

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: TBD, 2023

Region: Raleigh Regional Office
County: Wilson
NC Facility ID: 9800233
Inspector's Name: Dawn Reddix
Date of Last Inspection: 06/07/2022
Compliance Code: 3 / Compliance - inspection

Facility Data	Permit Applicability (this application only)
<p>Applicant (Facility's Name): Alliance One Specialty Products, LLC</p> <p>Facility Address: Alliance One Specialty Products, LLC 2305 Baldree Road Wilson, NC 27893</p> <p>SIC: 2141 / Tobacco Stemming And Redrying NAICS: 31221 / Tobacco Stemming and Redrying</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p>SIP: 15A NCAC 02D .0515, and .0521 NSPS: 40 CFR 60 Dc NESHAP: NA PSD: NA PSD Avoidance: 15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530 NC Toxics: 15A NCAC 02D .1100 112(r): NA Other: NA</p>

Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	<p>Application Number: 9800233.22A Date Received: 05/08/2022 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 10335/T01 Existing Permit Issue Date: 05/21/2018 Existing Permit Expiration Date: 04/30/2023</p>
Jonathan Varnell General Manager (252) 206-3200 2305 Baldree Road Wilson, NC 27893	Jonathan Varnell General Manager (252) 206-3200 2305 Baldree Road Wilson, NC 27893	Jonathan Varnell General Manager (252) 206-3200 2305 Baldree Road Wilson, NC 27893	

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2021	0.0200	2.94	107.17	2.47	0.4100	0.0559	0.0535 [Hexane, n-]
2020	0.0200	3.02	129.15	2.54	0.4700	0.0570	0.0545 [Hexane, n-]
2019	0.0200	2.65	126.10	2.23	0.4500	0.0497	0.0475 [Hexane, n-]
2018	0.0100	2.25	129.16	1.89	0.4300	0.0434	0.0415 [Hexane, n-]
2017	0.0100	2.30	130.53	1.93	0.4300	0.0434	0.0415 [Hexane, n-]

<p>Review Engineer: Richard Simpson</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p>Comments / Recommendations:</p> <p>Issue: 10335/T02 Permit Issue Date: TBD, 2023 Permit Expiration Date: TBD, 2028</p>
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I. Introduction:

Alliance One Specialty Products, LLC currently holds Title V Permit No. 10335T01 with an expiration date of April 30, 2023 for a tobacco processing operation in Wilson, Wilson County, North Carolina.

II. Description of Facility:

Alliance One Specialty Products, LLC (AOSP) is a contractor, processor and supplier of Flue-Cured, Burley, Oriental, Sun-Cured, Dark Air-Cured and Dark Fire-Cured tobaccos. They offer customers a wide range of products and services, including a full complement of tobacco blends for the following products: Cigarettes, Pipes, Roll Your Own (RYO) and cigars. The facility receives tobacco strips and stems to be processed and sold to end-users. Emissions from the facility are primarily particulate matter and VOCs from the Cut Rag Process and Batch Flavoring Process lines. The primary equipment at the facility includes feeders, top dress cylinders, separators, conveyors, and pack out equipment. The facility also operates two natural gas-fired boilers for process steam. The plant is called the “Cut Rag” facility and is operated by 93 hourly and 34 staff employees. The typical operating schedule is two eight-hour shifts (6am-2pm; 2pm – 10 pm) per day, four to five days per week, year-round.

III. Purpose of Application

Permit application No. 9800233.22A was received on May 11, 2022 and deemed complete for a renewal of an existing Title V permit pursuant to 15A NCAC 02Q .0513. The renewal application was received at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. This permit action will address the following sources and control devices associated with the application:

IV. History/Background/Application Chronology

May 11, 2022 – Permit application 9800233.22A was received for a Title V renewal and a permit acknowledgement was sent to the facility.

May 21, 2018 – Permit 10335T01 was issued.

June 7, 2022 – The facility was inspected by RRO engineer Dawn Reddix and the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of the inspection.

January XX-XX, 2023 – The facility, Raleigh Regional Office, and Stationary Compliance Section were requested by the Permitting Section to comment on the permit renewal. Comments were received and included in the permit.

