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

May 9, 2018

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
Tobaccoville Facility
Tobaccoville, NC
Permit #00745-TV-39

This facility had applied for a significant modification of its Title V Air Quality operation permit requesting an emission limit to avoid the applicability of Prevention of Significant Deterioration preconstruction permitting requirements for the addition of the Small Batch Project. This modification will not cause a significant increase of regulated air pollutant emissions. In addition to this modification, the public may comment on those sections of the permit identified in the statement of basis that are not covered under Forsyth County Air Quality Control Ordinance and Technical Code (FCAQTC) Rule 3Q .0512(a) Permit Shield. 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 June 8, 2018, the close of the public comment period.

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
DRAFT 00745-TV-39	TBD	November 27, 2012	February 27, 2012

Facility Name: R.J. Reynolds Tobacco Company - Tobaccoville
Mailing Address: P.O. Box 2959
City, State, ZIP Code: Winston-Salem, NC 27102

Facility Location: RJR Moore Road
City: Tobaccoville, 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 # 00745-TV-39
Zzzz XX, 2018

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1.1 Equipment List and Applicable Conditions

Building 851-1 Cigarette Manufacturing

		Applicable Standards							CAM				non-CAM			Visible Emissions	
		PM	PM		PM	SO2	SO2	VOC	Fabric Filter	Fume Incin.	Thermal Incin.	Visual Observ.	Fabric Filter	Wet Scrubber			
	Applicable Permit Section	3.3(A)	3.3(B) (1)	max. lb/hr	3.3(B) (2)	3.4(A)	3.4(B)	3.7	3.6(B) (1),(5),(6)	3.6(B) (2),(5),(6)	3.6(B) (3),(5),(6)	3.6(B) (4),(5),(6)	3.6(A) (1),(3),(4)	3.6(A) (2),(3),(4)		3.5(A)	3.5(B) NSPS Dc
ES#	**Emission Source**								**CD#**	**Controls**					**EP#**	**Emission Point**	
1	Strip Receiving/Blending		x	45.0	x				102	x			x			9	x	
									103	x			x			10	x	
									104	x			x			8	x	
									70					x		21/21A	x	
									82					x		12/12A	x	
									84,85,86					x		6/6A	x	
									87,88					x		5/5A	x	
									89					x		1/1:2A	x	
									90					x		5/5A	x	
									91					x		4/4:47A	x	
									95					x		2/1:2A	x	
									105					x		47/4:47A	x	
6	Recovered Tobacco Silo Discharge (Menthol)		x	17.9	x				67					x		24/24E	x	
7	Recovered Tobacco Conveying		x	17.9	x				67					x		24/24E	x	
									77	x			x			24	x	
									79					x		24	x	
									71,72, 73,74					x		24/24A 24B/24C 24D	x	
8	Processed & Recovered Tobacco Input		x	16.5					67					x		24/24E	x	
									80	x			x			24	x	
									92					x		16/16A	x	

Building 851-1 Cigarette Manufacturing

		Applicable Standards							CAM				non-CAM			
		PM	PM		PM	SO2	SO2	VOC	Fabric Filter	Fume Incin.	Thermal Incin.	Visual Observ.	Fabric Filter	Wet Scrubber	Visible Emissions	
	Applicable Permit Section	3.3(A)	3.3(B) (1)	max. lb/hr	3.3(B) (2)	3.4(A)	3.4(B)	3.7	3.6(B) (1),(5),(6)	3.6(B) (2),(5),(6)	3.6(B) (3),(5),(6)	3.6(B) (4),(5),(6)	3.6(A) (1),(3),(4)	3.6(A) (2),(3),(4)	3.5(A)	3.5(B) NSPS Dc
ES#	**Emission Source**								**CD#**	**Controls**					**EP#**	**Emission Point**
9	Processed Tobacco Conveying		x	27.9					66						51/25:51A	x	
									67				x		24/24E	x	
									71,72, 73,74				x		24/24A 24B/24C 24D	x	
10	Expanded Tobacco Conveying		x	28.4	x				63				x		25 25:51A	x	
									71,72, 73,74				x		24/24A 24B/24C 24D	x	
11	Tobacco Strip Conveying/Blending		x	46.3	x				68,70				x		21/21A	x	
									87,88,90				x		5/5A	x	
									89	x			x		1/1:2A	x	
									95				x		2/1:2A	x	
									91				x		4/4:47A	x	
									105				x		47/4:47A	x	
12	Tobacco Strip Conveying/Storage		x	47.4	x				68				x		21/21A	x	
									69	x			x		22/22A	x	
									70	x			x		21/21A	x	
									71,72, 73,74				x		24/24A 24B/24C 24D	x	
									107				x		37	x	
13	Tobacco Strip Conveying to Casing/Drying		x	30.5	x				107				x		37	x	
									112				x		36	x	

Building 851-1 Cigarette Manufacturing

		Applicable Standards								CAM				non-CAM			Visible Emissions	
		PM	PM		PM	SO2	SO2	VOC		Fabric Filter	Fume Incin.	Thermal Incin.	Visual Observ.	Fabric Filter	Wet Scrubber			
	Applicable Permit Section	3.3(A)	3.3(B) (1)	max. lb/hr	3.3(B) (2)	3.4(A)	3.4(B)	3.7		3.6(B) (1),(5),(6)	3.6(B) (2),(5),(6)	3.6(B) (3),(5),(6)	3.6(B) (4),(5),(6)	3.6(A) (1),(3),(4)	3.6(A) (2),(3),(4)		3.5(A)	3.5(B) NSPS Dc
ES#	**Emission Source**								**CD#**	**Controls**						**EP#**	**Emission Point**	
14	Tobacco Strip Casing/Drying		x	26.3	x				70					x		21/21A	x	
									107					x		37	x	
									112					x		36	x	
									108	x			x			34	x	
									109	x			x			35	x	
									128						x	43	x	
									129						x	40	x	
									N/A							38,39,	x	
15	Tobacco Casing/Cutting/Storage		x	45.2	x				13,19					x		32/32A	x	
									14,20					x		31/31A	x	
									15,16					x		30/30A	x	
									17,18					x		29/29A	x	
									50-53, 55, 57, 59, 61					x		23	x	
									54, 56, 58, 60	x			x			23	x	
									71-74					x		24/24A 24B/24C 24D	x	
									119, 120, 121, 122						x	20	x	
									123, 124, 125, 126						x	23	x	
							x		RTO			x	x			60	x	
									N/A							61	x	
									N/A							26	x	
									Fugitive									
16	Cut Tobacco Silo Discharge		x	43.6	x				13,19					x		32/32A	x	
									14,20					x		31/31A	x	
									15,16					x		30/30A	x	
									18					x		29/29A	x	

Building 851-1 Cigarette Manufacturing

	Applicable Standards							CAM				non-CAM		Visible Emissions	
	PM	PM		PM	SO2	SO2	VOC	Fabric Filter	Fume Incin.	Thermal Incin.	Visual Observ.	Fabric Filter	Wet Scrubber		
Applicable Permit Section	3.3(A)	3.3(B)	max.	3.3(B)	3.4(A)	3.4(B)	3.7	3.6(B)	3.6(B)	3.6(B)	3.6(B)	3.6(A)	3.6(A)	3.5(A)	3.5(B) NSPS Dc
		(1)	lb/hr	(2)				(1),(5),(6)	(2),(5),(6)	(3),(5),(6)	(4),(5),(6)	(1),(3),(4)	(2),(3),(4)		

ES#	Emission Source	CD#	Controls						EP#	Emission Point	
18	Filter Making	113					x		29/29B	x	
		114					x		32/32B	x	
		115					x		30/30B	x	
		116					x		31/31B	x	
19	Cigarette Making	1,2					x		29	x	
		21, 22	x			x			29	x	
		3,4					x		32	x	
		23, 24	x			x			32	x	
		5, 6, 7, 10, 30, 131					x		31	x	
		25-27	x			x			31	x	
		8,9,11,12					x		30	x	
		28, 29, 31, 32	x			x			30	x	
20	Housekeeping (Industrial Vac)	33					x		30	x	
		35					x		31	x	
		38,42					x		29	x	
		40,44,45					x		32	x	
		46					x		33	x	
		48	Note: This control vents through CD-71.				x		24/24A 24B/24C 24D	x	
		64					x		25	x	
		93					x		6	x	
		106					x		4	x	
		111					x		37	x	

Building 851-1 Cigarette Manufacturing

		Applicable Standards							CAM				non-CAM			Visible Emissions	
		PM	PM		PM	SO2	SO2	VOC	Fabric Filter	Fume Incin.	Thermal Incin.	Visual Observ.	Fabric Filter	Wet Scrubber			
	Applicable Permit Section	3.3(A)	3.3(B) (1)	max. lb/hr	3.3(B) (2)	3.4(A)	3.4(B)	3.7	3.6(B) (1),(5),(6)	3.6(B) (2),(5),(6)	3.6(B) (3),(5),(6)	3.6(B) (4),(5),(6)	3.6(A) (1),(3),(4)	3.6(A) (2),(3),(4)		3.5(A)	3.5(B) NSPS Dc
ES#	**Emission Source**								**CD#**	**Controls**						**EP#**	**Emission Point**
21	Tobacco Expansion Process		x	10.2			x		66					x		51/25:51A	x	
									63					x		25/25:51A	x	
									130		x		x			52	x	
									127						x	50	x	
									92					x		16/16A	x	
									67					x		14/24E	x	
24	Box Filling		x	19.2					19					x		32/32A	x	
25	Small Batch - Receiving and Blending		x	4.10					132						x	62	x	
26	Small Batch - Casing and Drying		x	2.58					132						x	62	x	
									133	x			x			63	x	
									N/A							64	x	
									N/A							65	x	
27	Small Batch - Casing and Cutting		x	5.97					122						x	20	x	
									126						x	23	x	
									53						x	23	x	
									60	x			x			23	x	
									Fugitive									
									17					x		29/29A	x	
									74					x		24/24A 24B/24C 24D	x	
							x		RTO			x	x			60	x	
									N/A							61	x	
									Fugitive									
F13	Casing Preparation Area							x	All Fugitive									
F16	Packing Equipment							x	All Fugitive									

Building 854-8 Utilities

		Applicable Standards								CAM				non-CAM			Visible Emissions	
		PM	PM		PM	SO2	SO2	VOC		Fabric Filter	Fume Incin.	Thermal Incin.	Visual Observ.	Fabric Filter	Wet Scrubber			
	Applicable Permit Section	3.3(A)	3.3(B) (1)	max. lb/hr	3.3(B) (2)	3.4(A)	3.4(B)	3.7		3.6(B) (1),(5),(6)	3.6(B) (2),(5),(6)	3.6(B) (3),(5),(6)	3.6(B) (4),(5),(6)	3.6(A) (1),(3),(4)	3.6(A) (2),(3),(4)		3.5(A)	3.5(B) NSPS Dc
ES#	**Emission Source**								**CD#**	**Controls**						**EP#**	**Emission Point**	
1	Boiler #5: (87.9 mmBtu/hr, NG)								N/A							22		x
	Combusting #2 fuel oil	x				x												
	Combusting natural gas	x					x										x	
2	Boiler #6: (87.9 mmBtu/hr, NG)								N/A							23		x
	Combusting #2 fuel oil	x				x												
	Combusting natural gas	x					x										x	
3	Boiler #7: (87.9 mmBtu/hr, NG)								N/A							24		x
	Combusting #2 fuel oil	x				x												
	Combusting natural gas	x					x										x	
4	#2 Emergency Gen. 19.92 MMBtu/hr						x		N/A							25	x	
TEMP	One or two temporary boilers with low-NOx burners fired with diesel fuel with a sulfur content not to exceed 0.05% sulfur or with natural gas and with a combined maximum firing rate not to exceed 98 mmBtu/hr.	x					x		N/A							EP-T1 (plus EP-T2, if applicable)	x	

Note:

The "x" denotes the applicable conditions in Sections 3.3 - 3.7.

Some emissions have the capability of being recirculated back to the plant through air handling units or exhaust to atmosphere. The Emission Point ID numbers that end with A, B, C, D, or E identify these exhausts as the stacks which have this capability. These emission points are air dehumidifier relief vents through which emissions may be vented to the atmosphere instead of back into the plant.

Mikropul Fabric Filter (ADC 15042) listed in permit application as CD-62-851-1 is not a true control device. It serves as a material separator and its exhaust is routed through CD-48-851-1. Therefore, it is not listed on this permit as a control device.

An emission source may be operated without the concurrent operation of its associated control device only if the emissions are not considered regulated pollutants during this time (ie. particulate matter emissions being exhausted inside the facility instead of to atmosphere while the control device is not operational).

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 Rule 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 Rule 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

1.2 Operating Conditions Not Covered Under the Permit Shield (Continued)

Source ID	Source Description	Unshielded Operating Conditions	Effective Date

SECTION 2
FACILITY GENERAL ADMINISTRATIVE CONDITIONS

2.1 **General Provisions** [Subchapter 3A and Rule 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 Subchapter 3A 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 Rules 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** [Rules 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** [Rules 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** [Rule 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** [Rule 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** [Rule 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** [Rule 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 Rule 3Q .0523.

D. A permit shield shall not extend to minor permit modifications made under Rule 3Q .0515.

2.8 **Circumvention** [Rules 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** [Rules 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** [Rules 3D .0535(f) and 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 Rules 3D .0524, .1110 or .1111

Excess Emissions and Permit Deviations

1. If the source specific NSPS (3D .0524) or NESHAP (3D .1110 or .1111) defines "excess emissions", these shall be reported as prescribed in 3D .0524, .1110 or .1111.

2. If the source specific NSPS (3D .0524) or NESHAP (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 Rules 3D .0524, 1110 or .1111

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

The permittee shall report excess emissions greater than four hours in duration as prescribed in Rule 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 Rule 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 Rule 3D .0535(f)(3).

2. Excess Emissions Less than Four Hours in Duration and Deviations [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 Rule 3D .0535 (Rule 3D .0535(g) is ***Locally Enforceable Only***).

The permittee shall comply with all other requirements contained in Rule 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 paragraph C below 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** [Rules 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 Rule 3Q .0519 of the FCAQTC.

2.13 **Annual Emission Inventory Requirements** [Rule 3Q .0207]

The permittee shall report to the Director by June 30th of each year the actual emissions of each air pollutant listed in Rule 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)> [Rules 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** [Rule 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)> [Rule 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** [Rule 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** [Rule 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** [Rule 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** [Rule 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)> [Rule 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** [Rule 3D .0501(b)]

When requested by this Office for determining compliance with emission control standards, means shall be provided by the owner to allow periodic sampling and measuring of emission rates, including necessary ports, scaffolding and power to operate sampling equipment; and upon the request of this Office, data on rates of emissions shall be supplied by the permittee.

2.23 **General Emissions Testing and Reporting Requirements** [Rule 3Q .0508(i)(16)]

When required to conduct emissions testing under the terms of the permit:

A. The permittee shall submit a sampling protocol to this Office at least 30 days prior to the scheduled test date.

B. The permittee shall notify this Office of the specific test dates at least 10 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 approved by the Director or his delegate.

D. The permittee shall submit one copy of the test report to this Office. 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 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** [Rule 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** [Rule 3Q .0508(i)(5)]

The Director may reopen, modify, revoke and reissue, or terminate this permit for reasons specified in Rule 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** [Rule 3Q .0508(e) and Rule 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 Rule 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** [Rules 3Q .0517 and .0508(g)]

This permit shall be reopened and revised in accordance with Rule 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** [Rules 3Q .0514, .0515, .0516, .0517, .0523 and .0524]

A. Permit modifications may be subject to the requirements of Rules 3Q .0514, .0515, .0516 and .0524.

B. Changes made pursuant to Rules 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 Rule 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 Rule 3Q .0523(c).

2.30 **Insignificant Activities** [Rules 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** [Rules 3Q .0505 and .0507]
The permittee shall submit applications and required information in accordance with the provision of Rules 3Q .0505 and .0507.

2.32 **Property Rights** [Rule 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)** [Rule 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)** [Rule 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** [Rule 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** [Rule 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 Rule 3D .0202(b).

2.38 **Ambient Air Quality Standards** [Rule 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 Rule 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** [Rule 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 Rule 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** [Rule 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 3D .0540(f).

New Source Performance Standards (NSPS) General Provisions - Permit Conditions

Following are conditions found in the 40 CFR Part 60 NSPS General Provisions. The following conditions only apply to sources subject to a relevant standard of a subpart of 40 CFR Part 60 except when otherwise specified in a particular subpart or in a relevant standard.

2.41 **NSPS - General Provisions** <40 CFR 60 Subpart A> [Rule 3D .0524]

The permittee shall comply with all applicable requirements specified in the general provisions of the New Source Performance Standards (40 CFR 60 Subpart A) including but not limited to requirements concerning notifications, testing, monitoring, recordkeeping, modifications and reconstruction.

2.42 **NSPS - Good Air Pollution Control Practice** <40 CFR 60.11(d)> [Rule 3D .0524]

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

2.43 **NSPS - Circumvention** <40 CFR 60.12> [Rule 3D .0524]

Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard under 40 CFR 60. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

2.44 **NSPS - Maintain Records - Startup/Shutdown/Malfunction** <40 CFR 60.7(b)> [Rule 3D .0524]

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

2.45 **NSPS - Files Available for Inspection** <40 CFR 60.7(f)> [Rule 3D .0524]

The permittee shall maintain a file of all measurements, including, if applicable, performance test measurements and all other information required in 40 CFR 60 . This file shall be kept in a permanent form suitable for inspection and shall be retained at least two years following the date of such measurements, maintenance, reports, and records.

2.46 **NSPS - Performance Testing Facilities Provided by Permittee** <40 CFR 60.8(e)> [Rule 3D .0524]

For any performance testing, the permittee shall provide, or cause to be provided, performance testing facilities as follows:

A. Sampling ports adequate for the applicable test methods. 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) with safe access.

C. Utilities for sampling and testing equipment.

D. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For purposes of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

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.

2.47 **CAM - Proper Maintenance** <40 CFR 64.7(b)> [Rule 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.

2.48 **CAM - Continued Operation** <40 CFR 64.7(c)> [Rule 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.

2.49 **CAM - Response to Excursions or Exceedances** <40 CFR 64.7(d)> [Rule 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).

2.50 **CAM - Documentation of Need for Improved Monitoring** <40 CFR 64.7(e)> [Rule 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.

National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP) General Conditions - [Rule 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.

2.51 **NESHAP - General Provisions** <40 CFR 63 Subpart A> [Rule 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.

2.52 **NESHAP - Circumvention** <40 CFR 63.4(b)> [Rule 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.

2.53 **NESHAP - Maintain Records** <40 CFR 63.10(b)(2)> [Rule 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. all 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.

2.54 **NESHAP - Files Available for Inspection** <40 CFR 63.10(b)(1)> [Rule 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.

2.55 **NESHAP - Performance Testing Facilities Provided by Permittee**
<40 CFR 63.7(d)> [Rule 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.

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

A. Prevention of Significant Deterioration (PSD) [Rule 3D .0530]

1. Best Available Control Technology for Volatile Organic Compounds

The permittee shall not use ethyl alcohol as a vehicle for introducing flavoring agents into tobacco except for limited use (trace amounts) at ES-15 and for use in the production of former Lorillard cigarette brands. This work practice standard has been determined to be Best Available Control Technology for emissions of volatile organic compounds at this facility.

2. Monitoring/Recordkeeping/Reporting [Rule 3Q .0508(f)]

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 ethyl alcohol use limitations described above.

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. **[Rules 3D .0605 and 3D .1105]**

3. Testing [Rule 3D .0501(b)]

If emissions testing is required by this Office or the U.S. EPA, or the permittee submits emissions testing to this Office in support of a permit application, the permittee shall perform such testing in accordance with the appropriate U.S. EPA reference method(s) as approved by this Office. The permittee may request approval from this Office for an alternate test method or procedure in writing.

B. Limitation to Avoid Being Major for Hazardous Air Pollutants [Rule 3D .1111, 3Q .0317(a)(5)]

In order to remain classified as an area source for hazardous air pollutants under Rule 3D .1111 and thereby avoid regulatory requirements of future NESHAP regulations, the facility must comply with the following:

1. Emission Limits -

(a) Total HAP emissions from the facility shall not exceed 25 tons for any 12-month period.

(b) Total vinyl acetate emissions from the facility shall not exceed 10 tons for any 12-month period.

2. **Monitoring/Recordkeeping - [Rule 3Q .0508(f)]**
Compliance with the limit specified in condition 3.1(B)(1) shall be demonstrated by the following:

(a) the permittee shall maintain monthly records of all fuel and product throughputs necessary to calculate total HAP and vinyl acetate emissions using the formulas in Sections (b) and (c) below; and,

(b) total vinyl acetate emissions shall be calculated at the end of each month for the previous 12-month period using the following formula:

$$E = \sum_{i=1}^{12} \sum_{j=1}^{n} Wj * Cj$$

E = 12-MONTH VINYL ACETATE EMISSIONS (POUNDS).
Wj = MONTHLY USAGE IN POUNDS FOR GLUE j.
Cj = VINYL ACETATE WEIGHT CONTENT IN GLUE j.
i = MONTH 1 THROUGH 12.

