner, any reasonable information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- B. The permittee shall furnish this Office copies of records required to be kept by the permit when such copies are requested by the Director.

2.18 Duty to Supplement or Correct Application [Sec. 3Q-0507(f)]

The permittee, upon becoming aware that any relevant facts were omitted from the application or that incorrect information was submitted with the application, shall promptly submit such supplementary facts or corrected information to this Office. The permittee shall also provide additional information necessary to address any requirements that become applicable to the source after the date a complete application was submitted but prior to release of the draft permit.

2.19 Certification by Responsible Official [Sec. 3Q-0520]

A responsible official (as defined in 40 CFR 70.2) shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statement and information in the document are true, accurate, and complete.

2.20 Inspection and Entry [Sec. 3Q-0508(l)]

- A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of this Office to perform the following:
 1. enter upon the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 2. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;

3. inspect, at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. sample or monitor substances or parameters, at reasonable times and using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements.

Nothing in this condition shall limit the ability of the U.S. EPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the Clean Air Act.

- B. No person shall obstruct, hamper or interfere with any such authorized representative while in the process of carrying out his official duties.

2.21 **Averaging Times <40 CFR 70.6(a)(3)> [Sec. 3Q-0508(f)]**

Unless otherwise specified in *Section 3* of this permit for a specific emission standard or limitation, the applicable averaging period for determining compliance with an emission standard or limitation during compliance testing shall be based on the applicable U.S. EPA reference test method.

2.22 **Compliance Testing [Sec. 3D-2602(e)]**

When requested by this Office for determining compliance with emission control standards, the permittee shall provide sampling ports, pipes, lines, or appurtenances for the collection of samples and data required by the test procedure; scaffolding and safe access to the sample and data collection locations; and light, electricity, and other utilities required for sample and data collection.

2.23 **General Emissions Testing and Reporting Requirements [Sec. 3D-2602 and 3Q-0508(i)(16)]**

Testing shall be conducted in accordance with FCAQTC Section 3D-2600 except as may be otherwise required in FCAQTC Sec. 3D-0524, 0912, 1110, 1111, 1415 or a permit condition specific to the emissions source. Requests to use an alternative test method or procedure must be made in writing at least 45 days prior to the test and approved by this Office. Alternatives to test methods or procedures specified for emissions sources subject to test requirements under 40 CFR 60, 40 CFR 61 or 40 CFR 63, may require approval by the U.S. EPA. When required to conduct emissions testing under the terms of the permit:

- A. The permittee shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved prior to air pollution testing. Emission testing protocols must be submitted at least 45 days before conducting the test for pre-approval prior to testing if requested by the permittee.
- B. The permittee shall notify this Office of the specific test dates at least 15 days prior to the scheduled test date in order to afford this Office the opportunity to have an observer on-site during the sampling program.

- C. During all sampling periods, the permittee shall operate the emission source(s) under operating conditions that best fulfill the purpose of the test and are approved by the Director or his delegate.
- D. The permittee shall submit one copy of the test report to this Office not later than 30 days after sample collection. The permittee may request an extension to submit the final test report if the extension request is a result of actions beyond the control of the permittee. The test report shall contain at a minimum the following information:
 - 1. a certification of the test results by sampling team leader and facility representative;
 - 2. a summary of emissions results expressed in the same units as the emission limits given in the rule for which compliance is being determined and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s) as appropriate;
 - 3. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics as necessary;
 - 4. all field, analytical and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
 - 5. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
 - 6. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
- E. This Office will review emission test results with respect to the specified testing objectives as proposed by the permittee and approved by this Office.

2.24 **Termination, Modification, and Revocation of the Permit [Sec. 3Q-0519]**

The Director may terminate, modify, or revoke and reissue this permit if:

- A. the information contained in the application or presented in support thereof is determined to be incorrect;
- B. the conditions under which the permit or permit renewal was granted have changed;
- C. violations of conditions contained in the permit have occurred;
- D. the permit holder fails to pay fees required under Section 3Q-0200 within 30 days after being billed;

- E. the permittee refuses to allow the Director or his authorized representative upon presentation of credentials:
 - 1. to enter, at reasonable times and using reasonable safety practices, the permittee's premises in which a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;
 - 2. to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;
 - 3. to inspect, at reasonable times and using reasonable safety practices, any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or
 - 4. to sample, at reasonable times and using reasonable safety practices, any emission sources at the facility;
- F. the U.S. EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- G. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of Chapter 3 of the Forsyth County Code.

2.25 Permit Reopenings, Modifications, Revocations and Reissuances, or Terminations [Sec. 3Q-0508(i)(5)]

The Director may reopen, modify, revoke and reissue, or terminate this permit for reasons specified in Sec. 3Q-0517 or 0519. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition in this permit.

2.26 Permit Renewal [Sec. 3Q-0508(e) and Sec. 3Q-0513]

This permit is issued for a term not to exceed five years. Permits issued under Title IV of the Clean Air Act shall be issued for a fixed period of five years. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the permittee or applicant has complied with Sec. 3Q-0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

2.27 Reopening for Cause [Sec. 3Q-0517 and 0508(g)]

This permit shall be reopened and revised in accordance with Sec. 3Q-0517 prior to its expiration date, for any of the following reasons:

- A. Additional applicable requirements become applicable to the facility with remaining permit term of three or more years.

- B. Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Clean Air Act. Excess emissions offset plans for this source shall become part of this permit upon approval by the U.S. EPA.
- C. The Director or the U.S. EPA finds that a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- D. The Director or the U.S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2.28 Construction and Operation Permits [Sections 3Q-0100 and 0300]

A construction and operating permit shall be obtained by the permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of Sections 3Q-0100 and 0300.

2.29 Permit Modifications [Sec. 3Q-0514, 0515, 0516, 0517, 0523 and 0524]

- A. Permit modifications may be subject to the requirements of Sec. 3Q-0514, 0515, 0516 and 0524.
- B. Changes made pursuant to Sec. 3Q-0523(a) and (b) do not require a permit modification.
- C. The permittee shall submit an application for reopening for cause in accordance with Sec. 3Q-0517 if notified by this Office.
- D. To the extent that emissions trading is allowed under FCAQTC Subchapter 3D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to Sec. 3Q-0523(c).

2.30 Insignificant Activities [Sec. 3Q-0503 and 0508(i)(15)]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The permittee shall have available at the facility at all times and made available to an authorized representative of this Office upon request, documentation, including calculations if necessary, to demonstrate that an emission source or activity is insignificant.

2.31 Standard Application Form and Required Information [Sec. 3Q-0505 and 0507]

The permittee shall submit applications and required information in accordance with the provision of Sec. 3Q-0505 and 0507.

2.32 Property Rights [Sec. 3Q-0508(i)(8)]

This permit does not convey any property rights of any sort, or any exclusive privileges.

2.33 Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [Sec. 3Q-0508(b)]

- A. If the permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR 82 Subpart A, Appendices A and B, the permittee shall service, repair, and maintain such equipment according to the work practices and personnel certification requirements, and the permittee shall use certified recycling and recovery equipment specified in 40 CFR 82 Subpart F.
- B. The permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR 82 Subpart F.
- C. The permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the U.S. EPA or its designee as required.

2.34 Prevention of Accidental Releases - Section 112(r) [Sec. 3Q-0508(h)]

If the permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the federal Clean Air Act, then the permittee is required to register this plan in accordance with 40 CFR Part 68.

2.35 Title IV Allowances [Sec. 3Q-0508(i)(1)]

The facility's emissions are prohibited from exceeding any allowances that the facility lawfully holds under Title IV of the Clean Air Act. This permit shall not limit the number of allowances held by the permittee, but the permittee may not use allowances as a defense to noncompliance with any other applicable requirement.

2.36 Air Pollution Alert, Warning or Emergency [Section 3D-0300]

Should the Director of this Office declare an Air Pollution Alert, Warning or Emergency, the permittee will be required to operate in accordance with the permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in Section 3D-0300.

2.37 Registration of Air Pollution Sources [Sec. 3D-0202]

The Director of this Office may require the permittee to register a source of air pollution. If the permittee is required to register a source of air pollution, this registration and required information shall be in accordance with Sec. 3D-0202(b).

2.38 Ambient Air Quality Standards [Sec. 3D-0501(e)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in Sec. 3D-0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

2.39 Odor [Sec. 3D-0522] Locally Enforceable Only

The permittee shall not cause or permit the emission of odors beyond the facility's property lines which are harmful, irritating or which unreasonably interfere with the use and enjoyment of any person's properties or living conditions, or any public properties or facilities. Such odors are prohibited by Sec. 3D-0522. No violation shall be cited, provided that the best practical treatment, maintenance, and control of odor(s) currently available is used. This requirement does not apply to normal agricultural practices, nor to accidental emissions of odors which are not normally produced during routine operations and activities as determined by the Director.

2.40 Fugitive Dust Control Requirement [Sec. 3D-0540]

The permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR 60, Appendix A), the owner or operator may be required to submit and implement a fugitive dust control plan as described in Sec. 3D-0540(f).

National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP) General Conditions - [Sec. 3D-1111]

Following are conditions found in the 40 CFR Part 63 NESHAP General Provisions. The following conditions only apply to sources subject to a relevant standard of a subpart of 40 CFR Part 63 except when otherwise specified in a particular subpart or in a relevant standard.

2.41 NESHAP - General Provisions <40 CFR 63 Subpart A> [Sec. 3D-1111]

The permittee shall comply with all applicable requirements specified in the general provisions of the National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR 63 Subpart A) including but not limited to requirements concerning notifications, testing, monitoring, recordkeeping, modifications, construction, and reconstruction.

2.42 NESHAP - Startup Shutdown and Malfunction Plan <40 CFR 63.6(e)(3)> [Sec. 3D-1111]

The permittee shall develop and implement a written startup, shutdown and malfunction plan in accordance with the requirements in 40 CFR 63.6(e)(3).

2.43 NESHAP - Good Air Pollution Control Practice <40 CFR 63.6(e) and 63.8(c)> [Sec. 3D-1111]

At all times, including periods of startup, shutdown, and malfunction, the permittee shall maintain and operate any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions at least to the levels required by all relevant standards. The permittee also shall maintain and operate each continuous monitoring system (CMS) as specified in 40 CFR 63.8, or in a relevant standard, and in a manner consistent with good air pollution control practices. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required by 40 CFR 63.6(e)(3). Operation and maintenance requirements established pursuant to Section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.

2.44 NESHAP - Circumvention <40 CFR 63.4(b)> [Sec. 3D-1111]

The permittee shall not build, erect, install, or use any article, machine, equipment or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere, the use of diluents to achieve compliance with a relevant standard for visible emissions, and the fragmentation of an operation such that the operation avoids regulation by a relevant standard.

2.45 NESHAP - Maintain Records <40 CFR 63.10(b)(2)> [Sec. 3D-1111]

For affected sources, the permittee shall maintain relevant records of:

- A. the occurrence and duration of each startup, shutdown, or malfunction of operation;
- B. the occurrence and duration of each malfunction of the air pollution control equipment;
- C. maintenance performed on the air pollution control equipment;
- D. actions taken during periods of startup, shutdown, and malfunction;
- E. all information necessary to demonstrate compliance with the affected source's startup, shutdown, and malfunction plan when all actions taken are consistent with the procedures specified in the plan;
- F. each period during which a CMS is malfunctioning or inoperative;
- G. all required measurement needed to demonstrate compliance with a relevant standard;
- H. all results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- I. all measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- J. all CMS calibration checks;
- K. all adjustments and maintenance performed on CMS;

- L. any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements if the source has been granted a waiver under 40 CFR 63.10(f);
- M. all emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test if the source has been granted such permission under 40 CFR 63.8(f)(6); and,
- N. all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

2.46 NESHAP - Files Available for Inspection <40 CFR 63.10(b)(1)> [Sec. 3D-1111]

The permittee shall maintain files of all information required by 40 CFR Part 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site.

2.47 NESHAP - Performance Testing Facilities Provided by Permittee <40 CFR 63.7(d)> [Sec. 3D-1111]

For any performance testing for each new source and, at the request of the Director, for each existing source, the permittee shall provide performance testing facilities as follows:

- A. Sampling ports adequate for test methods applicable to the affected source. This includes:
 - 1. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and
 - 2. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- B. Safe sampling platform(s).
- C. Safe access to sampling platform(s).
- D. Utilities for sampling and testing equipment.
- E. Any other facilities that the Director deems necessary for safe and adequate testing of a source.
- F. Unless otherwise specified in the applicable subpart, each performance test shall be conducted according to the requirements in 40 CFR 63.7.

Compliance Assurance Monitoring for Major Stationary Sources (CAM) - General Conditions - [40 CFR Part 64]

Following are conditions based on the requirements found in 40 CFR Part 64. These conditions only apply to sources subject to the CAM requirements.

2.48 CAM - Proper Maintenance <40 CFR 64.7(b)> [Sec. 3D-0614]

At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

2.49 CAM - Continued Operation <40 CFR 64.7(c)> [Sec. 3D-0614]

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

2.50 CAM - Response to Excursions or Exceedances <40 CFR 64.7(d)> [Sec. 3D-0614]

Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designed condition, or below the applicable emissions limitation or standard, as applicable.

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. Based on the results of this determination, this Office may require the permittee to develop and implement a Quality Improvement Plan (QIP). The elements of a QIP are identified in 40 CFR 64.8(b).

2.51 **CAM - Documentation of Need for Improved Monitoring <40 CFR 64.7(e)> [Sec. 3D-0614]**

After approval of the CAM plan, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify this Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conduction monitoring and collecting data, or the monitoring of additional parameters.

SECTION 3

SPECIFIC LIMITATIONS AND CONDITIONS

The emission source(s) and associated air pollution control device(s) listed below are subject to the following specific terms, conditions, and limitations, including the monitoring recordkeeping, and reporting requirements to which those requirements apply:

3.1 Facility-Wide Emission Source Conditions

NONE AT THIS TIME: RESERVED FOR FUTURE USE

3.2 Source Specific Emission Limits/Conditions

A. **ES-4-603-1 (Dryer #6) and ES-5-603-1(Dryer #7) - Prevention of Significant Deterioration (PSD), Limit to Avoid PSD Review [Sec. 3D-0530 and 3Q-0317(b)]**

1. **Emission limit**

Emissions of VOC from processing GTC products at dryers #6 and #7 (ES-4-603-1 and ES-5-603-1) shall be limited to less than 40 tons in any consecutive 12-month period. Emissions shall be calculated using the following formula:

$$V = (A \times 2.324) / 2000$$

where:

V = monthly VOC emission in tons

A = Monthly G7-48/56/63 production in tons at Plant 603

The non-integer constant in the equation is an emission factor in lb-VOC per ton of production, as determined by the most recent stack tests.

2. **Monitoring/Recordkeeping requirement [Sec. 3Q-0508(f)]**

The permittee shall monitor and maintain monthly records of production of G7-48/56/63 processed through dryers #6 and #7 (ES-4-603-1 and ES-5-603-1). At the end of each month, the total VOC emissions shall be calculated and recorded for each 12-month period.

3. **Reporting requirement [Sec. 3Q-0508(f)]**

The records in 3.2(A)(2) shall form the basis of a semi-annual report which shall be submitted to this Office by January 30th and July 30th for the proceeding six-month period. This reporting requirement is an alternative excess emission report as described in condition 2.10(B)(2)(b).

B. **ES-4-603-1 (Dryer #6) and ES-5-603-1 (Dryer #7) - Prevention of Significant Deterioration (PSD), Limits to Avoid PSD Review [Sec. 3D-0530 and 3Q-0317(b)]**

1. **Emission limit**

- (a) Combined emissions of VOC from processing G7 products shall be limited to less than 62.66 tons in any consecutive 12-month period.
- (b) No more than 20,000,000 lbs. of the "E" family of reconstituted sheet shall be processed in any consecutive 12-month period.
- (c) No more than 12,000,000 lbs. of the "F" family of reconstituted sheet shall be processed in any consecutive 12-month period.

2. **Monitoring/Recordkeeping requirement [Sec. 3Q-0508(f)]**

The permittee shall monitor and maintain monthly records of the amounts of all G7 products processed. The records shall classify the G7 products according to the VOC emission factor (lbs. VOC/ton of G7) as follows:

G7 "family"	Factor greater than:	Factor less than or equal to:
A		1.54
B	1.78	2.32
C	1.54	1.78
D	2.32	2.56
E	equal to 2.32	
F	2.56	4.82
G	4.82	6.27
H	equal to 0.704	

$$V = [(A \times 1.54) + (B \times 2.32) + (C \times 1.78) + (D \times 2.56) + (E \times 2.32) + (F \times 4.82) + (G \times 6.27) + (H \times 0.704)] / 2000$$

where:

V = monthly VOC emission in tons

A = Monthly production in tons of A family

B = Monthly production in tons of B family

C = Monthly production in tons of C family

D = Monthly production in tons of D family

E = Monthly production in tons of E (GTC) family

F = Monthly production in tons of F family

G = Monthly production in tons of G family

H = Monthly production in tons of H family

The non-integer constants in the equation are emission factors in lb-VOC per ton production, as determined by the most recent stack tests.

At the end of each month the permittee shall calculate and record the total VOC emissions for that 12-month period.

At the end of each month the permittee shall calculate and record the amount of "E" family of reconstituted sheet processed for that 12-month period.

At the end of each month the permittee shall calculate and record the amount of "F" family of reconstituted sheet processed for that 12-month period.

3. **Reporting requirement [Sec. 3Q-0508(f)]**

The records in 3.2(B)(2) shall form the basis of a semi-annual report which shall be submitted to this Office by January 30th and July 30th for the proceeding six-month period. This reporting requirement is an alternative excess emission report as described in condition 2.10(B)(2)(b).

C. **Building Group 611 - Research and Development Activities [Sec. 3Q-0317]**

The permittee shall maintain a log on-site of R&D activities documenting that the activity results in no changes to the applicable requirements. There are no reporting requirements associated with this monitoring requirement.

D. **ES-3-611-3 (Casing & Cutting), ES-2-611-4 (Casing & Drying), and ES-5-611-2 (Cigarette Making) - Prevention of Significant Deterioration (PSD), Limit to Avoid PSD Review [Sec. 3D-0530 and 3Q-0317(b)]**

In order for the 00339-TV-31 modification to avoid PSD review the facility must comply with the following:

1. **Emission limit**

The combined emissions of VOC from Casing & Cutting (ES-3-611-3), Casing & Drying (ES-2-611-4), and Cigarette Making (ES-5-611-2) shall be limited to less than 40 tons in any consecutive 12-month period.

2. **Monitoring/Recordkeeping - [Sec. 3Q-0508(f)]**

Compliance with the limit specified in condition 3.2(D)(1) shall be demonstrated by the following:

- (a) The permittee shall maintain monthly records of all product throughputs necessary to calculate VOC emissions using the following formula:

$$(A*W + B*X + C*Y + D*Z + E) / 2000 = \text{monthly VOC emissions (tons)}$$

where:

A = monthly tons of tobacco processed in Casing & Cutting (ES-3-611-3);

B = monthly millions of cigarettes made in Cigarette Making (ES-5-611-2);

C = monthly tons of tobacco processed in Casing & Drying (ES-2-611-4);

D = monthly pounds of menthol applied in Cigarette Making (ES-5-611-2);

E = monthly combined pounds of ethanol applied in Casing & Cutting (ES-3-611-3) and Casing & Drying (ES-2-611-4);

W = VOC emission factor (lb VOC/ton tobacco) for tobacco processed in Casing & Cutting (ES-3-611-3), from the permit application for the 00339-TV-31 permit;

X = VOC emission factor (lb VOC/million cigarettes) for cigarettes made in Cigarette Making (ES-5-611-2), from the permit application for the 00339-TV-31 permit;

Y = VOC emission factor (lb VOC/ton tobacco) for tobacco processed in Casing & Drying (ES-2-611-4), from the permit application for the 00339-TV-31 permit; and

Z = VOC emission factor (lb VOC/lb menthol applied) for menthol applied in Cigarette Making (ES-5-611-2), from the permit application for the 00339-TV-31 permit.