TBD, 2023– TVEE changes were approved by Jenny Sheppard TVEE Coordinator.

TBD, 2023 – Permit 10335T02 was issued.

V. Permit Modifications/Changes and TVEE Discussion

The following changes were made to Air Permit No. 10335T01.*

Page No.	Section	Description of Changes
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Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers. Permit was updated with the latest Permit Shell 7.0.
Throughout	Permit	Changed: Permit number, replaces permit number, effective date, application number, effective date of permit.
NA	NA	Added the “Notice Regarding the Right to Contest a Division of Air Quality Permit Decision”.
Attachment	Insignificant Activities	Moved to Section 3.
3-4	Section 1 and Section 2.1 A	Removed the oriental delaminator (ID No. ES-3) since it is no longer at the facility.
3-4	Section 1 and Section 2.1 A	Removed the duplicate emission sources, FDR and ITM cutters, (ID Nos. ES-B and ES-C).
3-4	Section 1 and Section 2.1 A	Updated the description for ID No. 10 from “FDR cutter” to “EVO cutter”.
3-4	Section 1 and Section 2.1 A	Updated emission source ES-15 description from “add back silo” to “Three add back silos”.
3-4	Section 1 and Section 2.1 A	Updated emission source ES-8 description from “pre blend silo” to “ Two pre blend silos”.
3-4	Section 1 and Section 2.1 A	Updated emission source ES-17 description from “pack out silo” to “ Two pack out silos”.
4-8	Sections 2.A. 1 and 2	Added emission source ID Nos. to 15A NCAC 02D .0503, .0515, .0516, and .0521.
10	Section 2.2 A.3	Added approved modeling language to 15A NCAC 02D .1100.
11-19	Section 3	The General Conditions were updated to the latest version of DAQ shell and moved to Section 4.
20	General Conditions	Moved List of Acronyms to page 3 of the permit.

*This list is not intended to be a detailed record of every change made to the permit but a summary of those changes. There were changes required to the Title V Equipment Editor (TVEE) under this permit renewal.

VI. Statement of Compliance

Five year compliance history

According to the DAQ database, the facility has received two compliance-related letters. A Notice of Violation dated August 28, 2017, was issued for failing to submit a first half 2017 semi-annual report. A Notice of Violation was issued on February 17, 2017, for failing to submit a semi-annual report for the second half of 2016.

During the most recent inspection conducted on June 7, 2022, Dawn Reddix of the RRO indicated that the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of inspection.

VII. Application Description

All minor updates are included in the Table of Changes. ES-3, Oriental Delaminator has been removed from the facility and can be removed from the permit; there is only one FDR Cutter (ES-10 and ES-B) and ITM Cutter (ES-11 and ES-C); the duplicates can be removed from the permit. FDR cutter should be renamed to EVO cutter. There are 3 add back silos, 2 pre-blend silos, and 2 pack-out silos. There were no changes to the regulations, and potential emissions for this renewal Title V permit application.

VIII. Regulatory Review/Equipment Changes

The facility is currently subject to the following regulations:

- A. 15A NCAC 02D .0503: “Particulates from Fuel Burning Indirect Heat Exchangers”
- B. 15A NCAC 02D .0515: “Particulates from Miscellaneous Industrial Processes”
- C. 15A NCAC 02D .0516: “Sulfur Dioxide Emissions from Combustion Sources”
- D. 15A NCAC 02D .0521: “Control of Visible Emissions”
- E. 15A NCAC 02D .0524: “New Source Performance Standards (40 CFR 60, Subpart Dc)”
- F. 15A NCAC 02D .1806: “Control and Prohibition of Odorous Emissions”
- G. 15A NCAC 02D .1100: “Toxic Air Pollutant Emissions Limitation and Reporting Requirements”
- H. 15A NCAC 02Q .0317: to comply with this permit and avoid the applicability of 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

The regulations associated with this Title V permit renewal are evaluated below. For a discussion of MACT, CAM, and PSD requirements, see Section IX. The permit will be updated to reflect the most current stipulations for all applicable regulations.