(c) If the vinyl acetate emissions exceed 8 tons/year on any monthly calculation, the 12-month total HAP emissions must be calculated for the same 12-month period using the following formula:

$$E = \sum_{i=1}^{12} 0.021*P1i + 0.012*P2i + 0.039*P14i + 0.040*P15i + 0.067*P21i + 0.00184*PNGi + 0.14*PFOi + 1660 + Vi$$

E = 12-MONTH TOTAL HAP EMISSIONS (POUNDS).
P1(i) = MONTHLY PRODUCT THROUGHPUT (TONS) FOR ES-01 IN MONTH i.
P2(i) = MONTHLY PRODUCT THROUGHPUT (TONS) FOR ES-02 IN MONTH i.
P14(i) = MONTHLY PRODUCT THROUGHPUT (TONS) FOR ES-14 IN MONTH i.
P15(i) = MONTHLY PRODUCT THROUGHPUT (TONS) FOR ES-15 IN MONTH i.
P21(i) = MONTHLY PRODUCT THROUGHPUT (TONS) FOR ES-21 IN MONTH i.
PNG(i) = MONTHLY NATURAL GAS USAGES (MMBTU) FOR ES-854-8-(1,2,3) IN MONTH i.
PFO(i) = MONTHLY #2 FUEL OIL USAGES (1000 GALLONS) FOR ES-854-8-(1,2,3) IN MONTH i.
1660 = THE POTENTIAL HAP EMISSIONS (lbs) FROM ES-854-8-4, ES-(18,19,F17)-851-1 and ES-(1-3, 13)-851-9 (EXCLUDING VINYL ACETATE).
Vi = MONTHLY VINYL ACETATE EMISSIONS (POUNDS) CALCULATED MONTHLY FOR ES-(18, 19, F16)-851-1 and ES-(5, 11)-851-9 IN SECTION 3.1(B)(2)(b) ABOVE.
i = MONTHS 1 THROUGH 12.

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

The permittee shall submit a semiannual report to this Office containing the following information:

(a) total vinyl acetate emissions (tons) emitted each month and for each 12-month period ending on each month using the formula in Section 3.1(B)(2)(b) above; and,

(b) if the vinyl acetate emissions exceed 8 tons for any 12-month period, the monthly and total 12-month emissions must be reported for the same 12-month period using the formula in Section 3.1(B)(2)(c) above.

(c) 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.

3.2 Source Specific Emission Limits

A. ES-1-851-1 - Prevention of Significant Deterioration [Rule 3D .0530 and 3Q .0317]

1. **Standard/Operation requirements for particulate matter and VOCs for ES-1 (851-1)**

   Annual VOC emissions shall not exceed 40 tons and PM annual emissions shall not exceed 25 tons. Compliance with these emission limits are demonstrated by limiting the throughput. Combined throughput rates shall not exceed 216,705 tons of tobacco (dry weight) per monthly rolling 12-month total in order to remain below the significant levels established for exemption from further regulation under Prevention of Significant Deterioration for particulate matter and VOC emissions.

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

   The permittee shall maintain monthly and monthly rolling 12-month total records of tobacco throughput rates (dry weight) for ES-01. These records shall be maintained at the facility for a period of five years following the date of such record and shall be made available upon request to this Office.

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

   The permittee shall submit a report of the monitoring requirements to this Office by January 30th and July 30th for the preceding six-month period.

B. Prevention of Significant Deterioration:

ES-18-851-1, ES-19-851-1, and F-16-851-1 [Rule 3D .0530 and 3Q .0317]

1. **Emission limit for volatile organic compounds (VOC)**

   The combined emissions of VOC from these sources shall be limited to no more than 100.1 tons in any consecutive 12-month period.

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

   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 limit described above. At a minimum these records shall include data sufficient to calculate the combined VOC emission rate from these emission sources on a monthly and monthly rolling 12-month total basis. The permittee shall maintain monthly and monthly rolling 12-month total records of VOC emissions from these emission sources. These records shall be maintained at the facility for a period of five years following the date of such record and shall be made available upon request to this Office.

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

   The monthly and monthly 12-month total records described in the paragraph above 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.

C. **Prevention of Significant Deterioration:**

ES-25-851-1, ES-26-851-1, and ES-27-851-1 [Rule 3D .0530 and 3Q .0317(b)]

1. **Emission limit for volatile organic compounds (VOC)**

The combined emissions of VOC from tobacco processing in

ES-25-851-1: Small Batch Receiving and Blending
ES-26-851-1: Small Batch Casing and Drying
ES-27-851-1: Small Batch Casing and Cutting

shall not exceed 39.5 tons in any consecutive 12-month period.

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

Compliance with the limit specified in condition 3.2(C)(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 + 14.2) / 2000 = monthly VOC emissions (tons)

where:

A = monthly dry tons of tobacco processed in Small Batch Receiving and Blending (ES-25-851-1);

B = monthly dry tons of tobacco processed in Small Batch Casing and Drying (ES-26-851-1);

C = monthly dry tons of tobacco processed in Small Batch Casing and Cutting (ES-27-851-1);

D = monthly pounds of ethanol applied in Small Batch Casing and Cutting (ES-27-851-1)

14.2 = monthly potential combined pounds of VOC from fuel combustion (associated with production in ES-25-851-1, ES-26-851-1 and ES-27-851-1) in the facility's boilers (ES-1-854-8, ES-2-854-8, ES-3-854-8, and ES-TEMP-854-8) and the thermal incinerator (CD-RTO-851-1).

W = VOC emission factor (lb VOC/dry ton tobacco) for tobacco processed in Small Batch Receiving and Blending (ES-25-851-1), from the permit application for the 00745-TV-39 permit;

X = VOC emission factor (lb VOC/dry ton tobacco) for tobacco processed in Small Batch Casing and Drying (ES-26-851-1), from the permit application for the 00745-TV-39 permit;

Y = VOC emission factor (lb VOC/dry ton tobacco) for tobacco processed in Small Batch Casing and Cutting (ES-27-851-1), from the permit application for the 00745-TV-39 permit;

Z = VOC emission factor (lb VOC/lb ethanol applied) ethanol applied in Small Batch Casing and Cutting (ES-27-851-1) from the permit application for the 00745-TV-39 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 the limit specified in condition 3.2(C)(1).

3. **Reporting - [Rule 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 [Rule 3D .0503]

1. Particulate allowable emission rate [Rule 3D .0503]

(a) **Building 854-8 Boilers: ES-854-8-1, ES-854-8-2 and ES-854-8-3** - 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 Rule 3D .0503(c,e).

Emission Source ID	Value of Q	Particulate Emission Limit (E)
ES-854-8-1	1256 million Btu/hr	0.17 lb/million Btu
ES-854-8-2	1256 million Btu/hr	0.17 lb/million Btu
ES-854-8-3	1256 million Btu/hr	0.17 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 Rule 3D .0503(c,e).

2. Monitoring/Recordkeeping/Reporting requirement [Rule 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 are natural gas, No. 2 fuel oil, or diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight which 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. Particulates from Industrial Processes

1. Control of Particulates from Miscellaneous Industrial Processes - [Rule 3D .0515]

Emissions for particulate matter from emission sources designated in Section 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. **Control of Particulates from Processes Subject to BACT - [Rule 3D .0530]**

Total particulate matter emissions from emission sources designated in Section 1.1 shall be controlled by a properly operated and maintained fabric filters or wet scrubbers where such controls are present. This control strategy has been determined to be Best Available Control Technology.

3.4 Sulfur Dioxide Emission Limits

A. NSPS for Sulfur Dioxide [Rule 3D .0524]

1. **NSPS-Sulfur dioxide allowable emission rate [40 CFR 60.42c(d, i)] [Rule 3D .0524] -** Emissions of sulfur dioxide from emission sources designated in Section 1.1 shall not exceed 0.50 lbs. per million Btu heat input. Compliance with this standard shall be continuously demonstrated by combusting only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.5% by weight, as certified by the fuel supplier for this facility. This standard and the fuel oil sulfur limit apply at all times, including periods of startup, shutdown, and malfunction.

2. **Monitoring [Rule 3Q .0308(a)(1)]** - Approved fuels for the boilers are natural gas and No. 2 fuel oil. Any change in fuel type for the boilers must receive prior approval from the Office of Environmental Assistance and Protection.

3. **Recordkeeping requirement [40 CFR 60.48c(f), (g) and (i)] [Rule 3D .0524]** - The permittee shall maintain the following records for a period of five years following the date of such record.

   (a) For each shipment of No. 2 fuel oil, the permittee shall obtain and maintain a written statement from the fuel supplier that certifies that all the fuel oil included in the shipment complies with the American Society for Testing and Materials (ASTM) specifications for No. 2 fuel oil. This written statement shall also include the name of the company supplying the fuel.

   (b) The permittee shall record and maintain records of the amount of No. 2 fuel oil and the amount of natural gas combusted during the reporting period.

4. **Reporting requirement [40 CFR 60.48c(e), (g) and (j)] [Rule 3D .0524] -** The permittee shall submit a semiannual report to this Office no later than January 30th for the period July through December, and no later than July 30th for the period January through June. Each report shall include the following items:

   (a) The calendar dates covered in the reporting period.

   (b) The amount of fuel oil and the amount of natural gas combusted during the reporting period. If no fuel oil or natural gas was combusted during the reporting period, a written statement signed by the permittee certifying that fact shall be provided to satisfy this reporting requirement for the given fuel.

   (c) If fuel oil was combusted during the reporting period, a written statement signed by the permittee certifying that all of the fuel oil combusted during the reporting period is represented by the fuel supplier certifications submitted for the current reporting period or by previously submitted fuel supplier certifications.

B. **Sulfur Dioxide Emissions from Combustion Sources [Rule 3D .0516]**

1. **Standard [Rule 3D .0516] -** Emissions of sulfur dioxide from emission sources designated in Section 1.1 shall not exceed 2.3 lb/MMBtu input.

2. No monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the above standard because the fuels being combusted are natural gas, No. 2 fuel oil, diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight, or propane which 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. Non-NSPS

1. **Standard [Rule 3D .0521(d)]** - Visible emissions from emission sources designated in Section 1.1 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.
2. No monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the above standard for all fuel combustion sources because the fuels being combusted are natural gas, No. 2 fuel oil, or diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight which 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. NSPS Sources

1. **Standard [40 CFR 60.43c(c) (Subpart Dc)] [Rule 3D .0524]** - Visible emissions from emission sources designated in Section 1.1 shall not exceed 20% opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27% opacity. This standard shall apply at all times, except during periods of startup, shutdown, or malfunction.
2. **Monitoring/Recordkeeping/Reporting requirement [Rule 3Q .0508(f)] -** No monitoring/recordkeeping/reporting is required for the specific purpose of demonstrating compliance with the above standard for all fuel combustion sources because the fuels being combusted are natural gas and No. 2 fuel oil which 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.
3. **Monitoring/Recordkeeping/Reporting requirement [Rule 3Q .0508(f)]** - For all non-fuel burners, Section 3.6 satisfies this requirement.

3.6 PM - Periodic Monitoring/Recordkeeping/Reporting

A. Non-CAM [Rule 3Q .0508(f)]

1. **Periodic monitoring for equipment controlled by fabric filters** - Particulate matter emissions from emission sources designated in Section 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 annual internal inspection of the fabric filters' structural integrity and operation shall be performed.

2. **Periodic monitoring for equipment controlled by wet scrubbers** - Particulate matter emissions from emission sources designated in Section 1.1 shall be controlled during all periods of operation. To ensure that optimum control efficiency is maintained, the permittee shall perform inspections and preventative maintenance in a manner consistent with good practice for minimizing emissions. The inspection and maintenance requirement must include the following:

   (a) an annual visual internal inspection of the wet scrubbers' structural integrity and operation;

   (b) the permittee shall maintain and operate low water pressure switches for each wet scrubber and an interlock system that shuts the process down during a low-flow condition.

3. **Recordkeeping requirement** - A log shall be maintained on-site with the dates of inspection and maintenance activities, inspection results, and maintenance performed.

4. **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) [Rule 3D .0614, 40 CFR Part 64]

1. **Monitoring - Fabric Filter Inspection & Maintenance** - To ensure the optimum efficiency of the control devices as designated in Section 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 annual visual internal inspection of the fabric filters’ structural integrity and operation.

   (b) Upon evidence of 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 shall be defined as failure to perform inspections and preventative maintenance on at least an annual basis or failure to perform repairs to correct abnormal occurrences in a timely manner.

2. **Monitoring - Fume Incinerator [Rule 3D .0614, 40 CFR Part 64]**

To ensure the optimum efficiency of the fume incinerator (CD-130) the permittee shall perform the following monitoring and recordkeeping activities:

(a) all waste gas and particulate matter emissions resulting from the sublimation loop shall be vented to the fume incinerator at all times the process is in operation. At no time shall this waste stream bypass the incinerator except for periods of malfunction/breakdown; and

(b) the incinerator combustion chamber shall operate at an air temperature of no less than 650 F and no more than 1750 F; and

(c) the incinerator shall be equipped with a temperature gauge situated to monitor the air temperature in the combustion chamber. The temperature gauge shall be checked and calibrated as required and in accordance with the manufacturer's written instruction; and

(d) the temperature shall be monitored continuously while the process is operating and averaged every 15 minutes to ensure proper combustion chamber operation. The temperature data shall be collected by the incinerator operating system and kept in a log (written or electronic form), maintained on site and made available for inspection upon request by this Office; and

(e) an excursion shall be defined as an incinerator combustion chamber temperature reading below 650 F or above 1750 F. Upon detection, the process shall be shut down and an investigation into the cause of the excursion shall be initiated; and

(f) the cause of any excursion, results of the investigation and any corrective action taken, as well as other supporting information, shall be documented in a log (written or electronic form), maintained on site and made available for inspection upon request by this Office. The log shall include the date of the investigation, the inspectors name and any corrective actions performed as a result of the investigation.

3. **Monitoring - Thermal Incinerator [Rule 3D .0614, 40 CFR Part 64]**

To ensure the optimum efficiency of the thermal incinerator (CD-RTO-851-1), the permittee shall perform the following operational, monitoring and recordkeeping activities:

(a) the incinerator combustion chamber shall operate at an air temperature of no less than 1500 ºF unless a revised minimum temperature has been established in accordance with condition (f) below;

(b) the incinerator shall be equipped with a temperature gauge to monitor the air temperature in the combustion chamber. The temperature gauge shall be checked and calibrated in accordance with the manufacturer's written instruction;

(c) the temperature shall be monitored continuously while any of the associated processes are operating and recorded on a 15-minute block average basis with four 15-minute block averages each hour to ensure proper combustion chamber operation. One-hour and 3-hour block averages of the incinerator combustion chamber temperature shall be calculated and recorded, based on the associated 15-minute block averages. The temperature data shall be collected by the incinerator operating system and kept in a log (written or electronic form), maintained on site and made available for inspection upon request by this Office;

(d) upon detection of a 1-hour block average combustion chamber temperature below 1500 ºF or, if applicable, a revised minimum temperature established during perfomance testing, the process shall be shut down and an investigation into the cause of the low temperature shall be initiated;

(e) the cause of any low 1-hour block average combustion chamber temperature event, results of the investigation and any corrective action taken, as well as other supporting information, shall be documented in a log (written or electronic form), maintained on site and made available for inspection upon request by this Office. The log shall include the date of the investigation, the inspectors name and any corrective actions performed as a result of the investigation.

(f) Performance testing may be conducted with the thermal incinerator combustion chamber temperature operating at less than 1500 ºF in order to demonstrate that the thermal incinerator achieves at least 98% destruction efficiency and is capable of achieving the requirements of Part II, condition 3(D)(2) at the lower temperature. The testing shall be conducted in accordance with Section 3D .2600 of the FCAQTC. For the performance testing, the following conditions apply: [Rule 3D .0614 and Section 3D .2600]

(i) Obligation – The permittee shall perform any required test at his own expense. [Rule 3D .2602(a)].

(ii) Means to allow sampling and measurement – 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. [Rule 3D .2602(e)]

(iii) Test methods – Testing shall be conducted in accordance with FCAQTC Section 3D .2600 except as may be otherwise required in FCAQTC Rules 3D .0524, 3D .0912, 3D .1110, 3D .1111, 3D .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. [Rules 3D .2601, .2602(i) and 3Q .0308(a)(1)]

(iv) Process rate – The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. [Rule 3D .2602(g)]

(v) Protocol – 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. [Rule 3D .2602(c)]

(vi) Notification – The permittee shall notify this Office at least 15 days before beginning the test so that a representative of this Office may be present to observe the test. [Rule 3D .2602(d)]

(vii) Emissions test report – The final air emission test report shall be submitted 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. Unless otherwise specified in the applicable permit or during the course of the protocol review, the results of the tests shall be expressed in the same units as the emission limits given in the rule for which compliance is being determined. [Rule 3D .2602(f) & (h)]

4. **Monitoring-Visual Stack Observations** - In order to demonstrate compliance with the CAM plan for control devices identified in Section 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 8:00:00 AM and ends at 7:59:59 AM the following calendar day. Visible emissions from each stack 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.

(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 visual 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.

5. **Recordkeeping** - Records of the monitoring required under 3.6(B)(1-5) 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) Maintenance of fume incinerator- the cause of any excursion; results of the investigation and any corrective action taken; the date of any investigation; the inspectors name; any corrective actions performed as a result of the investigation.

(c) Maintenance of thermal incinerator- the cause of any excursion; results of the investigation and any corrective action taken; the date of any investigation; the inspectors name; any corrective actions performed as a result of the investigation.

(d) 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.

6. **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 [Rule 3D .0958]

A. **Work practice standards [Rule 3D .0958(c) and 3Q .0508(i)(16)]** - For equipment designated in Section 1.1 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. **Monitoring/Recordkeeping requirements [Rule 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.

C. **Alternative VOC work practice monitoring/recordkeeping requirements for ES-(18, 19, F-13, F-16)-851-1 and ES-(5, 6)-851-9 [Rule 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.

D. **Reporting requirements [Rule 3D .0508(f)(2)]** - The permittee shall submit a summary report of the monitoring requirements specified in condition 3.7(B) and (C) 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.

3.8 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ)

Specific emission source permit conditions for ES-854-8-4:
(Emergency Generator, 3,210 HP, Diesel-fired, 19.92 mmBtu/hr)

FCAQTC Rule 3D .1111 "National Emission Standards for Hazardous Air Pollutants" - For **ES-854-8-4**, the permittee shall comply with all applicable provisions, including the maintenance and recordkeeping requirements contained in FCAQTC Rule 3D .1111, as promulgated in 40 CFR 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)", including Subpart A "General Provisions." The permittee shall comply with the definition of emergency stationary RICE in 40 CFR 63.6675 and the following stationary RICE provisions. **<40 CFR Part 63, Subpart ZZZZ> [Rule 3D .1111]**

A. **Maintenance and Work Practices** – Pursuant to 40 CFR 63.6603(a), 63.6625(e), (f), and (h) and 63.6640(f) the permittee shall comply with the following:

1. Change the oil and filter every 500 hours of operation or annually, whichever comes first. The permittee has the option to utilize an oil analysis program as provided in 40 CFR 63.6625(i) in order to extend the specified oil change requirement.
2. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
4. Operate and maintain the engine and control device (if any) according to the manufacturer's emission related written instructions or maintenance plan developed by the permittee that minimizes emissions from the engine to the extent practicable.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
7. If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedules required in Sections A.1. through 3., above, or if performing the management practice on the required schedules would otherwise pose an unacceptable risk under federal, state or local law, the management practices can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice shall be performed as soon as possible after the emergency has ended or the unacceptable risk has abated. The Permittee shall report any failure to perform the management practice on the schedule required and the federal, state, or local law under which the risk was deemed unacceptable.

8. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to this Office which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

B. **Operation –** The permittee shall operate the emergency generator in accordance with 40 CFR 63. 6640(f), and the following conditions. If the permittee fails to operate the emergency generator according to these requirements, the emergency generator will not be considered an emergency engine and must meet all requirements for non-emergency engines.

1. There is no time limit on the use of the emergency generator in emergency situations.

2. The permittee may operate the engine for any combination of the purposes specified in Sections B.1.a. through b. below for a maximum of 100 hours per calendar year.

   a. The engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission authority or equivalent balancing authority and transmission operator, or the insurance company associated with the engine The permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.

   b. The engine may operate for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergency or other authorized entity as determined by the Reliability Coordinator has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP– 002–3.

   c. The engine may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3. Pursuant to 40 CFR 63.6640(f)(4), the engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Section B.2. Except as provided in Sections a. and b. below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

   a. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for the facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

   b. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if ALL of the following conditions are met:

      i. The engine is dispatched by the local balancing authority or local transmission or distribution system operator.

      ii. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

      iii. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

      iv. The power is provided only to the facility itself or to support the local transmission and distribution system.

      v. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

4. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to this Office which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

C. **Fuel Requirements** – Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, an emergency engine that operates for the purposes specified in Section B.3.b. above or operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Sections B.2.b. or c. shall use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Any existing diesel fuel purchased prior to January 1, 2015 may be used until depleted. The diesel fuel requirements of 40 CFR 80.510(b) are shown below:

Sulfur content	15 ppm maximum.
Cetane index or	A minimum cetane index of 40; or
Aromatic content	A maximum aromatic content of 35 volume percent.

D. **Recordkeeping** – Pursuant to 40 CFR 63.6655(d), (e) and (f), the permittee shall keep records for at least five (5) years showing:

1. The engine was operated and maintained according to the manufacturer's emission related operation and maintenance instructions or the permittee's maintenance plan which must provide for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
2. If applicable, the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine.
3. The hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for purposes specified in Sections B.2.b. or c., or B.3.b. above, then the permittee shall keep records of the notification of the emergency situation, and the date, start time and end time of the engine operation for these purposes.