- (b) Each month the permittee shall calculate the monthly VOC total and the 12-month VOC total.
- (c) Each 12-month VOC total shall not exceed 40 tons of VOC.
- (d) The permittee shall keep a log of the cigarette makers in Cigarette Making (ES-5-611-2), documenting the make/model and maximum production rate of each cigarette maker.

3. **Reporting - [Sec. 3Q-0508(f)]**

- (a) The permittee shall submit a semiannual report to this Office which includes the total VOC emissions (tons) emitted each month and the total VOC emissions (tons) emitted each 12-month period.
- (b) The report shall be received by this Office by July 30th for the previous months of January through June, and by January 30th for the previous months of July through December.

3.3 Particulate Emission Limits

A. Particulates from Fuel Burning Indirect Heat Exchangers [Sec. 3D-0503]

1. Particulate Allowable Emission Rate [Sec. 3D-0503]

(a) Building 602-1 Boilers:

ES-1-602-1, ES-2-602-1, ES-5-602-1, and ES-6-602-1 -

Emissions of particulate matter from these emission sources shall not exceed the allowable emission rate calculated by the equation $E = 1.09 * Q^{-0.2594}$; where E = allowable emission limit for particulate matter in lb/million Btu, and Q = maximum heat input in million Btu/hr of all fuel burning indirect heat exchangers, determined according to Sec. 3D-0503(c) and (e).

Emission Source ID	Value of Q	Particulate emission limit (E)
ES-1-602-1	792.5 MMBtu/hr	0.19 lb/million Btu
ES-2-602-1	792.5 MMBtu/hr	0.19 lb/million Btu
ES-5-602-1	792.5 MMBtu/hr	0.19 lb/million Btu
ES-6-602-1	792.5 MMBtu/hr	0.19 lb/million Btu

(b) Temporary Boiler(s): **ES-TEMP -**

Emissions of particulate matter from ES-TEMP shall not exceed the allowable emission rate calculated by the equation $E = 1.09 * Q^{-0.2594}$; where E = allowable emission limit for particulate matter in lb/million Btu, and Q = maximum heat input in million Btu/hr of all fuel burning indirect heat exchangers, determined according to Sec. 3D-0503(c) and (e).

2. **Monitoring/Recordkeeping/Reporting requirement [Sec. 3Q-0508(f)] -** No monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the above standard because the fuels being combusted inherently meet this standard. However, the permittee shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed to fulfill the requirements for condition 2.13 entitled Annual Emission Inventory Requirements.

B. Control of Particulates from Miscellaneous Industrial Processes - [Sec. 3D-0515]

1. Particulate Allowable Emissions Rate - [Sec. 3D-0515]

Emissions for particulate matter from emission sources designated in condition 1.1, shall not exceed the allowable emission rate calculated with the equation $E = 4.10(P)^{0.67}$ calculated to three significant figures for process rates up to 30 tons/hr, or with the equation $E = 55.0(P)^{0.11} - 40$ calculated to three significant figures for process rates greater than 30 tons/hr; where E equals the maximum allowable PM emission rate in lb/hr, and P equals the process rate in tons/hr. Accordingly, the potential emission rate from this equipment shall at no time exceed the emission rates based on maximum production.

2. **Monitoring/Recordkeeping/Reporting requirements [Sec. 3Q-0508(f)]** - For sources with particulate matter control, condition 3.6 provides monitoring, recordkeeping, and reporting requirements sufficient to assure compliance with the above standard. For sources without particulate matter control, no monitoring, recordkeeping, or reporting is required for the specific purpose of demonstrating compliance with the above standard because each of those sources inherently meets the standard based on the nature of the source.

3.4 Sulfur Dioxide Emission Limits

- A. **Sulfur Dioxide Emission from Combustion Sources [Sec. 3D-0516]**
Emissions of sulfur dioxide from the temporary boiler(s) (ES-TEMP) shall not exceed 2.3 lb/MMBtu input.
- B. **Sulfur Dioxide Emission from Combustion Sources [Sec. 3D-0501(e)]**
Emissions of sulfur dioxide from the Building 602-1 boilers (ES-1-602-1, ES-2-602-1, ES-5-602-1, and ES-6-602-1) shall not exceed 1.6 pounds per million Btu input which is a source specific SIP limit established in 1983.
- C. **Monitoring/Recordkeeping/Reporting requirement [Sec. 3Q-0508(f)]**
No monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the above standards because the fuels being combusted inherently meet these standards. However, the permittee shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed to fulfill the requirements for condition 2.13 entitled Annual Emission Inventory Requirements.

3.5 Control of Visible Emissions

A. Control of Visible Emissions [Sec. 3D-0521(c)]

Opacity Standard - Visible emissions from emission sources designated in condition 1.1 shall not exceed 40% opacity when averaged over a six-minute period. However, the six-minute averaging periods may exceed 40% opacity if:

1. no six-minute average exceeds 90%;
2. no more than one six-minute period exceeds 40% in any hour; and
3. no more than four six-minute periods exceed 40% in any 24 hours.

This standard shall apply at all times, except during periods of startup, shutdown, or malfunction.

B. Control of Visible Emissions [Sec. 3D-0521(d)]

Opacity Standard - Visible emissions from emission sources designated in condition 1.1 shall not exceed 20% opacity when averaged over a six-minute period. However, the six-minute averaging periods may exceed 20% opacity if:

1. no six-minute average exceeds 87%;
2. no more than one six-minute period exceeds 20% in any hour; and
3. no more than four six-minute periods exceed 20% in any 24 hours.

This standard shall apply at all times, except during periods of startup, shutdown, or malfunction.

C. Monitoring/Recordkeeping/Reporting Requirements [Sec. 3Q-0508(f)]

1. **Combustion Sources** - No monitoring, recordkeeping, or reporting is required for the specific purpose of demonstrating compliance with the above standard because the fuels being combusted inherently meet the standard. However, the permittee shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed to fulfill the requirements for condition 2.13 entitled Annual Emission Inventory Requirements.
2. **Non-Combustion Sources** - For sources with particulate matter control, condition 3.6 provides monitoring, recordkeeping, and reporting requirements sufficient to assure compliance with the above standard. For sources without particulate matter control, no monitoring, recordkeeping, or reporting is required for the specific purpose of demonstrating compliance with the above standard because each of those sources inherently meets the standard based on the nature of the source.

3.6 Monitoring, Recordkeeping, and Reporting

A. Periodic Monitoring [Sec. 3Q-0508(f)]

Sources Not Subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM)

1. **Periodic monitoring for equipment controlled by fabric filters** - Particulate matter emissions from emission sources designated in condition 1.1 shall be controlled during all periods of operation. To ensure the optimum efficiency of the control devices, the permittee shall perform inspections and maintenance in a manner and frequency consistent with good practice for minimizing emissions. At a minimum, an internal inspection shall be performed annually.
2. **Recordkeeping requirement** - A log shall be maintained on-site with the dates of inspection and maintenance activities, inspection results, and maintenance performed.
3. **Reporting requirement** - The permittee shall submit a summary report of the monitoring requirements to this Office by January 30th and July 30th for each preceding six-month period.

B. Compliance Assurance Monitoring (CAM) [Sec. 3D-0614, 40 CFR Part 64]

1. **Monitoring-Fabric Filter Inspection & Maintenance** - To ensure the optimum efficiency of the control devices as designated in condition 1.1, the permittee shall perform inspections and maintenance in a manner and frequency consistent with good practice for minimizing emissions. Inspection and maintenance must include the following:
 - (a) An internal inspection shall be performed of each control device at least on an annual basis.
 - (b) When an inspection reveals a problem, an investigation shall be initiated and maintenance activities, required to correct the problem, shall be scheduled and performed. The investigation and corrective action shall be conducted as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions.
 - (c) Only trained maintenance personnel will perform inspection and maintenance.
 - (d) An excursion is when improper maintenance results in the improper operation of the control device.
2. **Monitoring-Visual Stack Observations** - - In order to demonstrate compliance with the CAM plan for control devices identified in condition 1.1, the permittee shall perform visual stack observations. As a minimum, the visual stack observation program shall include the following:
 - (a) With respect to the CAM plan visual stack observations, an "operational day" begins at 7:00:00 AM and ends at 6:59:59 AM the following calendar day.

- (i) Visible emissions from each stack (except stack EP-5-611-4, serving emission source ES-2-611-4) shall be monitored for the presence of visible emissions, once per operational day for each plant operational day. The visible emissions observation data for each stack must be available for at least 90 percent of the facility's operating days during the six-month reporting period to ensure compliance with this requirement. If an emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily check.
 - (ii) Visible emissions from stack EP-5-611-4, serving emission source ES-2-611-4, shall be monitored for the presence of visible emissions, once per operational day for each plant operational day during which the ES-2-611-4 equipment runs for four continuous hours.
- (b) The presence of any visible emissions shall trigger an investigation to determine the cause and, if applicable, corrective action. The investigation and corrective action shall be conducted as expeditiously as practicable in accordance with good air pollution control practice for minimizing emissions. The visual observation shall be repeated as soon as practicable after the investigation and completion of any corrective action to verify that the visible emissions are no longer present. If the visible emissions are present after the investigation and corrective action has been taken, the emissions shall be considered an excursion.
- (c) Observers shall receive on-the-job training pertaining to visual observations and what constitutes an excursion.
3. **Recordkeeping** - Records of the monitoring required under conditions 3.6(B)(1) and (2) shall be maintained on-site, made available to Office personnel, that include the following:
- (a) Maintenance of fabric filters - dates of inspections and maintenance activities; results of investigations and corrective actions taken; names of persons conducting activities; records of employee on-the-job training for inspection and maintenance.
 - (b) Visual observations - date/time of each observation; person performing observation; results of observation (visible emissions present or absent); results of investigation and corrective action if visible emissions are present; records of employee on-the-job training for visual observations.

Copies of these records shall be retained by the permittee for a period of five years after the date on which the record was made.

If requested by an agent of this Office, the permittee shall readily supply copies of these records at the time of inspection. Likewise, the permittee shall submit copies of the records upon request by this Office.

4. **Reporting requirement** - The permittee shall submit a summary report of all monitoring requirements in this section to this Office by January 30th and July 30th for each preceding six-month period.

3.7 Work Practices for Sources of Volatile Organic Compounds [Sec. 3D-0958]

- A. **ES-5-611-2 (Cigarette Making) - Work practice standards [Sec. 3D-0958(c) and 3Q-0508(i)(16)]** - The permittee shall:
1. store all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
 2. clean up spills as soon as possible following proper safety procedures,
 3. store wipe rags in closed containers,
 4. not clean sponges, fabric, wood, paper products, and other absorbent materials, unless volatile organic compound emissions are captured and controlled,
 5. drain solvents used to clean supply lines and other coating equipment into containers designed for closure, and close containers immediately after each use,
 6. clean mixing, blending, and manufacturing vats and containers by adding cleaning solvent, closing the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be poured into a closed container.
- B. **Work practice standards [Sec. 3D-0958(d) and 3Q-0508(i)(16)]** - For all parts washing the permittee shall:
1. flush parts in the freeboard area,
 2. take precautions to reduce the pooling of solvent on and in the parts,
 3. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
 4. not clean filling machines above the fill line,
 5. not agitate solvent to the point of causing splashing, unless volatile organic compound emissions are captured and controlled.
- C. **Monitoring/Recordkeeping requirements [Sec. 3Q-0508(f)]** - To ensure compliance with the work practice standards specified in condition 3.7(A) the permittee shall perform weekly inspections at each affected emissions source to verify compliance with the work practices and identify any deviations. The results of the inspections and any deviations shall be recorded in a log (written or electronic form), maintained on site and made readily available upon request by a representative of this Office. The log shall contain the following:
1. the date and time of each inspection;
 2. the results of each inspection; and
 3. all deviations from required work practice standards and the corrective actions taken.

- D. **Alternative VOC work practice monitoring and recordkeeping requirements [Sec. 3D-0958(c), 3Q-0508(f), and 3Q-0508(i)(16)]** - The permittee may perform documented annual employee training as an alternative monitoring/recordkeeping compliance method for the work practice requirements specified in condition 3.7(A). To ensure compliance with this requirement the permittee shall:
1. train all personnel involved in operation of the above equipment, at least annually, in accordance with the reasons, procedures and importance of VOC work practice methods. All personnel shall be trained prior to being involved in the operation; and
 2. maintain records on site demonstrating that the annual training program is in place. These records shall be made available for inspection upon request by this Office and shall include, but not be limited to:
 - (a) an up-to-date list of personnel involved in operation of the above equipment and documentation of successful completion of both initial and annual training including dates of the training sessions; and
 - (b) an outline of the subjects covered in the initial and annual training for each group of personnel.
- E. **Reporting requirements [Sec. 3D-0508(f)(2)]** - The permittee shall submit a summary report of the monitoring requirements specified in conditions 3.7(C) and (D) to this Office by January 30th and July 30th for each preceding six-month period. This report shall contain the total number of weeks in which the work practice standards weekly inspection was not made during the reporting period. The report shall also include which monitoring/recordkeeping method was selected during the reporting period to demonstrate compliance with condition 3.7(A) and the date of a switch being made from one compliance method to the other. If the alternative method in condition 3.7(D) was used during the reporting period, the report shall include a list of the personnel involved in the operation of the affected equipment during the semi-annual period and the dates of their most recent two training sessions.

3.8 **Reserved for Future Use**

3.9 Specific emission source permit condition for the following four boilers:

ES-1-602-1: Whitaker Park, Building 602-1, Boiler #1

ES-2-602-1: Whitaker Park, Building 602-1, Boiler #2

ES-5-602-1: Whitaker Park, Building 602-1, Boiler #5

ES-6-602-1: Whitaker Park, Building 602-1, Boiler #6

Limitation on the use of No. 2 fuel oil [Sec. 3Q-0308(a)(1) and 0317(5)] - Except as provided in condition 3.10, to avoid the applicability of Sec. 3D-1111, 40 CFR Part 63, Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources), the permittee shall not combust No. 2 fuel oil except during periodic testing not to exceed 48 hours per calendar year per boiler, gas supply emergencies, or periods of gas curtailment pursuant to a contract with the natural gas supplier. For each boiler, the permittee shall maintain records of the dates No. 2 fuel oil was combusted, the amount of No. 2 fuel oil combusted on each date, the purpose for combusting No. 2 fuel oil on each date, and the number of hours per calendar year that No. 2 fuel oil was combusted during periodic testing of the boiler.

3.10 National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources (40 CFR 63, Subpart JJJJJJ)

Specific emission source permit conditions for the following four boilers:

- ES-1-602-1: Whitaker Park, Building 602-1, Boiler #1
- ES-2-602-1: Whitaker Park, Building 602-1, Boiler #2
- ES-5-602-1: Whitaker Park, Building 602-1, Boiler #5
- ES-6-602-1: Whitaker Park, Building 602-1, Boiler #6

Upon start-up of a boiler with No. 2 fuel oil usage beyond the limitations in condition 3.9, for that boiler the permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart JJJJJJ, National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, including the applicable requirements of 40 CFR Part 63, General Provisions as specified in Table 8 to Subpart JJJJJJ. **<40 CFR 63, Subpart JJJJJJ> [Sec. 3D-1111]**

- A. **Notification requirement** - Within 30 days after becoming subject to 40 CFR Part 63 Subpart JJJJJJ, the permittee shall notify this Office of the change. The notification must identify:
1. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.
 2. The date upon which the fuel switch, physical change, or permit limit occurred.

The permittee shall demonstrate compliance with 40 CFR Part 63 Subpart JJJJJJ within 180 days after becoming subject to this rule.

- B. **Tune-up requirements** - As required under 40 CFR 63.11214(b), the permittee shall conduct an initial boiler tune-up according to the requirements in 40 CFR 63.11223(b) no later than March 21, 2014 or 180 days after becoming subject to 40 CFR Part 63 Subpart JJJJJJ, whichever is later. Subsequent biennial tune-ups shall be conducted no more than 25 months after the previous tune-up. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.
- C. **Energy assessment requirement** - As required under 40 CFR 63.11214(c), the permittee shall conduct a one-time energy assessment no later than March 21, 2014 or 180 days after becoming subject to 40 CFR Part 63 Subpart JJJJJJ, whichever is later. The energy assessment must be performed by a qualified energy assessor according to the requirements in Table 2 to Subpart JJJJJJ of Part 63. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this section satisfies the energy assessment requirement.

D. **Biennial compliance certification report** - The permittee shall prepare a biennial compliance report as required under 40 CFR 63.11225(b). The first report shall be prepared March 1, 2015 or by March 1 of the year following the initial tune-up required in condition 3.10(B), whichever is later. Subsequent reports shall be prepared March 1st of every other year. The report shall include the following information:

1. Company name and address.
2. Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart.
3. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

The permittee shall submit the report to this Office if requested by this Office, or no later than March 15 of the reporting year if any deviations from the applicable requirements occurred during the reporting period.

E. **Recordkeeping requirements** - The permittee shall maintain the following records:

1. Copies of all required notifications and reports submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status as required under 40 CFR 63.10(b)(2)(xiv).
2. Records of tune-ups required in condition 3.10(B) and 40 CFR 63.11214(b) identifying each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned as required under 40 CFR 63.11225(c)(2)(i).
3. A copy of the energy assessment required in condition 3.10(C) and 40 CFR 63.11214(c).
4. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment as required under 40 CFR 63.11225(c)(4).
5. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a) as required under 40 CFR 63.11225(c)(5), 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 in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), each record must be kept for 5 years following the date of each recorded action. Records must be kept onsite for at least 2 years after the date of each recorded action and may be kept off site for the remaining 3 years.

- F. **Reporting requirements** - The permittee shall submit the following reports:
1. Initial Notification according to the requirements of 40 CFR 63.9(b) and 40 CFR 63.11225(a)(2) no later than January 20, 2014 or within 120 days after becoming subject to 40 CFR Part 63 Subpart JJJJJJ, whichever is later.
 2. Notification of Compliance Status according to the requirements of 40 CFR 63.9(h) and 40 CFR 63.11225(a)(4) for the initial tune-up required in condition 3.10(B) and 40 CFR 63.11214(b) no later than July 19, 2014 or 120 days after the applicable compliance date, whichever is later. The notification must also be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13 and to this Office.
 3. Notification of Compliance Status according to the requirements of 40 CFR 63.9(h) and 40 CFR 63.11225(a)(2) for the energy assessment required in condition 3.10(C) and 40 CFR 63.11214(c) no later than July 19, 2014 or 120 days after the applicable compliance date, whichever is later.
 4. The Biennial Compliance report required in condition 3.10(D) and 40 CFR 63.11225(b) if any deviations from the applicable requirements occurred during the reporting period no later than March 15 of the reporting year.

**SECTION 4
CONTROL OF TOXIC AIR POLLUTANTS -
LOCALLY ENFORCEABLE ONLY**

The entire facility is subject to Section 3D-1100 of the FCAQTC for the toxic air pollutants listed. This section is locally enforceable only. All the emission sources and their associated air pollution control device(s) are subject to the following specific terms, conditions, and limitations, including the monitoring recordkeeping, and reporting requirements to which those requirements apply.

4.1. Facility-Wide Toxic Air Pollutant Conditions

A. Permit Requirements for Toxic Air Pollutants and Control of Toxic Air Pollutants [Section 3D-1100]

1. **Other and future air toxic requirements [Sections 3D-1100 and 3Q-0700] -** Specification of a listed toxic air pollutant (TAP) in this permit does not excuse the permittee from complying with the requirements of Sections 3D-1100 and 3Q-0700 of the FCAQTC with regard to any other listed TAP emitted from the regulated facility, nor does this permit exempt the permittee from compliance with any future air toxic regulations promulgated pursuant to the requirements of the Clean Air Act.
2. **De minimis limits [Section 3Q-0700] -** Total facility-wide emissions of the following pollutants shall not exceed their respective de minimis emissions limits as shown in Sec. 3Q-0711 unless a modeling demonstration is first approved by this Office which shows that the emissions of the subject TAPs from the facility will not adversely affect human health. This demonstration shall be in accordance with the requirements set forth in Sections 3D-1100 and 3Q-0700 of the FCAQTC. This demonstration must be made with an up-to-date version of a U.S. EPA approved computer model or, upon approval by this Office, calculated using the results of a previous modeling analysis showing compliance with the acceptable ambient levels for the pollutants listed below.