The facility currently has the following sources. Their regulatory requirements are as follows:

- A. Cut Rag Process consisting of one feeder line (30,000 pounds per hour maximum process rate) including slicing, conditioning, and separating equipment as described below:

Vertical Slicer (ES-1), Tipper Feeder (ES-2), FDR Cutter (ES-10), ITM Cutter (ES-11), Tipper Feeder (ES-13), Tipper Feeder (ES-14), Three Add Back Silos (ES-15) and Pack out Station (ES-18) with all sources controlled by one bagfilter (BH-1).

Separator (ES-5), Air Leg (ES-6), Optical Sorter (ES-7), Two Pre Blend Silos (ES-8), Roller & Shaker (ES-9), Cooler (VAS) (ES-12) and Two Pack out Silos (ES-17) with all sources controlled by one bagfilter (BH-2).

There are no control devices for the Conditioning Cylinder (ES-DCC), Casing Cylinder (ES-CC), Top Flavoring Cylinder (ES-TFC), and Rotary Dryer (ES-D).

The “Cut Rag” processes tobacco for cigarette manufacturing where tobacco strips and stems are processed. The cut rag process line consisting of a series of handling, drying, separating, casing, cutting, topdressing, packaging equipment and an additional line for the addition of specialty flavorings. The maximum processing rate is 30,000 pounds per hour.

- 1. 15A NCAC 02D .0515: “Particulates from Miscellaneous Industrial Processes”

The maximum process rate for this source is 30,000 pounds per hour (15tph). The PM emission allowable rate as per this rule is based on the following equation:

$$E = 4.10 \times P^{0.67}$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

The controlled and uncontrolled emissions from all the above sources have a particulate matter emissions rate which is lower than the allowable emission rate.

Testing

If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting

For uncontrolled sources Conditioning Cylinder (ES-DCC), Casing Cylinder (ES-CC), Top Flavoring Cylinder (ES-TFC), and Rotary Dryer (ES-D), the applicant is required to maintain production records. No reporting is required for particulate emissions from these sources:

The particulate matter emissions from controlled sources: Vertical Slicer (ES-1), Tipper Feeder (ES-2), FDR Cutter (ES-10), ITM Cutter (ES-11), Tipper Feeder (ES-13), Tipper Feeder (ES-14), Three Add Back Silos (ES-15), Separator (ES-5), Air Leg (ES-6), Optical Sorter (ES-7), Two Pre Blend Silos (ES-8), Roller & Shaker (ES-9), Cooler (VAS) (ES-12) and Two Pack Out Silos (ES-17) shall be controlled by the bagfilters (ID Nos. BH-1 and BH-2).

The applicant has to perform inspections and maintenance as recommended by the manufacturer and as a minimum, the inspection and maintenance requirement shall include a monthly visual inspection of the system ductwork and material collection unit for leaks and an annual internal inspection of the bagfilter's structural integrity.

The results of inspection and maintenance shall be maintained in a logbook and made available to DAQ upon request.

The applicant shall submit a semi-annual summary report of the monitoring and recordkeeping activities.

2. 15A NCAC 02D .0521: "Control of Visible Emissions"

The visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period.

If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting

Once a month the applicant shall observe the emission points of these sources for any visible emissions. If visible emissions from these sources are observed to be above normal, the applicant shall take appropriate action to correct the above-normal emissions as soon as practicable and record the action taken.

The applicant shall maintain logbook the results of the monitoring and make available to DAQ upon request and submit a semi-annual summary report of the observations.

- B. One natural gas-fired boiler (25.1 million Btu per hour maximum heat input capacity, ES-102) and one new natural gas-fired boiler (12.4 million Btu per hour maximum heat input capacity, ES-103).

Both of these boilers are subject to NSPS Subpart Dc because they are steam generating units for which construction, modification, or reconstruction is commenced after June 9, 1989 and each boiler has a maximum design heat input capacity of 100 million Btu per hour or less, but greater than or equal to 10 million Btu per hour. As they only fire natural gas, they are not subject to any PM (including opacity limitations), or SO₂ emission standards under this rule. The only requirement for these boilers under this rule is to keep records of the amount of fuel combusted each month. Therefore, the State regulation under 15A NCAC 02D .0503, 02D .0521 and 02D .0516 are placed into the permit.