E. **Reporting** – Pursuant to 40 CFR 63.6650(h), if the engine operates for the purposes specified in Section B.3.b. above, or operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Sections B.2.b. or c. above, the permittee shall submit an annual report to this Office. The first annual report shall be submitted no later than March 31, 2016 and cover calendar year 2015. Subsequent annual reports shall be submitted by March 31 of each year and cover the previous calendar year.

The annual report must also be submitted electronically to EPA through the specific NESHAP Subpart ZZZZ reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX). However, if the reporting form specific to NESHAP Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report shall be submitted to EPA at the appropriate address listed in 40 CFR 63.13.

EPA Region IV
Director, Air, Pesticides and Toxics Management Division
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104

The annual report shall contain the following information:

1. Company name and address where the engine is located.
2. Date of the report and beginning and ending dates of the reporting period.
3. Engine site rating and model year for each engine.
4. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
5. Hours operated for the purposes specified in Sections B.2.b or c. above, including the date, start time, and end time for engine operation.
6. Number of hours the engine is contractually obligated to be available for the purposes specified in Sections B.2.b or c. above.
7. Hours spent for operation for the purpose specified in Section B.3.b. above including the date, start time, and end time for engine operation. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
8. If there were no deviations from the fuel requirements in Section C. above that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
9. If there were deviations from the fuel requirements in Section C. that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

3.9 **Specific emission source permit condition for the following three boilers:**

ES-854-8-1: Tobaccoville Boiler #5
ES-854-8-2: Tobaccoville Boiler #6
ES-854-8-3: Tobaccoville Boiler #7

Limitation on the use of No. 2 fuel oil - Except as provided in condition **3.10**, to avoid the applicability of 3D .1111, 40 CFR Part 63, Subpart JJJJJJ, 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 is combusted, the amount of No. 2 fuel oil combusted on each date, and the purpose for combusting No. 2 fuel oil on each date. **[Rules 3Q .0308(a)(1) and .0317]**

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

Specific emission source permit conditions for the following three boilers:

ES-854-8-1: Tobaccoville Boiler #5
ES-854-8-2: Tobaccoville Boiler #6
ES-854-8-3: Tobaccoville Boiler #7

Upon start-up for 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> [Rule 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 63.1225(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 Subchapter 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** - 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. [Sections 3D. 1100 and 3Q. 0700]

2. **De minimis limits** - Total facility-wide emissions of the following pollutants shall not exceed their respective de minimis emissions limits as shown in Rule 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 Section 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. [Section 3Q .0700]

Pollutant (CAS Number)	De minimis level
acetaldehyde (75-07-0)	6.8 lb/hr
acrolein (107-02-8)	0.02 lb hr
benzo(a)pyrene (50-32-8)	2.2 lb/yr
1,3-butadiene (106-99-0)	11 lb/yr
carbon disulfide (75-15-0)	3.9 lb/day
chloroform (67-66-3)	290 lb/yr
cresol (1319-77-3)	0.56 lb/hr
p-dichlorobenzene (106-46-7)	16.8 lb/hr
1,4-dioxane (123-91-1)	12 lb/day
n-hexane (110-54-3)	23 lb/day
manganese and compounds	0.63 lb/day

mercury, vapor (7439-97-6)	0.013 lb/day
methyl chloroform (71-55-6)	250 lb/day
nickel metal (7440-02-0)	0.13 lb/day
methyl ethyl ketone (78-93-3)	78 lb/day and 22.4 lb/hr
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** - Combined emissions of the following TAPs from all sources not exempted by Rule 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 Rule 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: [Section 3D .1100]

Pollutant (CAS Number)	Maximum facility-wide emission rate	AERMOD EPA version	Date of model output file
acetic acid (64-19-7)	438.30 lb/hour	16216r	04/23/2018
ammonia (7664-41-7)	349.31 lb/hour	16216r	04/23/2018
arsenic and inorganic arsenic compounds	73.47 lb/year	16216r	04/23/2018
benzene (71-43-2)	9,119 lb/year	16216r	04/23/2018
beryllium (7440-41-7)	142.3 lb/year	16216r	04/23/2018
cadmium (7440-43-9)	203.5 lb/year	16216r	04/23/2018
ethylene oxide (75-21-8)	1,029 lb/year	16216r	04/23/2018
fluorides	3.80 lb/hour and 91.15 lb/day	16216r	04/23/2018
formaldehyde (50-00-0)	20.81 lb/hour	16216r	04/23/2018
hydrogen chloride (7647-01-1)	236.71 lb/hour	16216r	04/23/2018

4. **Monitoring/recordkeeping/reporting requirement** -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 two 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. [Rules 3D .0605 and 3D .1105]

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. Process Modification Project Equipment to Manufacture Former Lorillard Cigarette Brands

Emission Source ID #	Emission Source Description	Control Device Description
Building 851-1		
ES-22-851-1 (TV-33 & TV-35)	New Conveyors for ES-1, ES-10, and ES-21	Fabric Filters: CD-X(3,4,6)-851-1
ES-23-851-1 (TV-33)	Ethanol-Based Top Dressing Materials	Thermal Incinerator: CD-RTO-851-1
ES-19-851-1 (TV-33)	Cigarette Making	Fabric Filters: CD-(4,5,8,9,11,12,24,25,28, 29,31,32)-851-1; and CD-(1,2,3,6,7,10,21,22,23,26, 27,30,131)-851-1 (unmodified)
ES-18-851-1 (TV-33)	Filter Making	Fabric Filters: CD-(113-116)-851-1 (unmodified)
F-13-851-1 (TV-33 & TV-35)	Casing Preparation Area	N/A (Fugitive)
F-16-851-1 (TV-33)	Packing Equipment	N/A (Fugitive)
ES-14-851-1 (TV-35)	Ethanol Use in Existing Casing Drums	Wet Scrubbers: CD-(128-129)-851-1
ES-15-851-1 (TV-35)	Propylene Glycol Use in Existing Casing Drums and Hoods	Wet Scrubbers: CD-(119-122)-851-1
ES-15-851-1 (TV-35)	Propylene Glycol Use in Existing Steam Flotation Chambers, Dryers, Pneumatic Separators and Hoods	Wet Scrubbers: CD-(123-126)-851-1

B. ES-TEMP Temporary Boiler Project:

Emission Source ID #	Emission Source Description	Emission Point ID No.
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 or with natural gas and with a combined maximum firing rate not to exceed 98 mmBtu/hr. Uncontrolled.	EP-T1 (plus EP-T2, if applicable)

C. Make and Pack Modernization Project

Emission Source ID #	Emission Source Description	Control Devices
Building 851-1		
ES-18-851-1	Filter Making	Four Fabric Filters: CD-(113-116)-851-1
ES-19-851-1	Cigarette Making	Twenty-Five Fabric Filters: CD-(1-12)-851-1, CD-(21-32)-851-1, and CD-131-851-1
F-16-851-1	Packing Equipment	Uncontrolled

D. New G7 Cutting Project

Emission Source ID #	Emission Source Description	Control Devices
Building 851-1		
ES-24-851-1	Box Filling	Fabric Filter: CD-19-851-1

E. Small Batch Project

Emission Source ID #	Emission Source Description	Control Devices
Building 851-1		
ES-25-851-1	Small Batch Receiving and Blending	Wet Scrubber: CD-132-851-1
ES-26-851-1	Small Batch Casing and Drying	Wet Scrubber: CD-132-851-1 Fabric Filter: CD-133-851-1
ES-27-851-1	Small Batch Casing and Cutting	Wet Scrubbers: CD-(122, 126, 53)-851-1 Fabric Filters: CD-(60, 17, 74)-851-1 Thermal Incineraor: CD-RTO-851-1

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 Forsyth County Air Quality Control Ordinance and Technical Code Subchapter 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. If a provision listed in Part II conflicts with a provision of Part I, the permittee shall comply with the provision listed in Part II.

C. ***Process Modification Project (as described in the application) to manufacture former Lorillard cigarette brands at the Tobaccoville facility.***

ES-22-851-1: New Conveyors for ES-1, ES-10, and ES-21

Fabric Filters: CD-X(3,4,6)-851-1

ES-23-851-1: Ethanol-Based Top Dressing Materials

Thermal Incinerator: CD-RTO-851-1

ES-19-851-1: Cigarette Making

Fabric Filters: CD-(4,5,8,9,11,12,24,25,28,29,31,32)-851-1

Fabric Filters: CD-(1,2,3,6,7,10,21,22,23,26,27,30,131)-851-1 (unmodified)

ES-18-851-1: Filter Making

Fabric Filters: CD-(113-116)-851-1 (unmodified)

F-13-851-1: Casing Preparation Area, (Fugitive)

F-16-851-1: Packing Equipment, (Fugitive)

ES-14-851-1: Ethanol Use in Existing Casing Drums

Wet Scrubbers: CD-(128-129)-851-1

ES-15-851-1: Propylene Glycol Use in Existing Casing Drums and Hoods

Wet Scrubbers: CD-(119-122)-851-1

ES-15-851-1: Propylene Glycol Use in Existing Steam Flotation Chambers, Dryers, Pneumatic Separators and Hoods

Wet Scrubbers: CD-(123-126)-851-1

D. **Prevention of Significant Deterioration (PSD). Best Available Control Technology (BACT) for Volatile Organic Compounds (VOCs) [Rule 3D .0530]**

1. **New Conveyor Systems (Part of ES-22)** - The permittee shall limit the uncontrolled hourly VOC emission rate from the following conveyor systems to no more than:

   0.60 lb/hr for the new conveyor system serving ES-1,

   0.20 lb/hr for the new conveyor system serving ES-10, and

   0.05 lb/hr for the new conveyor system serving ES-21.

   Monitoring/recordkeeping/reporting requirement - 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 emisison rates described above. At a minimum these records shall include data sufficient to calculate the applicable hourly averaged uncontrolled VOC emission rates.

   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. **[Rules 3D .0605 and 3D .1105]**

2. **Manufacture of former Lorillard products using ethanol-based top dressing materials in the top dressing drums and downstream conveyors (ES-23)** - The permittee shall limit the VOC emission rate from this emission source to no more than 0.54 lb VOC per ton of wet tobacco and at least 98% destruction efficiency of the thermal incinerator. Compliance with these limits shall be based upon the 3-hour block average of the incinerator combustion chamber temperature.

   The permitteee shall control the VOC emissions by means of a thermal incinerator (CD-RTO-851-1). To ensure the optimum efficiency of the thermal incinerator, the permittee shall perform applicable operational, monitoring and recordkeeping activities as stated in Part I, condition 3.6(B)(3-6).

3. **Cigarette Production Floor Fugitives (ES-18, ES-19, F-16, ES-23)** - The permittee shall limit the combined uncontrolled VOC emission rate from these emission sources to no more than 271.81 tons per monthly rolling 12-month total.

   Monitoring/recordkeeping/reporting requirement - 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 emisison rate described above. At a minimum these records shall include data sufficient to calculate the combined uncontrolled VOC emission rate from these emission sources on a monthly and monthly rolling 12-month total basis.

   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. **[Rules 3D .0605 and 3D .1105]**

4. **ES-15 Casing Drums: Propylene Glycol-based Casing Materials (Part of ES-22)** - The permittee shall limit the uncontrolled VOC emission rate from the casings drums while manufacturing former Lorillard products to no more than 13.35 lb/hr and 3.7 tons per monthly rolling 12-month total.

   Monitoring/recordkeeping/reporting requirement - 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 emisison rate described above. At a minimum these records shall include data sufficient to calculate the applicable hourly averaged uncontrolled VOC emission rate.

   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. **[Rules 3D .0605 and 3D .1105]**

5. **ES-15 Flotation Chambers, Dryers, and Separators: Propylene Glycol-based Casing Materials (Part of ES-22)** - The permittee shall limit the uncontrolled VOC emission rate from the flotation chambers, dryers, and separators while manufacturing former Lorillard products to no more than 219.2 lb/hr and 97.5 tons per monthly rolling 12-month total.

   Monitoring/recordkeeping/reporting requirement - 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 emisison rate described above. At a minimum these records shall include data sufficient to calculate the applicable hourly averaged uncontrolled VOC emission rate.

   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. **[Rules 3D .0605 and 3D .1105]**

6. **ES-14 Casing Drums: Ethanol-based Casing Materials (Part of ES-23)** - The permittee shall limit the uncontrolled VOC emission rate from the casings drums while manufacturing former Lorillard products to no more than 1.2 lb VOC per ton wet tobacco.

Monitoring/recordkeeping/reporting requirement - 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 emisison rate described above. At a minimum these records shall include data sufficient to calculate the applicable hourly averaged uncontrolled VOC emission rate and wet tobacco process rate.

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. **[Rules 3D .0605 and 3D .1105]**

7. **F-13 Casing Preparation Area Mix Tanks and Day Tanks** - The permittee shall limit the uncontrolled VOC emission rate from the casing prepartion area mix tanks and day tanks as described below:

   Casing preparation area mix tanks (Part of ES-22): No more than 0.0054 tons propylene glycol per monthly rolling 12-month total.

   Casing preparation area day tanks (Part of ES--22): No more than 0.0054 tons propylene glycol per monthly rolling 12-month total.

   Casing preparation area mix tanks (Part of ES-23): No more than 0.0049 tons ethanol per monthly rolling 12-month total.

   Casing preparation area day tanks (part of ES-23): No more than 0.0049 tons ethanol per monthly rolling 12-month total.

   Monitoring/recordkeeping/reporting requirement - 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 emisison rates described above. At a minimum these records shall include data sufficient to calculate the applicable hourly averaged uncontrolled VOC emission rates.

   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. **[Rules 3D .0605 and 3D .1105]**

E. **PM - Monitoring/Recordkeeping/Reporting for Sources Listed in Part II, Section 1.**

1. **Monitoring for equipment controlled by fabric filters: ES-18-851-1, ES-19-851-1, ES-22-851-1** - Particulate matter emissions from emission sources designated in Part II, Section 1 shall be controlled during all periods of operation by the applicable fabric filters designated in Part II, Section 1. 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 annual internal inspection of the fabric filters' structural integrity and operation shall be performed.

2. **Monitoring for equipment controlled by wet scrubbers: ES-14-851-1 & ES-15-851-1** - Particulate matter emissions from emission sources designated in Part II, Section 1 shall be controlled during all periods of operation by the applicable wet scrubbers designated in Part II, Section 1. To ensure that optimum control efficiency is maintained, the permittee shall perform inspections and preventative maintenance in a manner consistent with good practice for minimizing emissions. The inspection and maintenance requirement must include the following:

   (a) an annual visual internal inspection of the wet scrubbers' structural integrity and operation;

   (b) the permittee shall maintain and operate low water pressure switches for each wet scrubber and an interlock system that shuts the process down during a low-flow condition.

3. 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.

4. 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. **[Rules 3D .0605 and 3D .1105]**

F. **Particulate Emissions from Miscellaneous Industrial Processes for Sources Listed in Part II, Section 1 - [Rule 3D .0515]**

Emissions for particulate matter from emission sources designated in Part II, Section 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.

G. **Sulfur Dioxide Emissions for Combustion Sources Listed in Part II, Section 1 - [Rule 3D .0516]**

Emissions of sulfur dioxide from the thermal incinerator (CD-X7-851-1) designated in Part II, Section 1 shall not exceed 2.3 lb/MMBtu input. Monitoring and recordkeeping is not required to ensure compliance with this standard.

H. **Visible Emissions for Sources Listed in Part II, Section 1 - [Rule 3D .0521(d)]**

Visible emissions from emission sources designated in Part II, Section 1 shall not exceed 20% opacity when averaged over a six-minute period with the following exceptions:

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

Monitoring and recordkeeping is not required to ensure compliance with this standard.

I. **Work Practices for Sources of Volatile Organic Compounds Listed in Part II, Section 1 - [Rule 3D .0958]**

This 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. This Rule does not apply to architectural or maintenance coating, or sources subject to 40 CFR Part 63, Subpart JJ.

1. **Work practice standards - [Rule 3D .0958(c) and 3Q .0508(i)(16)]** - For equipment listed in Part II, Section 1 the permittee shall:
   (a) 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,
   (b) clean up spills as soon as possible following proper safety procedures,
   (c) store wipe rags in closed containers,
   (d) not clean sponges, fabric, wood, paper products, and other absorbent materials, unless volatile organic compound emissions are captured and controlled,
   (e) drain solvents used to clean supply lines and other coating equipment into containers designed for closure, and close containers immediately after each use,
   (f) 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.

2. **Monitoring/Recordkeeping requirements - [Rule 3Q .0508(f)] -** To ensure compliance with the work practice standards specified in Condition 3(I)(1) above, 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:

   (a) the date and time of each inspection;

   (b) the results of each inspection; and

   (c) all deviations from required work practice standards and the corrective actions taken.

3. **Alternative VOC work practice monitoring/recordkeeping requirements for sources of volatile organic compounds listed in Part II, Section 1 - [Rules 3D .0958(c) 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(I)(1) above. To ensure compliance with this requirement the permittee shall:

   (a) 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

   (b) 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:

      (i) 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,

      (ii) an outline of the subjects covered in the initial and annual training for each group of personnel.

4. 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.

5. 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. **[Rules 3D .0605 and 3D .1105]**

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. **ES-TEMP Temporary Boiler Project:**

One or two temporary boilers with low-NOx burners fired with diesel fuel with a sulfur content not to exceed 0.05% sulfur or with natural gas and with a combined maximum firing rate not to exceed 98 mmBtu/hr. Uncontrolled.

1. **Notification requirements - The permittee shall submit to this Office notification as**
   (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 Rule 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.

[Rule 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.

[Rule 3D .0524 and 40 CFR 60.41c]

SECTION 5
SPECIFIC LIMITATIONS AND CONDITIONS

The air emission source(s) and associated air pollution control device(s) listed in Part II, Section 1, Condition C 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 C 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 C in accordance with provisions contained in Part I of this permit.

C. ***Make and Pack Modernization Project (as described in the application)***

ES-18-851-1: Removing existing filter makers and installing new replacement filter makers.

ES-19-851-1 and F-16-851-1: Removing existing cigarette making and packing complexes and installing new replacement cigarette making and packing complexes.

- **ES-18-851-1: Filter Making**

Four Fabric Filter Control Devices (Roll Filters)

Control Device ID CD-( )-851-1	Emission Point ID EP-( )-851-1
113	29 or 29B
114	32 or 32B
115	30 or 30B
116	31 or 31B

- **ES-19-851-1: Cigarette making**

Twenty-Five Fabric Filter Control Devices (Baghouses)

Control Device ID CD-( )-851-1	Emission Point ID EP-( )-851-1
1	29
2	29
3	32
4	32
5	31
6	31
7	31
8	30
9	30
10	31
11	30
12	30

21	29
22	29
23	32
24	32
25	31
26	31
27	31
28	30
29	30
30	31
31	30
32	30
131	31

- **F-16-851-1: Packing Equipment**

  Fugitive Emissions, Uncontrolled

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. **[Rule 3A. 0103(a)]**

2. **Commencement of Construction** - If construction/modification of this equipment has not commenced by April 30, 2019 (18 months after the effective date of permit 00745-TV-37), 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. **[Rule 3Q .0308(a)]**

SECTION 6
SPECIFIC LIMITATIONS AND CONDITIONS

The air emission source(s) and associated air pollution control device(s) listed in Part II, Section 1, Condition D 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 D 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 D in accordance with provisions contained in Part I of this permit.

C. ***New G7 Cutting Project (as described in the application)***

ES-24-851-1: Box Filling

Emission Point (EP-32-851-1 or EP-32A-851-1)

Fabric Filter control device (CD-19-851-1)

The purpose of the project is to allow processing of new G7 tobacco and new G7 infeed materials for use at other R. J. Reynolds Tobacco Company facilities.

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. **[Rule 3A. 0103(a)]**

2. **Commencement of Construction** - If construction/modification of this equipment has not commenced by Qqqq KK, 2019 (18 months after the effective date of permit 00745-TV-39), 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. **[Rule 3Q .0308(a)]**

SECTION 7
SPECIFIC LIMITATIONS AND CONDITIONS

The air emission source(s) and associated air pollution control device(s) listed in Part II, Section 1, Condition E 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 E 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 E in accordance with provisions contained in Part I of this permit.

C. ***Small Batch Project (as described in the application)***

ES-25-851-1: Small Batch Receiving and Blending

Emission Point (EP-62-851-1)

Wet Scrubber control device (CD-132-851-1)

ES-26-851-1: Small Batch Casing and Drying

Emission Point (EP-62-851-1)

Wet Scrubber control device (CD-132-851-1)

Emission Point (EP-63-851-1)

Fabric Filter control device (CD-133-851-1)

Emission Point (EP-64-851-1), Uncontrolled

Emission Point (EP-65-851-1), Uncontrolled

ES-27-851-1: Small Batch Casing and Cutting

Emission Point (EP-20-851-1)

Wet Scrubber control device (CD-122-851-1)

Emission Point (EP-23-851-1)

Wet Scrubber control device (CD-126-851-1)

Emission Point (EP-23-851-1)

Fabric Filter control device (CD-53-851-1)

Emission Point (EP-23-851-1)

Fabric Filter control device (CD-60-851-1)

Emission Point (EP-29-851-1)
Fabric Filter control device (CD-17-851-1)

Emission Point (EP-24-851-1)
Fabric Filter control device (CD-74-851-1)

Emission Point (EP-61-851-1), Uncontrolled

Emission Point (EP-60-851-1)
Thermal Incinerator control device (CD-RTO-851-1)

The purpose of the project is to allow efficent processing of many tobacco blends in small batches.