Pollutant (CAS Number)	De minimis level
benzo(a)pyrene (50-32-8)	2.2 lb/yr
chloroform (67-66-3)	290 lb/yr
cresol (1319-77-3)	0.56 lb/hr
1,4-dioxane (123-91-1)	12 lb/day
fluorides	0.34 lb/day and 0.064 lb/hr
n-hexane (110-54-3)	23 lb/day
hydrogen chloride (7647-01-0)	0.18 lb/hr
manganese and compounds	0.63 lb/day
methyl ethyl ketone (78-93-3)	78 lb/day and 22.4 lb/hr
mercury, vapor (7439-97-6)	0.013 lb/day
methyl chloroform (71-55-6)	250 lb/day and 64 lb/hr

nickel metal (7440-02-0)	0.13 lb/day
phenol (108-95-2)	0.24 lb/hr
soluble chromate compounds, as chromium (VI) equivalent	0.013 lb/day
styrene (100-42-5)	2.7 lb/hr
toluene (108-88-3)	98 lb/day and 14.4 lb/hr
trichlorofluoromethane (75-69-4)	140 lb/hr
xylene (1330-20-7)	57 lb/day and 16.4 lb/hr

3. **Dispersion modeling emission limits [Section 3D-1100]** - Combined emissions of the following TAPs from all sources not exempted by Sec. 3Q-0702(a) or (b) at this facility shall not exceed the emission rates listed below. Dispersion modeling, approved by this Office, demonstrated that the permitted emissions of the TAPs listed in the table below from this facility impacted the surrounding ambient air at levels below the acceptable ambient levels (AALs) specified in Sec. 3D-1104 of the FCAQTC. The emission rates listed below shall be used as a basis for certifying that any future modifications or changes in the methods of operation will result in ambient impacts below these AALs. In no case shall actual emissions resulting from changes or modifications exceed any of the following emission rates without first applying for and receiving a permit:

Pollutant (CAS Number)	Maximum facility-wide emission rate	AERMOD EPA version	Date of model output file
acetaldehyde (75-07-0)	0.38 lb/hr	07026	06/19/2007
acetic acid (64-19-7)	109.4 lb/hr	15181	01/04/2016
acrolein (107-02-8)	4.62 lb/hr	15181	01/04/2016
ammonia (7664-41-7)	163.0 lb/hr	15181	01/04/2016
arsenic and inorganic arsenic compounds	4.40 lb/yr	15181	01/04/2016
benzene (71-43-2)	147.4 lb/yr	07026	06/19/2007
beryllium (7440-41-7)	8.59 lb/yr	15181	01/04/2016
1,3-butadiene (106-99-0)	9,736 lb/yr	15181	01/04/2016
cadmium (7440-43-9)	11.52 lb/yr	15181	01/04/2016
carbon disulfide (75-15-0)	24.06 lb/day	07026	06/19/2007
ethylene oxide (75-21-8)	19.5 lb/yr	15181	01/04/2016
formaldehyde (50-00-0)	7.91 lb/hr	15181	01/04/2016
phosphine (7803-51-2)	1.68 lb/hr	07026	06/19/2007

4. **Monitoring/recordkeeping/reporting requirement [Sec. 3D-0605 and 1105]** -The permittee shall maintain updated records of production rates, throughputs, material usage, and other process operational information as is necessary to determine compliance with the emission rates specified in permit conditions 4.1(A)(2) and (3). At a minimum these records shall include data sufficient to calculate monthly averaged emission rates (in pounds per hour of emission source operation) for TAPs with 1-hour or 24-hour emission limits and yearly emission rates (in pounds per calendar year) for TAPs with annual emission limits.

Copies of these records shall be retained by the permittee for a period of three years after the date on which the record was made.

If requested by an agent of this Office, the permittee shall readily supply copies of these records at the time of inspection. Likewise, the permittee shall submit copies of the records upon request by this Office.

PART II

AIR QUALITY CONSTRUCTION PERMIT

The permittee is hereby authorized to construct air emission source(s) and associated air pollution control device(s) listed in Part II, Section 1 of this permit, in accordance with the associated air quality permit application(s) received, including all plans, specifications, previous applications, and other supporting data, all of which are filed with this Office and are incorporated in Part II of this Air Quality Permit.

SECTION 1

PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

A. ES-TEMP Temporary Boiler Project

Emission Source ID #	Emission Source Description	Emission Point ID No.
ES-TEMP	<p>Scenario 1: One or two temporary boilers with low-NOx burners fired with diesel fuel with a sulfur content not to exceed 0.05% sulfur and with a combined maximum firing rate not to exceed 40.824 mmBtu/hr. Uncontrolled.</p> <p style="text-align: center;">OR</p> <p>Scenario 2: One, two, or three temporary boilers with low-NOx burners fired with natural gas, each with a maximum firing rate not to exceed 93 mmBtu/hr. Uncontrolled.</p>	EP-T1 (plus EP-T2, and EP-T3, if applicable)

B. New Tobacco Mills at Building 603-1 Project

Emission Source ID #	Emission Source Description	Emission Point ID No.
Building 603-1		
ES-6-603-1	Tobacco Mills	EP-27-603-1

SECTION 2 GENERAL CONDITIONS

This section describes terms and conditions applicable to the construction of the air emission source(s) and associated air pollution control device(s) listed in Part II Section 1. Unless otherwise specified herein all references to the "permit" in this section apply only to Part II of the permit.

A. General Provisions

1. This permit is nontransferable by the permittee. Future owners and operators must obtain a new air quality permit from this Office.
2. This issuance of this permit in no way absolves the permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the issuance date of this permit.
3. A violation of any term or condition of Part II of this permit shall subject the permittee to enforcement pursuant to Forsyth County Air Quality Control Ordinance and Technical Code, including assessment of civil and/or criminal penalties.

B. Submissions

(REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, AND REQUESTS FOR RENEWAL)

Unless otherwise approved by this Office, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to this Office.

C. Part II Renewal Request

The permittee shall request renewal of the emission source(s) and associated air pollution control device(s) listed in Part II Section 1 at the same time as specified in Part I, condition 2.26 of this permit.

D. Annual Fee Payment

The permittee shall pay all fees in accordance with FCAQTC Section 3Q-0200 and in conjunction with Part I, condition 2.12 of this permit.

E. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Part II Section 1 must be reported to the Director:

1. changes in the information submitted in the application;
2. changes that modify equipment or processes; or
3. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by this Office to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

F. Termination, Modification, and Revocation of the Permit

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred; or
4. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of Forsyth County Air Quality Control Ordinance and Technical Code.

G. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow this Office, or an authorized representative to perform the following:

1. enter the permittee's premises where the permitted facility is located or emissions related activity is conducted, or where records are kept under the conditions of the permit;
2. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
3. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

SECTION 3 SPECIFIC LIMITATIONS AND CONDITIONS

The air emission source(s) and associated air pollution control device(s) listed in Part II, Section 1, Condition A are subject to the following specific terms, conditions, and limitations, including the monitoring, record keeping, and reporting requirements as specified herein:

- A. Any air emission sources or control devices authorized to construct in Part II, Section 1, Condition A must be constructed and maintained in accordance with the provisions contained herein. The permittee shall comply with applicable Forsyth County Air Quality Control Ordinance and Technical Code Regulations.
- B. The permittee shall operate the air emission sources and control devices listed in Part II, Section 1, Condition A in accordance with provisions contained in Part I of this permit.
- C. **ES-TEMP Temporary Boiler Project:**

In the event that the Whitaker Park facility's steam supply (received from the Building 602-1 boilers) is interrupted, one or more temporary boilers will be installed and operated at the Whitaker Park facility in accordance with one of two possible scenarios.

Scenario 1: One or two temporary boilers with low-NOx burners fired with diesel fuel with a sulfur content not to exceed 0.05% sulfur and with a combined maximum firing rate not to exceed 40.824 mmBtu/hr. Uncontrolled.

Scenario 2: One, two, or three temporary boilers with low-NOx burners fired with natural gas, each with a maximum firing rate not to exceed 93 mmBtu/hr. Uncontrolled.

- 1. **Notification requirements - The permittee shall submit to this Office notification as follows:**
 - (a) A written notification, hard-copy or electronic, providing the date that each temporary boiler was ordered and the date and time that each temporary boiler began operation. The notification shall also include information describing make, model, firing rate (mmBtu/hr), and installation location of the boiler(s). This notification shall be submitted so that it is received no later than three business days after the date temporary boiler operation commences.
 - (b) A written notification, hard-copy or electronic, providing the date that each temporary boiler was removed from the facility and the date and time that each boiler last ceased operation prior to removal. This notification shall be submitted so that it is received no later than five business days after the date each boiler is removed from the facility.

[Sec. 3-0103(a)(5) and 3Q-0308(a)]

2. **Temporary boiler criteria: 40 CFR 63, Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources)** - Each boiler must at all times meet the definition of a temporary boiler as stated in section 63.11237 of 40 CFR, Part 63, Subpart JJJJJJ.

"Temporary boiler" is defined in section 63.11237 as:

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

- (a) The equipment is attached to a foundation.
- (b) The boiler or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location within the facility and performs the same or similar function will be included in calculating the consecutive time period unless there is a gap in operation of 12 months or more.
- (c) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (d) The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

[Sec. 3D-1111, and 40 CFR 63.11237]

3. **Temporary boiler criteria: 40 CFR 60, Subpart Dc** - Each boiler must at all times meet the definition of a temporary boiler as stated in section 60.41c of 40 CFR, Part 60, Subpart Dc.

"Temporary boiler" is defined in section 60.41c as:

Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO₂ emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

- (a) The equipment is attached to a foundation.

- (b) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
- (c) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (d) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

[Sec. 3D-0524 and 40 CFR 60.41c]

SECTION 4 SPECIFIC LIMITATIONS AND CONDITIONS

The air emission source(s) and associated air pollution control device(s) listed in Part II, Section 1, **Condition B** are subject to the following specific terms, conditions, and limitations, including the monitoring, record keeping, and reporting requirements as specified herein:

- A. Any air emission sources or control devices authorized to construct in Part II, Section 1, **Condition B** must be constructed and maintained in accordance with the provisions contained herein. The permittee shall comply with applicable Forsyth County Air Quality Control Ordinance and Technical Code Regulations.
- B. The permittee shall operate the air emission sources and control devices listed in Part II, Section 1, **Condition B** in accordance with provisions contained in Part I of this permit.
- C. **New Tobacco Mills at Building 603-1 Project (as described in the application)**

ES-6-603-1: Tobacco Mills (New)

Emission Point: EP-27-603-1 (Existing)

Fabric Filter Control Device: CD-5-603-1 (Existing)

The intent of the project is to direct a portion of the tobacco from the from ES-4-603-1 (Dryer #6) and ES-5-603-1 (Dryer #7) to the new tobacco mills for additional processing before entering the packing line. A conveying and mill feed system will be added to carry the tobacco to the mills.

- 1. **30-Day Notification From Start-up** - The permittee shall notify this Office of the actual start-up date of the completed project within 30 days after such date. This notification is to enable this Office to plan an inspection to verify compliance with any applicable standards. **[Sec. 3A-0103(a)]**
- 2. **Commencement of Construction** - If construction/modification of this equipment has not commenced by **March 1, 2020** (18 months after the effective date of permit 00339-TV-35), or construction activities lapse for a period of 18 months after construction has commenced, the permittee shall reapply to this Office and obtain a permit to construct before commencing or resuming construction. **[Sec. 3Q-0308(a)]**

Attachment 1

Insignificant Activities List

As provided in Sec. 3Q-0503(7) and (8), certain air emission sources are considered insignificant activities and are not listed on the permit. However, insignificant activities because of size or production rate [Sec. 3Q-0503(8)] are required to be listed in the initial permit application and with each request for renewal. The following list summarizes the insignificant activities provided in Title V permit applications and subsequent updates. Insignificant activities are not exempted from any applicable requirement or from demonstrating compliance with any applicable requirement.

Insignificant because of size or production rate [Sec. 3Q-0503(8)]	
Emission Source ID.	Emission Source Description
602-1-(12-13)	(2) 500,900 gallon fuel oil tanks
F-1-603-1	Pulp Press Room/Refining Area
F-2-603-1	Evaporator Building
F-3-603-1	#6 AND #7 Forming machines
F-(4, 4A)-603-1	Glycerine Tanks
F-5-603-1	DAP Tank
F-6-603-1	Urea Tank
F-7-603-1	Casing/Propylene Glycol Emulsion Tank
F-8-603-1	Pulping Tank A
F-9-603-1	Pulping Tank B
F-10-603-1	Extract Mixing Tank
F-11-603-1	Cold cleaning machine/maintenance activities
F-12-603-1	Waste Water Ventilation
IS-PACKER-603-1	Twin Ram Box Packer and conveyors
F-(14,15)-603-1	Glycerine day tanks
F-16-603-1	DAP Tank (relocated from 605-12)
IS-LABS-611-16	R & D Labs
IS-7-611-16	Pellet Extrusion Process (R&D facility)
IS-DIET-611-16	Tobacco Expansion Process (R&D)
IS-F2-611-16	Smokeless Pouching and Packing
(Bldg. 611-7)	(2) Cigarette makers for training. (added 7/21/04)
IS-FP230-604-12	230 HP diesel engine for emergency use (fire pump), (Utilities outbuilding)
ES-4-611-16	Smokeless Tobacco Processing "D"
IS-1-611-16	NIP Extract filter cleaning, (R&D, 611-16)
IS-3-611-16	Spray dryer MS-150, (R&D, 611-16)
IS-5-611-16	Spray dryer process, (R&D, 611-16)
IS-6-611-16	X1/X7 process, (R&D, 611-16)
IS-10-611-16	Environmental Chamber
none	Spray Dryer (181), (Shed 181)
IS-F1-611-9	eLiquid and Cartomizer Manufacturing (Building 611-9)

List continued on next page.

Insignificant because of size or production rate [Sec. 3Q-0503(8)]	
Emission Source ID.	Emission Source Description
IS-F5-611-16	X5 dissolvable process, 611-6 Room 117
IS-F7-611-16	Strips Extrusion
IS-F5(1)-611-2	Cigarette Maker (TPCM #1), Building 611-2, (Insignificant even with menthol application)
IS-F5(2)-611-2	Cigarette Maker (TPCM #2), Building 611-2, (Insignificant even with menthol application)
IS-F5(5)-611-2	Cigarette Maker (TPCM #5), Building 611-2, (Insignificant even with menthol application)
IS-F5(9)-611-2	Cigarette Maker (TPCM #9), Building 611-2, (Insignificant even with menthol application)
IS-F5(10)-611-2	Cigarette Maker (TPCM #10), Building 611-2, (Insignificant even with menthol application)
IS-F5(11)-611-2	Cigarette Maker (TPCM #11), Building 611-2, (Insignificant even with menthol application)
IS-F5(12)-611-2	Cigarette Maker (TPCM #12), Building 611-2, (Insignificant even with menthol application)
IS-4(1)-611-2	Filter Maker (FMM#1), Building 611-26, (Insignificant even with menthol application)
IS-4(2)-611-6	Filter Maker (FMM#2), Building 611-6, (Insignificant even with menthol application)
IS-4(3)-611-6	Filter Maker (FMM#3), Building 611-6, (Insignificant even with menthol application)
IS-4(4)-611-6	Filter Maker (FMM#4), Building 611-6, (Insignificant even with menthol application)
IS-4(5)-611-6	Filter Maker (FMM#5), Building 611-6, (Insignificant even with menthol application)
IS-4(6)-611-6	Filter Maker (FMM#6), Building 611-6, (Insignificant even with menthol application)
IS-4(7)-611-6	Filter Maker (FMM#7), Building 611-6, (Insignificant even with menthol application)
IS-F6(1)-611-2	Packer (TPPM #1), Building 611-2
IS-F6(3)-611-2	Packer (TPPM #3), Building 611-2
IS-F6(4)-611-2	Packer (TPPM #4), Building 611-2
IS-F6(11)-611-2	Packer (TPPM #11), Building 611-2
IS-9-611-16	Sterilization System
IS-BLEACH-611-16	Tobacco Bleaching
611-ISVUSE	VUSE testing labs - 5 smoking machines various locations in 611
611-2-IS-F5(8)	Cigarette maker - TPCM#8 (new)
611-3-IS-FLM	FabLab makers (3 existing)
611-4-IS-FLD	FabLab rotary dryer (1 existing)
611-4-IS-FLPC	FabLab pill coater (2 existing)
IS-COMB-611-3	Combiner
IS-GEN-602-2	Natural Gas Backup Generator 150 kW
IS-FP175-604-12	175 HP diesel engine for emergency use (fire pump)
IS-F2-611-9	CLS Fill with E-liquid

Insignificant because of category [Sec. 3Q-0503(7)]	
Emission Source ID.	Emission Source Description
IS-PW1-602-7	Parts washer, (Building 602)
IS-PW1-603-1	Parts washer, (Building 603)
IS-PW1-605-11	Parts washer, (Building 605)
6-611-4	Housekeeping

FORSYTH COUNTY
OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION

**RENEWAL
STATEMENT OF BASIS
for Permit #00339-TV-36**

R.J. Reynolds, Whitaker Park facility - Premise # 00339

Permit Tracking #: **1066**

Site Location:
Winston-Salem, NC

Current (Pre-Renewal) Permit:
00339-TV-35

New Permit To Be Issued:
00339-TV-36

Technical Contact:
Mr. Max Hopkins: (336) 741-6932

Responsible Official Manufacturing:
Mr. Johnny K. Cagigas
Vice President of Manufacturing

Responsible Official R&D:
Mr. Daniel J. Herko
Executive Vice President of R&D
and Scientific and Regulatory Affairs

Rob Russ
Agency
Reviewer

Signature

Date

Peter Lloyd
Agency Q/A
Supervisor

Signature

Date

Two Excel spreadsheet files are also part of this Statement of Basis. One of the spreadsheet files contains CONFIDENTIAL information (**00339-TV-36-SoB-CONFIDENTIAL.xlsx**) and is stored on a USB flash drive that is kept locked up with the other Whitaker Park facility confidential files. The other spreadsheet file (**00339-TV-36-SoB-PUBLIC.xlsx**) does not contain any confidential information and is stored with the other Whitaker Park files on this Office's shared drive. The following information is considered confidential: maximum throughput rates, emission factors (but not emission rates), some equipment or material composition details, and process flow diagrams.

In this Statement of Basis, all references to permit conditions are for permit conditions in Part I of the permit unless otherwise specified.

SECTION A: **Processing**

This Statement of Basis is for a Title V permit renewal for the Whitaker Park facility owned by the R. J. Reynolds Tobacco Company (RJRT). The renewal request was received 2-26-2013 prior to the 3-11-2013 due date. At the time the application was received, the facility's active permit was permit 00339-TV-29. The facility's current permit is 00339-TV-35 with an effective date of 9-1-2018.

The 2-26-2013 renewal application included some updated information concerning equipment that had shut down or been removed. Those equipment changes have been incorporated in permits that have already been issued since receiving the renewal application.

The application also addressed some changes to the insignificant status of some activities – whether the activities were "Insignificant activities because of category" in accordance with Sec. 3Q-0503(7) or "Insignificant activities because of size or production rate" in accordance with Sec. 3Q-0503(8). The current list of insignificant activities includes the most up-to-date listing of the facility's activities that are insignificant via Sec. 3Q-0503(7) or Sec. 3Q-0503(8).

In the renewal application, RJRT identified the four existing boilers as being subject to the area source boiler GACT (40 CFR Part 63, Subpart JJJJJJ) which was a regulation not included in the facility's existing permit (permit 00339-TV-29). Subsequent review of Subpart JJJJJJ applicability in light of the 2-1-2013 revisions to Subpart JJJJJJ (FR Vol. 78, No. 22, Pgs. 7488 - 7521) resulted in a determination that the boilers were actually exempt from Subpart JJJJJJ as "gas-fired" boilers.

With the revisions, a gas-fired boiler is now defined in 40 CFR 63.11237 to be "any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year."

RJRT has confirmed that the four Whitaker Park boilers meet the 40 CFR 63.11237 definition of gas-fired boiler, and in a letter received by this Office on 6-19-2013, RJRT requested that the boilers be exempt from 40 CFR 63 Subpart JJJJJJ.