1. 15A NCAC 02D .0503: “Particulates from Fuel Burning Indirect Heat Exchangers”
This rule limits total particulate matter (total PM) including filterable and condensable PM as a function of heat input according to the following equation:

$$E = 1.090 * Q^{-0.2594}$$

For boiler ES-102, the value of Q is the total maximum input for all sources subject to this regulation at the time of first installation. For this boiler the maximum heat input at the time of installation was 25.1 mmBtu/hr. The allowable particulate matter emission rate under this rule is 0.472 lb/mmBtu. A natural gas fired boiler per AP-42 emissions factors is expected to be 0.007 lb/mmBtu.

For boiler (ES-103), the value of Q is 37.5 mmBtu/hr (25.1 + 12.4 million Btu/hour). The allowable particulate matter emission rate under this rule is 0.425 lb/mmBtu. Based on the rating of this boiler the allowable rate is 52.7 lbs per hour of particulate matter emissions. Based on AP-42 emissions factors the emissions from this new boiler while firing natural gas will be 0.09 lbs per hour. Thus, this boiler will always be in compliance by the firing of natural gas in this source and as per DAQ policy, no monitoring, recordkeeping and reporting will be required to ensure compliance with this rule.

$$\begin{aligned} E &= 1.090 * (37.5 \text{ million Btu per hour})^{-0.2594} \\ &= 1.090 * 0.3905 = 0.425 \text{ lbs per million Btu heat input} \end{aligned}$$

2. 15A NCAC 02D .0521: “Control of Visible Emissions”

The visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. Natural gas fired boilers generally have no visible emissions and in consistent with current DAQ policy, no monitoring, recordkeeping and reporting will be required to ensure compliance with this rule.

3. 15A NCAC 02D .0524 NEW SOURCE PERFORMANCE STANDARDS

Both of these boilers are subject to NSPS Subpart Dc because they are steam generating units for which construction, modification, or reconstruction is commenced after June 9, 1989 and each boiler has a maximum design heat input capacity of 100 million Btu per hour or less, but greater than or equal to 10 million Btu per hour. As boilers only fire natural gas, they are not subject to any particulate matter or SO₂ emission standards under this rule. These boilers are only required to keep records of the amount of fuel combusted each month.

4. 15A NCAC 02D .0516: “Sulfur Dioxide Emissions from Combustion Sources”

Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input while firing natural gas. Firing of natural gas in these boilers will result in sulfur dioxide emissions less than the allowable and the boilers will always be in compliance.

Monitoring/Recordkeeping/Reporting

No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas at these sources.

5. 15A NCAC 02D .1111: “Maximum Achievable Control Technology”

The boilers at this facility are subject to 40 CFR Subpart JJJJJ because they are an industrial, commercial, or institutional boiler as defined in 40 CFR 63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.

This subpart applies to each new, reconstructed, or existing affected source as defined in paragraphs 40 CFR 63.11194 (a)(2) of this section: The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in 40 CFR 63.11200 and as defined in 40 CFR 63.11237, located at an area source. An affected source is a new source if you commenced construction of the affected source after June 4, 2010, and the boiler meets the applicability criteria at the time you commence construction.

However, pursuant to 40 CFR 63.11195(e) natural gas-fired boilers are not subject to this subpart and to any requirements in this subpart.. Thus, these boilers are not subject to this rule.

C. All sources at this facility including the Batch Flavoring Process (ES-BFB) consisting of Unpacking operations, Flavoring operations and Pack out operations.

State Enforceable Only

1. 15A NCAC 02D .1806: Control and Prohibition of Odorous Emissions

The facility shall not operate the facility without implementing management practices or installing and operating odor control equipment.

State Enforceable Only

2. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

The only TAP expected to be emitted at a rate greater than its associated toxic air pollutant permitting emissions rate (TPER) is ammonia. The applicant previously submitted a modeling analysis for review by the DAQ’s Air Quality Analysis Branch (AQAB), which was approved via memo issued August 5, 2013. (See review for applicant 9800233.13A).