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. **[Rule 3A. 0103(a)]**

2. **Commencement of Construction** - If construction/modification of this equipment has not commenced by Qqqq KK, 2019 (18 months after the effective date of permit 00745-TV-39), 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. **[Rule 3Q .0308(a)]**

FORSYTH COUNTY
OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION

SIGNIFICANT MODIFICATION – STATEMENT OF BASIS for Permit #00745-TV-39

R.J. Reynolds Tobacco Company (RJRT) Tobaccoville facility - Premise # 00745

Small Batch Project: Significant Modification
Permit Tracking #: **1293**

New G7 Cutting Project: Minor Modification
Permit Tracking #: **1288**

Site Location:	Current Permit No	New Permit No.
Tobaccoville, NC	**00745-TV-38**	**00745-TV-39**

Technical Contacts:	Phone:	Responsible Official:
Max Hopkins **Senior Staff Engineer - EHS**	**(336) 741-6932**	**Johnny K. Cagigas** **Vice President of Manufacturing** **&** **Nancy H. Hawley** **EVP Operations**

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 (**00745-TV-39-SoB-CONFIDENTIAL.xlsx**) and is stored on a USB flash drive that is kept locked up with the other Tobaccoville facility confidential files. The other spreadsheet file (**00745-TV-39-SoB-PUBLIC.xlsx**) does not contain any confidential information and is stored with the other Tobaccoville files on this Office's shared drive. The following information is considered confidential: maximum throughput rates, emission factors (but not emission rates), some equipment details, and process flow diagrams.

I. Processing

Two different permit modification projects are being addressed with this draft permit, permit 00745-TV-39. One is a minor modification for the New G7 Cutting Project, and the other is a significant modification for the Small Batch Project. Because the Small Batch Project is being processed as a significant modification in accordance with Sec. 3Q-0516 of the Forsyth County Air Quality Technical Code (FCAQTC), this draft permit will go through a 30-day public comment period and a concurrent 45-day review by the U.S. EPA prior to final approval. The Small Batch Project modification qualifies as significant because it involves the addition of a new Prevention of Significant Deterioration (PSD) avoidance condition for volatile organic compounds (VOCs). The minor modification for the New G7 Cutting Project will go also go through the 30-day public comment period and a concurrent 45-day review by the U.S. EPA to provide coverage under Rule 3Q .0512(a) Permit Shield.

Because the current active permit (#00745-TV-38) also underwent review by the U.S. EPA, that permit contains no operating conditions listed as unshielded in Part I, condition 1.2. Consequently, there are no unshielded operating conditions that need to be removed from being listed as unshielded in the new permit (#00745-TV-39).

II. Small Batch Project – Significant Modification

For a detailed analysis of emissions from ES-25-851-1 , ES-26-851-1, and ES-27-851-1 see the Excel file portion of this Statement of Basis.

A. Small Batch Project - Overview

The modification and associated PSD avoidance limit involves the addition of three new emissions sources at the R. J. Reynolds Tobacco Company (RJRT) Tobaccoville facility: Small Batch Receiving and Blending (ES-25-851-1), Small Batch Casing and Drying (ES-26-851-1), and Small Batch Casing and Cutting (ES-27-851-1). In addition, two new day tanks will be added to an existing emission source, Casing Preparation Area (F-13-851-1). The overall purpose of the modification is to allow efficient processing of many different tobacco blends in small batches. The applicant is requesting a PSD avoidance condition to limit VOC emissions. This new limit is included in condition 3.2(C). The proposed modification will increase emissions of some toxic air pollutants (TAPs) so an air toxics review pursuant to Sec. 3Q-0700 was triggered (LOCAL ENFORCEABLE ONLY). For some TAPs, air toxics modeling was also performed.

B. Small Batch Project - Emissions

Small Batch Receiving and Blending (ES-25-851-1), Small Batch Casing and Drying (ES-26-851-1), and Small batch Casing and Cutting (ES-27-851-1) emit VOCs, hazardous air pollutants (HAPs), TAPs, and particulate matter (PM). The Casing Preparation Area (F-13-851-1) emits only fugitive emissions of VOCs.

1. ES-25-851-1: Small Batch Receiving and Blending

Conditioning Drum:
New emission point (EP-62-851-1) with wet scrubber control 90% for PM and 30% for VOC

Particulate Matter

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 the PM10 and PM2.5 emissions are 80% of the PM emissions.

The uncontrolled PM emissions from the ES-25-851-1 equipment are 13.51 lb/hour which converts to 1.351 lb/hour after control by a wet scrubber with 90% control efficiency for particulate matter. Based on 8760 hours per year, the potential uncontrolled PM emissions are 59.17 tons/year, the potential controlled PM emissions are 5.917 tons/year.

The uncontrolled PM10 and PM2.5 emissions from the ES-25-851-1 equipment are 10.81 lb/hour which converts to 1.081 lb/hour after control by a wet scrubber with 90% control efficiency. Based on 8760 hours per year, the potential uncontrolled PM emissions are 47.34 tons/year, the potential controlled PM emissions are 4.734 tons/year.

Volatile Organic Compounds

The emission factors (confidential) are based on past stack testing of a similar source. The uncontrolled VOC emissions from the ES-25-851-1 equipment are 0.3246 lb/hour which converts to 0.2272 lb/hour after control by a wet scrubber with 30% VOC control. Based on 8760 hours per year, the potential uncontrolled VOC emissions are 1.42 tons/year, and the potential controlled VOC emissions are 0.995 tons/year. The 0.995 tons/year controlled potential VOC emissions do not reflect any production limitations based on PSD avoidance. Meeting the PSD avoidance limitation for VOC emissions will in practice require the facility to limit production on ES-25-851-1.

2. ES-26-851-1: Small Batch Casing and Drying

Casing Drum:
New emission point (EP-62-851-1) with wet scrubber control 90% for PM and 30% for VOC

Ethanol Emissions (former Lorillard materials):
New emission point (EP-62-851-1) with wet scrubber control 30% for VOC

Apron Dryer (Drying Section):
New emission point (EP-63-851-1) with fabric filter control 99.9% for PM

Apron Dryer (Cooling Section):
New emission point (EP-64-851-1) PM and VOC uncontrolled

Apron Dryer (Reorder Section):
New emission point (EP-65-851-1) PM and VOC uncontrolled

Particulate Matter

The PM emission factors (confidential) are based on past stack testing of a similar source. Based on the nature of the source, emissions determinations assume that the PM10 and PM2.5 emissions are 80% of the PM emissions except for the Apron Dryer (Drying Section) where PM10 and PM2.5 are assumed to equal PM.

The combined uncontrolled PM emissions from the ES-26-851-1 processes are 32.30 lb/hour which converts to 0.0796 lb/hour after applicable controls. Based on 8760 hours per year, the potential uncontrolled PM emissions are 141.49 tons/year, the potential controlled PM emissions are 0.3488 tons/year.

The combined uncontrolled PM10 and PM2.5 emissions from the ES-26-851-1 processes are 32.28 lb/hour which converts to 0.0701 lb/hour after applicable controls. Based on 8760 hours per year, the potential

uncontrolled PM emissions are 141.40 tons/year, the potential controlled PM emissions are 0.3072 tons/year.

Volatile Organic Compounds

The emission factors (confidential) are based on past stack testing of similar sources. The uncontrolled VOC emissions from the ES-26-851-1 processes are 1.764 lb/hour which converts to 1.584 lb/hour after applicable controls. Based on 8760 hours per year, the potential uncontrolled VOC emissions are 7.73 tons/year, and the potential controlled VOC emissions are 6.94 tons/year. The 6.94 tons/year controlled potential VOC emissions do not reflect any production limitations based on PSD avoidance. Meeting the PSD avoidance limitation for VOC emissions will in practice require the facility to limit production on ES-26-851-1.

3. ES-27-851-1: Small Batch Casing and Cutting

Casing Drum:
Existing emission point (EP-20-851-1) with wet scrubber control 90% for PM and 30% for VOC

Cutter:
Existing emission point (EP-24-851-1) VOC uncontrolled

Steam Expansion Chamber:
Existing emission point (EP-23-851-1) with wet scrubber control 98% for PM and 30% for VOC

Dryer & Tower Separator
Existing emission point (EP-23-851-1) with fabric filter control 99.9% for PM and VOC uncontrolled

Top Dressing Drums
Existing emission point (EP-61-851-1) PM and non-ethanol VOC uncontrolled

Top Dressing Drums
Existing emission point (EP-60-851-1)
with thermal incinerator 67.7% capture and 98% control for ethanol VOC

Top Dressing Drums
(fugitive) ethanol VOC uncontrolled

Conveying Equipment
Existing emission points (EP-(29-32)-851-1) with fabric filter control 99.8% for PM and VOC uncontrolled

Particulate Matter

The PM emission factors (confidential) are based on past stack testing of similar sources. Based on the nature of the sources, emissions determinations assume that PM10 and PM2.5 emissions equal PM emissions except for the Casing Drum and Steam Expansion Chamber where the PM10 and PM2.5 emissions are estimated to be 80% of the PM emissions.

The combined uncontrolled PM emissions from the ES-27-851-1 processes are 31.90 lb/hour which converts to 0.0991 lb/hour after applicable controls. Based on 8760 hours per year, the potential uncontrolled PM emissions are 139.73 tons/year, the potential controlled PM emissions are 0.4339 tons/year.

The combined uncontrolled PM10 and PM2.5 emissions from the ES-27-851-1 processes are 31.43 lb/hour which converts to 0.0868 lb/hour after applicable controls. Based on 8760 hours per year, the potential

uncontrolled PM emissions are 137.68 tons/year, the potential controlled PM emissions are 0.3801 tons/year.

Volatile Organic Compounds

The emission factors (confidential) are based on past stack testing of similar sources. The uncontrolled VOC emissions from the ES-27-851-1 processes are 66.29 lb/hour which converts to 27.20 lb/hour after applicable controls. Based on 8760 hours per year, the potential uncontrolled VOC emissions are 290.34 tons/year, and the potential controlled VOC emissions are 119.14 tons/year. The 119.14 tons/year controlled potential VOC emissions do not reflect any production limitations based on PSD avoidance. Meeting the PSD avoidance limitation for VOC emissions will in practice require the facility to limit production on ES-27-851-1.

4. F-13-851-1: Casing Preparation Area - Two New Day Tanks

The only pollutant emitted from the day tanks is VOC with no TAP or HAP emissions known. The fugitive VOC emissions are based on emissions calculated for larger existing tanks in the Casing Preparation Area. There is no VOC control. The VOC emissions from each tank are estimated to be less than 0.01 tons/year. The tanks qualify as "insignificant activities because of size or production rate" in accordance with FCAQTC Sec. 3Q-503(8).

C. Small Batch Project - PSD Applicability

Three PSD pollutants (VOC, PM10, and PM2.5) are emitted by ES-25-851-1, ES-26-851-1 and ES-27-851-1. As part of the PSD applicability analysis, however, the facility also examined emissions related to additional steam usage in the facility's boilers and additional usage of the thermal incinerator (CD-RTO-851-1). The analysis calculated potential increases in emissions of VOC, PM, SO2, NOx and CO from the combustion of natural gas or fuel oil (whichever was worst-case) in the boilers and from natural gas in the thermal incinerator. PM10 and PM2.5 emissions were conservatively assumed to equal PM emissions. The combustion emission factors that were used came from the U.S EPA's AP-42 document. The emissions were based on an additional 3.1 mmBtu/hr heat input from the boilers and 0.46 mmBtu/hr from the thermal incinerator. The calculated emissions from potential increased combustion are: PM10 (0.340 ton/yr), PM2.5 (0.340 ton/yr), SO2 (7.002 ton/yr), NOx (1.184 ton/yr), and CO (1.284 ton/yr).

The overall potential emissions from additional combustion plus the potential emissions from ES-25-851-1, ES-26-851-1 and ES-27-851-1 are summarized in the table below:

PSD Significance Threshold Analysis

Source	PM10 [tons/yr]	PM2.5 [tons/yr]	VOC [tons/yr]	SO2 [tons/yr]	NOx [tons/yr]	CO [tons/yr]
ES-25-851-1	4.73	4.73	1.00			
ES-26-851-1	0.31	0.31	6.94			
ES-27-851-1	0.38	0.38	119.14			
Boiler Fuel Usage Increase	0.325	0.325	0.073	7.001	0.986	1.118
RTO Fuel usage Increase	0.015	0.015	0.011	0.001	0.198	0.166
Total Potential Emissions*	5.76	5.76	**127.16**	7.00	1.18	1.28
PSD Threshold	15	10	**40**	40	40	100
Emissions Above Threshold?	No	No	**Yes**	No	No	No

* Controlled, as applicable

The only pollutant that is above the applicable PSD significance threshold is VOC. The facility chose to accept a new 39.5 ton/year PSD avoidance limit for VOC.

The PSD avoidance limit for VOC is included in the draft 00745-TV-39 permit in Part I, condition 3.2(C) as follows:

C. **Prevention of Significant Deterioration:**

ES-25-851-1, ES-26-851-1, and ES-27-851-1 [Rule 3D .0530 and 3Q .0317(b)]

1. **Emission limit for volatile organic compounds (VOC)**

The combined emissions of VOC from tobacco processing in

ES-25-851-1: Small Batch Receiving and Blending

ES-26-851-1: Small Batch Casing and Drying

ES-27-851-1: Small Batch Casing and Cutting

shall not exceed 39.5 tons in any consecutive 12-month period.

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

Compliance with the limit specified in condition 3.2(C)(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 + 14.2) / 2000 = monthly VOC emissions (tons)

where:

A = monthly dry tons of tobacco processed in Small Batch Receiving and Blending (ES-25-851-1);

B = monthly dry tons of tobacco processed in Small Batch Casing and Drying (ES-26-851-1);

C = monthly dry tons of tobacco processed in Small Batch Casing and Cutting (ES-27-851-1);

D = monthly pounds of ethanol applied in Small Batch Casing and Cutting (ES-27-851-1) ;

14.2 = monthly potential combined pounds of VOC from fuel combustion (associated with production in ES-25-851-1, ES-26-851-1 and ES-27-851-1) in the facility's boilers (ES-1-851-8, ES-2-851-8, ES-3-851-8, and ES-TEMP-851-8) and the thermal incinerator (CD-RTO-851-1).

W = VOC emission factor (lb VOC/dry ton tobacco) for tobacco processed in Small Batch Receiving and Blending (ES-25-851-1), from the permit application for the 00745-TV-39 permit;

X = VOC emission factor (lb VOC/dry ton tobacco) for tobacco processed in Small Batch Casing and Drying (ES-26-851-1), from the permit application for the 00745-TV-39 permit;

Y = VOC emission factor (lb VOC/dry ton tobacco) for tobacco processed in Small Batch Casing and Cutting (ES-27-851-1), from the permit application for the 00745-TV-39 permit;

Z = VOC emission factor (lb VOC/lb ethanol applied) ethanol applied in Small Batch Casing and Cutting (ES-27-851-1), from the permit application for the 00745-TV-39 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 the limit specified in condition 3.2(C)(1).

3. **Reporting - [Rule 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.

D. Small Batch Project - Compliance Assurance Monitoring (CAM) Requirements

CAM applicability is based on a “pollutant specific emission unit” (PSEU) which 40 CFR Part 64 defines as "an emission unit considered separately with respect to each regulated air pollutant." In order for a PSEU to be subject to CAM it must:

1. Be subject to an emission limitation or standard for the applicable regulated air pollutant (or surrogate thereof), other than an emission limitation or standard that is exempt under 40 CFR 64.2(b)(1).

2. Use a control device to achieve compliance with any such limitation or standard.

3. Have potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100% of the amount in tons per year, required for a source to be classified as a major source.

In order to simplify the CAM applicability process, RJRT uses a conservative approach that tends to assign CAM requirements to more control devices than necessary. RJRT assigns CAM applicability to all controlled PSEUs that have potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100% of the emissions (in tons per year) required for a source to be classified as a major source. In the case of this modification project that, means that each PSEU that has potential pre-control PM10 or VOC emissions greater than 100 tons per year (TPY) is considered subject to CAM.

The Small Batch Project modification includes the addition of two new control devices: a wet scrubber (CD-132-851-1) and a fabric filter (CD-133-851-1). As shown on the Excel file portion of this Statement of Basis the wet scrubber is not subject to CAM because the pre-control potential PM10 and VOC emissions are each less than 100 tons/yr with pre-control potential PM10 emissions being 47.55 ton/yr and pre-control potential VOC emissions being 2.63 ton/yr. The fabric filter, however, is subject to CAM because the pre-control emissions of PM10 are 141.0 ton/yr. The fabric filter is not a large PSEU because the post-control PM10 emissions are only 0.141 ton/yr based on 99.9% control. CAM requirements for the fabric filter are included in the permit in Part I, Condition 3.6(B). Non-CAM Periodic Monitoring/Recordkeeping/Reporting for the wet scrubber is in Part I, Condition 3.6(A)(2-4).

One of the emissions sources in the Small Batch Project (ES-27-851-1) is controlled by the thermal incinerator (CD-RTO-851-1). Additionally, an emission source being modified by the New G7 Cutting Project (ES-15-851-1) is also controlled by the thermal incinerator. Because those two emissions sources are being incorporated in Part I of this permit, CAM monitoring for the thermal incinerator has been added to this permit in Part I, condition 3.6(B). The thermal incinerator is subject to CAM because its pre-control VOC emissions are 173.1 ton/yr, but it is not a large PSEU because its post-control VOC emissions are only 3.46 ton/yr based on 98% destruction efficiency.

Monitoring requirements for the existing thermal incinerator had been in the construction part of the (Part II) beginning with the 00745-TV-33 permit for the project to manufacture former Lorillard cigarette brands using ethanol-based top dressing materials. That project has not yet been incorporated into the operation part of the permit (Part I), so the monitoring requirements and performance testing options are being retained in Part II of the 00745-TV-39 permit in condition 3(D)(2) by referencing the CAM monitoring in Part I, condition 3.6(B)(3-6). The performance testing of the thermal incinerator was successfully completed on March 16, 2016. The testing demonstrated that the thermal incinerator met the requirements of Part II, Condition 3(D)(2) including at least 98% VOC destruction efficiency.

E. Small Batch Project - Compliance with the PM emissions standard in Sec. 3D-0515

Part I, condition 3.3(B) includes requirements pertaining to FCAQTC Sec. 3D-0515, Particulates from Miscellaneous Industrial Processes.

ES-25-851-1: Small Batch Receiving and Blending
Based on the confidential maximum throughput rate for ES-25-851-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 4.10 lb/hr. The source's combined 1.35 lb/hr controlled PM emissions are 33% of that limit. The source's combined 13.51 lb/hr uncontrolled PM emissions are 330% of that limit. Consequently, particulate matter control by the wet scrubber is required for compliance with Sec. 3D-0515.

ES-26-851-1: Small Batch Casing and Drying
Based on the confidential maximum throughput rate for ES-26-851-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 2.58 lb/hr. The source's combined 0.08 lb/hr controlled PM emissions are 3.1% of that limit. The source's combined 32.303 lb/hr uncontrolled PM emissions are 1252% of that limit. Consequently, some particulate matter control is required for compliance with Sec. 3D-0515. As long as the Apron Dryer (Drying Section) emissions are controlled by the 99.9% efficient fabric filter, the wet scrubber is not required for ES-26-851-1 to comply with Sec. 3D-0515. With only control of the Apron Dryer (Drying Section) PM emissions by the fabric filter, the overall ES-26-851-1 PM emissions are 0.135 lb/hr which is less than 5.3% of the Sec. 3D-0515 limit.

ES-27-851-1: Small Batch Casing and Cutting
Based on the confidential maximum throughput rate for ES-27-851-1, the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 5.97 lb/hr. The source's combined 0.099 lb/hr controlled PM emissions are 1.7% of that limit. The source's combined 31.901 lb/hr uncontrolled PM emissions are 534% of that limit. Consequently, some particulate matter control is required for compliance with Sec. 3D-

0515. As long as the tower separator emissions are controlled by the 99.9% efficient fabric filter, the other PM control devices are not required for ES-27-851-1 to comply with Sec. 3D-0515. With only control of the tower separator PM emissions by the fabric filter, the overall ES-27-851-1 PM emissions are 5.06 lb/hr which is less than 85% of the Sec. 3D-0515 limit.

The CAM and non-CAM monitoring, recordkeeping and reporting requirements listed in Part I, permit conditions 3.6(A) and (B), as applicable, are sufficient to assure compliance with the Sec. 3D-0515 PM limit for ES-25-851-1, ES-26-851-1, and ES-27-851-1.

F. Small Batch Project - Compliance with the visible emissions standard in Sec. 3D-0521(d)

Part I, condition 3.5(A) includes requirements pertaining to FCAQTC Sec. 3D-0521(d), Control of Visible Emissions.

Equipment associated with ES-25-851-1, ES-26-851-1 and ES-27-851-1 is subject to the 20% opacity visible emissions standard in Sec. 3D-0521(d). Most of the PM emission points associated with those emission sources are controlled by either a fabric filter or a wet scrubber. The few uncontrolled PM emission points have very low PM emissions. With the applicable control devices in use and with very low PM emissions from the uncontrolled stacks, compliance with the 20% opacity visible emissions standard is expected for ES-25-851-1, ES-26-851-1 and ES-27-851-1.

The monitoring, recordkeeping and reporting requirements listed in Part I, permit condition 3.6 are sufficient to assure proper operation of the applicable control devices and compliance with the applicable visible emissions standard.