However, if RJRT at a later date, combusts No 2 fuel oil in a manner that makes a boiler no longer fit the definition of a Subpart JJJJJJ "gas-fired boiler", the boiler would become subject to Subpart JJJJJJ as an "existing" (not "new") oil-fired boiler. Prior to the 2-1-2013 amendments to Subpart JJJJJJ, such a switch would have made the boiler subject to Subpart JJJJJJ as a "new" source (which would have more extensive requirements).

The revisions amended 40 CFR 63.11194(e) to specify that an existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in 40 CFR 63.11237, that meets the applicability requirements of Subpart JJJJJJ after June 4, 2010 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an "existing" source under the subpart as long as the boiler was designed to accommodate the alternate fuel.

Permit conditions related to the applicability of Subpart JJJJJJ to the boilers were first included in the facility's permit with the 00339-TV-33 permit (effective date 7-1-2017). Permit condition 3.9 was added to the permit to address the avoidance of Subpart JJJJJJ applicability by limiting the use of No. 2 fuel oil. Permit condition 3.10 was added to allow one or more of the boilers to become subject to Subpart JJJJJJ by exceeding the No. 2 fuel oil use limitations in permit condition 3.9.

The renewal application also included a request to modify the alternative VOC work practice monitoring/recordkeeping requirements in permit condition 3.7(D) so that the requirements for the

Whitaker Park facility match the wording in RJRT's Tobaccoville facility permit. At Whitaker Park, condition 3.7(D) is only applicable to one emission source Cigarette Making (ES-5-611-2). Specifically, RJRT requested that the requirement to do quarterly inspections of the equipment be removed from the permit. RJRT cited the following justifications for the removal: (1) The quarterly inspection is not required at Tobaccoville, and RJRT would like both permits to be consistent. (2) When the Cigarette Making equipment is operating, there is an operator present to assure proper operation so the equipment is, in effect, being inspected on a continuous basis while operating. (3) The Cigarette Making equipment in Building 611-2 is operated very little. In the request, RJRT stated that the equipment operated only 5 hours in CY2011. A review of past emission inventories for calendar years 2012 through 2017 indicates that the equipment operated for the following number of hours in each of those calendar years: 4, 6, 3, 3, 8, and 10 hours, respectively. Based on this information, this Office has determined that the performance of quarterly inspections is not warranted. The renewed permit (permit 00339-TV-36), does not include the quarterly inspection requirement. The wording of condition 3.7(D) has been revised to match the analogous wording in the Tobaccoville facility Title V permit.

On November 16, 2018, RJRT informed this Office that on November 5, 2018 the existing diesel-fired emergency generator (ES-11-602-1) was permanently shut down, and a new 150 kW natural gas fired emergency generator (IS-GEN-602-2) began operation. The new generator is manufactured by Generac Power Systems, Inc. (Model SG150, Model Year 2018, Engine Family JGNXB08.92O3). The existing ES-11-602-1 emergency generator has therefore not been included in the Whitaker Park facility's renewed permit (permit 00339-TV-36). The new IS-GEN-602-2 emergency generator is exempt from permitting as an insignificant activity "because of size or production rate" in accordance with Sec. 3Q-0503(8) so it will not be included in the renewed permit.

The new IS-GEN-602-2 generator engine is subject to both 40 CFR Part 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) and 40 CFR Part 60 Subpart JJJJ (New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines). As stated in 40 CFR 63.6590(c), the generator engine meets the requirements of Part 63 Subpart ZZZZ by meeting the requirements of Part 60 Subpart JJJJ. The generator engine is EPA certified as meeting the emission standards in Part 60 Subpart JJJJ: Certificate Number JGNXB08.92O3-064. RJRT is complying with the requirements of Part 60 Subpart JJJJ by operating and maintaining the emergency generator in accordance with the manufacturer's instructions. RJRT will also install a non-resettable hour meter on the generator engine.

The Whitaker Park facility is currently an area source for HAPs because it has potential emissions of no single HAP above the 10 ton/12-month major source threshold, and the potential emissions of all its HAPs combined is less than the 25 ton/12-month major source threshold. The facility had once been a major HAP source, but on 1/24/2012, RJRT submitted a demonstration that the Whitaker Park facility met the qualifications to be classified as a area source for HAPs. On 2/10/2012, this Office issued a letter approving the area source status of the facility - so beginning on 2/10/2012 the Whitaker Park facility was officially classified as an area source for HAPs.

In an email message (with attachment) received on 12/18/2018, RJRT proposed a discussion regarding the cessation of the applicability of 40 CFR Part 63, Subpart JJJJ (NESHAP for Paper and Other Web Coating – the POWC MACT) to ES-5-611-2 (Cigarette Making). The proposal was in light of the U.S. EPA's 1/25/2018 memorandum reversing the longstanding "Once In Always In" (OIAI) policy and the related Federal Register notice published at 83 Fed. Reg. 5543 (Feb. 8, 2018). The EPA's intent to reverse the OIAI policy is currently under litigation. Because of the litigation, this Office was initially hesitant to remove the applicability of Subpart JJJJ. However, after further analysis and discovering that NC DEQ was removing similar MACT applicability conditions from State permits, this Office determined that removing the POWC MACT applicability condition is warranted for the renewed Whitaker Park permit. This decision was relayed to RJRT via email on 1-11-2019.

On 1-16-2019, this Office received a letter from Johnny Cagigas, Responsible Official for Whitaker Park, formally requesting that no sources at Whitaker Park be subject to 40 CFR Part 63, Subpart JJJJ and that condition 3.2(D) from the 00339-TV-35 permit not be included in the 00339-TV-36 permit. The letter was treated by this Office as an update to the renewal application. The request to remove the POWC MACT permit condition from Whitaker Park's permit was approved by this Office. As a consequence of not including that condition in the renewed permit, the PSD avoidance condition that had been condition 3.2(E) in the 00339-TV-35 permit was renumbered to be condition 3.2(D) in the 00339-TV-36 permit. Entries in the Condition 1.1 equipment list were adjusted to reflect this numbering change and the absence of the 40 CFR Part 63, Subpart JJJJ permit condition.

This Office's Facility Database is being updated to show that no permitted sources are currently subject to any Part 63 GACT/MACT. Formerly the database showed the facility as having permitted sources subject to two Part 63 subparts: Subparts JJJJ and ZZZZ. Despite this, the Part 63 general conditions are being retained in Section 2 of the permit in case any of the four boilers in Building 602-1 exceeds the limitations in permit condition 3.9 and becomes subject to 40 CFR Part 63, Subpart JJJJJJ as described in permit condition 3.10. In addition, the requirement to semi-annually report any deviations from POWC MACT requirement is no longer required. That report was identified as Report R142 in this Office's Facility Database. The R142 report is being voided with the last report due date being 1/30/2019.

Because this draft permit (permit 00339-TV-36) is being processed as a renewal it will go through a 30-day public comment period and a concurrent 45-day review by the U.S. EPA prior to final approval.

SECTION B: **General Facility Description**

According to its website, R. J. Reynolds Tobacco Company (RJRT) is the second-largest tobacco company in the United States. RJRT is the maker of Newport, Camel and Pall Mall - the No. 2, 3 and 4 selling brands in the U.S. cigarette market for 2017. RJRT is a wholly owned subsidiary of Reynolds American Inc. (RAI).

RAI was formed in 2004 when RJRT merged with Brown and Williamson Tobacco Corporation (B&W), a subsidiary of British American Tobacco p.l.c. (BAT). As a result of the merger with B&W, BAT owned approximately 42% of RAI, the parent company of RJRT. On July 25, 2017, BAT acquired the remaining 58% of RAI, and RAI became an unconsolidated subsidiary of BAT.

RJRT operates a manufacturing complex along with associated tobacco processing operations and a steam/electric utility plant in the northern part of Winston-Salem, North Carolina. This complex is referred to as the Whitaker Park facility.

In the past, the Whitaker Park facility manufactured large quantities of cigarettes, but now cigarette making is only conducted as part of Research and Development (R&D) activity at the facility. RJRT has consolidated its cigarette manufacturing operations at its Tobaccolville facility in Tobaccolville, North Carolina. Tobacco is still processed at Whitaker Park either for use by RJRT at the Tobaccolville facility or for use by third party customers.

The Whitaker Park facility also has four boilers (Boilers #1, #2, #5 and #6) permitted to combust either natural gas or No. 2 fuel oil. The boilers are used for generating process heat for the tobacco processing operations. The boilers are in the Utilities Building – Building 602-1. In addition, a natural gas fired emergency generator and two diesel-fired engines for fire-fighting water pumps are located at the facility. The facility's permit also allows for up to three temporary boilers to be installed if the

steam supply from the main four boilers is interrupted.

In Building 603-1, the Whitaker Park facility has a process for making tobacco "cast sheet" from tobacco leaf stems and pieces. The cast sheet (which is formed like a large sheet of paper in paper making) is then ground up and used in cigarettes in a manner similar to how regular tobacco leaves are used.

Also located at Whitaker Park are Product Recovery Operation (PRO) activities where cigarette cartons and packs containing off-spec, unsold, or out-dated cigarettes are torn apart. The packaging, cigarette filters, and paper on the cigarettes are separated from the actual tobacco. The collected tobacco is then sent to RJRT's Tobaccoville facility for refurbishing to be resold as long as it has remained in RJRT control. If the product has left RJRT's control (such as being at a store) it cannot be reused. The cigarettes are then destroyed in the greasy mills and brought to the land fill. Some empty packaging for non-cigarette tobacco products (like snuff) is also processed as part of PRO activities. For many years PRO activities were housed in Buildings 2-1 and 2-2 at Whitaker Park. During CY2016 PRO activities were modified, reconfigured and moved to Building 603-5 at Whitaker Park. RJRT no longer owns the property where Buildings 2-1 and 2-2 are located, and RJRT activity no longer occurs there.

RJRT's R&D activity is also housed at Whitaker Park in the Group 611 buildings and Shed 181. The R&D operations include small scale cigarette making, filter making, and cast sheet operations, as well as activities associated with new smokeless tobacco products. The facility's air quality permit includes permitted sources in Buildings 611-2, 611-3, 611-4, 611-16, and in Shed 181. Shed 181 houses R&D activities related to cast sheet.

SECTION C: **Tobacco Manufacturing and Processing – PM and VOC** **Emissions**

I. ES-1-603-1: Tobacco Scrap Feed / Broke Recovery System

A. ES-1-603-1 - Overview

In Tobacco Scrap Feed / Broke Recovery System activities, tobacco scrap is blended and conveyed to tobacco presses where water is added. There are hoods to collect dust from tobacco feeders, conveyors, and can filling stations. Particulate matter is the only pollutant emitted from this emission source.

All emissions from Tobacco Scrap Feed / Broke Recovery System are vented to atmosphere via a stack with PM emissions controlled by a fabric filter with 99% control efficiency for PM.

For more detail see the "603-1" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-1-603-1 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of a similar source. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-1-603-1 equipment are 2.59 lb/hour which converts to 0.0259 lb/hour after control by the fabric filter with 99% control

efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-1-603-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 15.8 lb/hr. The source's combined 0.0259 lb/hr controlled PM emissions are 0.16% of that limit. The source's combined 2.59 lb/hr uncontrolled PM emissions are 16.4% of that limit. Consequently, particulate matter control by the fabric filter is not required for compliance with Sec. 3D-0515. Nonetheless, the non-CAM recordkeeping and reporting requirements listed in condition 3.6(A) are sufficient to assure that the fabric filter is operating properly.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(B) includes requirements pertaining to Sec. 3D-0521(d). The non-CAM recordkeeping and reporting requirements listed in condition 3.6(A) are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 11.33 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 0.1133 tons/year.

C. ES-1-603-1 – VOC Emissions

No VOC emissions are emitted from Tobacco Scrap Feed / Broke Recovery System (ES-1-603-1).

II. ES-2-603-1: Tobacco Stem Feed

A. ES-2-603-1 - Overview

In Tobacco Stem Feed, tobacco stem is blended and conveyed to tobacco presses where water is added. There are hoods and pickup points to collect dust from tobacco feeders, conveyors, and can filling stations. Particulate matter is the only pollutant emitted from this emission source.

All emissions from Tobacco Stem Feed are vented to atmosphere via a stack with PM emissions controlled by fabric filters with 99% control efficiency for PM.

For more detail see the "603-1" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-2-603-1 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of a similar source. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-2-603-1 equipment are 2.12 lb/hour which converts to 0.0212 lb/hour after control by the fabric filters with 99% control efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-2-603-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 15.8 lb/hr. The source's combined 0.0212 lb/hr

controlled PM emissions are 0.13% of that limit. The source's combined 2.12 lb/hr uncontrolled PM emissions are 13.4% of that limit. Consequently, particulate matter control by the fabric filter is not required for compliance with Sec. 3D-0515. Nonetheless, the non-CAM recordkeeping and reporting requirements listed in condition 3.6(A) are sufficient to assure that the fabric filter is operating properly.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(B) includes requirements pertaining to Sec. 3D-0521(d). The non-CAM recordkeeping and reporting requirements listed in condition 3.6(A) are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 9.31 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 0.0931 tons/year.

C. ES-2-603-1 – VOC Emissions

No VOC emissions are emitted from Tobacco Stem Feed (ES-2-603-1).

III. ES-3-603-1: Dust Infeed & Extraction

A. ES-3-603-1 - Overview

In Dust Infeed & Extraction, tobacco dust is blended and conveyed to tobacco centrifuges where water is added. There are hoods to collect dust from tobacco feeders, conveyors, and can filling stations. Particulate matter is the only pollutant emitted from this emission source.

All emissions from Dust Infeed & Extraction are vented to atmosphere via a stack with PM emissions controlled by a fabric filter with 99% control efficiency for PM.

For more detail see the "603-1" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-3-603-1 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of a similar source. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-3-603-1 equipment are 0.370 lb/hour which converts to 0.0037 lb/hour after control by the fabric filter with 99% control efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-3-603-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 7.58 lb/hr. The source's combined 0.0037 lb/hr controlled PM emissions are 0.05% of that limit. The source's combined 0.370 lb/hr uncontrolled PM emissions are 4.9% of that limit. Consequently, particulate matter control by the fabric filter is not required for compliance with Sec. 3D-0515. Nonetheless, the non-CAM recordkeeping and reporting requirements listed in condition 3.6(A) are sufficient to assure that the fabric filter is operating properly.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(B) includes requirements pertaining to Sec. 3D-0521(d). The non-CAM recordkeeping and reporting requirements listed in condition 3.6(A) are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 1.62 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 0.016 tons/year.

C. ES-3-603-1 – VOC Emissions

No VOC emissions are emitted from Dust Infeed & Extraction (ES-3-603-1).

IV. ES-4-603-1: Tobacco Dryer #6

A. ES-4-603-1 - Overview

Prior to entry into the dryer, tobacco scrap, stems, and dust are fed into the blending area and proceed from blending to the extraction area where tobacco/cellulose raw materials are mixed with water. This mixture then enters the pulp presses where the water solubles are removed and sent to the evaporator.

The remaining tobacco/cellulose pulp then enters the dryer forming machine where a paper-like tobacco sheet is formed. Some of the water solubles from the evaporator, which may be treated with ingredients, are then reapplied back to the tobacco sheet. The product then enters the dryer. The remaining water solubles are applied between the first and second pass of the three pass dryer. The dried product is then sent to product sizing.

From Dryer #6, emissions include VOC and PM emissions as well as some federal HAPs and local TAPs. TAP regulations are locally-enforceable only. There is no control for PM, VOCs, HAPs, or TAPs. The dryer's heat source is steam generated by the Whitaker Park boilers. No fuel is combusted in the dryer.

For more detail see the "603-1" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-4-603-1 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of the identical Whitaker Park Dryer #7 (ES-5-603-1). Based on the nature of the source, emissions determinations for the dryer assume that PM10 and PM2.5 emissions equal PM emissions.

Overall, the potential hourly PM/PM10/PM2.5 emissions from Dryer #6 are 0.698 lb/hour.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-4-603-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 9.94 lb/hr. The source's 0.698 lb/hr PM emissions are 7.0% of that limit. Compliance with Sec. 3D-0515 is therefore demonstrated without the need for PM control.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). Compliance with Sec. 3D-0521(d) is assured based on the nature of the emission source.

Based on 8760 hours per year, the potential annual PM/PM10/PM2.5 emissions from Dryer #6 are 3.06 tons/year.

C. ES-4-603-1 – VOC Emissions

The VOC emission factor (confidential) is based on past stack testing of the identical Whitaker Park Dryer #7 (ES-5-603-1).

The potential hourly VOC emissions from Dryer #6 are 23.51 lb/hour. Based on 8760 hours per year, the potential annual VOC emissions from are 102.98 tons/year.

V. ES-5-603-1: Tobacco Dryer #7

A. ES-5-603-1 - Overview

Tobacco Dryer #7 is identical to Tobacco Dryer #6 (ES-4-603-1) except that emissions vent through different stacks. The emissions from Tobacco Dryer #7 are the same as the emissions from Tobacco Dryer #6. From Dryer #7, emissions include VOC and PM emissions as well as some federal HAPs and local TAPs. TAP regulations are locally-enforceable only. There is no control for PM, VOCs, HAPs, or TAPs. Dryer #7 complies with the applicable standards in the same manner as Dryer #6.

B. ES-5-603-1 – PM Emissions

The potential hourly PM/PM10/PM2.5 emissions from Dryer #7 are 0.698 lb/hour. Based on 8760 hours per year, the potential annual PM/PM10/PM2.5 emissions are 3.06 tons/year.

C. ES-5-603-1 – VOC Emissions

The potential hourly VOC emissions from Dryer #7 are 23.51 lb/hour. Based on 8760 hours per year, the potential annual VOC emissions from are 102.98 tons/year.

VI. ES-6-603-1: Tobacco Mills

A. ES-6-603-1 - Overview

The ES-6-603-1 tobacco mills process a portion of tobacco from Dryer #6 and Dryer #7 (ES-4-603-1 and ES-5-603-1, respectively). The remaining tobacco bypasses the mills and goes directly to the packers. Conveyors and a mill feed system carry the tobacco to the mills. Particulate matter is the only pollutant emitted from this emission source.

All emissions from the tobacco mills are vented to atmosphere via a stack with PM emissions controlled by a fabric filter with 99.9% control efficiency for PM.

For more detail see the "603-1" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-6-603-1 – PM Emissions

The PM emission factors (confidential) are based on past stack testing of similar sources (conveying and milling). Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-6-603-1 equipment are 370.44 lb/hour which converts to 0.3704 lb/hour after control by the fabric filter with 99.9% control efficiency for particulate matter.

Sec. 3D-0515, “Particulates from Miscellaneous Industrial Processes”

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-6-603-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 15.8 lb/hr. The source’s combined 0.3704 lb/hr controlled PM emissions are 2.3% of that limit. The source’s combined 370.44 lb/hr uncontrolled PM emissions are 2,345% of that limit. Consequently, particulate matter control by the fabric filter is required for compliance with Sec. 3D-0515. The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-6-603-1.

Sec. 3D-0521(d), “Control of Visible Emissions”

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 1,622.5 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 1.623 tons/year.

C. ES-6-603-1 – VOC Emissions

No VOC emissions are emitted from Tobacco Mills (ES-6-603-1).

VII. ES-1-603-5: Thresher Line

A. ES-1-603-5 - Overview

The thresher line can operate in two separate modes (“boxing out” and “strip”), but can only operate in one mode at a time. Strip mode involves tobacco milling and conveying. Boxing out mode involves the transfer of tobacco from can to box. The worst-case emissions occur while operating in strip mode due to the milling activity.

All emissions from the Thresher Line are vented to atmosphere via a stack with PM emissions controlled by a fabric filter with 99.9% control efficiency for PM.

For more detail see the “603-5” worksheet in the “00339-TV-36-SoB-CONFIDENTIAL.xlsx” or “00339-TV-36-SoB-PUBLIC.xlsx” Excel spreadsheet.

B. ES-1-603-5 – PM Emissions

The PM emission factors (confidential) are based on past stack testing of similar sources (conveying and milling). Based on the nature of the source, emissions determinations assume that PM10 and

PM2.5 emissions equal PM emissions. Potential emissions are based on operation in “worst-case” strip mode.

The uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-1-603-5 equipment are 38.51 lb/hour which converts to 0.0385 lb/hour after control by the fabric filter with 99.9% control efficiency for particulate matter.

Sec. 3D-0515, “Particulates from Miscellaneous Industrial Processes”

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-1-603-5, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 3.47 lb/hr. The source’s combined 0.0385 lb/hr controlled PM emissions are 1.1% of that limit. The source’s combined 38.51 lb/hr uncontrolled PM emissions are 1,110% of that limit. Consequently, particulate matter control by the fabric filter is required for compliance with Sec. 3D-0515. The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-6-603-1.

Sec. 3D-0521(d), “Control of Visible Emissions”

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 168.7 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 0.169 tons/year.

C. ES-1-603-5 – VOC Emissions

No VOC emissions are emitted from the Thresher Line (ES-1-603-5).

VIII. ES-2-603-5: Carton Cutting Line

A. ES-2-603-5 - Overview

In Carton Cutting, returned cigarette cartons are cut down and the packaging is separated from the cigarette “rods”. Equipment includes a rotary drum screener, a waste cyclone, and conveyors. Particulate matter is the only pollutant emitted from this emission source.

All emissions from the Carton Cutting Line are vented to atmosphere via stacks with PM emissions controlled by fabric filters with 99.9% control efficiency for PM.

For more detail see the “603-5” worksheet in the “00339-TV-36-SoB-CONFIDENTIAL.xlsx” or “00339-TV-36-SoB-PUBLIC.xlsx” Excel spreadsheet.

B. ES-2-603-5 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of the same equipment before it was relocated to Building 603-5. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The potential uncontrolled hourly PM/PM10/PM2.5 emissions from the ES-2-603-5 equipment are 94.03 lb/hour which converts to 0.094 lb/hour after control by the fabric filters with 99.9% control efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-2-603-5, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 3.40 lb/hr. The source's combined 0.094 lb/hr controlled PM emissions are 2.8% of that limit. The source's combined 94.03 lb/hr uncontrolled PM emissions are 2,766% of that limit. Consequently, particulate matter control by the fabric filters is required for compliance with Sec. 3D-0515. The non-CAM and CAM monitoring, recordkeeping and reporting requirements listed in conditions 3.6(A) and (B) respectively, are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-2-603-5.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The non-CAM and CAM monitoring, recordkeeping and reporting requirements listed in conditions 3.6(A) and (B) respectively, are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 411.8 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 0.412 tons/year.

C. ES-2-603-5 – VOC Emissions

No VOC emissions are emitted from the Carton Cutting Line (ES-2-603-5).

IX. ES-3-603-5: TPO Line (Total Pack Opening Line)

A. ES-3-603-5 - Overview

In TPO (Total Pack Opening), returned cigarette packs are cut down and the packaging is separated from the cigarette "rods". Equipment includes a rotary drum screener, vibrating screener, a waste cyclone, and conveyors. Particulate matter is the only pollutant emitted from this emission source.

All emissions from the TPO Line are vented to atmosphere via stacks with PM emissions controlled by fabric filters with 99.9% control efficiency for PM.

For more detail see the "603-5" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-3-603-5 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of the same equipment before it was relocated to Building 603-5. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The potential uncontrolled hourly PM/PM10/PM2.5 emissions from the ES-3-603-5 equipment are 392.4 lb/hour which converts to 0.392 lb/hour after control by the fabric filters with 99.9% control efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-3-603-5, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 5.59 lb/hr. The source's combined 0.392 lb/hr controlled

PM emissions are 7.0% of that limit. The source's combined 392.4 lb/hr uncontrolled PM emissions are 7,019% of that limit. Consequently, particulate matter control by the fabric filters is required for compliance with Sec. 3D-0515. The non-CAM and CAM monitoring, recordkeeping and reporting requirements listed in conditions 3.6(A) and (B) respectively, are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-3-603-5.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The non-CAM and CAM monitoring, recordkeeping and reporting requirements listed in conditions 3.6(A) and (B) respectively, are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 1,718.7 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 1.719 tons/year.

C. ES-3-603-5 – VOC Emissions

No VOC emissions are emitted from the TPO Line (ES-3-603-5).

X. ES-4-603-5: Greasy Mill 1st

A. ES-4-603-5 - Overview

In the Greasy Mill 1st process, returned tobacco products (mostly cigarettes) are destroyed prior to disposal in the landfill. In this process, there are two possible paths for the tobacco products. In one path, product moves from can hoist to feeder to conveyor to greasy mill before being conveyed via cyclone to the dumpster. In the other path, product moves from can hoist to feeder to conveyor to milling to greasy mill before being conveyed via cyclone to the dumpster. The second path is worst-case due to the additional milling activity. Particulate matter is the only pollutant emitted from this emission source.

All emissions from the Greasy Mill 1st process are vented to atmosphere via stacks with PM emissions controlled by fabric filters with 99.9% control efficiency for PM.

For more detail see the "603-5" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-4-603-5 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of the same equipment before it was relocated to Building 603-5. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions. Potential emissions are based on operation in the "worst-case" path with the additional milling activity.

The potential uncontrolled hourly PM/PM10/PM2.5 emissions from the ES-4-603-5 equipment are 204.3 lb/hour which converts to 0.204 lb/hour after control by the fabric filters with 99.9% control efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential

maximum throughput rate for ES-4-603-5, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 6.68 lb/hr. The source's combined 0.204 lb/hr controlled PM emissions are 3.1% of that limit. The source's combined 204.3 lb/hr uncontrolled PM emissions are 3,058% of that limit. Consequently, particulate matter control by the fabric filters is required for compliance with Sec. 3D-0515. The non-CAM and CAM monitoring, recordkeeping and reporting requirements listed in conditions 3.6(A) and (B) respectively, are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-4-603-5.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The non-CAM and CAM monitoring, recordkeeping and reporting requirements listed in conditions 3.6(A) and (B) respectively, are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 894.8 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 0.895 tons/year.

C. ES-4-603-5 – VOC Emissions

No VOC emissions are emitted from the Greasy Mill 1st process (ES-4-603-5).

XI. ES-5-603-5: Greasy Mill 3rd

A. ES-5-603-5 - Overview

In the Greasy Mill 3rd process, non-cigarette products brought back from market are destroyed prior to disposal in the landfill. The products being destroyed are moist products such as chewing tobacco. This moist product produces much less dust than product recovery processes involving cigarette tobacco products which are less moist. In the Greasy Mill 3rd process, the only emission source is the greasy mill itself. Particulate matter is the only pollutant emitted from this emission source.

All emissions from the Greasy Mill 3rd process are vented to atmosphere via a stack with PM emissions controlled by a fabric filter with 99.9% control efficiency for PM.

For more detail see the "603-5" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-5-603-5 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of the same equipment before it was relocated to Building 603-5. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-5-603-5 equipment are 135.7 lb/hour which converts to 0.136 lb/hour after control by the fabric filter with 99.9% control efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-5-603-5, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 8.07 lb/hr. The source's 0.136 lb/hr controlled PM

emissions are 1.7% of that limit. The source's 135.7 lb/hr uncontrolled PM emissions are 1,681% of that limit. Consequently, particulate matter control by the fabric filter is required for compliance with Sec. 3D-0515. The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-5-603-5.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 594.2 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 0.594 tons/year.

C. ES-5-603-5 – VOC Emissions

No VOC emissions are emitted from the Greasy Mill 3rd process (ES-5-603-5).

XII. ES-5-611-2: Cigarette Making

A. ES-5-611-2 - Overview

In Cigarette Making, the cigarette maker machines use tobacco, filter rods, adhesives, paper, and ink to produce cigarette rods. For some cigarette products, menthol is added. For the production of former Lorillard tobacco products, casing materials containing ethanol are applied. The only pollutants emitted from this source are VOC, acetic acid (a TAP but not a HAP), ammonia (a TAP but not a HAP), and vinyl acetate (a HAP but not a TAP) with no other TAP or HAP emissions known. Vinyl acetate comes from the use of adhesives. There are no particulate matter emissions from this source.

All of the emissions from this source are uncontrolled fugitive emissions.

For more detail see the "611-2" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-5-611-2 – VOC Emissions

The VOC, HAP, and TAP emission factors (confidential) are based on past stack testing of similar equipment or on mass balance techniques

The overall potential hourly VOC emissions from the ES-5-611-2 equipment while only making traditional RJRT (non-ethanol based) products are 4.35 lb/hour. In this production mode, based on 8760 hours per year, the potential annual VOC emissions are 19.05 tons/year.

The overall potential hourly VOC emissions from the ES-5-611-2 equipment while making former Lorillard products (ethanol based) are 5.23 lb/hour. In this production mode, based on 8760 hours per year, the potential annual VOC emissions are 22.93 tons/year.

XIII. ES-3-611-3: Casing & Cutting

A. ES-3-611-3 - Overview

In Tobacco Casing and Cutting, tobacco materials that have been received from other processes are weighed, cased, checked for metal debris, cut, conditioned, dried, sized, and top-dressed before being deposited in metal cans.

Emissions from ES-3-611-3 come from several different types of sources: conveying, cutters, feeders, a top-dressing drum (with and without ethanol usage), a rotary dryer, a casing drum, primary and secondary separators, and a flotation chamber.

ES-3-611-3 emissions include VOC and PM emissions as well as some federal HAPs and local TAPs. TAP regulations are locally-enforceable only. There is no control for VOC, HAPs, or TAPs, but some ES-3-611-3 equipment does have PM control. All emissions from the rotary dryer and separators are vented to atmosphere via stacks with PM emissions controlled by fabric filters with 99.9% control efficiency for PM. All emissions from the top dressing drum, casing drum, and flotation chamber are vented to atmosphere via stacks without control.

Fugitive VOC, HAP, and TAP emissions come from the cutters, feeders, and conveying.

For the other ES-3-611-3 equipment, VOC, HAP, and TAP emissions vent to atmosphere via stacks without control.

The ES-3-611-3 equipment is used to make traditional RJRT products as well as former Lorillard products. VOC emissions are significantly higher when making the former Lorillard products due to the ethanol-based casing materials used to make the products. When ethanol is used, the ethanol emissions are emitted from the top dressing drum.

For more detail see the "611-3" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-3-611-3 – PM Emissions

The PM emission factors (confidential) are based on past stack testing of similar sources. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

Overall, the uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-3-611-3 equipment are 34.84 lb/hour which converts to 2.856 lb/hour after applicable controls.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-3-611-3, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 8.17 lb/hr. The source's combined 2.856 lb/hr controlled PM emissions are 34.6% of that limit, and the source's combined 34.84 lb/hr uncontrolled PM emissions are 426% of that limit. Consequently, particulate matter control is required for compliance with Sec. 3D-0515. The non-CAM monitoring, recordkeeping and reporting requirements listed in permit condition 3.6(A) are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-3-611-3.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The non-CAM monitoring, recordkeeping and reporting requirements listed in permit condition 3.6(A) are

sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 152.6 tons/year, and the potential annual PM/PM10/PM2.5 emissions, with applicable controls, are 12.51 tons/year.

C. ES-3-611-3 – VOC Emissions

The VOC emission factors (confidential) are based on past stack testing of a similar sources and mass balance.

The overall potential hourly VOC emissions from the ES-3-611-3 equipment while only making traditional RJRT (non-ethanol based) products are 4.66 lb/hour. In this production mode, based on 8760 hours per year, the potential annual VOC emissions are 20.40 tons/year.

The overall potential hourly VOC emissions from the ES-3-611-3 equipment while making only former Lorillard (ethanol based) products are 78.78 lb/hour. In this production mode, based on 8760 hours per year, the potential annual VOC emissions are 345.62 tons/year.

XIV. ES-1-611-4: Blending & Conditioning

A. ES-1-611-4 - Overview

In Blending and Conditioning, various tobacco materials are weighed, conditioned, and conveyed to other processes. From ES-1-611-4, the emissions include VOC and PM emissions as well as some federal HAPs and local TAPs. TAP regulations are locally-enforceable only. There is no control for PM, VOCs, HAPs, or TAPs.

For more detail see the “ES-1-611-4” worksheet in the “00339-TV-36-SoB-CONFIDENTIAL.xlsx” or “00339-TV-36-SoB-PUBLIC.xlsx” Excel spreadsheet.

B. ES-1-611-4 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of similar equipment. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions each equal 80% PM emissions. The particulate matter emissions come from a conditioning drum that is vented to atmosphere via a stack without control.

Overall, the potential hourly PM emissions from ES-1-611-4 are 1.792 lb/hour, and the potential hourly PM10/PM2.5 emissions are 1.434 lb/hour

Sec. 3D-0515, “Particulates from Miscellaneous Industrial Processes”

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-1-611-4, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 3.82 lb/hr. The source’s 1.792 lb/hr PM emissions are 47% of that limit. Compliance with Sec. 3D-0515 is therefore demonstrated without the need for PM control.

Sec. 3D-0521(d), “Control of Visible Emissions”

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). Compliance with Sec. 3D-0521(d) is assured based on the nature of the emission source.

Based on 8760 hours per year, the potential annual PM emissions from Blending and Conditioning (ES-1-611-4) are 7.85 tons/year And the potential annual PM10/PM2.5 emissions are 6.30 tons/year.

C. ES-1-611-4 – VOC Emissions

The VOC emission factor (confidential) is based on past stack testing of similar equipment. The VOC emissions come from a conditioning drum that is vented to atmosphere via a stack without control and from another conditioning drum that is unvented - resulting in fugitive VOC emissions.

Overall, the potential hourly VOC emissions from ES-1-611-4 are 0.141 lb/hour. Based on 8760 hours per year, the potential hourly VOC emissions from Blending and Conditioning (ES-1-611-4) are 0.618 tons/year.

XV. ES-2-611-4: Casing & Drying

A. ES-2-611-4 - Overview

In Tobacco Casing and Drying, tobacco materials are weighed, cased, dried, cooled, and canned out for inclusion in other processes.

Emissions from ES-2-611-4 come from several different types of sources: conveying, a casing drum, and three sections of a dryer (cooling, discharge, and heating).

ES-2-611-4 emissions include VOC and PM emissions as well as some federal HAPs and local TAPs. TAP regulations are locally-enforceable only. There is no control for PM, VOC, HAPs, or TAPs, except that the dryer heating section is controlled by a fabric filter with 99.9% control efficiency for PM.

The ES-2-611-4 equipment is used to make traditional RJRT products as well as former Lorillard products. VOC emissions are higher when making the former Lorillard products due to the ethanol-based casing materials used to make the products. When ethanol is used, the ethanol emissions are emitted from the casing drum.

For more detail see the “ES-2-611-4” worksheet in the “00339-TV-36-SoB-CONFIDENTIAL.xlsx” or “00339-TV-36-SoB-PUBLIC.xlsx” Excel spreadsheet.

B. ES-2-611-4 – PM Emissions

The PM emission factors (confidential) are based on past stack testing of similar sources. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

Overall, the uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-2-611-4 equipment are 56.03 lb/hour which converts to 0.319 lb/hour after applicable controls.

Sec. 3D-0515, “Particulates from Miscellaneous Industrial Processes”

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-2-611-4, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 5.38 lb/hr. The source’s combined 0.319 lb/hr controlled PM emissions are 5.9% of that limit, and the source’s combined 56.03 lb/hr uncontrolled PM

emissions are 1,041% of that limit. Consequently, particulate matter control is required for compliance with Sec. 3D-0515. The CAM monitoring, recordkeeping and reporting requirements listed in permit condition 3.6(B) are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-2-611-4.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The CAM monitoring, recordkeeping and reporting requirements listed in permit condition 3.6(B) are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 245.4 tons/year, and the potential annual PM/PM10/PM2.5 emissions, with applicable controls, are 1.40 tons/year.

C. ES-2-611-4 – VOC Emissions

The VOC emission factors (confidential) are based on past stack testing of similar equipment. The VOC emissions come from a casing drum, and three sections of a dryer (cooling, discharge, and heating) that are vented to atmosphere via a stack without control and from conveyors that are unvented - resulting in fugitive VOC emissions.

The overall potential hourly VOC emissions from the ES-2-611-4 equipment while only making traditional RJRT (non-ethanol based) products are 3.48 lb/hour. In this production mode, based on 8760 hours per year, the potential annual VOC emissions are 15.25 tons/year.

The overall potential hourly VOC emissions from the ES-2-611-4 equipment while making only former Lorillard (ethanol based) products are 6.33 lb/hour. In this production mode, based on 8760 hours per year, the potential annual VOC emissions are 27.73 tons/year.

XVI. ES-3-611-4: Tobacco Milling

A. ES-3-611-4 - Overview

In the Tobacco Milling process at Building 611-4, tobacco is milled into fine particles.

All emissions from the tobacco mill are vented to atmosphere via a stack with PM emissions controlled by a fabric filter with 99% control efficiency for PM. Particulate matter is the only pollutant emitted from this emission source.

For more detail see the "ES-3-611-4" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-3-611-4 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of a similar source. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

The uncontrolled potential hourly PM/PM10/PM2.5 emissions from the ES-3-611-4 equipment are 157.4 lb/hour which converts to 1.574 lb/hour after control by the fabric filter with 99% control efficiency for particulate matter.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-3-611-4 the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 4.76 lb/hr. The source's 1.574 lb/hr controlled PM emissions are 33.1% of that limit. The source's combined 157.4 lb/hr uncontrolled PM emissions are 3,306% of that limit. Consequently, particulate matter control by the fabric filter is required for compliance with Sec. 3D-0515. The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-3-611-4.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). The CAM monitoring, recordkeeping and reporting requirements listed in condition 3.6(B), are sufficient to assure compliance with Sec. 3D-0521(d).

Based on 8760 hours per year, the potential uncontrolled annual PM/PM10/PM2.5 emissions are 689.3 tons/year, and the potential controlled annual PM/PM10/PM2.5 emissions are 6.893 tons/year.

C. ES-3-611-1 – VOC Emissions

No VOC emissions are emitted from Tobacco Milling in Building 611-4 (ES-3-611-4).

XVII. ES-2-611-16: Smokeless Processing

A. ES-2-611-16 - Overview

In Smokeless Processing, tobacco materials are placed in mixers along with various flavorings and water. The mixture is then heated for an extended period of time during which additional flavorings are periodically added. Smokeless processing is a batch process. Air from the mixers is vented to the atmosphere via a stack.

From ES-2-611-16, the emissions are only VOC and PM. RJRT uses a wet scrubber to remove steam vapors from the working space in Building 611-16. The wet scrubber is not needed for compliance purposes, and RJRT has agreed not to take credit for any pollution control efficiency. In the permit, ES-2-611-16 is listed as uncontrolled so no periodic monitoring requirements apply to the wet scrubber.

For more detail see the "611-16" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-2-611-16 – PM Emissions

The PM emission factor (confidential) is based on mass balance and conservative engineering estimations. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

Overall, the potential hourly PM/PM10/PM2.5 emissions from ES-2-611-16 are 0.275 lb/hour.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-2-611-16, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 0.587 lb/hr. The source's 0.275 lb/hr PM emissions are 47% of that limit. Compliance with Sec. 3D-0515 is therefore demonstrated without the

need for PM control.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). Compliance with Sec. 3D-0521(d) is assured based on the nature of the emission source.

Based on 8760 hours per year, the potential annual PM/PM10/PM2.5 emissions from Smokeless Processing (ES-2-611-16) are 1.20 tons/year.

C. ES-2-611-16 – VOC Emissions

The VOC emission factor (confidential) is based on mass balance and conservative engineering estimations.

Overall, the potential hourly VOC emissions from ES-2-611-16 are 2.31 lb/hour. Based on 8760 hours per year, the potential annual VOC emissions from Smokeless Processing (ES-2-611-16) are 10.12 tons/year.

XVIII. ES-1-181: Reconstituted Tobacco

A. ES-1-181 - Overview

The Reconstituted Tobacco process at the Whitaker Park facility is housed in a building named "Shed 181". In the Reconstituted Tobacco process, tobacco materials are blended and mixed with water, centrifuged to remove water solubles, and then refined. Water solubles are sent to an evaporator. The refined materials enter a forming machine where a paper-like tobacco sheet is created. Some of the water solubles from the evaporator may be mixed with other ingredients and reapplied to the tobacco sheet. The sheet is then directed to a dryer. The remaining water solubles may be applied during the drying process. The final dried product may then be sent to a dicer for sizing, or left in roll form, and then directed through a scale and into storage containers.