The expected actual emission rates of ammonia were modeled resulting in a maximum impact of 9% of the AAL. No monitoring, recordkeeping and reporting will be required. The emissions rate of ammonia is in permit Section 2.2 A. 3.

Sources	Toxic Air Pollutants	Emission Limits
Rotary dryer (ID No. ES-D)	ammonia	0.61 pounds per hour
Conditioning cylinder (ID No. ES-DCC)		0.110 pounds per hour

- 15A NCAC 02Q .0317: “Avoidance Conditions” for 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

The facility currently has a PSD avoidance condition to limit the emissions of VOCs from the facility to less than 250 tons per year. The facility complies by utilizing a mass balance approach to the usage of VOC containing materials.

The applicant will continue to calculate VOC emissions on a monthly basis and the calculations shall be made at the end of each month. These calculations of total VOCs shall be recorded monthly in a logbook and the Permittee shall submit a semi-annual summary report of monitoring and recordkeeping activities.

IX. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS

NSPS applicability is discussed above in Section VIII. of this review.

NESHAPS/MACT

This facility is an area source of HAPs however, no GACT rules apply to sources at this facility (See Section VIII. above of this review).

PSD

The facility has taken a PSD avoidance limitation for VOC emissions (See Section VIII. above of this review). This facility remains a minor source under the PSD program.

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

CAM – 40 CFR 64 requires that a compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the 100 ton/yr major source threshold and use a control device to meet an applicable standard. The facility demonstrated the following calculation for the maximum uncontrolled PM emission rate of 20 lb/hr.

$$(20 \text{ lb/hr}) \times (8,760 \text{ hr/yr}) = 175,200 \text{ lb/yr} = 87.6 \text{ tons/yr}$$

CAM is not applicable for this facility.

X. Facility Wide Air Toxics (State-enforceable Only)

North Carolina General Statute (NCGS) 143-215.107(a) was approved on June 28, 2012 and this Act exempts from State Air Toxics those sources of emissions that are subject to certain Federal emissions requirements under 40 CFR Part 61 (NESHAP), Part 63 (MACT). This statute was placed

into the North Carolina State Air Toxics regulations on May 1, 2014 under Regulation 15A NCAC 02Q .0702(a)(27).

Pursuant to 15A NCAC 02D .1100, 15A NCAC 02Q .0700, and in accordance with the approved application for an air toxic compliance demonstration, the emission limits contained in the current permit shall not be exceeded. To ensure compliance with these regulations the Permittee shall maintain records of production rates, throughput, material usage, and other process operational information as is necessary to determine compliance with the air toxic emission limits specified above for a minimum of five years from the date of recording.

See Section VIII of this review. The sources will continue to comply with all requirements for 15A NCAC 02D .1104 and 15A NCAC 02Q .0700. There are no other unacceptable risk sources with this Title V permit renewal and the current status of the facility is not affected.

XI. Facility Emissions Review

The actual emissions from the annual reporting inventories are listed in the first page of this review.

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

A thirty-day public notice period and a forty-five-day EPA review period is required for the Title V Permit renewal. A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to the EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

EPA's 45 Day Review period
Brad Akers (U.S. EPA, Region IV) was provided a PROPOSED permit for review on **TBD**, 2023. EPA 45-day review period ended on **TBD**, 2023. No comments were offered or received.

Public Notice

The 30-day public notice of the PROPOSED permit was posted on the NCDAQ website on **TBD**, 2023. No comments were offered or received.

XIII. Other Regulatory Considerations

- No fee is required for this permit renewal.
- The appropriate number of application copies was received by the DAQ.
- A Professional Engineer's seal is not required for this application.
- A zoning consistency determination is not required for this application.
- Wilson County has triggered increment under PSD for PM₁₀, SO₂, and NO_x. For PSD increment tracking purposes, this Title V permit renewal does not consume PM₁₀, SO₂, and NO_x increments.
- The application was signed by Jonathan Varnell, General Manager on May 2, 2022.

XIV. Recommendations

The Title V permit renewal application for Alliance One Specialty Products, LLC in Wilson, Wilson County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and

requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 10335T02.