G. Small Batch Project - Compliance with Air Toxics Requirements (Locally Enforceable Only)

Small Batch Project

RJRT chose to perform a facility-wide air toxics review in association with the Small Batch Project. The review included all TAPs emitted by all sources at the facility except for TAPs emitted by sources specifically exempted from air toxics regulation. The exempt sources are the existing three 87.9 mmBtu/hr boilers and the diesel engines associated with the emergency generator and the emergency fire water pump. The engines are exempt pursuant to FCAQTC Sec. 3Q-0702(a)(27)(B) because they are affected sources under 40 CFR Part 63 – specifically 40 CFR Part 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). The three boilers are exempt pursuant to Sec. 3Q-0702(a)(18) because they are combustion sources as defined in Sec. 3Q-0703 and are not new or modified combustion sources permitted on or after July 10, 2010. The temporary boilers (which have not yet been installed) were included in the air toxics review because they were permitted after July 10, 2010.

Overall, the air toxics review included 30 TAPs. In addition to those 30 reviewed TAPs, the facility emits one more TAP (1.3-butadiene). 1.3-Butadiene was not included in the TAP review because it is only emitted by the diesel fire pump engine which was exempt from the review. The table below shows the 30 TAPs included in the review plus 1,3-butadiene.

		*Uncontrolled Potential			3Q .0711(a) TPERs			Percent of TPER		
TAP	Modeled?	lb/hr	lb/day	lb/yr	lb/hr	lb/day	lb/yr	lb/hr	lb/day	lb/yr
Acetaldehyde	No	0.9415			6.8			13.85%		
Acetic acid	**Yes**	14.505			0.96			**1511%**		
Acrolein	No	0.0183			0.02			91.42%		
Ammonia	**Yes**	12.72			0.68			**1871%**		
Arsenic	**Yes**			3.482			0.053			**6570%**
Benzene	**Yes**			53.934			8.1			**666%**
Benzo(a)pyrene	No			0.0013			2.2			0.060%
Beryllium	**Yes**			2.5783			0.28			**921%**
Cadmium	**Yes**			2.8397			0.37			**767%**
Carbon disulfide	No		0.00006			3.9			0.001%	
Chloroform	No			119.51			290			41.21%
Chromic acid	No		0.008			0.013			61.4%	
Cresol	No	0.0907			0.56			16.20%		
Dichlorobenzene**	No	0.00002			16.8			0.0001%		
Dioxane	No		0.3313			12			2.76%	
Ethylene oxide	**Yes**			121.25			1.8			**6736%**
Fluorides	**Yes**	0.0261	0.6266		0.064	0.34		40.8%	**184%**	
Formaldehyde	**Yes**	0.3225			0.04			**806%**		
HCl	**Yes**	0.1998			0.18			**111%**		
Hexane, n-	No		5.4183			23			23.6%	
Manganese	No		0.0144			0.63			2.28%	
MEK	No	0.0385	0.9236		22.4	78		0.172%	1.184%	
Methyl chloroform	No	0.0002	0.004		64	250		0.0003%	0.002%	
Mercury	No		0.0072			0.013			55.6%	
Nickel	No		0.0084			0.13			6.49%	
Phenol	No	0.0147			0.24			6.108%		
Styrene	No	1E-05			2.7			0.0004%		
Toluene	No	0.0613	1.471		14.4	98		0.43%	1.50%	
Trichlorofluoromethane	No	0.2352			140			0.1680%		
Xylene	No	0.0018	0.0439		16.4	57		0.0112%	0.077%	
1,3-Butadiene	No			0.5687			11			5.17%

* No TAP pollutants are controlled.
** The dichlorobenzene emissions are conservatively assumed to be 1,4-dichlorobenzene (p-dichlorobenzene).

Of these TAPs, ten have potential emissions that are above the applicable TAP Permitting Emission Rates (TPERs) listed in FCAQTC Sec. 3Q-0711(a). Those ten TAPs were modeled. The other 20 TAPs plus 1,3-butadiene were not modeled. They are listed in the de minimis limits table in permit condition 4.1(A)(2) in Part I of the 00745-TV-39 permit along with their respective TPER values from Sec. 3Q-0711(a).

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 "ratioed up" to a level corresponding to 98% of the AAL and the model was rerun.

Acetic acid, ammonia, fluorides, formaldehyde, and hydrogen chloride are hourly TAPs so the “ratioed up” facility-wide hourly emission rates for these TAPs were added as facility-wide limits in the table in condition 4.1(A)(3) in Part I of the 00745-TV-39 permit. Fluorides is also a daily TAP so the “ratioed up” facility-wide hourly emission rate for fluorides was multiplied by 24 hrs/day, and the resulting daily emission rate was added as a facility-wide limit in the table in permit condition 4.1(A)(3).

Arsenic, benzene, beryllium, cadmium, and ethylene oxide, are yearly TAPs so the "ratioed up" facility-wide hourly emission rates for these TAPs were multiplied by 8760 hrs/yr, and the resulting yearly emission rates were added as facility-wide limits in the table in permit condition 4.1(A)(3).

The list of modeled TAPs in Part I, permit condition 4.1(A)(3) is shown below.

Pollutant (CAS Number)	Maximum facility-wide emission rate	AERMOD EPA version	Date of model output file
acetic acid (64-19-7)	438.30 lb/hour	16216r	04/23/2018
ammonia (7664-41-7)	349.31 lb/hour	16216r	04/23/2018
arsenic and inorganic arsenic compounds	73.47 lb/year	16216r	04/23/2018
benzene (71-43-2)	9,119 lb/year	16216r	04/23/2018
beryllium (7440-41-7)	142.3 lb/year	16216r	04/23/2018
cadmium (7440-43-9)	203.5 lb/year	16216r	04/23/2018
ethylene oxide (75-21-8)	1,029 lb/year	16216r	04/23/2018
fluorides	3.80 lb/hour and 91.15 lb/day	16216r	04/23/2018
formaldehyde (50-00-0)	20.81 lb/hour	16216r	04/23/2018
hydrogen chloride (7647-01-1)	236.71 lb/hour	16216r	04/23/2018

Detailed information regarding the modeling analysis is presented in the "Air Compliance Analysis Summary Sheet" that is attached to this Statement of Basis.

TAP monitoring and recordkeeping requirements

Because the uncontrolled potential emissions of all non-modeled TAPs from the facility are below the respective FCAQTC 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 Part I, condition 4.1(A)(4) of the permit with no TAP reporting required.

H. Small Batch Project - Hazardous Air Pollutants (HAPs)

In previous permitting, the Tobaccoville facility chose to take a HAP emission limit in order to avoid being a major source for HAPs. That HAP emission limit is in Part I, condition 3.1(B) of the permit. The permit condition limits the total HAP emissions from the facility to no more than 25 tons per 12-month period, and the vinyl acetate emissions from the facility to no more than 10 tons per 12-month period. Vinyl acetate is the only single HAP with potential emissions greater than 10 tons/year.

The potential uncontrolled emissions of all HAPs combined are 67.1 ton/yr with 55.8 ton/yr of that being vinyl acetate. The potential uncontrolled emissions of all the other (non vinyl acetate) HAPs combined are 11.3 ton/yr. The most recent year of actual emissions data is CY2016. During that year the total emissions

of all HAPs combined was only 4.2 tons with vinyl acetate making up 0.96 tons of that total. The limits in Part I, condition 3.1(B), will not be exceeded by the addition of the two projects being incorporated in the new 00745-TV-39 permit.

III. New G7 Cutting Project - Minor Modification

For a detailed analysis of emissions from ES-1-851-1, ES-11-851-1, ES-12-851-1, ES-15-851-1, and ES-24-851-1, see the Excel file portion of this Statement of Basis.

A. New G7 Cutting Project - Overview

The overall purpose of the modification is to allow processing of new G7 tobacco and new G7 infeed materials for use at other RJRT facilities. "G7" is a term used by RJRT to identify a certain proprietary tobacco product. The new G7 materials will enter the Tobaccoville facility through Strip Receiving and Blending (ES-1-851-1). The new G7 materials will be processed through Tobacco Strip Conveying and Blending (ES-11-851-1) and conveyed to bulkers in Tobacco Strip Conveying and Storage (ES-12-851-1). The new G7 materials will then be processed through Tobacco Casing, Cutting and Storage (ES-15-851-1) and transferred to other RJRT facilities through a new Box Filling emission unit (ES-24-851-1). ES-1-851-1, ES-11-851-1, ES-12-851-1, and ES-15-851-1 are existing sources. ES-24-851-1 is a new source.

The new emission source designated Box Filling (ES-24-851-1) will be created to allow transfer of the G7 materials to other RJRT facilities. The new ES-24-851-1 will include a new box filling station, a new hammer mill, and some new and modified conveyors. The new hammer mill will provide additional cutting and sizing capability for G7 infeed materials as well as G7 tobacco being transferred to other RJRT facilities. Emissions from the new box packer filling station, new hammer mill, and new conveyor junctions will be collected and routed to an existing dust collector (CD-19-851-1). The only pollutant emitted from Box Filling (ES-24-851-1) is particulate matter with PM2.5 and PM10 conservatively assumed to equal PM.

The maximum hourly processing rate of the Box Filling operation is less than half of the maximum hourly processing rates of the other four emission sources that will be used to process the new G7 product. Because of this, the annual potential emissions of those four sources while processing G7 product are based on the maximum annual throughput rate of the Box Filling operation.

B. New G7 Cutting Project - Emissions

Collectively ES-1-851-1, ES-11-851-1, ES-12-851-1, ES-15-851-1, and ES-24-851-1 emit VOCs, hazardous air pollutants (HAPs), TAPs, and particulate matter (PM). The new Box Filling emission unit (ES-24-851-1), however, only emits PM - with no TAP or HAP emissions.

1. ES-24-851-1: Box Filling

Particulate matter emissions are controlled by an existing 99.8% efficient fabric filter (CD-19-851-1) and vented to atmosphere via existing emission point EP-32/32A. There are no VOC emissions.

Particulate Matter

PM emission factors were determined for the new box packer filling station, new hammer mill, and new conveyor junctions. These PM emission factors (confidential) are based on emission factors for similar sources. Based on the nature of the source, PM2.5 and PM10 emissions are conservatively assumed to equal PM.

The uncontrolled PM/PM10/PM2.5 emissions from the combined ES-24-851-1 equipment are 10.175 lb/hour which converts to 0.02035 lb/hour after control by the fabric filter with 99.8% control efficiency for particulate matter. Based on 8760 hours per year, the potential uncontrolled PM emissions are 44.6 tons/year, the potential controlled PM emissions are 0.09 tons/year.

2. ES-1-851-1: Strip Receiving and Blending

Particulate matter emissions are controlled by existing 99.8% efficient fabric filters. VOC emissions are uncontrolled. Hourly emissions are calculated based on the full maximum processing rate of the Strip Receiving and Blending equipment which is greater than the maximum processing rate of the Box Filling operation.

Particulate Matter

The PM emission factors (confidential) are based on past stack testing of a similar equipment. Based on the nature of the emissions, PM2.5 and PM10 emissions are conservatively assumed to equal PM.

The uncontrolled PM/PM10/PM2.5 emissions from the combined ES-1-851-1 equipment are 490,1 lb/hour which converts to 0.9802 lb/hour after control by the fabric filters with 99.8% control efficiency for particulate matter. Based on the maximum annual throughput rate of the Box Filling operation, the ES-1-851-1 potential uncontrolled PM emissions are 613 tons/year, and the potential controlled PM emissions are 1.23 tons/year.

Volatile Organic Compounds

The VOC emission factor (confidential) is based on recent G7 processing stack testing at RJRT's Whitaker Park pilot plant in November 2017. The uncontrolled VOC emissions from the applicable ES-1-851-1 equipment (conditioning drums) is 2.436 lb/hour. Based on the maximum annual throughput rate of the Box Filling operation, the ES-1-851-1 potential uncontrolled VOC emissions are 3.05 tons/year.

3. ES-11-851-1: Tobacco Strip Conveying and Blending

Particulate matter emissions are controlled by existing 99.8% efficient fabric filters. There are no VOC emissions. Hourly emissions are calculated based on the full maximum processing rate of the Tobacco Strip Conveying and Blending equipment which is greater than the maximum processing rate of the Box Filling operation.

Particulate Matter

The PM emission factors (confidential) are based on past stack testing of similar equipment (conveyor hoods). Based on the nature of the emissions, PM2.5 and PM10 emissions are conservatively assumed to equal PM.

The uncontrolled PM/PM10/PM2.5 emissions from the combined ES-11-851-1 equipment are 52.25 lb/hour which converts to 0.1185 lb/hour after control by the fabric filters with 99.8% control efficiency for particulate matter. Based on the maximum annual throughput rate of the Box Filling operation, the ES-11-851-1 potential uncontrolled PM emissions are 99.8 tons/year, and the potential controlled PM emissions are 0.200 tons/year.

4. ES-12-851-1: Tobacco Strip Conveying and Storage

Particulate matter emissions are controlled by existing 99.8% efficient fabric filters. There are no VOC emissions. Hourly emissions are calculated based on the full maximum processing rate of the Tobacco Strip Conveying and Storage equipment which is greater than the maximum processing rate of the Box Filling operation.

Particulate Matter

The PM emission factors (confidential) are based on past stack testing of similar equipment (conveyor hoods). Based on the nature of the emissions, PM2.5 and PM10 emissions are conservatively assumed to equal PM.

The uncontrolled PM/PM10/PM2.5 emissions from the combined ES-12-851-1 equipment are 30.43 lb/hour which converts to 0.0609 lb/hour after control by the fabric filters with 99.8% control efficiency for particulate matter. Based on the maximum annual throughput rate of the Box Filling operation, the ES-12-851-1 potential uncontrolled PM emissions are 51.3 tons/year, and the potential controlled PM emissions are 0.103 tons/year.

5. ES-15-851-1: Tobacco Casing, Cutting and Storage

ES-15-851-1 is a complex emission source with several different control devices and exhaust points. Particulate matter emissions are uncontrolled or are controlled by existing fabric filters that have 98%, 99.8% or 99.9% control efficiency or by an existing wet scrubber with 90% control efficiency for PM. VOC emissions are uncontrolled or controlled by an existing wet scrubber with 30% control efficiency for VOC. Hourly emissions are calculated based on the full maximum processing rate of the Tobacco Casing, Cutting and Storage equipment which is greater than the maximum processing rate of the Box Filling operation.

Particulate Matter

The PM emission factors (confidential) are based on past stack testing of similar equipment. Based on the nature of the emissions, PM2.5 and PM10 emissions are conservatively assumed to equal PM - except for emissions from the casing and cutting casing drums and hoods, the G7 steam flotation chambers, and the top dressing drums where PM10 and PM2.5 are assumed to equal 80% of the PM emissions.

The uncontrolled PM emissions from the combined ES-15-851-1 equipment are 563.13 lb/hour which converts to 1.695 lb/hour after applicable controls. Based on the maximum annual throughput rate of the Box Filling operation, the ES-51-851-1 potential uncontrolled PM emissions are 948.65 tons/year, and the potential controlled PM emissions are 2.855 tons/year.

The uncontrolled PM10/PM2.5 emissions from the combined ES-15-851-1 equipment are 556.07 lb/hour which converts to 1.483 lb/hour after applicable controls. Based on the maximum annual throughput rate of the Box Filling operation, the ES-51-851-1 potential uncontrolled PM emissions are 936.77 tons/year, and the potential controlled PM emissions are 2.497 tons/year.

Volatile Organic Compounds

The VOC emission factors (confidential) are based on recent G7 processing stack testing at RJRT's Whitaker Park pilot plant in November 2017 or on emission factors for similar equipment. The uncontrolled VOC emissions from the applicable ES-15-851-1 equipment are 15.43 lb/hour which converts to 14.61 lb/hour after applicable controls.

Based on the maximum annual throughput rate of the Box Filling operation, the ES-15-851-1 potential uncontrolled VOC emissions are 26.00 tons/year, and the potential controlled VOC emissions are 24.61 tons/year.

C. New G7 Cutting Project - PSD Applicability

Three PSD pollutants (VOC, PM10, and PM2.5) are emitted by ES-1-851-1, ES-11-851-1, ES-12-851-1, ES-15-851-1, and ES-24-851-1. The overall emissions are summarized in the table below:

Comparison to PSD Significance Levels

	CONTROLLED Potential Emission Rates			
	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
ES-1-851-1	1.23	1.23	1.23	3.05
ES-11-851-1	0.20	0.20	0.20	0.00
ES-12-851-1	0.10	0.10	0.10	0.00
ES-15-851-1	2.85	2.50	2.50	24.61
ES-24-851-1	0.09	0.09	0.09	0.00
Total	**4.47**	**4.12**	**4.12**	**27.66**
PSD Thresholds		15	10	40
% of Threshold		27.4%	41.2%	69.2%
PSD Triggered?		**No**	**No**	**No**

Because none of the three PSD pollutants exceed the respective significance level, no further PSD analysis is required.

D. New G7 Cutting Project - Compliance Assurance Monitoring (CAM) Requirements

CAM applicability is based on a “pollutant specific emission unit” (PSEU) which 40 CFR Part 64 defines as "an emission unit considered separately with respect to each regulated air pollutant." In order for a PSEU to be subject to CAM it must:

1. Be subject to an emission limitation or standard for the applicable regulated air pollutant (or surrogate thereof), other than an emission limitation or standard that is exempt under 40 CFR 64.2(b)(1).

2. Use a control device to achieve compliance with any such limitation or standard.

3. Have potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100% of the amount in tons per year, required for a source to be classified as a major source.

In order to simplify the CAM applicability process, RJRT uses a conservative approach that tends to assign CAM requirements to more control devices than necessary. RJRT assigns CAM applicability to all controlled PSEUs that have potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100% of the emissions (in tons per year) required for a source to be

classified as a major source. In the case of this modification project that, means that each PSEU that has potential pre-control PM10 or VOC emissions greater than 100 tons per year (TPY) is considered subject to CAM.

The New G7 Cutting Project modification includes the addition of one new control device: a fabric filter (CD-19-851-1). The pre-control PM10 emissions from ES-24-851-1 are 44.6 ton/year which is less than the 100 ton/year CAM threshold. Non-CAM monitoring, recordkeeping and reporting requirements listed in Part I, permit condition 3.6(A). The CAM applicability of control devices serving ES-1-851-1, ES-11-851-1, ES-12-851-1, and ES-15-851-1 is unchanged by the New G7 Cutting project. The Equipment List in Part I, Section 1 of the permit indicates which control devices have CAM requirements and which do not. CAM monitoring, recordkeeping and reporting requirements listed in Part I, permit condition 3.6(B).

E. New G7 Cutting Project - Compliance with the PM emissions standard in Sec. 3D-0515

Part I, condition 3.3(B) includes requirements pertaining to FCAQTC Sec. 3D-0515, Particulates from Miscellaneous Industrial Processes.

ES-24-851-1: Box Filling
Based on the confidential maximum throughput rate for ES-24-851-1 the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 19.2 lb/hr. The source's combined 0.0203 lb/hr controlled PM emissions are 0.11% of that limit. The source's combined 10.17 lb/hr uncontrolled PM emissions are 53% of that limit. Consequently, particulate matter control by the fabric filter is not required for compliance with Sec. 3D-0515.

ES-1-851-1: Strip Receiving and Blending
Based on the confidential maximum throughput rate for ES-1-851-1 the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 41.3 lb/hr. The source's combined 0.9802 lb/hr controlled PM emissions are 2.4% of that limit. The source's combined 490.1 lb/hr uncontrolled PM emissions are 1187% of that limit. Consequently, particulate matter control by the fabric filters is required for compliance with Sec. 3D-0515.

ES-11-851-1: Tobacco Strip Conveying and Blending
Based on the confidential maximum throughput rate for ES-11-851-1 the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 36.4 lb/hr. The source's combined 0.1185 lb/hr controlled PM emissions are 0.33% of that limit. The source's combined 59.2 lb/hr uncontrolled PM emissions are 163% of that limit. Consequently, particulate matter control by the fabric filters is required for compliance with Sec. 3D-0515.

ES-12-851-1: Tobacco Strip Conveying and Storage
Based on the confidential maximum throughput rate for ES-12-851-1 the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 36.4 lb/hr. The source's combined 0.0609 lb/hr controlled PM emissions are 0.17% of that limit. The source's combined 30.43 lb/hr uncontrolled PM emissions are 84% of that limit. Consequently, particulate matter control by the fabric filters is not required for compliance with Sec. 3D-0515.

ES-15-851-1: Tobacco Casing, Cutting and Storage
Based on the confidential maximum throughput rate for ES-15-851-1 the maximum allowable PM emission rate from the source according to Sec. 3D-0515 is 36.4 lb/hr. The source's combined 1.695 lb/hr controlled PM emissions are 4.7% of that limit. The source's combined 563.1 lb/hr uncontrolled PM emissions are 1547% of that limit. Consequently, particulate matter control by the fabric filters and wet scrubbers is required for compliance with Sec. 3D-0515.

The CAM and non-CAM monitoring, recordkeeping and reporting requirements listed in Part I, conditions 3.6(A) and (B), as applicable, are sufficient to assure compliance with the Sec. 3D-0515 PM limit.

F. New G7 Cutting Project - Compliance with the visible emissions standard in Sec. 3D-0521(d)

Part I, condition 3.5(A) includes requirements pertaining to FCAQTC Sec. 3D-0521(d), Control of Visible Emissions.