Pollutants emitted from the Reconstituted Tobacco process include particulate matter, VOC, federal HAPs, and local TAPs. TAP regulations are locally-enforceable only. All emissions are ducted to atmosphere via stacks without control. All of the emissions come from the dryers.

For more detail see the "181" worksheet in the "00339-TV-36-SoB-CONFIDENTIAL.xlsx" or "00339-TV-36-SoB-PUBLIC.xlsx" Excel spreadsheet.

B. ES-1-181 – PM Emissions

The PM emission factor (confidential) is based on past stack testing of similar equipment. Based on the nature of the source, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions.

Overall, the potential hourly PM/PM10/PM2.5 emissions from ES-1-181 are 0.0868 lb/hour.

Sec. 3D-0515, "Particulates from Miscellaneous Industrial Processes"

Condition 3.3(B) includes requirements pertaining to Sec. 3D-0515. Based on the confidential maximum throughput rate for ES-1-181, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 1.54 lb/hr. The source's 0.0868 lb/hr PM emissions are 5.6% of that limit. Compliance with Sec. 3D-0515 is therefore demonstrated without the need for PM control.

Sec. 3D-0521(d), "Control of Visible Emissions"

Condition 3.5(A) includes requirements pertaining to Sec. 3D-0521(d). Compliance with Sec. 3D-0521(d) is assured based on the nature of the emission source.

Based on 8760 hours per year, the potential annual PM/PM10/PM2.5 emissions from the Reconstituted Tobacco process, (ES-1-181) are 0.380 tons/year.

C. ES-1-181 – VOC Emissions

The VOC emission factor (confidential) is based on past stack testing of similar equipment.

Overall, the potential hourly VOC emissions from ES-1-181 are 2.922 lb/hour. Based on 8760 hours per year, the potential annual VOC emissions from the Reconstituted Tobacco process, (ES-1-181) are 12.80 tons/year.

SECTION D:
Permit Conditions

PART I, SECTION 1:
PERMITTED EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

Condition 1.1
Equipment List and Applicable Conditions

The equipment list shows the permitted emission sources at the facility. The list is organized as a chart with control devices and emissions points identified. The chart header also lists various permit conditions that appear in the permit, and "X" marks are used to show which permit conditions apply to each source. Control devices are identified by Control Device ID number (CD#), and the chart indicates with "X" marks the applicable CAM or non-CAM permit conditions that apply. Emission points are identified by Emission Point ID number (EP#).

Condition 1.2
Operating Conditions Not Covered Under the Permit Shield

Permit Condition 1.2 is used to list any conditions in the permit that have been revised or added to the permit following procedures other than the Significant Modification procedures in Section 3Q-0500 of the FCAQTC. Because this draft permit (permit 00339-TV-36) is being processed as a renewal, it will go through a 30-day public comment period and a concurrent 45-day review by the U.S. EPA prior to final approval. Since this 00339-TV-36 permit is being reviewed by the U.S. EPA, the table (Operating Conditions Not Covered Under the Permit Shield) in Permit Condition 1.2 contains no entries.

The previous permit (permit 00339-TV-35) included unshielded operating conditions associated with

that permit plus the previous three permits (00339-TV-34, 00339-TV-33, 00339-TV-32).

Permit 00339-TV-35 was issued with an effective date of September 1, 2018. The permit was for a minor Title V modification for new tobacco mills at Building 603-1.

Permit 00339-TV-34 was issued with an effective date of February 1, 2018. The permit was for a minor Title V modification for the New G7 Product at Building 603-1 Project. The permit also incorporated a 502(b)(10) request related to increased tobacco milling activity in Building 611-4.

Permit 00339-TV-33 was issued with an effective date of July 28, 2017. The permit was for a minor Title V modification for the Temporary Boiler Project.

Permit 00339-TV-32 was issued with an effective date of March 2, 2016. The permit incorporated two minor Title V modifications. One modification was for R&D equipment configuration changes. The other modification involved the relocation of Product Recovery Operation (PRO) equipment from Buildings 2-1 and 2-2 to Building 603-5.

PART I, SECTION 2: **FACILITY GENERAL ADMINISTRATIVE CONDITIONS**

This section contains general conditions including conditions pertaining to National Emission Standards for Hazardous Air Pollutants (NESHAP, 40 CFR Part 63) General Conditions and Compliance Assurance Monitoring (CAM, 40 CFR Part 64) General Conditions.

PART I, SECTION 3: **SPECIFIC LIMITATIONS AND CONDITIONS**

Condition 3.1 **Facility-Wide Emissions Source Conditions**

There currently are no facility-wide emission source conditions applicable – so this permit condition is reserved for future use.

Condition 3.2 **Source Specific Emission Limits:**

3.2(A) **Prevention of Significant Deterioration: PSD Avoidance** **ES-4-603-1 (Tobacco Dryer #6) and ES-5-603-1 (Tobacco Dryer #7)** **[Sec. 3D-0530 and 3Q-0317]**

This limit is in place to restrict VOC emissions to 40 tons/year to avoid PSD review. Emissions of VOC from processing GTC products at Dryer #6 and Dryer #7 (ES-4-603-1 and ES-5-603-1) shall be limited to less than 40 tons in any consecutive 12-month period. Emissions shall be calculated using the following formula:

$$V = (A \times 2.324) / 2000$$

where

V = monthly VOC emission in tons

A = Monthly G7-48/56/63 production in tons at Plant 603

The non-integer constant in the equation is an emission factor in lb-VOC per ton of production, as determined by the most recent stack tests.

The emission factor, 2.324 lbs VOC per ton of G7-48/56/63 production was determined based on stack tests of similar equipment.

Monitoring and recordkeeping of data used to calculate the emissions must be maintained at the source and emissions calculated monthly for each 12-month period and compared to the VOC limit.

A semi-annual report must be submitted by January 30 and July 30 that summarizes the records maintained and the emission calculations.

3.2(B)

Prevention of Significant Deterioration: PSD Avoidance ES-4-603-1 (Tobacco Dryer #6) and ES-5-603-1 (Tobacco Dryer #7) [Sec. 3D-0530 and 3Q-0317]

This limit covers Dryer #6 and Dryer #7 (ES-4-603-1 and ES-5-603-1) and limits VOC emissions to 62.66 tons/12-month period. Along with the VOC limit there are also process limits for individual process blends. The "E" family of reconstituted sheet is limited to 20,000,000 lbs./12-month period. The "F" family of reconstituted sheet is limited to 12,000,000 lbs./12-month period.

The following formula is used to calculate VOC emissions from the processing of G7 products:

G7 "family"	Factor greater than:	Factor less than or equal to:
A		1.54
B	1.78	2.32
C	1.54	1.78
D	2.32	2.56
E	equal to 2.32	
F	2.56	4.82
G	4.82	6.27
H	equal to 0.704	

$$V = [(A \times 1.54) + (B \times 2.32) + (C \times 1.78) + (D \times 2.56) + (E \times 2.32) + (F \times 4.82) + (G \times 6.27) + (H \times 0.704)] / 2000$$

Where

V = monthly VOC emission in tons

A = Monthly production in tons of A family

B = Monthly production in tons of B family

C = Monthly production in tons of C family

D = Monthly production in tons of D family

E = Monthly production in tons of E (GTC) family

F = Monthly production in tons of F family

G = Monthly production in tons of G family

H = Monthly production in tons of H family

The non-integer constants in the equation are emission factors in lb-VOC per ton production, as

determined by the most recent stack tests.

Monitoring and recordkeeping of data used to calculate the emissions must be maintained at the source and emissions calculated monthly for each 12-month period and compared to the VOC limit.

A semi-annual report must be submitted by January 30 and July 30 that summarizes the records maintained and the emission calculations.

3.2(C)

Building Group 611 - Research and Development Activities [Sec. 3Q-0317]

RJRT must maintain records on each process modification involving the R&D equipment to document that the modification does not require a permit application. This provides RJRT flexibility for making insignificant changes in the processes. This requirement was first added to the Whitaker Park permit in permit 00339-TV-14 (Effective date: July 1, 2004).

3.2(D)

Prevention of Significant Deterioration: PSD Avoidance ES-3-611-3 (Casing & Cutting), ES-2-611-4 (Casing & Drying), and ES-5-611-2 (Cigarette Making) [Sec. 3D-0530 and 3Q-0317]

The combined emissions of VOC from Casing & Cutting (ES-3-611-3), Casing & Drying (ES-2-611-4), and Cigarette Making (ES-5-611-2) shall be limited to less than 40 tons in any consecutive 12-month period. Compliance with this limit is determined as follows:

The permittee shall maintain monthly records of all product throughputs necessary to calculate VOC emissions using the following formula:

$$(A*W + B*X + C*Y + D*Z + E) / 2000 = \text{monthly VOC emissions (tons)}$$

where:

A = monthly tons of tobacco processed in Casing & Cutting (ES-3-611-3);

B = monthly millions of cigarettes made in Cigarette Making (ES-5-611-2);

C = monthly tons of tobacco processed in Casing & Drying (ES-2-611-4);

D = monthly pounds of menthol applied in Cigarette Making (ES-5-611-2);

E = monthly combined pounds of ethanol applied in Casing & Cutting (ES-3-611-3) and Casing & Drying (ES-2-611-4);

- W = VOC emission factor (lb VOC/ton tobacco) for tobacco processed in Casing & Cutting (ES-3-611-3), from the permit application for the 00339-TV-31 permit;
- X = VOC emission factor (lb VOC/million cigarettes) for cigarettes made in Cigarette Making (ES-5-611-2), from the permit application for the 00339-TV-31 permit;
- Y = VOC emission factor (lb VOC/ton tobacco) for tobacco processed in Casing & Drying (ES-2-611-4), from the permit application for the 00339-TV-31 permit; and
- Z = VOC emission factor (lb VOC/lb menthol applied) for menthol applied in Cigarette Making (ES-5-611-2), from the permit application for the 00339-TV-31 permit.

Each month the permittee shall calculate the monthly VOC total and the 12-month VOC total.

Each 12-month VOC total shall not exceed 40 tons of VOC.

The permittee shall keep a log of the cigarette makers in Cigarette Making (ES-5-611-2), documenting the make/model and maximum production rate of each cigarette maker.

Condition 3.3 **Particulate Emission Limits**

This permit condition includes PM limits for the facility's boilers and the facility's other industrial processes.

3.3(A)

Particulates from Fuel Burning Indirect Heat Exchangers [Sec. 3D-0503]

This condition includes PM limits based on Sec. 3D-0503 of the FCAQTC for the four existing boilers. It also includes Sec. 3D-0503 PM limits for the temporary boilers in the event that they are ever needed and installed.

Four Existing Boilers

RJRT currently operates four boilers at the Whitaker Park facility: ES-1-602-1, ES-2-602-1, ES-5-602-1, ES-6-602-1 (Boilers #1, #2, #5, and #6, respectively). All four boilers are permitted to combust natural gas or No. 2 fuel oil. In the past, Boilers #1 and #2 were fired with coal or a coal/waste pellet mixture, and Boilers #5 and #6 with coal. All coal or coal/waste pellet combustion at Whitaker Park ceased on April 8, 2007. Three other boilers (#3, #4, and #7) have also been removed leaving just the four currently existing boilers.

According to Sec. 3D-0503(c), the emissions of particulate matter from these emission sources shall not exceed the allowable emission rate calculated by the equation $E = 1.09 * Q^{-0.2594}$; where E = allowable emission limit for particulate matter in lb/million Btu, and Q = maximum heat input in million Btu/hr of all fuel burning indirect heat exchangers, determined according to Sec. 3D-0503(c) and (e).

RJRT originally had four boilers (#1, #2, #3, #4) prior to air quality regulations. The Q value was first established based on boilers #1-4.

According to Sec. 3D-0503(e), boilers added after February 1, 1983 do not change a Q value previously set. Also, boilers shut down (except during a replacement) do not change an established Q value.

Boilers #5 and #6 were both added prior to 1983 (1968 and 1975 respectively) therefore the Q value was updated to include boilers #1-6. Boiler #7 was permitted in 1985 and did not change the Q value of existing boilers. Boiler #7 was shut down prior to the issuance of permit 00339-TV-13 on July 5, 2003. In addition, the temporary boilers (ES-TEMP) were initially permitted in permit 00339-TV-33 with an effective date of July 28, 2017 (after 2/1/1983), so they do not change the Q value of the four existing boilers.

Boilers 3 and 4 were both shut down in 2008, but the shutdown did not change the existing Q value.

Consequently, the Q values for Boilers #1, #2, #5 and #6 are all the same (792.5 mmBtu/hr) and are based on the total mmBtu/hr maximum heat input of current and former Boilers #1, #2, #3, #4, #5, and #6. The boilers have a higher firing rate on a MMBtu/hr basis while combusting natural gas than while combusting fuel oil – so the higher natural gas based firing rates are used to set the Q values. The firing rates are as follows:

Boiler #	MMBtu/hr
1	140
2	140
3	129
4	129
5	125.5
6	129
Total	792.5

According to Sec. 3D-0503(c), the emissions of particulate matter from these emission sources shall not exceed the allowable emission rate calculated by the equation $E = 1.09 * Q^{-0.2594}$; where E = allowable emission limit for particulate matter in lb/million Btu, and Q = maximum heat input in million Btu/hr of all fuel burning indirect heat exchangers, determined according to Sec. 3D-0503(c) and (e).

Based on the equation ($E = 1.09 * Q^{-0.2594}$) in Sec. 3D-0503(c) and a Q value of 792.5 MMBtu/hr, the allowable PM emissions for each of the four existing boilers is 0.19 lb/MMBtu.

No. 2 fuel oil combustion results in higher PM emissions than natural gas combustion according to the EPA's AP-42 document. The fuel oil combustion emission factor for total PM (filterable + condensable) is 3.3 lb PM/1000 gallons from AP-42 Tables 1.3-1 and 1.3-2. Based on 137,700 Btu/gal (or 137.7mmBtu/1000 gal) this converts to 0.0240 lb/mmBtu which is less than 13% of the 0.19 lb/mmBtu limit in Sec. 3D-0503.

Temporary Boilers

As stated in Part II, Condition 3(C) of the permit, one or more temporary boilers may be installed and operated at the Whitaker Park facility in the event that the facility's steam supply (received from the Building 602-1 boilers) is interrupted. To date, no temporary boilers have been installed, but the permit allows for their use if it is ever needed. The installation and operation is limited to two scenarios:

Scenario 1: One or two temporary boilers with low-NOx burners fired with diesel fuel with a sulfur content not to exceed 0.05% sulfur and with a combined maximum firing rate not to exceed 40.824 mmBtu/hr. Uncontrolled.

Scenario 2: One, two, or three temporary boilers with low-NOx burners fired with natural gas, each with a maximum firing rate not to exceed 93 mmBtu/hr. Uncontrolled.

For the temporary boilers, the actual fuel to be combusted and the actual Q values will not be known until the boilers are actually needed. According to the permit, the maximum possible Q value would be based on three temporary boilers firing natural gas each with a maximum firing rate of 93

MMBtu/hr plus the maximum firing rates of the existing four boilers. The firing rates are as follows:

Boiler #	MMBtu/hr
1	140
2	140
5	125.5
6	129
Temp Boiler 1	93
Temp Boiler 2	93
Temp Boiler 3	93
Total	813.5

The allowable PM emissions for each of the three temporary boilers would therefore be 0.19 lb/MMBtu based on the equation in Sec. 3D-0503(c). Operating three temporary boilers at 93 MMBtu/hr each is only permitted for the combustion of natural gas. From AP-42, Table 1.4-2, the natural gas combustion emission factor for total PM (filterable + condensable) is 7.6 lb PM/million scf. Based on 1,020 Btu/million scf this converts to 0.00745 lb/mmBtu which is less than 4% of the 0.19 lb/mmBtu limit in Sec. 3D-0503.

For temporary boilers combusting diesel fuel (fuel oil), the maximum possible Q value would be based on one or two boilers with a combined maximum firing rate of 40.824 MMBtu/hr plus the maximum firing rates of the existing four boilers. The firing rates are as follows:

Boiler #	MMBtu/hr
1	140
2	140
5	125.5
6	129
Temp Boiler(s)	40.824
Total	575.324

The allowable PM emissions for the temporary boiler(s) would therefore be 0.21 lb/MMBtu each. As described above, the PM emission factor for fuel oil combustion converts to 0.0240 lb/mmBtu which is less than 13% of the 0.21 lb/mmBtu limit in Sec. 3D-0503.

For both the four existing boilers and the temporary boilers(s), no monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the Sec. 3D-0503 PM standard because the fuels being combusted are natural gas and No. 2 fuel oil which inherently meet this standard. However, as stated in permit condition 3.3(A)(2), the permittee shall maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed to fulfill the requirements for condition 2.13 entitled Annual Emission Inventory Requirements.

3.3(B) Particulates from Industrial Processes

Condition 3.3(B) includes PM limits based on Sec. 3D-0515 of the FCAQTC for the facility's particulate emissions sources other than the boilers, the insignificant source emergency generator, and the two insignificant source emergency fire protection water pump engines. The boilers are subject to the PM limit in Sec. 3D-0503. The emergency generator and the two emergency fire protection water pump engines are not subject to a PM standard.

Sec. 3D-0515 states that emissions of particulate matter shall not exceed the allowable emission rate calculated by the equation, $E = 4.10 \times P^{0.67}$, for process weight rates up to 30 tons/hr or by the equation, $(55.0 \times P^{0.11}) - 40$, for process weight rates greater than 30 tons/hr; where E = allowable

PM emission rate in lb/hr, and P = process weight in tons/hr.

The allowable emission rate is dependent on the throughput at any point in time. For comparison to the standard, the potential emission rate is compared to the allowable emission rate at maximum throughput.

In Section C of this Statement of Basis, the potential controlled and uncontrolled PM emissions of each emissions source are compared to the applicable Sec. 3D-0515 PM standard. In all cases, the sources are shown to be in compliance with Sec. 3D-0515 either without controls or when utilizing required controls.

For sources with particulate control, 40 CFR Part 64 Compliance Assurance Monitoring (CAM) and non-CAM periodic monitoring requirements for PM are located in permit condition 3.6. The requirements include monitoring and recordkeeping requirements for fabric filters - plus requirements to submit reports of the monitoring requirements twice each year. Also in condition 3.6 is a CAM requirement to conduct daily stack observations for visible emissions. The daily stack observations permit condition includes monitoring and recordkeeping requirements, plus a requirement to submit a report of the monitoring requirements twice each year. For sources without particulate matter control, no monitoring, recordkeeping, or reporting is required for the specific purpose of demonstrating compliance with the Sec. 3D-0515 PM standard because each of those sources inherently meets the standard based on the nature of the source.

Condition 3.4 **Sulfur Dioxide Emission Limits**

This permit condition includes sulfur dioxide (SO₂) limits for the facility's permitted combustion processes.

3.4(A) **Sulfur dioxide emissions from combustion sources [Sec. 3D-0516]**

Condition 3.4(A) addresses the 2.3 lb/million Btu SO₂ limit in Sec. 3D-0516 of the FCAQTC. As specified in the equipment list in condition 1.1, this limit applies to the temporary boiler(s) (ES-TEMP).

As explained further below, Sec. 3D-0516 does not apply to the four existing boilers at the Whitaker Park facility.

ES-TEMP (Temporary Boiler(s))

Sec. 3D-0516 limits the amount of sulfur dioxide emitted from any temporary boilers to no more than 2.3 pounds of sulfur dioxide per million Btu input. As described above, any temporary boilers would be required to combust either natural gas or diesel fuel with a sulfur content not to exceed 0.05% sulfur (500 ppmw sulfur).

The fuel oil combustion emission factor, from AP-42 Table 1.3-1, is 142S lb/1000 gallons (S = sulfur content). With 0.05% sulfur the emissions would be 7.1 lb SO₂/1000 gallons. Based on 137,700 Btu/gal (or 137.7mmBtu/1000 gal) this converts to 0.0516 lb/mmBtu which is less than 3% of the 2.3 lb SO₂/MMBtu standard. When combusting No. 2 diesel fuel the allowable emissions rate can not be exceeded.