Equipment associated with ES-1-851-1, ES-11-851-1, ES-12-851-1, ES-15-851-1, and ES-24-851-1 is subject to the 20% opacity visible emissions standard in Sec. 3D-0521(d). Most of the PM emission points associated with those emission sources are controlled by either a fabric filter or a wet scrubber. The few uncontrolled PM emission points have very low PM emissions. With the applicable control devices in use and with very low PM emissions from the uncontrolled stacks, compliance with the 20% opacity visible emissions standard is expected for ES-1-851-1, ES-11-851-1, ES-12-851-1, ES-15-851-1, and ES-24-851-1.

The monitoring, recordkeeping and reporting requirements listed in Part I, permit condition 3.6 are sufficient to assure proper operation of the applicable control devices and compliance with the applicable visible emissions standard.

G. New G7 Cutting Project - Compliance with Air Toxics Requirements (Locally Enforceable Only)

The only pollutant emitted by the new Box Filling operation (ES-24-851-1) is particulate matter with PM2.5 and PM10 emissions conservatively assumed to equal PM. The source does not emit any TAPs. ES-1-851-1, ES-11-851-1, ES-12-851-1, and ES-15-851-1 are sources of TAPs, but the processing of new G7 materials does not result in any increase in production rate at these sources and does not result in any increase in TAP emissions. Consequently no TAP review is triggered for the New G7 Cutting project. In addition, the facility-wide TAP analysis performed in association with the Small Batch Project (described in Section (II)(G) of this statement of basis) addresses TAPs from ES-1-851-1, ES-11-851-1, ES-12-851-1, and ES-15-851-1.

H. New G7 Cutting Project - Hazardous Air Pollutants (HAPs)

The only pollutant emitted by the new Box Filling operation (ES-24-851-1) is particulate matter with PM2.5 and PM10 emissions conservatively assumed to equal PM. The source does not emit any HAPs. ES-1-851-1, ES-11-851-1, ES-12-851-1, and ES-15-851-1 are sources of HAPs, but the processing of new G7 materials does not result in any increase in production rate at these sources and does not result in any increase in HAP emissions. The facility-wide HAP analysis performed in association with the Small Batch Project (described in Section (II)(H) of this statement of basis) addresses HAPs from ES-1-851-1, ES-11-851-1, ES-12-851-1, and ES-15-851-1.

IV. Changes to the Permit

1. Modified the Permit Number to 00745-TV-39 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.

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. In Part I, Condition 1.1 (Equipment List and Applicable Conditions), added entries for ES-24-851-1, ES-25-851-1, ES-26-851-1, and ES-27-851-1. Updated/corrected control device numbers and emission point numbers to correctly reflect the facility with the addition of the New G7 Cutting Project and the Small Batch Project. Added an entry for CAM requirements for the thermal incinerator and updated the permit condition references for CAM. To improve readability, some formatting changes were also made to the equipment list.

5. In Part I, Condition 3.2(C) added a PSD avoidance condition for ES-25-851-1, ES-26-851-1, and ES-27-851-1.

6. In Part I, Condition 3.4(B)(2) added propane to the list of fuels because it can be combusted by both the thermal incinerator (CD-RTO-851-1) and the fume incinerator (CD-130-851-1).

7. In Part I, Condition 3.6(B) added CAM requirements for the thermal incinerator. Renumbered some of the conditions as applicable.

8. In Part I, Condition 4.1(A)(2-3), updated the de minimis table and the dispersion modeling emission limits table to reflect the air toxic review for the Small Batch Project.

9. In Part II, Section 1, added Condition (D) for the New G7 Cutting Project and Condition (E) for the Small Batch Project.

10. In Part II, Sections 1 and 3, updated the control device number for the thermal incinerator from CD-X7-851-1 to CD-RTO-851-1. The new control device number (CD-RTO-851-1) is used throughout the rest of the permit to identify the thermal incinerator.

11. In Part II, Section 3, Condition (D) modified the wording to account for the thermal incinerator monitoring requirements being moved to Part I, Condition 3.6(B).

12. In Part II, Sections 4 and 5, deleted the phrase "including Subchapter 3D .0515" from the end of Condition (A).

13. In Part II, added Section 6 for the New G7 Cutting Project and Section 7 for the Small Batch Project.

V. Permit Processing Notes

2/19/2018
A Title V minor permit modification application was received at this Office pertaining to the RJRT Tobaccoville facility. The application A1 form was signed by RJRT Vice President of Manufacturing, Johnny Cagigas, with his signature dated 2-19-2018. The application was for the New G7 Cutting Project. The application included payment of the $947 permit modification application fee and was issued tracking number 1288. The application consisted of a non-confidential (public) version and a confidential version including a request for confidential treatment of certain information.

2/21/2018
This Office mailed a Confidential Treatment Determination letter to RJRT in response to the confidentiality request received on 2/19/2018 for the New G7 Cutting Project.

3/13/2018
A Title V significant permit modification application was received at this Office pertaining to the RJRT Tobaccoville facility. The application A1 form was signed by Nancy H. Hawley, RJRT EVP Operations, with her signature dated 3-13-2018. The application was for the Small Batch Project. The application included payment of the $947 permit modification application fee and was issued tracking number 1293.

The application consisted of a non-confidential (public) version and a confidential version including a request for confidential treatment of certain information. Because the application was requesting a limit to avoid PSD, it qualified as a Title V significant modification.

3/14/2018
From RJRT via email, I received electronic versions of the modeling files associated with the Small Batch Project. The files contained no confidential information. I told this Office's modeling reviewer, Paul Martin, that the files had arrived and where they were stored on this Office's server.

3/20/2018
Paul Martin emailed me a spreadsheet file showing details about the emission rates incorporated into the air toxics modeling for the Small Batch Project.

3/21/2018
In response to a request from this Office, RJRT provided additional information in support of the original Small Batch Project application. The additional information included both confidential and public versions of the documents and a confidential electronic spreadsheet file. The submittal included a request for confidential treatment of certain information.

3/22/2018
This Office mailed a Confidential Treatment Determination letter to RJRT in response to the confidentiality request received on 3/21/2018 for the Small Batch Project.

3/22/2018
In response to a request from this Office, RJRT provided additional information in support of the original Small Batch Project application. The additional information included both confidential and public versions of the documents and a confidential electronic spreadsheet file. The submittal included a request for confidential treatment of certain information.

4/5/2018
This Office mailed a Confidential Treatment Determination letter to RJRT in response to the confidentiality request received on 3/22/2018 for the Small Batch Project.

4/18/2018
I emailed a first draft version and a second draft version of the 00745-TV-39 permit to RJRT for review and comments.

4/23/2018
Paul Martin completed the first draft of the "Air Compliance Analysis Summary Sheet" pertaining to the modeling for the Small Batch Project. I reviewed the draft and supplied some comments.

4/24/2018
From RJRT, I received comments on the two draft versions of the 00745-TV-39 permit that I had sent on 4/18/2018.

4/24/2018
In response to a request from this Office, RJRT provided an update to the original New G7 Cutting Project application. The update included both confidential and public versions of the documents and included a request for confidential treatment of certain information.

4/24/2018
In response to a request from this Office, RJRT provided additional information in support of the original Small Batch Project application. The additional information included both confidential and public versions of the document and included a request for confidential treatment of certain information.

4/26/2018
Paul Martin completed the second draft of the “Air Compliance Analysis Summary Sheet” incorporating comments I made on 4/23/2018.

4/26/2018
After incorporating the RJRT comments received on 4/24/2018, I emailed a third draft version of the 00745-TV-39 permit to RJRT for review and comments.

4/26/2018
From RJRT, I received comments on the third draft version of the 00745-TV-39 permit that I had sent on 4/18/2018.

4/30/2018
This Office mailed a Confidential Treatment Determination letter to RJRT in response to the confidentiality request received on 4/24/2018 for the New G7 Cutting Project.

4/30/2018
This Office mailed a Confidential Treatment Determination letter to RJRT in response to the confidentiality request received on 4/24/2018 for the Small Batch Project.

5/2/2018
Paul Martin completed the final version of the “Air Compliance Analysis Summary Sheet”. The “Air Compliance Analysis Summary Sheet” will be included as an attachment to the statement of basis.

5/3/2018
After incorporating the RJRT comments received on 4/26/2018, I emailed a fourth draft version of the 00745-TV-39 permit to RJRT for review and comments.

5/3/2018
From RJRT, I received comments on the fourth draft version of the 00745-TV-39 permit that I had sent on 5/3/2018.

5/4/2018
After incorporating the RJRT comments received on 5/3/2018, I completed the fifth draft version of the 00745-TV-39 permit, the accompanying statement of basis, and draft public notice documents. I sent an email to Peter Lloyd asking him to review the documents.

5/7/2018
Peter Lloyd completed his review having made several edits. The DRAFT 00745-TV-39 permit and statement of basis will be submitted for a 30-day public comment period and 45-day EPA review beginning on 5/9/2018. The 30-day public comment period will end on 6/8/2018. The EPA 45-day review period will end on 6/23/2018.

VI. 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 00745-TV-39 which details all the necessary requirements to ensure compliance. This Office recommends approval of these permit modifications for construction and operation of the significant modification for the Small Batch Project and the minor modification for the New G7 Cutting Project.

Small Batch project - RJRT Tobaccoville (00745)

Public

ES-25

Small Batch Receiving and Blending

			ES-25 UNCONTROLLED Emission Factors PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Maximum G7 Process Rate lb/hr	ton/hr	# of Sources Conveyors	ES-25 Uncontrolled Emission Rate PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr	ES-25 Uncontrolled Emission Rate PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	ES-25 Uncontrolled Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
ES-25	Conditioning Drum	EP-X1	[redacted]							13.51	10.81	10.81	0.3246	8760	118347.6	94678.08	94678.08	2843.496	59.1738	47.33904	47.33904	1.421748
	TOTAL									13.51	10.81	10.81	0.3246		118347.60	94678.08	94678.08	2843.496	59.17	47.34	47.34	1.421748

	Uncontrolled Emissions	Controlled Emissions
3D-0515 "P" [ton/hr]	[redacted]	
"E" [lb/hr]	[lb/hr]	[lb/hr]
4.1	13.51	1.3510
% of Std =	330%	33.0%

PSD VOC E.F. in permit "W" [redacted] lb/ton

	PM10 or PM2.5 as % of PM		PM Comtrol Eff %	VOC Comtrol Eff %	CONTROLLED Emission Rate PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr		CONTROLLED Emission Rate PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	CONTROLLED Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
	80	Rotoclone	90	30	1.351	1.0808	1.0808	0.2272		11834.8	9467.8	9467.8	1990.4472	5.91738	4.733904	4.733904	0.995224
					1.3510	**1.0808**	**1.0808**	**0.2272**	[redacted]	**11834.8**	**9467.8**	**9467.8**	**1990.4472**	**5.917**	**4.734**	**4.734**	**0.995224**
															47.55 non-CAM		

ES-26

Small Batch Casing and Drying

			ES-26 UNCONTROLLED Emission Factors PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Maximum G7 Process Rate lb/hr	ton/hr	# of Sources Conveyors	ES-26 Uncontrolled Emission Rate PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr	ES-26 Uncontrolled Emission Rate PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	ES-26 Uncontrolled Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
ES-26	Casing Drum	EP-X1	[redacted]							0.06125	0.04900	0.04900	0.000203	8760	536.55	429.24	429.24	1.77828	0.268275	0.21462	0.21462	0.000889
ES-26	Ethanol - Lorillard Materials	EP-X1								0.00	0.00	0.00	0.6000	8760	0	0	0	5256	0	0	0	2.628
ES-26	Apron Dryer (Drying Section)	EP-X2	[redacted]							32.20	32.200	32.20	1.079	8760	282072	282072	282072	9447.66	141.036	141.036	141.036	4.72383
ES-26	Apron Dryer (Cooling Section)	EP-X3								0.0215	0.0172	0.0172	0.0284	8760	187.902	150.3216	150.3216	248.784	0.093951	0.075161	0.075161	0.124392
ES-26	Apron Dryer (Reorder Section)	EP-X4								0.0199	0.0159	0.0159	0.0568	8760	173.886	139.1088	139.1088	497.568	0.086943	0.069554	0.069554	0.248784
	TOTAL									32.303	32.282	32.282	1.764		282970.34	282790.67	282790.67	15451.79	141.49	141.40	141.40	7.73
																				CAM		non-CAM

	Uncontrolled Emissions	Controlled Emissions
3D-0515 "P" [ton/hr]	[redacted]	
"E" [lb/hr]	[lb/hr]	[lb/hr]
2.58	32.303	0.0796
% of Std =	1252%	3.1%

0.0000

		PM10 or PM2.5 as % of PM		PM Comtrol Eff %	VOC Comtrol Eff %	CONTROLLED Emission Rate PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	CONTROLLED Emission Rate PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	CONTROLLED Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Casing Drum	EP-X1	80	Rotoclone	90	30	0.006125	0.004900	0.004900	0.000142	53.66	42.92	42.92	1.24	0.02683	0.02146	0.02146	0.000622
Ethanol - Lorillard Materials	EP-X1		Rotoclone		30	0.0000	0.000000	0.000000	0.4200	0.00	0.00	0.00	3679.20	0.000000	0.000000	0.000000	1.8396
Apron Dryer (Drying Section)	EP-X2	100	Baghouse	99.9	0	0.03220	0.032200	0.032200	1.0785	282.072	282.072	282.072	9447.66	0.141036	0.141036	0.141036	4.72383
Apron Dryer (Cooling Section)	EP-X3	80	Uncontrolled	0	0	0.0215	0.017160	0.017160	0.0284	187.90	150.32	150.32	248.78	0.093951	0.075161	0.075161	0.124392
Apron Dryer (Reorder Section)	EP-X4	80	Uncontrolled	0	0	0.019850	0.015880	0.015880	0.0568	173.89	139.11	139.11	497.568	0.086943	0.069555	0.069555	0.248784
						0.0796	**0.0701**	**0.0701**	**1.584**	**697.52**	**614.43**	**614.43**	**13874.46**	**0.34876**	**0.30721**	**0.30721**	**6.93723**

PSD VOC E.F. in permit "X" [redacted] lb/ton

ES-27

Small Batch Casing and Cutting

			ES-27 UNCONTROLLED Emission Factors PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Maximum G7 Process Rate lb/hr	ton/hr	# of Sources Conveyors	ES-27 Uncontrolled Emission Rate PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr	ES-27 Uncontrolled Emission Rate PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	ES-27 Uncontrolled Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
ES-27	Casing Drum	EP-20	[redacted]							0.18375	0.14700	0.14700	0.385200	8760	1609.65	1287.72	1287.72	3374.352	0.804825	0.64386	0.64386	1.687176
ES-27	Cutter	EP-24								0.00	0.00	0.00	0.0134	8760	0	0	0	116.946	0	0	0	0.058473
ES-27	Steam Expansion Chamber	EP-23								2.15	1.72	1.72	0.7905	8760	18855.9	15084.72	15084.72	6924.561	9.42795	7.54236	7.54236	3.462281
ES-27	Dryer	EP-23								1.5243	1.5243	1.5243	6.0393	8760	13352.43	13352.43	13352.43	52903.83	6.676215	6.676215	6.676215	26.45192
ES-27	Tower Separator	EP-23								26.8695	26.8695	26.8695	0.5801	8760	235376.82	235376.82	235376.82	5081.895	117.6884	117.6884	117.6884	2.540948
ES-27	Top Dressing Drums	EP-61								0.0069	0.0069	0.0069	0.0000	8760	60.5535	60.5535	60.5535	0	0.030277	0.030277	0.030277	0
ES-27	Top Dressing Drums (Non-Ethanol)	EP-61								0.0000	0.0000	0.0000	0.0807	8760	0	0	0	706.713	0	0	0	0.353357
ES-27	Top Dressing Drums (Ethanol) Uncontrolled	Fugitive								0.0000	0.0000	0.0000	18.8567	8760	0	0	0	165185.0424	0	0	0	82.59252
ES-27	Top Dressing Drums (Ethanol) RTO Controlled	EP-60								0.0000	0.0000	0.0000	39.5233	8760	0	0	0	346223.7576	0	0	0	173.1119
ES-27	Conveying Equipment - PM PM10	EP-29,30,31,32	[redacted]							1.1641	1.1641	1.1641	0.0000	8760	10197.08676	10197.08676	10197.08676	0	5.098543	5.098543	5.098543	0
ES-27	Conveying Equipment - VOC	EP-29,30,31,32								0.0000	0.0000	0.0000	0.0175	8760	0	0	0	153.11604	0	0	0	0.076558
	TOTAL									31.901	31.434	31.434	66.29		279452.44	275359.33	275359.33	580670.21	139.73	137.68	137.68	290.34

	Uncontrolled Emissions	Controlled Emissions
3D-0515 "P" [ton/hr]	[redacted]	
"E" [lb/hr]	[lb/hr]	[lb/hr]
5.97	31.901	0.0991
% of Std =	534%	1.7%

		PM10 or PM2.5 as % of PM		PM Control Eff %	VOC Control Eff %	CONTROLLED Emission Rate PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	CONTROLLED Emission Rate PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	CONTROLLED Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Casing Drum	EP-20	80	Rotoclone	90	30	0.018375	0.014700	0.014700	0.269640	160.97	128.77	128.77	2362.05	0.08048	0.06439	0.06439	1.181023
Cutter	EP-24		Baghouse		0	0.0000	0.000000	0.000000	0.0134	0.00	0.00	0.00	116.95	0.000000	0.000000	0.000000	0.058473
Steam Expansion Chamber	EP-23	80	Rotoclone	98	30	0.04305	0.034440	0.034440	0.553333	377.118	301.694	301.694	4847.19	0.188559	0.150847	0.150847	2.423596
Dryer	EP-23	100	Baghouse	99.9	0	0.00152	0.001524	0.001524	6.03925	13.35	13.35	13.35	52903.83	0.006676	0.006676	0.006676	26.45192
Tower Separator	EP-23	100	Baghouse	99.9	0	0.02687	0.026869	0.026869	0.580125	235.38	235.38	235.38	5081.90	0.117688	0.117689	0.117689	2.540948
Top Dressing Drums	EP-61	100	Uncontrolled	0		0.00691	0.006913	0.006913	0	60.55	60.55	60.55	0.00	0.030277	0.030277	0.030277	0
Top Dressing Drums (Non-Ethanol)	EP-61		Uncontrolled		0	0.00000	0.000000	0.000000	0.080675	0.00	0.00	0.00	706.71	0.000000	0.000000	0.000000	0.353357
Top Dressing Drums (Ethanol) Uncontrolled	Fugitive		Uncontrolled		0	0.00000	0.000000	0.000000	18.85674	0.00	0.00	0.00	165185.04	0.000000	0.000000	0.000000	82.59252
Top Dressing Drums (Ethanol) RTO Controlled	EP-60		RTO		98	0.00000	0.000000	0.000000	0.790465	0.00	0.00	0.00	6924.48	0.000000	0.000000	0.000000	3.462238
Conveying Equipment - PM PM10	EP-29,30,31,32	100	Baghouse	99.8		0.00233	0.002328	0.002328	0	20.39	20.39	20.39	0.00	0.010197	0.010197	0.010197	0
Conveying Equipment - VOC	EP-29,30,31,32		Uncontrolled		0	0.00000	0.000000	0.000000	0.017479	0.00	0.00	0.00	153.12	0.000000	0.000000	0.000000	0.076558
						0.09906	**0.08677**	**0.08677**	**27.201**	**867.76**	**760.14**	**760.14**	**238281.26**	**0.43388**	**0.38007**	**0.38007**	**119.141**

PSD VOC E.F. in permit for ES-27 (non-ethanol) "Y" [redacted] lb/ton

PSD VOC E.F. in permit for ES-27 ETHANOL "Z" [redacted] lb/lb ethanol usage

Small Batch Project - RJRT Tobaccoville (00745)

Criteria Pollutant Emissions

Boiler Fuel Usage and RTO Fuel Usage

Boiler Fuel Combustion Emissions

	PM	VOC	SO2	NOx	CO
Natural Gas Emission Factor [lb/mmscf]	7.6	5.5	0.6	32	84
Natural Gas Emission Factor [lb/mmBtu]	0.007451	0.005392	0.000588	0.031373	0.082353
No. 2 Fuel Oil Emission factor [lb/1000 gal]	3.3	0.2	71	10	5
No. 2 Fuel Oil Emission factor [lb/mmBtu]	0.023965	0.001452	0.515614	0.072622	0.036311
Max Emissioin Fuel	Fuel Oil	Nat. Gas	Fuel Oil	Fuel Oil	Nat. Gas
Max Emission factor [lb/mmBtu]	0.023965	0.005392	0.515614	0.072622	0.082353
Emissions [lb/hr]	0.074292	0.016716	1.598402	0.225127	0.255294
Emissions [lb/year]	**650.8**	**146.4**	**14002.0**	**1972.1**	**2236.4**
Emissions [ton/year]	**0.3254**	**0.0732**	**7.0010**	**0.9861**	**1.1182**

Total Heat Input [mmBtu/hr]	3.1	3.1	3.1	3.1	3.1
Nat. Gas Heating Value [Btu/scf]	1020	1020	1020	1020	1020
No. 2 Fuel Oil Heating Value [Btu/gal]	137700	137700	137700	137700	137700
Hours per year	8760	8760	8760	8760	8760

RTO Fuel Combustion Emissions

	PM	VOC	SO2	NOx	CO
Natural Gas Emission Factor [lb/mmscf]	7.6	5.5	0.6	100	84
Natural Gas Emission Factor [lb/mmBtu]	0.007451	0.005392	0.000588	0.098039	0.082353
Emissions [lb/hr]	0.003427	0.00248	0.000271	0.045098	0.037882
Emissions [lb/year]	**30.0**	**21.7**	**2.4**	**395.1**	**331.8**
Emissions [ton/year]	**0.0150**	**0.0109**	**0.0012**	**0.1975**	**0.1659**

Total Heat Input [mmBtu/hr]	0.46	0.46	0.46	0.46	0.46
Nat. Gas Heating Value [Btu/scf]	1020	1020	1020	1020	1020
Hours per year	8760	8760	8760	8760	8760

Total Combustion Emissions (Boilers + RTO)

	PM	VOC	SO2	NOx	CO
Emissions [lb/year]	**680.82**	**168.16**	**14004.37**	**2367.17**	**2568.23**
Emissions [ton/year]	**0.340**	**0.084**	**7.002**	**1.184**	**1.284**
Emissions [lb/month]		**14.013**			

	Boilers	RTO	Total	Combustion VOC for PSD in permit
VOC lb/hr	0.017	0.0025	0.0195	14.2 lb/month

Small Batch project - RJRT Tobaccoville (00745)

PSD Significance Threshold Analysis

PSD Significance Threshold Analysis

Source	PM10 [tons/yr]	PM2.5 [tons/yr]	VOC [tons/yr]	SO2 [tons/yr]	NOx [tons/yr]	CO [tons/yr]
ES-25	4.73	4.73	1.00			
ES-26	0.31	0.31	6.94			
ES-27	0.38	0.38	119.14			
Boiler Fuel Usage Increase	0.325	0.325	0.073	7.001	0.986	1.118
RTO Fuel usage Increase	0.015	0.015	0.011	0.001	0.198	0.166
Total Emissions	5.76	5.76	127.16	7.00	1.18	1.28
PSD Threshold	15	10	40	40	40	100
Emissions Above Threshold?	No	No	Yes	No	No	No

RJRT proposes a PSD avoidance limit of 39.5 TPY

Small Batch project - RJRT Tobaccoville (00745)

TAP Emissions Compared to TPERs

		***Potential Emissions			3Q .0711(a) TPERs			Percent of TPER		
TAP	Modeled?	lb/hr	lb/day	lb/yr	lb/hr	lb/day	lb/yr	lb/hr	lb/day	lb/yr
Acetaldehyde	No	0.9415			6.8			13.85%		
Acetic acid	Yes	14.505			0.96			1511%		
Acrolein	No	0.0183			0.02			91.42%		
Ammonia	Yes	12.72			0.68			1871%		
Arsenic	Yes			3.482			0.053			6570%
Benzene	Yes			53.934			8.1			666%
Benzo(a)pyrene	No			0.0013			2.2			0.060%
Beryllium	Yes			2.5783			0.28			921%
Cadmium	Yes			2.8397			0.37			767%
Carbon disulfide	No		0.00006			3.9			0.001%	
Chloroform	No			119.51			290			41.21%
Chromic acid	No		0.008			0.013			61.4%	
Cresol	No	0.0907			0.56			16.20%		
Dichlorobenzene**	No	0.00002			16.8			0.0001%		
Dioxane	No		0.3313			12			2.76%	
Ethylene oxide	Yes			121.25			1.8			6736%
Fluorides	Yes	0.0261	0.6266		0.064	0.34		40.8%	184%	
Formaldehyde	Yes	0.3225			0.04			806%		
HCl	Yes	0.1998			0.18			111%		
Hexane, n-	No		5.4183			23			23.6%	
Manganese	No		0.0144			0.63			2.28%	
MEK	No	0.0385	0.9236		22.4	78		0.172%	1.184%	
Methyl chloroform	No	0.0002	0.004		64	250		0.0003%	0.002%	
Mercury	No		0.0072			0.013			55.6%	
Nickel	No		0.0084			0.13			6.49%	
Phenol	No	0.0147			0.24			6.108%		
Styrene	No	1E-05			2.7			0.0004%		
Toluene	No	0.0613	1.471		14.4	98		0.43%	1.50%	
Trichlorofluoromethane	No	0.2352			140			0.1680%		
Xylene	No	0.0018	0.0439		16.4	57		0.0112%	0.077%	
1,3-Butadiene*	No			0.5687			11			5.170%

The only source of 1,3-butadiene at the facility is the diesel fire pump (IS-FP) which is exempt from air toxics regulations per 3Q-0702(a)(27)(B) because it is subject to a Part 63 MACT (ZZZZ).
The fire pump is also an insignificant activity per 3Q-0503(8).
The dichlorobenzene emissions are conservatively assumed to be 1,4-dichlorobenzene (p-dichlorobenzene)
No TAP pollutants are controlled

New G7 Cutting project - RJRT Tobaccoville (00745)

Public

ES-1 Processing G7

Strip Receiving and Blending

ES-1 UNCONTROLLED Emission Factors

			PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Maximum G7 Process Rate lb/hr	ton/hr	# of Sources Conveyors
ES-1	Conditioning Drums	EP-8,9,10	[redacted]						
ES-1	Conveyor Hoods	EP-8,9,10							
	TOTAL								

3D-0515 "P" [ton/hr]: [redacted]

	"E" [lb/hr]	Uncontrolled Emissions [lb/hr]	Controlled Emissions [lb/hr]
	41.3	490.10	0.9802
% of Std =		1187%	2.37%

ES-1 Uncontrolled Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr
Conditioning Drums	472.9	472.9	472.9	2.436	2502.857
Conveyor Hoods	17.25	17.25	17.25	0	2502.857
TOTAL	490.10	490.10	490.10	2.436	

ES-1 Uncontrolled Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Conditioning Drums	1183476	1183476	1183476	6096.96	591.738	591.738	591.738	3.04848
Conveyor Hoods	43162.272	43162.272	43162.272	0	21.58114	21.58114	21.58114	0
TOTAL	1226638.27	1226638.27	1226638.27	6096.96	613.32	613.32	613.32	3.05

	PM Comtrol Eff %	VOC Comtrol Eff %
Conditioning Drums EP-8,9,10	99.8	
Conveyor Hoods EP-8,9,10	99.8	

ES-1 CONTROLLED Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr
Conditioning Drums	0.9457	0.9457	0.9457	2.436
Conveyor Hoods	0.03449	0.03449	0.03449	0
	0.9802	**0.9802**	**0.9802**	**2.436**

ES-1 CONTROLLED Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Conditioning Drums	2367	2367	2367	6097	1.1835	1.1835	1.1835	3.0485
Conveyor Hoods	86.32	86.32	86.32	0	0.043162	0.043162	0.043162	0
	2453	**2453**	**2453**	**6097**	1.227	1.227	1.227	3.049

ES-11 Processing G7

Tobacco Strip Conveying and Blending

ES-11 UNCONTROLLED Emission Factors

			PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Maximum G7 Process Rate lb/hr	ton/hr	# of Sources Conveyors
ES-11	Conveyor Hoods	EP-1,2,4,5,21,47	[redacted]						
	TOTAL								

3D-0515 "P" [ton/hr]: [redacted]

	"E" [lb/hr]	Uncontrolled Emissions [lb/hr]	Controlled Emissions [lb/hr]
	36.4	59.25	0.1185
% of Std =		163%	0.33%

ES-11 Uncontrolled Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr
Conveyor Hoods	59.25	59.25	59.25	0	3369.231
TOTAL	59.25	59.25	59.25	0	

ES-11 Uncontrolled Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Conveyor Hoods	199625.508	199625.508	199625.508	0	99.81275	99.81275	99.81275	0
TOTAL	199625.51	199625.51	199625.51	0	99.81	99.81	99.81	0

	PM Comtrol Eff %	VOC Comtrol Eff %
Conveyor Hoods EP-1,2,4,5,21,47	99.8	

ES-11 CONTROLLED Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr
Conveyor Hoods	0.118499	0.118499	0.118499	0
	0.1185	**0.1185**	**0.1185**	**0**

ES-11 CONTROLLED Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Conveyor Hoods	399.25	399.25	399.25	0	0.199626	0.199626	0.199626	0
	399.3	**399.3**	**399.3**	**0**	0.200	0.200	0.200	0

ES-12 Processing G7

Tobacco Strip Conveying and Storage

ES-12 UNCONTROLLED Emission Factors

			PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Maximum G7 Process Rate lb/hr	ton/hr	# of Sources Conveyors
ES-12	Conveyor Hoods	EP-21,22,24,37	[redacted]						
	TOTAL								

3D-0515 "P" [ton/hr]: [redacted]

	"E" [lb/hr]	Uncontrolled Emissions [lb/hr]	Controlled Emissions [lb/hr]
	36.4	30.43	0.0609
% of Std =		84%	0.17%

ES-12 Uncontrolled Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr
Conveyor Hoods	30.43	30.43	30.43	0	3369.231
TOTAL	30.43	30.43	30.43	0	

ES-12 Uncontrolled Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Conveyor Hoods	102510.396	102510.396	102510.396	0	51.2552	51.2552	51.2552	0
TOTAL	102510.40	102510.40	102510.40	0	51.26	51.26	51.26	0

	PM Comtrol Eff %	VOC Comtrol Eff %
Conveyor Hoods EP-21,22,24,37	99.8	

ES-12 CONTROLLED Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr
Conveyor Hoods	0.060851	0.060851	0.060851	0
	0.06085	**0.06085**	**0.06085**	**0**

ES-12 CONTROLLED Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Conveyor Hoods	205.02	205.02	205.02	0	0.10251	0.10251	0.10251	0
	205.0	**205.0**	**205.0**	**0**	0.103	0.103	0.103	0

ES-24 Processing G7

Box Filling

ES-24 UNCONTROLLED Emission Factors

			PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Maximum G7 Process Rate lb/hr	ton/hr	# of Sources Conveyors
ES-24	Box Packer (Hood)	CD-19, EP-32/32A	[redacted]						
ES-24	Hammer Mill (Hood)	CD-19, EP-32/32A							
ES-24	Conveyor Hoods	CD-19, EP-32/32A							
	TOTAL								

3D-0515 "P" [ton/hr]: [redacted]

	"E" [lb/hr]	Uncontrolled Emissions [lb/hr]	Controlled Emissions [lb/hr]
	19.2	10.17	0.0203
% of Std =		53%	0.11%

ES-24 Uncontrolled Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr
Box Packer (Hood)	0.1232	0.1232	0.1232	0	8760.000
Hammer Mill (Hood)	8.450	8.450	8.450	0	8760.000
Conveyor Hoods	1.601	1.601	1.601	0	8760.000
TOTAL	10.175	10.175	10.175	0	

ES-24 Uncontrolled Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Box Packer (Hood)	1079.0568	1079.0568	1079.0568	0	0.539528	0.539528	0.539528	0
Hammer Mill (Hood)	74022	74022	74022	0	37.011	37.011	37.011	0
Conveyor Hoods	14027.7384	14027.7384	14027.7384	0	7.013869	7.013869	7.013869	0
TOTAL	89128.80	89128.80	89128.80	0	44.5644	44.5644	44.5644	0

Non-CAM

	PM Comtrol Eff %	VOC Comtrol Eff %
Box Packer (Hood) CD-19, EP-32/32A	99.8	
Hammer Mill (Hood) CD-19, EP-32/32A	99.8	
Conveyor Hoods CD-19, EP-32/32A	99.8	

ES-24 CONTROLLED Emission Rate

	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr
Box Packer (Hood)	0.0002464	0.0002464	0.0002464	0
Hammer Mill (Hood)	0.0169	0.0169	0.0169	0
Conveyor Hoods	0.003203	0.003203	0.003203	0
	0.02035	**0.02035**	**0.02035**	**0**

ES-24 CONTROLLED Emission Rate

	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
Box Packer (Hood)	2.158	2.158	2.158	0	0.001079	0.001079	0.001079	0
Hammer Mill (Hood)	148.0	148.0	148.0	0	0.074	0.074	0.074	0
Conveyor Hoods	28.06	28.06	28.06	0	0.014030	0.014030	0.014030	0
	178.2	**178.2**	**178.2**	**0**	0.08911	0.08911	0.08911	0

New G7 Cutting project - RJRT Tobaccoville (00745)

Public

ES-15 Processing G7

Tobacco Casing, Cutting and Storage

			ES-15 UNCONTROLLED Emission Factors				Maximum G7		# of	ES-15 Uncontrolled Emission Rate					ES-15 Uncontrolled Emission Rate					ES-15 Uncontrolled Emission Rate				
			PM lb/ton	PM10 lb/ton	PM2.5 lb/ton	VOC lb/ton	Process Rate lb/hr	ton/hr	Sources Conveyors	PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	hrs/yr	PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
ES-15	*C &C Casing Drums and Hoods	EP-20								3.185	2.5480	2.5480	2.400	3369.231	10731	8584.8	8584.8	8085.48	5.3655	4.2924	4.2924	4.04274
ES-15	*G7 Steam Flotation Chambers	EP-23								31.98	25.58	25.58	0.3328	3369.231	107748	86198.4	86198.4	1121.28	53.874	43.0992	43.0992	0.56064
ES-15	G7 Rotary Dryer	EP-23								22.65	22.65	22.65	1.916	3369.231	76299.6	76299.6	76299.6	6456.12	38.1498	38.1498	38.1498	3.22806
ES-15	G7 Primary Pneumatic Separator	EP-23								392.60	392.60	392.60	6.968	3369.231	1322760	1322760	1322760	23476.8	661.38	661.38	661.38	11.7384
ES-15	G7 Secondary Pneumatic Separator	EP-23								6.604	6.604	6.604	0	3369.231	22250.4	22250.4	22250.4	0	11.1252	11.1252	11.1252	0
ES-15	Cutters (indoor Fugitive VOC)	Fugitive								0	0	0	0.2314	3369.231	0	0	0	779.64	0	0	0	0.38982
ES-15	Separators and Hoods PM	EP-24								33.95	33.95	33.95	0	3369.231	114380.0208	114380.0208	114380.0208	0	57.19001	57.19001	57.19001	0
ES-15	Separators and Hoods VOC	EP-24								0	0	0	1.369	3369.231	0	0	0	4613.3664	0	0	0	2.306683
ES-15	*Top Dressing Drums	EP-26, 61								0.1027	0.08216	0.08216	1.199	3369.231	346.02	276.816	276.816	4038.36	0.17301	0.138408	0.138408	2.01918
ES-15	Conveying Equipment Hoods PM	EP-29, 30, 31, 32								72.06	72.06	72.06	0	3369.231	242787.78	242787.78	242787.78	0	121.3939	121.3939	121.3939	0
ES-15	Conveying Equipment Hoods VOC	EP-29, 30, 31, 32								0	0	0	1.015	3369.231	0	0	0	3420.2544	0	0	0	1.710127
	TOTAL									563.13	556.07	556.07	15.43		1897302.82	1873537.82	1873537.82	51991.30	948.65	936.77	936.77	26.00

3D-0515 "P" [ton/hr]	"E" [lb/hr]	Uncontrolled Emissions [lb/hr]	Controlled Emissions [lb/hr]
	36.4	563.13	1.6947
	% of Std =	1547%	4.66%

* For these sources, PM2.5 and PM10 are assumed to be 80% of the PM emissions.

		PM Comtrol Eff %	VOC Comtrol Eff %	CONTROLLED Emission Rate PM lb/hr	PM10 lb/hr	PM2.5 lb/hr	VOC lb/hr	CONTROLLED Emission Rate PM lb/yr	PM10 lb/yr	PM2.5 lb/yr	VOC lb/yr	CONTROLLED Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
*C &C Casing Drums and Hoods	EP-20	90	30	0.3185	**0.2548**	**0.2548**	1.680	1073.10	858.48	858.48	5660.00	0.53655	0.42924	0.42924	2.83
*G7 Steam Flotation Chambers	EP-23	98	30	0.6396	**0.5117**	**0.5117**	0.2330	2154.96	1723.97	1723.97	785.00	1.077480	0.861984	0.861984	0.3925
G7 Rotary Dryer	EP-23	99.9	0	0.02265	0.02265	0.02265	1.9162	76.300	76.300	76.300	6456.00	0.038150	0.038150	0.038150	3.228
G7 Primary Pneumatic Separator	EP-23	99.9	0	0.3926	0.3926	0.3926	6.968	1322.76	1322.76	1322.76	23477.00	0.661380	0.661380	0.661380	11.7385
G7 Secondary Pneumatic Separator	EP-23	99.9		0.006604	0.006604	0.006604	0	22.25	22.25	22.25	0	0.011125	0.011125	0.011125	0
Cutters (indoor Fugitive VOC)	Fugitive		0	0	0	0	0.2314	0	0	0	779.60	0	0	0	0.3898
Separators and Hoods PM	EP-24	99.8		0.0679	0.0679	0.0679	0	228.76	228.80	228.80	0	0.114380	0.114400	0.114400	0
Separators and Hoods VOC	EP-24		0	0	0	0	1.369264	0	0	0	4613.00	0	0	0	2.3065
*Top Dressing Drums	EP-26, 61	0	0	0.1027	0.0822	0.0822	1.1986	346.02	276.80	276.80	4038.00	0.17301	0.1384	0.1384	2.019
Conveying Equipment Hoods PM	EP-29, 30, 31, 32	99.8		0.1441	0.1441	0.1441	0	485.58	485.60	485.60	0	0.242788	0.2428	0.2428	0
Conveying Equipment Hoods VOC	EP-29, 30, 31, 32		0	0	0	0	1.015144	0	0	0	3420.00	0	0	0	1.71
				1.695	**1.483**	**1.483**	**14.611**	**5709.73**	**4994.96**	**4994.96**	**49228.60**	2.855	2.497	2.497	24.614
	G7 Sub-Totals			1.061	0.9335	0.9335	9.117	3576.27	3145.28	3145.28	30718.00				
	G7 Sub-Totals			0.247	0.2263	0.2263	2.214	832	762	762	7458				

Comparison to PSD Significance Levels

	CONTROLLED Emission Rate PM ton/yr	PM10 ton/yr	PM2.5 ton/yr	VOC ton/yr
ES-1	1.23	1.23	1.23	3.05
ES-11	0.20	0.20	0.20	0.00
ES-12	0.10	0.10	0.10	0.00
ES-15	2.85	2.50	2.50	24.61
ES-24	0.09	0.09	0.09	0.00
Total	**4.47**	**4.12**	**4.12**	**27.66**
PSD Thresholds		15	10	40
% of Threshold		27.4%	41.2%	69.2%
PSD Triggered?		**No**	**No**	**No**

Forsyth County Office of Environmental Protection and Assistance
AIR COMPLIANCE ANALYSIS SUMMARY SHEET

FACILITY:	**RJR – TOBACCOVILLE**	**DATE:**	**23-APR-2018**
PREMISE NUMBER:	**For Permit 00745-TV-39**	**CASE MGR:**	**ROR**
LOCATION:	**Tobaccoville**	**REVIEWED BY:**	**PCM**

Permit Type (Check all that apply):			**New**	**Renewal**	**Modification**
		SMALL "B" OPERATING PERMIT			
		SYNTHETIC MINOR PERMIT			
	X	**TITLE V PERMIT**			**X**
	X	**PSD MAJOR PERMIT**			
	X	**AIR TOXIC DEMO / OTHER**	**N**	**COLOCATED (Y/N)**	
Modeling Analysis:		**CRITERIA / AAQS**		**PSD INCREMENT**	
	X	**TAPS**		**TAPR (DE MINIMIS)**	

EXECUTIVE SUMMARY:
The RJ Reynolds Tobaccoville Facility is located in north-central Forsyth County adjacent to the towns of Tobaccoville, King, and the Stokes County line. It is currently permitted as a Title V and a PSD major facility in Forsyth County under premise #00745, and is currently in compliance for all criteria, HAPs and TAPs emissions.

PROJECT DESCRIPTION:
RJR proposes to permit new construction of new emission sources ES-25, ES-26, and ES-27 at their Tobaccoville manufacturing facility. The modeling files labeled the new stacks as X1, X2, X3 and X4, but RJR has subsequently renamed the stacks so in the permit these four stacks are identified as 62, 63, 64 and 65 respectively. As part of this modification, emission factors for all emission sources at the facility were updated. The result of this modification and subsequent factor revisions may result in the potential increase of ten (10) TAPs: acetic acid, ammonia, ethylene oxide, hydrogen chloride, fluorides, benzene, formaldehyde, arsenic, cadmium, and beryllium previously modeled due to their exceeding their respective 3D.1104 Allowable Ambient Levels (AALs). RJR has submitted an Aermod study demonstrating the worst-case ambient concentrations for the TAPs of concern to ensure continued compliance to all AALs, as well as to update permitted emissions rates for each source to allow maximum production flexibility.

SUMMARY OF ANALYSIS & RESULTS:
The results of this summary include worst-case concentrations for each pollutant modeled, as well as source-by-source and facility-wide emission rate limits for each pollutant based on expansion of the modeled concentrations to 98% of their respective AALs. There were no changes to facility's modeling files.