From AP-42, Table 1.4-2, the natural gas combustion emission factor for SO₂ is 0.6 lb SO₂/million scf. Based on 1,020 Btu/million scf this converts to 0.000588 lb/mmBtu which is less than 0.03% of the 2.3 lb SO₂/MMBtu standard. When combusting natural gas the allowable emissions rate can not

be exceeded.

Insignificant Sources

Sec. 3D-0516 also applies to the insignificant source natural gas fired emergency generator (IS-GEN-602-2) and two insignificant source emergency fire protection water pump engines that are not listed on the permit.

One of the two emergency fire protection water pump engines (the newer one) is subject to both 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart IIII, and is permitted to burn only ULSD fuel that is no more than 15 ppmw sulfur (0.0015% sulfur by weight). The other engine is subject to only 40 CFR Part 63 Subpart ZZZZ and is permitted to burn No. 2 fuel oil that with a maximum sulfur content of 0.5% by weight (5,000 ppmw). RJRT currently combusts only ULSD fuel in both of these engines. The large margin of compliance with the Sec. 3D-0516 SO₂ standard demonstrated above for the Caterpillar emergency generator, indicates that these two emergency fire protection water pump engines are not capable of exceeding the SO₂ emissions limit in Sec. 3D-0516.

The insignificant source natural gas fired emergency generator (IS-GEN-602-2) is subject to both 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart IIII. As stated in 40 CFR 63.6590(c), the generator engine meets the requirements of Part 63 Subpart ZZZZ by meeting the requirements of Part 60 Subpart JJJJ. The generator engine is EPA certified as meeting the emission standards in Part 60 Subpart JJJJ: Certificate Number JGNXB08.92O3-064. RJRT is complying with the requirements of Part 60 Subpart JJJJ by operating and maintaining the emergency generator in accordance with the manufacturer's instructions. From AP-42, Table 3.2-3 (Uncontrolled Emission Factors for 4-Stroke Rich-Burn Engines), the natural gas combustion emission factor for SO₂ is 0.000588 lb/mmBtu which is less than 0.03% of the 2.3 lb SO₂/MMBtu standard. When combusting natural gas the allowable emissions rate can not be exceeded.

For the temporary boilers, emergency generator, and emergency engines, no monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the Sec. 3D-0516 SO₂ standard because the fuels being combusted are natural gas and No. 2 fuel oil which inherently meet this standard. However, as stated in permit condition 3.4(C), the permittee is required to maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed to fulfill the requirements for condition 2.13 entitled Annual Emission Inventory Requirements.

3.4(B)

SIP based SO₂ limit for the four existing boilers [Sec. 3D-0501(e)]

Applicable sources: Four Existing Boilers (ES-1-602-1, ES-2-602-1, ES-5-602-1, ES-6-602-1)

Sec. 3D-0501(e) of the FCAQTC requires the four boilers to be operated with such control or in such a manner as to not cause the ambient air quality standard to be exceeded. The ambient air quality standard for SO₂ is contained in Sec. 3D-0402(a).

In condition 3.4(B), the sulfur dioxide emission limit (1.6 lb SO₂/MMBtu input) is a source specific SIP limit, which remains in place from the original North Carolina SIP in 1972. A revised standard of 2.3 lb SO₂/MMBtu became effective January 6, 1983 (47 FR 54934, December 7, 1982) as part of a SIP revision for many combustion sources, but the Whitaker Park boilers were specifically listed as sources that still had to meet the old 1.6 lb SO₂/MMBtu standard. The approval of the Forsyth County local implementation plan is codified in 40 CFR 52.1770 in Table 2 of the North Carolina State Implementation Plan.

The U.S. EPA approved Forsyth County's portion of the North Carolina SIP effective July 1, 1991 (56 FR 20140, May 2, 1991). In that Federal Register final rule "R.J. Reynolds-Whitaker Park" is specifically listed along with two sources outside Forsyth County as sources that were required to remain subject to the 1.6 lb SO₂/MMBtu standard.

With respect to SO₂ emissions, the worst case fuel for the boilers is combusting No. 2 fuel oil even though the firing rates with fuel oil are slightly less than with natural gas.

No. 2 diesel fuel is, by ASTM specification, formulated with a maximum sulfur content of 0.5% by weight (5,000 ppmw). The emission factor for No. 2 fuel oil combustion, from AP-42 Table 1.3-1, is 1.42S lb/1000 gallons (S = sulfur content). With 0.5% sulfur the emissions would be 71 lb SO₂/1000 gallons. Based on 137,700 Btu/gal (or 137.7 mmBtu/1000 gal) this converts to 0.516 lb/mmBtu which is less than 33% of the 1.6 lb SO₂/MMBtu standard. When combusting No. 2 diesel fuel the allowable emissions rate of 1.6 lb SO₂/MMBtu can not be exceeded.

For natural gas combustion, the SO₂ emission factor from AP-42 table 1.4-2 is 0.6 lb SO₂ per million cubic feet of natural gas which converts to 0.000588 lb/MMBtu based on the 1020 Btu/ft³ heat content of the natural gas. When combusting natural gas the allowable emissions rate of 1.6 lb SO₂/MMBtu can not be exceeded.

For the four existing boilers, no monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the Sec. 3D-0516 SO₂ standard because the fuels being combusted are natural gas and No. 2 fuel oil which inherently meet this standard. However, as stated in permit condition 3.4(C), the permittee is required to maintain the appropriate records for raw material usage and/or production rates in order to calculate the emissions data needed to fulfill the requirements for condition 2.13 entitled Annual Emission Inventory Requirements.

NOTE: All four of the existing boilers were constructed prior to the 6/19/1984 effective date of 40 CFR Part 60, Subpart Db – so they are not subject to any Subpart Db standards (including SO₂ standards) or to Sec. 3D-0524. Boilers ES-1-602-1, ES-2-602-1, ES-5-602-1, and ES-6-602-1 began operation in 1960, 1960, 1968, and 1975, respectively. Boilers ES-1-602-1, ES-2-602-1, ES-5-602-1, and ES-6-602-1 originally combusted coal, but were modified to combust natural gas and No. 2 fuel oil. Permit 00339-TV-5 (Effective Date 5/12/1999) was the first permit allowing combustion of natural gas or No. 2 fuel oil in Boiler ES-6-602-1. Permit 00339-TV-13 (Effective Date 7/5/2003) was the first permit allowing combustion of natural gas or No. 2 fuel oil in Boilers ES-1-602-1, ES-2-602-1, and ES-5-602-1. NSPS requirements for the boilers were not triggered at those times because under Part 60, Standards for Stationary Sources, General Provisions, 60.14 "Modifications" means any physical or operational change which results in an increase in the emission rate of any pollutant to which a standard applies shall be considered a modification. No emissions increase is expected except for VOC, however, Db standards do not apply to VOC, therefore, no modification occurred per NSPS applicability. By the time of the 8/1/2007 inspection, all four boilers had been converted to natural gas or No. fuel oil combustion, and all coal combustion at the facility had ceased.

Condition 3.5

Opacity (Visible Emissions) Limits [Sec. 3D-0516]

This permit condition includes opacity (visible emissions) limits for the facility's non-fugitive emissions sources. According to Sec. 3D-0521(b), the rule applies to "all fuel burning sources and to other processes that may have a visible emission. However, sources subject to a visible emission standard in Sec. 3D-0506, 0508, 0524, 0543, 0544, 1110, 1111, 1205, 1206, 1210, 1211 or 1212 shall meet that standard instead of the standard contained in this Rule."

Sec. 3D-0521 includes two sets of visible emissions (VE) standards: Sec. 3D-0521(c) for sources manufactured as of July 1, 1971; and Sec. 3D-0521(d) for sources manufactured after July 1, 1971.

At the Whitaker Park facility, only three sources were manufactured on or before July 1, 1971: Boilers ES-1-602-1, ES-2-602-1, and ES-5-602-1. These three boilers began operation in 1960, 1960, and 1968, respectively. They are subject to the VE standard in Sec. 3D-0521(c).

All other non-fugitive emissions sources at the facility, including Boiler ES-6-602-1, were constructed after 7/1/1971 and are subject to the VE standard in Sec. 3D-0521(d). Boiler ES-6-602-1 was constructed after 7/1/1971 and began operation in 1975.

NOTE: All four of the existing boilers were constructed prior to the 6/19/1984 effective date of 40 CFR Part 60, Subpart Db – so they are not subject to any Subpart Db standards (including visible emissions standards) or to Sec. 3D-0524.

3.5(A)

Control of Visible Emissions [Sec. 3D-0521(c)]

Condition 3.5(A) addresses the opacity limits in Sec. 3D-0521(c) of the FCAQTC. This rule applies to Boilers ES-1-602-1, ES-2-602-1, and ES-5-602-1. The opacity limit requires that visible emissions shall not exceed 40% opacity when averaged over a six-minute period with the following exceptions: (a) No six-minute period exceeds 94% opacity; (b) No more than one six-minute period exceeds 20% opacity in any hour; and (c) No more than four six-minute periods exceed 40% opacity in any 24-hour period.

For combustion sources, no monitoring, recordkeeping, or reporting is required for the specific purpose of demonstrating compliance with the Sec. 3D-0521(c) opacity standard because the fuels being combusted are natural gas and No. 2 fuel oil with a sulfur content not to exceed 0.05% sulfur by weight which inherently meet the standard.

3.5(B)

Control of Visible Emissions [Sec. 3D-0521(d)]

Condition 3.5(B) addresses the opacity limits in Sec. 3D-0521(d) of the FCAQTC. This rule applies to all non-fugitive emissions sources at the facility – except for Boilers ES-1-602-1, ES-2-602-1, and ES-5-602-1. The opacity limit requires that visible emissions shall not exceed 20% opacity when averaged over a six-minute period with the following exceptions: (a) No six-minute period exceeds 87% opacity; (b) No more than one six-minute period exceeds 20% opacity in any hour; and (c) No more than four six-minute periods exceed 20% opacity in any 24-hour period.

Most non-combustion particulate matter sources at the Whitaker Park facility are controlled. For sources with particulate control, 40 CFR Part 64 Compliance Assurance Monitoring (CAM) and non-CAM periodic monitoring requirements for PM are located in permit condition 3.6. The requirements include monitoring and recordkeeping requirements for fabric filters - plus requirements to submit reports of the monitoring requirements twice each year. In condition 3.6(B) is a requirement to conduct daily stack observations for visible emissions for sources subject to CAM. The daily stack observations permit condition includes monitoring and recordkeeping requirements, plus a requirement to submit a report of the monitoring requirements twice each year. For non-combustion sources without particulate matter control, no monitoring, recordkeeping, or reporting is required for the specific purpose of demonstrating compliance with the 3D-0521(d) opacity standard because each of those sources inherently meets the standard based on the nature of the source.

For combustion sources, no monitoring, recordkeeping, or reporting is required for the specific purpose of demonstrating compliance with the Sec. 3D-0521(d) opacity standard because the fuels being combusted are natural gas and No. 2 fuel oil with a sulfur content not to exceed 0.05% sulfur by weight which inherently meet the standard.

NOTE: When the boilers switch from natural gas to No. 2 fuel oil combustion, natural gas is used as the pilot light to ignite the fuel oil. If natural gas is not available (due to curtailment, etc.), then propane can be used for the pilot light to ignite the fuel oil. Propane is never used to actually fuel the boilers.

Condition 3.6 **Monitoring, Recordkeeping, and Reporting**

This permit condition includes 40 CFR Part 64 Compliance Assurance Monitoring (CAM) requirements along with non-CAM periodic monitoring requirements. The only permitted control devices for permitted equipment at the Whitaker Park facility are fabric filters for particulate matter control.

3.6(A) **Periodic Monitoring (non-CAM) for Sources Not Subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM)**

This condition includes periodic monitoring for non-CAM equipment controlled by fabric filters. Condition 3.6(A)(3) requires that a semi-annual report be submitted summarizing the fabric filter monitoring requirements.

3.6(B) **Compliance Assurance Monitoring (CAM) [Sec. 3D-0614, 40 CFR Part 64]**

This condition includes CAM requirements for sources controlled by some of the facility's fabric filters. The condition also includes CAM requirements to perform visual stack observations for stacks associated with sources subject to CAM. Condition 3.6(B)(4) requires that a semi-annual report be submitted summarizing the fabric filter monitoring and visual stack observation requirements.

CAM applicability is based on a "pollutant specific emission unit" (PSEU). There are many individual pieces of process equipment at the Whitaker Park facility. In order to streamline the permit process, RJRT has grouped process equipment into "emission sources" for listing in the permit. In most cases the "emission source" is one line of process equipment, all with similar regulatory requirements.

An "emission source" may be comprised of a few pieces of equipment, and in other cases it may be comprised of many individual pieces of equipment. Even though the permit specifies an emission limit for the entire "emission source", each individual piece of equipment, comprising the "emission source", is subject to the Sec. 3D-0515 particulate standard based on the process rate of the individual piece of equipment.

For the purposes of CAM applicability, each individual piece of equipment is the appropriate emission source to be considered the PSEU for purposes of CAM.

There are many "emission sources" that have several individual PSEUs being controlled by the same control device. When determining the potential pre-control emission rate, RJRT has added together the pre-control emissions from all PSEUs within an "emission source" that are controlled by the same

control device. This method has been used to simplify the CAM applicability process. This is a conservative approach that has the potential to include more control devices under CAM requirements than are necessary. The only thing that is needed is to calculate the potential pre-control PM10 emissions from each fabric filter within a particular emission source. If those emissions exceed 100 TPY - then CAM applies.

None of the PSEUs at the Whitaker Park facility have potential controlled PM10 emissions at or above 100 TPY – so none of those PSEUs are “large PSEUs” that trigger the need for the collection of four or more data values equally spaced over each hour as specified in 40 CFR 64.3(b)(4)(ii).

Condition 3.7

Work Practices for Sources of Volatile Organic Compounds [Sec. 3D-0958]

This condition includes VOC work practice standards from Sec. 3D-0958(c) and (d) of the FCAQTC. The rule applies to all facilities that use volatile organic compounds as solvents, carriers, material processing media, or industrial chemical reactants, or in other similar uses or that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions.

Condition 3.7(A), which is applicable only to ES-5-611-2 (Cigarette Making), includes Sec. 3D-0958(c) VOC work practice requirements. Condition 3.7(B) includes the Sec. 3D-0958(d) VOC work practice requirements for parts washing. Condition 3.7(C) includes monitoring and recordkeeping requirements for ES-5-611-2 related to condition 3.7(A). Condition 3.7(C) requires that the permittee perform weekly inspections at ES-5-611-2.

Condition 3.7(D) provides an alternative compliance option in lieu of the weekly inspections. The alternative option involves annual employee training and a requirement to keep records of successful completion of both initial and annual training including dates of the training sessions for all personnel involved in the operation of the Cigarette Making Equipment. To date, RJRT has always chosen to use this alternative compliance option rather than the weekly inspections described in condition 3.7(C).

Condition 3.7(E) requires that a semi-annual report be submitted summarizing the monitoring requirements specified in conditions 3.7(C) and (D). This report must contain the total number of weeks in which the work practice standards weekly inspection was not made during the reporting period. The report must also include which monitoring/recordkeeping method was selected during the reporting period to demonstrate compliance with condition 3.7(A) and the date of a switch being made from one compliance method to the other. In addition, if the alternative method in condition 3.7(D) was used during the reporting period, the report must include a list of the personnel involved in the operation of the affected equipment during the semi-annual period and the dates of their most recent two training sessions. As explained in Section A above, the requirement to do quarterly inspections of the Cigarette Making Equipment that was included in previous permits in condition 3.7(D), is no longer included in the 00339-TV-36 permit.

The applicability of Sec. 3D-0958 within Forsyth County is stated in Sec. 3D-0902(e) - specifically in Sec. 3D-0902(e)(9). At the state level, the analogous rule, 15A NCAC 02D .0902(e), does not include 02D .0902(e)(9) so the “Work Practices for Sources of Volatile Organic Compounds” requirements in 02D .0958 do not apply within the North Carolina counties regulated by the North Carolina Division of Air Quality. The state rule 02D .0902(e) was amended (effective 11/1/2016) with the removal of Rule 02D .0902(e)(9). Nonetheless, because Sec. 3D-0902(e)(9) still exists in the FCAQTC, it is still applicable within Forsyth County, NC. The next time that the FCAQTC is officially updated by the Forsyth County Board of Commissioners, Sec. 3D-0902(e)(9) will be removed, and the “Work Practices for Sources of Volatile Organic Compounds” requirements in Sec. 3D-0958 will

no longer be applicable within Forsyth County.

Condition 3.8 **Reserved for Future Use**

In the previous permit (permit 00339-TV-35), this condition addressed 40 CFR Part 63, Subpart ZZZZ, requirements for ES-11-602-1, the facility's 1,610 HP, 14 MMBtu.hr, diesel-fired emergency generator. On November 16, 2018, RJRT informed this Office that on November 5, 2018 the ES-11-602-1 emergency generator was permanently shut down and replaced by a new 150 kW natural gas fired emergency generator (IS-GEN-602-2). As explained in Section A, the new generator is subject to both 40 CFR Part 63 Subpart ZZZZ and 40 CFR 60 Subpart JJJJ, but meets the requirements of Subpart ZZZZ by meeting the requirements of Subpart JJJJ. The new generator is exempt from permitting as an insignificant activity by size or production rate per Sec. 3Q-0503(8), so there is no longer a need to address Subpart ZZZZ requirements in the permit. Those requirements have therefore been removed from the permit. Condition 3.8 has been retained in the 00339-TV-36 permit as "Reserved for Future Use."

NOTE: The facility also has two diesel engines that are used to power emergency fire water pumps. The engines are insignificant activities by size or production rate per Sec. 3Q-0503(8) so are not listed in the permit.

The older pump engine (230 hp, manufactured in November 1979) is subject to 40 CFR Part 63 Subpart ZZZZ, but it is not subject to 40 CFR Part 60, Subpart IIII because it was constructed before July 1, 2005. The 230 hp emergency fire water pump engine is allowed to burn No. 2 fuel oil with a sulfur content no greater than 0.5 weight percent sulfur because the requirement to use diesel fuel that meets the requirements in 40 CFR 80.510(b) has not been triggered. Triggering 40 CFR 80.510(b) would require the use of 15 ppmw sulfur fuel oil.

The newer pump engine (175 hp, manufactured in August 2016) is subject to both 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ (but it meets Subpart ZZZZ requirements by meeting IIII requirements). The 175 hp engine is an EPA Certified Tier 3 engine so compliance with the NSPS Subpart IIII emissions standards for PM, NO_x, and CO have been verified. The engine's model year is 2016 according to its EPA certification sheet. Its total displacement is 4.5 liters with 4 cylinders, or about 1.125 liters per cylinder. According to 40 CFR 60.4207(b) of Subpart IIII, it must use fuel oil that meets the requirements of 40 CFR 80.510(b) which limits sulfur content to 15 ppmw. So this new emergency fire water pump engine is currently the only fuel oil combustion source at the Whitaker Park facility that is actually required to burn fuel oil that is no more than 15 ppmw sulfur.

Condition 3.9 **Limitation on the use of No. 2 fuel oil to avoid the applicability of 40 CFR Part 63, Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources)**

This condition applies to the facility's four existing boilers: ES-1-602-1, ES-2-602-1, ES-5-602-1, ES-6-602-1. The condition specifies criteria that must be met in order for the boilers to avoid triggering the applicability of the Area Source Boiler GACT. In particular, if a boiler combusts fuel oil except during periodic testing not to exceed 48 hours per calendar year per boiler, gas supply emergencies, or periods of gas curtailment pursuant to a contract with the natural gas supplier, that boiler triggers the applicability of 40 CFR Part 63, Subpart JJJJJJ. The condition also requires that the facility maintain various records related to fuel oil combustion to document whether or not Subpart JJJJJJ was triggered.

Condition 3.9 does not specifically forbid any boiler from triggering the applicability of Subpart JJJJJJ. It merely specifies criteria that must be met to avoid triggering the applicability of the Subpart JJJJJJ. If a boiler does not meet the Subpart JJJJJJ avoidance criteria, that boiler becomes subject to Subpart JJJJJJ. The triggering of Subpart JJJJJJ is on an individual boiler basis. One boiler becoming subject to Subpart JJJJJJ, does not affect the applicability of Subpart JJJJJJ to any of the other boilers. Permit condition 3.10 addresses the applicable requirements of 40 CFR Part 63, Subpart JJJJJJ.

NOTE: The Whitaker Park facility is an area source for HAPs because it has potential emissions of no single HAP above the 10 ton/12-month major source threshold, and the potential emissions of all its HAPs combined is less than the 25 ton/12-month major source threshold.

Condition 3.10
National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources (Subpart JJJJJJ)

This condition applies to the facility's four existing boilers: ES-1-602-1, ES-2-602-1, ES-5-602-1, ES-6-602-1. The condition specifies that the permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart JJJJJJ, upon start-up of a boiler with No. 2 fuel oil usage beyond the limitations listed in condition 3.9. Condition 3.10 includes applicable requirements of 40 CFR Part 63, Subpart JJJJJJ. Condition 3.10(A) requires the permittee to notify this Office no more than 30 days after any of the boilers does become subject to Subpart JJJJJJ. To date, none of the four boilers has become subject to Subpart JJJJJJ.

PART I, SECTION 4:
CONTROL OF TOXIC AIR POLLUTANTS -
LOCALLY ENFORCEABLE ONLY

Condition 4.1
Facility-Wide Toxic Air Pollutant Conditions

A facility-wide air toxics review was last performed in January 2016 in association with the Temporary Boiler Project that was incorporated in the 00339-TV-33 permit. The statement of basis for the Temporary Boiler minor modification contains a detailed analysis of the associated air toxics review including air toxic pollutant modeling. The issuance of the following two permits (00339-TV-34 and 00339-TV-35) did not involve an air toxics review, and this current renewal activity for the issuance of permit 00339-TV-36 does not trigger an official air toxics review. Consequently, no changes have been made to any air toxics requirements in the renewed 00339-TV-36 permit compared to the 00339-TV-35 permit.

The four existing boilers in Whitaker Building 602-1 are exempt from the air toxics analysis in accordance with Sec. 3Q-0702(a)(18) which exempts combustion sources "except new or modified combustion sources permitted on or after July 10, 2010." Combustion source is defined in Sec. 3Q-0703 as follows: "Combustion sources" means boilers, space heaters, process heaters, internal combustion engines, and combustion turbines, which burn only wood or unadulterated fossil fuel. It does not include incinerators, waste combustors, kilns, dryers, or direct heat exchange industrial processes.

Sec. 3Q-0702(a)(27)(B) also provides an air toxics exemption for any air emission source that is “an affected source under 40 CFR Part 63, as amended.” This rule exempts the natural gas fired emergency generator and two fire protection water pump engines at Whitaker Park because they are all subject to 40 CFR 63, Subpart ZZZZ (the RICE MACT). The following three sources are exempt from air toxics review by means of Sec. 3Q-0702(a)(27)(B): The 175 HP Diesel fire pump (IS-FP175, Bldg. 604-12); the 230 HP Diesel fire pump (IS-FP, Bldg. 602-1); and the 150 kW natural gas fired emergency generator (IS-GEN-602-2).

Condition 4.1(A)(3) includes a list of 18 non-modeled TAPs. The facility-wide potential emissions of each of these TAPs (disregarding sources exempt from the air toxics regulations) are below the *de minimis* levels or Toxic Pollutant Emission Rates (TPERs) listed in Sec. 3Q-0711(a). The Whitaker Park facility has no controls for any TAPs.

Condition 4.1(A)(4) includes a list of 13 modeled TAPs. Modeling was performed based on the facility-wide potential emissions of each of the TAPs (disregarding sources exempt from the air toxics regulations). For each pollutant that was modeled, the maximum modeled ambient concentration was less than the respective Acceptable Ambient Level (AAL) listed in FCAQTC Sec. 3D-1104. The overall emission rate for each pollutant was then "ratioed up" to a level corresponding to 98% of the AAL and the model was rerun. The maximum facility-wide emissions rates shown in condition 4.1(A)(3) are the emission rates corresponding to 98% of the AAL for each pollutant.

The facility's most recent emissions inventory report was for CY2017. The actual TAP emissions emitted for that year did not exceed any of the annual limits in permit conditions 4.1(A)(2) or (3).

Because the uncontrolled potential emissions of all non-modeled TAPs from the facility are below the respective Sec. 3Q-0711(a) TPER values and the modeling demonstrates that the respective AALs are not exceeded even at emission rates greater than the facility's uncontrolled potential emission rates, only the basic TAP monitoring and recordkeeping requirements are included in condition 4.1(A)(4) of the permit with no TAP reporting required.

SECTION E: **Insignificant Activities**

The facility's insignificant activities have been reviewed and verified. The activities are insignificant in accordance with either Sec. 3Q-0503(7) "Insignificant activities because of category" or Sec. 3Q-0503(8) "Insignificant activities because of size or production rate". Although the insignificant activities are not listed in the Title V permit, a general permit condition (condition 2.30) is placed in the Title V permit stating that all insignificant activities shall comply with all applicable requirements. An updated list of the insignificant activities is attached to the permit but is not an official part of the permit.

SECTION F: **Changes to the Permit**

1. Modified the Permit Number to 00339-TV-36 on the permit page with the Forsyth County Seal, on the first page of the permit's Table of Contents, and in the page headers. Updated the wording of some of the page footers. The permit expiration date and renewal application due date were updated on the permit page with the Forsyth County Seal
2. The permit's effective date will be added to the permit page with the Forsyth County Seal, the first Table of Contents page, and the page headers.

3. In the Table of Contents for the permit, the listed page numbers and entries were adjusted to reflect the revised permit.
4. Throughout the permit, the formatting of citations to requirements in the Forsyth County Air Quality Technical Code (FCAQTC) were updated. For example, the citation for Rule 3Q .0515 was updated to Sec. 3D-0515. Also, changed the formatting of the emission source IDs, control device IDs, and emission point IDs so that the building number comes last. For example, for Emission Source 5 in Building 611-2, the ID was changed from ES-611-2-5 to ES-5-611-2.
5. At the beginning of Part I, added the phrase: "Part I, AIR QUALITY OPERATING PERMIT, In Part I of this permit, all references to permit conditions are for permit conditions in Part I unless otherwise specified."
6. In Part I, Condition 1.1 (Equipment List and Applicable Conditions), the tables were checked for accuracy and updated as necessary. Some changes were made to the table headers. For ES-603-1-3 (Dust Feed & Extraction), changed the 3D-0515 limit from 7.60 to 7.58. For ES-611-16-3 (Smokeless Processing), changed the 3D-0515 limit from 0.59 to 0.587. The changes make the limits have "three significant figures" as specified in Sec. 3D-0515(a). Split the listing of Dryers #6 and #7 in Building 603-1 into two separate rows (with applicable stack IDs) and adjusted the Sec. 3D-0515 limits accordingly. The two dryers can operate independently so are two distinct emissions sources. Removed the listing for ES-11-602-1 (Emergency Generator) because it has been permanently shut down, and removed the related column for the "4Z RICE MACT". At the end of Condition 1.1, added language indicating that the four boilers in Building 602-1 may use propane to start fuel oil combustion if natural gas is unavailable. Entries in the equipment list regarding the applicability of conditions in permit condition 3.2 were adjusted to reflect the changes described in items 12 and 13 below.
7. In Part I, General Condition 1.2 "Operating Conditions Not Covered Under the Permit Shield", all items that had been listed in permit 00339-TV-35 were removed because the 00339-TV-36 permit will have undergone EPA review.
8. In Part I, General Condition 2.11(B) the formatting of a condition reference was changed from "paragraph C below" to "condition 2.11(C)".
9. In Part I, Section 2, General Condition 2.14 (Compliance Certification) was modified to match the language in this Office's current permit shell based on the current wording of Sec. 3Q-0508(n).
10. In Part I, Condition 3.2(A), modified the title of the condition from: "ES-603-1-(4, 5) - Prevention of Significant Deterioration [Rule 3D .0530 and 3Q .0317(b)]" to "ES-4-603-1 (Dryer #6) and ES-5-603-1(Dryer #7) - Prevention of Significant Deterioration (PSD), Limit to Avoid PSD Review [Sec. 3D-0530 and 3Q-0317(b)]". In Part I, Conditions 3.2(A)(1) and (2), changed "ES-603-1-(4,5)" to "ES-4-603-1 and ES-5-603-1".
11. In Part I, Condition 3.2(B), modified the title of the condition from: "ES-603-1-(4, 5) - Prevention of Significant Deterioration [Rule 3D .0530 and 3Q .0317(b)]" to "ES-4-603-1 (Dryer #6) and ES-5-603-1 (Dryer #7) - Prevention of Significant Deterioration (PSD), Limits to Avoid PSD Review [Sec. 3D-0530 and 3Q-0317(b)]".
12. In Part I, Condition 3.2(D) that had been in the previous permit (#00339-TV-35) was deleted from the 00339-TV-36 permit.
13. In Part I, the permit condition that had been labeled 3.2(E) in the 00339-TV-35 permit was

renumbered to condition 3.2(D) in the 00339-TV-36 permit. In Part I, Condition 3.2(D) modified the title of the condition from: “611-3-ES-3, 611-4-ES-2, and 611-2-ES-5 - Prevention of Significant Deterioration [Rule 3D .0530 and 3Q .0317(b)]” to “ES-3-611-3 (Casing & Cutting), ES-2-611-4 (Casing & Drying), and ES-5-611-2 (Cigarette Making) - Prevention of Significant Deterioration (PSD), Limit to Avoid PSD Review [Sec. 3D-0530 and 3Q-0317(b)]”. In Part I, Conditions 3.2(D)(1) and (2), changed “611-3-ES-3” to “ES-3-611-3”, “611-2-ES-5” to “ES-5-611-2”, and “611-4-ES-2” to “ES-2-611-4”. Also corrected a typo in Condition 3.2(D)(2)(a) changing “611-4-ES-4” to “ES-2-611-4” in the definition of “Y”.

14. In Part I, condition 3.3(A)(2), removed references to specific fuels. In Part I, Condition 3.3(B), changed “Section 1.1” to “condition 1.1”. In condition 3.3(B), added, as condition 3.3(B)(2), a reference to the monitoring, recordkeeping, and reporting requirements in Section 3.6.
15. In Part I, Condition 3.4(A), removed 3.4(A)(1), the reference to the generator, because it has been permanently shut down. In Part I, Condition 3.4(A), changed “ES-TEMP, temporary boiler(s),” to “the temporary boiler(s) (ES-TEMP)” and changed the condition from 3.4(A)(2) to just 3.4(A). In Part I, Condition 3.4(B), changed “ES-602-(1,2,5,6)-11 (boilers)” to “the Building 602-1 boilers (ES-1-602-1, ES-2-602-1, ES-5-602-1, and ES-6-602-1)”. NOTE: “ES-602-(1,2,5,6)-11” was a typo and should have been “ES-602-(1,2,5,6)-1”. In Part I, condition 3.4(C), removed references to specific fuels.
16. In Part I, Condition 3.5(A) and (B), changed “Standard” to “Opacity Standard” and changed “Section 1.1” to “condition 1.1”. In Part I, Condition 3.5(C), modified the language for Monitoring/Recordkeeping/Reporting Requirements including the removal of references to specific fuels.
17. In Part I, Condition 3.6, modified the wording of the title to condition 3.6 from “PM - Periodic Monitoring/Recordkeeping/Reporting” to “Monitoring, Recordkeeping, and Reporting” and modified the wording of the title to condition 3.6(A) from “Non-CAM [Rule 3Q .0508(f)]” to “Periodic Monitoring [Sec. 3Q-0508(f)] Sources Not Subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM)”. In Condition 3.6(A) and (B), changed “Section 1.1” to “condition 1.1”. In Condition 3.6(B)(3), changed “3.6(B)(1, 2)” to “conditions 3.6(B)(1) and (2)”. Added two paragraphs to the end of condition 3.6(B)(3).
18. In Part I, Condition 3.7(A), changed the wording from “Work practice standards [Rule 3D .0958(c) and 3Q .0508(i)(16)] - For equipment designated in Section 1.1 the permittee shall:” to “ES-5-611-2 (Cigarette Making) - Work practice standards [Sec. 3D-0958(c) and 3Q-0508(i)(16)] - The permittee shall:”. In condition 3.7(D) the requirement to perform quarterly inspections has been removed. The wording in condition 3.7(D) now matches the analogous wording in the Tobaccoville permit.
19. In Part I, Condition 3.8, deleted all the wording related to 40 CFR part 63, Subpart ZZZZ because the ES-11-602-1 emergency generator has been permanently shut down. Condition 3.8 has been retained but is listed as “Reserved for Future Use”. In Part I, Condition 1.1, at the end of the equipment list, changed the wording in the notes from “Sections 3.3 – 3.8” to “Sections 3.3 – 3.7”.
20. In Part I, Condition 3.9, added the title of 40 CFR Part 63, Subpart JJJJJJ “(National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources)”. Added a requirement to maintain records of “the number of hours per calendar year that No. 2 fuel oil was combusted during periodic testing of the boiler”. Relocated citations to start of the condition and changed “.0317” to “0317(5)”.
21. In Part I, Condition 3.10, changed the formatting of condition references. For example, condition “**3.10.B**” was changed to “3.10(B)”. Added “40 CFR 63,” to the title.

22. In Part I, added Condition 4.1 relocated the rule citations from the end of the permit conditions to just after the title of the permit conditions. In the opening paragraph, changed "Subchapter 3D .1100" to "Section 3D-1100".
23. In Part II, Section 2, Condition D, changed "Forsyth County Air Quality Control Ordinance and Technical Code Subchapter 3Q .0200" to "FCAQTC Section 3Q-0200".
24. In Part II, Section 4, Condition C (New Tobacco Mills at Building 603-1 Project), changed "from the ES-603-1-(4,5) dryers" to "from ES-4-603-1 (Dryer #6) and ES-5-603-1 (Dryer #7)".

SECTION G: **Permit Processing Notes**

2/26/2013

A Title V permit renewal application was received at this Office pertaining to the RJRT Whitaker Park facility. The application included both confidential and public versions of the documents and included a request for confidential treatment of certain information. At that time, the current permit was permit #00339-TV-29 which had been issued with an effective date of 8/24/2012. The 00339-TV-29 permit was for a minor Title V modification to remove all equipment and permit conditions related to Building 601-1 from the Whitaker Park facility's permit because all cigarette manufacturing equipment in the building had been removed or was being disassembled. In addition, a condition related to 40 CFR Part 63 Subpart ZZZZ for the facility's emergency generator was added to the 00339-TV-29 permit.

7/19/2013

This Office mailed a Confidential Treatment Determination letter to RJRT in response to the confidentiality request received on 2/26/2013 for the renewal application.

1/17/2014

Permit 00339-TV-30 was issued with an effective date of 1/21/2014. The permit was for a minor Title V modification for the Tobacco Milling Project (Building 611-4).

11/2/2015

Permit 00339-TV-31 was issued with an effective date of 11/2/2015. The permit was for a significant Title V modification for the R&D Facility Ethanol use Project.

3/1/2016

Permit 00339-TV-32 was issued with an effective date of 3/2/2016. The permit was for a minor Title V modification for the Product Recovery (PRO) Relocation Project and a second minor Title V modification for R&D equipment configuration changes.

7/26/2017

Permit 00339-TV-33 was issued with an effective date of 7/28/2017. The permit was for a minor Title V modification for the Temporary Boiler Project.

1/30/2018

Permit 00339-TV-34 was issued with an effective date of 2/1/2018. The permit was for a minor Title V modification for the New G7 Product at Building 603-1 Project. The permit also incorporated a 502(b)(10) request related to increased tobacco milling activity in Building 611-4.

8/29/2018

Permit 00339-TV-35 was issued with an effective date of 9/1/2018. The permit was for a minor Title V modification for new tobacco mills at Building 603-1.

11/9/2018

Via email attachment, I sent a copy of the DRAFT 00339-TV-36 permit to RJRT for their review.

11/13/2018

Via email attachment, I sent some questions to RJRT regarding the Whitaker Park renewal.

11/13/2018

Received notification via email from RJRT that the new natural gas fired emergency generator (IS-GEN-60202) began operation at Whitaker Park on 11/5/2018. The new generator is an insignificant activity. Attached to the email was the EPA Certification that the new engine complies with 40 CFR Part 60 Subpart JJJJ Table 1 emission standards. With the start-up of the natural gas fired generator, the old diesel fired generator (ES-11-602-11) was permanently shut down and will be removed. The old ES-11-602-11 generator will not be included in the renewed Title V permit.

12/5/2018

Via email (with attachment), I received some responses to my questions that I had sent on 11/13/2018. I also sent RJRT an additional question. Later in the day, I received an email (with attachment) addressing all of my questions from 11/13/2018 plus the additional question from earlier today.

12/6/2018

Via email (with attachment), I commented on the responses received from RJRT on 12/5/2018. Later that day, RJRT responded to my comments via email (with attachment).

12/12/2018

Scott Snow with RJRT came to the EAP office, and we discussed issues related to the Title V permit renewal.

12/14/2018

Via email (with attachments), received from RJRT for ES-1-603-1, ES-2-603-1, and ES-3-603-1: an updated public B1 form, D3-1 form, and public CAM analysis D6 form. Also received updated C2 forms for CD-1-603-1 and CD-2-603-1.

12/18/2018

RJRT send an email (with attachment) providing comments on the draft permit that I had sent them on 11/9/2018.

12/20/2018

Via postal mail, received from RJRT for ES-1-603-1, ES-2-603-1, and ES-3-603-1: an updated public and confidential B1 form, D3-1 form, and public and confidential CAM analysis D6 form. Also received updated C2 forms for CD-1-603-1 and CD-2-603-1. The update included both confidential and public versions of the documents and included a request for confidential treatment of certain information. Also, on this day RJRT send an email (with attachment) providing corrections and updates to the insignificant activities list.

12/21/2018

This Office mailed a Confidential Treatment Determination letter to RJRT in response to the confidentiality request received on 12/20/2018. I completed edits to the DRAFT permit and Statement of Basis based on the latest comments and information. I also completed a DRAFT public notice document.

1/4/2019

I completed edits to the DRAFT permit and Statement of Basis based on the latest comments and information. I also completed a DRAFT public notice document.

1/7/2019

I sent an email to Peter Lloyd asking him to review the DRAFT 00339TV-36 permit, the accompanying Statement of Basis, and draft public notice.

1/11/2019

Peter completed his initial review.

1/16/2019

This Office received an update to the renewal application from Whitaker Park, Responsible Official, Johnny Cagigas. The update requested the removal of the 40 CFR Part 63, Subpart JJJJ permit condition from the facility's permit. That permit condition was the 00339-TV-35 permit as condition 3.2(D). The request was in light of the EPA's recent withdrawal of its longstanding Once In Always In policy regarding MACT applicability.

1/16/2019

I completed edits to the draft 00339-TV36 permit and Statement of Basis pertaining to removal of the 40 CFR Part 63, Subpart JJJJ, permit condition. I sent an email to Peter Lloyd asking him to review the revised DRAFT 00339-TV-36 permit and the accompanying Statement of Basis. I also completed a revised In-House database form indicating that the facility was no longer subject to 40 CR Part 63, Subpart JJJJ. In addition, drafted a reporting requirement update form to void report R142 which was the semi-annual reporting relating to 40 CFR Part 63, Subpart JJJJ.

MM/DD/YYYY

Peter Lloyd completed his review which included some questions and edits. After discussing items from Peter's review, I made some corrections and added some additional information. Peter reviewed the edited documents and approved the changes.

MM/DD/YYYY

I prepared the updated draft versions of the permit and statement of basis. I also prepared the public notice with the appropriate dates. I create a single PDF document from those three documents.

The DRAFT 00339-TV-36 permit and Statement of Basis will be submitted for a 30-day public comment period and 45-day EPA review beginning on MM/DD/YYYY. The public comment period will end on MM/DD/YYYY, and the EPA review period on MM/DD/YYYY.

SECTION H: **Statement of Basis Conclusions**

This Office, upon completion of its review of these modifications, has concluded that the facility will be in compliance with all applicable regulations and has drafted permit number 00339-TV-36 which details all the necessary requirements to ensure compliance. This Office recommends approval of the renewed permit for the Whitaker Park facility.