TOXIC AIR POLLUTANTS MODELING ANALYSIS[(1)]						
POLLUTANT	**Avg. Period**	**CAS #**	**Model Used**	**Maximum Modeled Concentration (mg/m^3)**	**Allowable Ambient Limit (AAL) (mg/m^3)**	**% of AAL**
Acrolein[(2)]	Hourly	107-02-8	AERMOD	**1.20E-01**	3.70E+00	**3.2%**
Arsenic (As)[(3)]	Annual	7440-38-2	AERMOD	**9.64E-02**	2.70E+00	**3.6%**
Ammonia (NH_3)[(2)]	Hourly	7664-41-7	AERMOD	**9.95E-08**	2.10E-06	**4.7%**
Benzene[(2)]	Annual	71-43-2	AERMOD	**7.00E-06**	1.20E-03	**0.6%**
Beryllium (Be)[(3)]	Annual	7440-41-7	AERMOD	**7.43E-08**	4.10E-06	**1.8%**
Cadmium (Cd)[(3)]	Annual	7440-43-9	AERMOD	**7.66E-08**	5.50E-06	**1.4%**
Ethylene Oxide	Annual	75-21-8	AERMOD	**3.11E-06**	2.70E-05	**11.5%**
Fluorides[(3)]	Daily & Hourly	- - -	AERMOD	**1.10E-04**	1.60E-02	**0.7%**
Formaldehyde[(3)]	Hourly	50-00-0	AERMOD	**2.26E-03**	1.50E-01	**1.5%**
Hydrochloric Acid	Hourly	7647-01-0	AERMOD	**5.79E-04**	7.00E-01	**0.1%**
Comments: *(1) Results from original emission rates provided by RJR and verified by EAP.*						

TOXIC AIR POLLUTANTS MODELED EMISSION RATES[1]					
Emission Point ID	Acetic Acid (g/s)	Ammonia (g/s)	Ethylene Oxide ((g/s)	Formaldehyde (g/s)	HCl (g/s)
8	6.5487E-05	6.9015E-02	- - -	3.0428E-07	- - -
9	6.5487E-05	6.9015E-02	- - -	3.0428E-07	- - -
10	6.5487E-05	6.9015E-02	- - -	3.0428E-07	- - -
20	4.4190E-03	1.5508E-02	- - -	1.2428E-03	- - -
23	4.6883E-01	3.9672E-01	- - -	2.4978E-02	- - -
24	- - -	1.1155E-03	- - -	- - -	- - -
29A	1.1819E-02	2.6147E-03	4.2154E-04	1.7002E-04	- - -
30A	2.7703E-02	2.3925E-03	4.6694E-04	1.8833E-04	- - -
31A	2.5348E-02	1.2767E-03	4.2413E-04	1.7107E-04	- - -
32A	1.3527E-02	3.6953E-01	4.2673E-04	1.7211E-04	- - -
34	5.7737E-01	3.6953E-01	- - -	3.6297E-03	- - -
35	5.7737E-01	2.0260E-02	- - -	3.6297E-03	- - -
38	3.8707E-02	4.4150E-02	- - -	2.9400E-05	- - -
3942	3.6892E-03	2.2639E-03	- - -	4.5561E-04	- - -
40	6.4511E-04	2.0260E-02	- - -	1.8144E-04	- - -
41	3.8707E-02	2.2639E-03	- - -	4.2940E-04	- - -
43	6.4511E-04	7.3523E-02	- - -	1.8144E-04	- - -
52	- - -	4.0319E-03	- - -	1.6638E-04	2.5173E-02
60	- - -	4.0852E-03	- - -	9.4498E-05	- - -
X1	4.4061E-05	2.3095E-02	- - -	1.1357E-05	- - -
X2	3.6086E-02	1.3797E-03	- - -	2.2686E-04	- - -
X3	1.1529E-04	1.2663E-03	- - -	1.4238E-05	- - -
X4	2.4192E-03	8.3923E-04	- - -	2.6838E-05	- - -
Comments:					

TOXIC AIR POLLUTANTS MODELED EMISSION RATES (continued)[1]					
Emission Point ID	Arsenic (g/s)	Benzene (g/s)	Beryllium (g/s)	Cadmium (g/s)	Fluorides (g/s)
52	4.3908E-07	5.3056E-04	2.6345E-08	2.4149E-06	- - -
60	2.5200E-07	2.6460E-06	1.5120E-08	1.3860E-06	- - -
TANE1	- - -	- - -	- - -	- - -	1.6785E-03
TANE2	- - -	- - -	- - -	- - -	1.6785E-03
TASW1	- - -	- - -	- - -	- - -	- - -
TASW2	- - -	- - -	- - -	- - -	- - -
TBN1	2.5200E-05	1.2375E-04	1.8900E-05	1.8900E-05	- - -
TBN2	2.5200E-05	1.2375E-04	1.8900E-05	1.8900E-05	1.70e-03
Comments: *(1)These emission rates in the table above reflect those original rates provided in the original multi-chemical modeling analysis submitted to the EAP by RJR, and were used as the basis for the EAP modeling review.*					

Toxic Air Pollutants Maximum Allowable Rates: ACETIC ACID					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
8	6.55E-05	1.20E-01	3.63	30.22	1.98E-03
9	6.55E-05	1.20E-01	3.63	30.22	1.98E-03
10	6.55E-05	1.20E-01	3.63	30.22	1.98E-03
20	4.42E-03	1.20E-01	3.63	30.22	1.34E-01
23	4.69E-01	1.20E-01	3.63	30.22	1.42E+01
29A	1.18E-02	1.20E-01	3.63	30.22	3.57E-01
30A	2.77E-02	1.20E-01	3.63	30.22	8.37E-01
31A	2.53E-02	1.20E-01	3.63	30.22	7.66E-01
32A	1.35E-02	1.20E-01	3.63	30.22	4.09E-01
34	5.77E-01	1.20E-01	3.63	30.22	1.74E+01
35	5.77E-01	1.20E-01	3.63	30.22	1.74E+01
38	3.87E-02	1.20E-01	3.63	30.22	1.17E+00
3942	3.69E-03	1.20E-01	3.63	30.22	1.11E-01
40	6.45E-04	1.20E-01	3.63	30.22	1.95E-02
41	3.87E-02	1.20E-01	3.63	30.22	1.17E+00
43	6.45E-04	1.20E-01	3.63	30.22	1.95E-02
X1	4.41E-05	1.20E-01	3.63	30.22	1.33E-03
X2	3.61E-02	1.20E-01	3.63	30.22	1.09E+00
X3	1.15E-04	1.20E-01	3.63	30.22	3.48E-03
X4	2.42E-03	1.20E-01	3.63	30.22	7.31E-02

Toxic Air Pollutants Maximum Allowable Rates: AMMONIA					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
8	6.90E-02	9.64E-02	2.65	27.45	1.89E+00
9	6.90E-02	9.64E-02	2.65	27.45	1.89E+00
10	6.90E-02	9.64E-02	2.65	27.45	1.89E+00
20	1.55E-02	9.64E-02	2.65	27.45	4.26E-01
23	3.97E-01	9.64E-02	2.65	27.45	1.09E+01
24	1.12E-03	9.64E-02	2.65	27.45	3.06E-02
29A	2.61E-03	9.64E-02	2.65	27.45	7.18E-02
30A	2.39E-03	9.64E-02	2.65	27.45	6.57E-02
31A	1.28E-03	9.64E-02	2.65	27.45	3.50E-02
32A	3.70E-01	9.64E-02	2.65	27.45	1.01E+01
34	3.70E-01	9.64E-02	2.65	27.45	1.01E+01
35	2.03E-02	9.64E-02	2.65	27.45	5.56E-01
38	4.41E-02	9.64E-02	2.65	27.45	1.21E+00
3942	2.26E-03	9.64E-02	2.65	27.45	6.21E-02
40	2.03E-02	9.64E-02	2.65	27.45	5.56E-01
41	2.26E-03	9.64E-02	2.65	27.45	6.21E-02
43	7.35E-02	9.64E-02	2.65	27.45	2.02E+00
52	4.03E-03	9.64E-02	2.65	27.45	1.11E-01
60	4.09E-03	9.64E-02	2.65	27.45	1.12E-01
X1	2.31E-02	9.64E-02	2.65	27.45	6.34E-01
X2	1.38E-03	9.64E-02	2.65	27.45	3.79E-02
X3	1.27E-03	9.64E-02	2.65	27.45	3.48E-02
X4	8.39E-04	9.64E-02	2.65	27.45	2.30E-02
TASW1	2.02E-02	9.64E-02	2.65	27.45	5.53E-01
TASW2	2.02E-02	9.64E-02	2.65	27.45	5.53E-01

Toxic Air Pollutants Maximum Allowable Rates: ARSENIC					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
52	4.39E-07	9.95E-08	2.06E-06	20.68	9.08E-06
60	2.52E-07	9.95E-08	2.06E-06	20.68	5.21E-06
TBN1	2.52E-05	9.95E-08	2.06E-06	20.68	5.21E-04
TBN2	2.52E-05	9.95E-08	2.06E-06	20.68	5.21E-04

Toxic Air Pollutants Maximum Allowable Rates: BENZENE					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
52	5.31E-04	7.00E-06	1.18E-03	168	8.91E-02
60	2.65E-06	7.00E-06	1.18E-03	168	4.45E-04
TBN1	1.24E-04	7.00E-06	1.18E-03	168	2.08E-02
TBN2	1.24E-04	7.00E-06	1.18E-03	168	2.08E-02

Toxic Air Pollutants Maximum Allowable Rates: BERYLLIUM					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
52	2.63E-08	7.43E-08	4.02E-06	54.08	1.42E-06
60	1.51E-08	7.43E-08	4.02E-06	54.08	8.18E-07
TBN1	1.89E-05	7.43E-08	4.02E-06	54.08	1.02E-03
TBN2	1.89E-05	7.43E-08	4.02E-06	54.08	1.02E-03

Toxic Air Pollutants Maximum Allowable Rates: CADMIUM					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
52	2.41E-06	7.66E-08	5.39E-06	70.37	1.70E-04
60	1.39E-06	7.66E-08	5.39E-06	70.37	9.75E-05
TBN1	1.89E-05	7.66E-08	5.39E-06	70.37	1.33E-03
TBN2	1.89E-05	7.66E-08	5.39E-06	70.37	1.33E-03

Toxic Air Pollutants Maximum Allowable Rates: ETHYLENE OXIDE					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
29A	4.22E-04	3.11E-06	2.65E-05	8.51	3.59E-03
30A	4.67E-04	3.11E-06	2.65E-05	8.51	3.97E-03
31A	4.24E-04	3.11E-06	2.65E-05	8.51	3.61E-03
32A	4.27E-04	3.11E-06	2.65E-05	8.51	3.63E-03

Toxic Air Pollutants Maximum Allowable Rates: FLUORIDES					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
TANE1	1.68E-03	1.10E-04	1.57E-02	142.55	2.39E-01
TANE2	1.68E-03	1.10E-04	1.57E-02	142.55	2.39E-01

Toxic Air Pollutants Maximum Allowable Rates: HYDROCHLORIC ACID					
Stack ID	Modeled Rate (g/s)	Modeled Concentration (mg/m3)	Expansion (98% of AAL)	Expansion Multiplier	Maximum Allowable Rate (g/s)
52	2.52E-02	5.79E-04	6.86E-01	1184.80	2.98E+01

Toxic Air Pollutants Maximum Allowable Rates: FORMALDEHYDE					
Stack ID	**Modeled Rate (g/s)**	**Modeled Concentration (mg/m3)**	**Expansion (98% of AAL)**	**Expansion Multiplier**	**Maximum Allowable Rate (g/s)**
8	3.04E-07	2.26E-03	0.15	65.04	1.98E-05
9	3.04E-07	2.26E-03	0.15	65.04	1.98E-05
10	3.04E-07	2.26E-03	0.15	65.04	1.98E-05
20	1.24E-03	2.26E-03	0.15	65.04	8.08E-02
23	2.50E-02	2.26E-03	0.15	65.04	1.62E+00
29A	1.70E-04	2.26E-03	0.15	65.04	1.11E-02
30A	1.88E-04	2.26E-03	0.15	65.04	1.22E-02
31A	1.71E-04	2.26E-03	0.15	65.04	1.11E-02
32A	1.72E-04	2.26E-03	0.15	65.04	1.12E-02
34	3.63E-03	2.26E-03	0.15	65.04	2.36E-01
35	3.63E-03	2.26E-03	0.15	65.04	2.36E-01
38	2.94E-05	2.26E-03	0.15	65.04	1.91E-03
3942	4.56E-04	2.26E-03	0.15	65.04	2.96E-02
40	1.81E-04	2.26E-03	0.15	65.04	1.18E-02
41	4.29E-04	2.26E-03	0.15	65.04	2.79E-02
43	1.81E-04	2.26E-03	0.15	65.04	1.18E-02
52	1.66E-04	2.26E-03	0.15	65.04	1.08E-02
60	9.45E-05	2.26E-03	0.15	65.04	6.15E-03
X1	1.14E-05	2.26E-03	0.15	65.04	7.39E-04
X2	2.27E-04	2.26E-03	0.15	65.04	1.48E-02
X3	1.42E-05	2.26E-03	0.15	65.04	9.26E-04
X4	2.68E-05	2.26E-03	0.15	65.04	1.75E-03
TBN1	2.16E-03	2.26E-03	0.15	65.04	1.40E-01
TBN2	2.16E-03	2.26E-03	0.15	65.04	1.40E-01

TOXIC AIR POLLUTANTS MAXIMUM FACILITY-WIDE EMISSION RATES[(1)]			
Pollutant	**Averaging Period**	**Maximum Rate**	**Unit**
Acetic Acid	1-hr	**4.38E+02**	**lb/hr**
Ammonia	1-hr	**3.49E+02**	**lb/hr**
Arsenic	Annual	**7.35E+01**	**lb/yr**
Benzene	Annual	**9.12E+03**	**lb/yr**
Beryllium	Annual	**1.42E+02**	**lb/yr**
Cadmium	Annual	**2.04E+02**	**lb/yr**
Ethylene Oxide	Annual	**1.03E+03**	**lb/yr**
Fluorides	24-hr	**9.11E+01**	**lb/day**
Fluorides	1-hr	**3.80E+00**	**lb/hr**
Formaldehyde	1-hr	**2.08E+01**	**lb/hr**
Hydrochloric Acid	1-hr	**2.37E+02**	**lb/hr**
(1) At 98% of each pollutant's AAL.			

AERMOD MODEL SETTINGS	
AERMOD EPA Version:	16216r
Processing Options:	Default (no deposition)
Dispersion Scheme:	Rural
Projection:	UTM Zone 17N
Datum:	NAD83 (GRS-80 ellipsoid)
Domain Anchor (X,Y):	557188.4E / 4011951.0N
Domain SW Corner:	553475.1E / 4007452.0N
Doman Extents (X,Y):	7250m x 8000m
Receptor Grid Type(s):	Discrete Cartesian
Grid Spacing(s):	Fenceline: 18m
	Near Field (up to 1000m): 100m
	Wide Field (up to 3000m): 250m
Total Receptors:	2546
AERMAP EPA Version:	11103
Elevation Input Type:	USGS 1/3” (1:24,000) Digital Elevation Model (DEM)
USGS QUAD ID:	Rural Hall (SE), King (NE), Pinnacle (NW), Vienna (SW)
DEM Format:	GeoTIFF World File
Processing Default:	Elevated Terrain, Inverse Distance Interpolation
AERMET EPA Version:	16216
Met Years:	2012-2016
Surface Station:	KINT - Winston-Salem, Smith Reynolds Airport
WMO ID:	93807
Tower Base:	296m MSL
UA Station:	KGSO - Greensboro/High Point/Winston-Salem Airport
WBAN ID:	13723
Levels Reported:	Mandatory & Significant
Aersurface:	Yes (NCDEQ)
Aerminute:	Yes

MODELED POINT SOURCE PARAMETERS										
STACK ID	DATE LAST MODELED	LOCATION (UTM)		BASE ELEVATION (M)	STACK HEIGHT (M)	STACK DIAMETER (M)	EXIT VELOCITY (M/S)	EXIT TEMP (K)	DISCHARGE ORIENTATION	RAIN CAP? (Y/N)
		EAST (M)	NORTH (M)							
8	4/23/2018	557209.30	4012236.00	314.25	17.0	0.61	18.11	333.7	VERTICAL	N
9	4/23/2018	557242.20	4012236.00	314.25	17.0	0.61	18.11	328.2	VERTICAL	N
10	4/23/2018	557225.70	4012236.00	314.25	17.0	0.61	18.11	330.9	VERTICAL	N
20	4/23/2018	557084.60	4012270.90	314.25	17.0	0.76	17.18	319.8	VERTICAL	N
23	4/23/2018	557084.90	4012174.20	311.51	25.4	1.83	22.49	314.3	VERTICAL	N
24	4/23/2018	557090.00	4012165.10	311.51	23.8	1.27	44.07	313.7	VERTICAL	N
29A	4/23/2018	557050.00	4012058.00	310.90	22.8	4.40	1.46	299.8	HORIZONTAL	N
30A	4/23/2018	556934.00	4012051.00	310.90	22.8	4.40	1.82	299.8	HORIZONTAL	N
31A	4/23/2018	556933.10	4011866.00	310.90	22.8	4.40	1.86	299.8	HORIZONTAL	N
32A	4/23/2018	557050.00	4011861.00	310.90	22.8	4.40	1.15	299.8	HORIZONTAL	N
34	4/23/2018	557053.50	4012326.90	314.25	17.4	1.02	11.96	365.9	VERTICAL	N
35	4/23/2018	557058.10	4012326.90	314.25	17.4	1.02	10.82	365.9	VERTICAL	N
38	4/23/2018	557053.70	4012300.00	314.25	17.4	0.56	10.43	332.0	VERTICAL	N
3942	4/23/2018	557064.80	4012297.10	314.25	17.4	2.84	1.83	327.6	HORIZONTAL	N
40	4/23/2018	557113.30	4012302.00	314.25	17.4	0.46	12.94	315.4	VERTICAL	N
41	4/23/2018	557053.90	4012291.40	314.25	17.4	0.56	10.43	332.0	VERTICAL	N
43	4/23/2018	557114.30	4012292.80	314.25	17.4	0.46	12.94	322.6	VERTICAL	N
52	4/23/2018	557154.70	4012092.20	311.51	38.7	0.97	19.25	442.0	VERTICAL	N
60	4/23/2018	557025.50	4012143.40	311.51	10.1	0.61	7.32	366.5	VERTICAL	N
X1	**4/23/2018**	**557120.80**	**4011888.90**	**310.90**	**11.0**	**0.25**	**13.63**	**322.6**	**VERTICAL**	**N**
X2	**4/23/2018**	**557124.80**	**4011900.70**	**310.90**	**11.0**	**0.36**	**13.53**	**365.9**	**VERTICAL**	**N**
X3	**4/23/2018**	**557120.10**	**4011900.60**	**310.90**	**11.0**	**0.36**	**14.33**	**327.6**	**VERTICAL**	**N**
X3	**4/23/2018**	**557114.80**	**4011900.60**	**310.90**	**11.0**	**0.36**	**14.17**	**327.6**	**VERTICAL**	**N**
TANE1	4/23/2018	557120.80	4011888.90	310.90	11.0	0.25	13.63	322.6	VERTICAL	N
TANE2	4/23/2018	557124.80	4011900.70	310.90	11.0	0.36	13.53	365.9	VERTICAL	N
TASW1	4/23/2018	557120.10	4011900.60	310.90	11.0	0.36	14.33	327.6	VERTICAL	N
TASW2	4/23/2018	557114.80	4011900.60	310.90	11.0	0.36	14.17	327.6	VERTICAL	N
TBN1	4/23/2018	557322.46	4011471.93	302.36	4.6	0.37	7.62	463.7	VERTICAL	N
TBN2	4/23/2018	557332.18	4011471.84	302.36	4.6	0.37	7.62	463.7	VERTICAL	N

NEW EMISSION POINT DESCRIPTIVE INFORMATION				
EMISSION POINT ID	**SOURCE IDENTIFICATION & DESCRIPTION**	**DATE INSTALLED (MODIFIED)**	**STATUS**	**Other**
X1	New Casing & Conditioning Drums	n/a	Planned – Not currently installed.	Tobaccoville Small Batch Project (emission sources ES-25, ES-26, & ES-27).
X2	New Apron Dry Section	n/a	Planned – Not currently installed.	
X3	New Apron Cooling Section	n/a	Planned – Not currently installed.	
X3	New Apron Reorder Section	n/a	Planned – Not currently installed.	

AERMOD / AERMAP SPECIFICATIONS TABLE				
MET DATA	KINT - KGSO 2014 [Surface Air = Winston-Salem, NC; 969 ft MSL; Upper Air = Greensboro, NC]			
NED TERRAIN FILES	Rural Hall, King, Vienna, Pinnacle, NC (1/3 Arc Sec USGS DEM)			
PROJECTION DATUM	NAD27 [ ]	NAD83 [X]	WGS-84 [ ]	NWS-84 [ ]
RURAL or URBAN?	Rural [X]	Urban [ ]		
ELEVATIONS EXTRACTED	Buildings [X]	Sources [X]	Tanks [ ]	Receptors [X]

MODELING HISTORY			
DATE	**MODELER**	**REASON**	**DESCRIPTION**
5/28/1999	DFP	TAPS DEMO	Initial triggered air toxics modeling demonstration (TV-2).
8/23/1999	DFP	TV MOD	Addition of flavoring chemical to plasticizer applied to cigarette filters (TV-3).
8/24/2000	VKS	TV MOD	Switching to a new glue for cigarette packages (TV-4).
4/20/2006	VKS	TV MOD	Exemption remodeling for TV-19 with new emission rates.
4/01/2011	VKS	TV MOD	Addition of R&D facility for TV-29.
10/31/2016	PCM	PSD MOD	Aermod TAPs runs for proposed temporary boilers (two location / fuel combination scenarios).
4/23/2018	PCM	PSD MOD	Aermod TAPs runs for ES-25, ES-26, & ES-27 w/update in TAPS emission factors for all sources.