NORTH CAROLINA DIVISION OF **AIR QUALITY**

Application Review

Issue Date: TBD

Region: Raleigh Regional Office

County: Wake

NC Facility ID: 9200504 Inspector's Name: Sindy Huang **Date of Last Inspection:** 05/20/2020

Compliance Code: 3 / Compliance - inspection Permit Applicability (this application only)

Facility Data

SIP: 02D: .0515, .0516, .0521, .1806

020: .0317

NSPS: n/a

NESHAP: ZZZZ

PSD: n/a

PSD Avoidance: VOC

NC Toxics: 02D .1100, 02Q .0711

112(r): n/a

Other: MACT Avoidance

Facility Address:

Austin Quality Foods, Inc.

Facility Contact

Environment, Health and

Mark Logue

Safety Manager

(919) 677-3292

Cary, NC 28513

One Quality Lane

One Quality Lane 27513 Cary, NC

SIC: 2052 / Cookies And Crackers

NAICS: 311821 / Cookie and Cracker Manufacturing

Applicant (Facility's Name): Austin Quality Foods, Inc.

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

> **Contact Data Authorized Contact**

Interim Plant Manager

Jimmy Justice

(919) 677-3367

One Quality Lane

Cary, NC 27513

Application Data

Technical Contact

Mark Logue

Environment, Health and

Safety Manager (919) 677-3292 One Quality Lane

Cary, NC 28513

Application Type: Renewal **Application Schedule:** TV-Renewal

Date Received: 08/03/2020

Existing Permit Data Existing Permit Number: 06816/T17

Application Number: 9200504.20A

Existing Permit Issue Date: 09/11/2019 **Existing Permit Expiration Date:** 01/31/2021

Total Actual emissions in TONS/YEAR:

Total Actual chiissions in TONS/TEAN.							
CY	SO2	NOX	voc	co	PM10	Total HAP	Largest HAP
2018	0.0800	10.57	141.27	8.78	0.8100	4.22	4.03 [Acetaldehyde]
2017	0.0700	10.83	136.66	9.04	0.8300	4.08	3.89 [Acetaldehyde]
2016	0.0700	10.75	120.79	8.95	0.8200	3.50	3.31 [Acetaldehyde]
2015	0.0600	9.63	99.42	8.08	0.7300	2.89	2.71 [Acetaldehyde]
2014	0.0700	10.42	94.34	8.67	0.7900	2.79	2.61 [Acetaldehyde]

Review Engineer: Russell Braswell **Comments / Recommendations:**

Issue 06816/T18 Permit Issue Date: TBD **Review Engineer's Signature:** Date:

Permit Expiration Date: TBD+5 years

1. Purpose of Application:

Austin Quality Foods, Inc. ("AQF"; "the facility") currently operates a factory in Wake County, North Carolina under Title V permit no. 06816T17 ("the existing permit"). The existing permit is set to expire on January 31, 2021. AQF submitted this application in order to renew the Title V permit as allowed by General Condition K of the existing permit. Because this application was received within six months of the expiration date, the existing permit will remain in effect, regardless of expiration date, until this application is processed.

2. Facility Description:

According to the most recent inspection report, this facility is a bakery that bakes, assembles, and packages different types of cookies and crackers. The facility employees approximately 700 people and operates 7 days a week 24 hours per day (8,760 hours per year). In addition to the bakery, the facility is used as a transshipping point for other products produced by the company's snack division.

Air emissions from this facility come from natural gas combustion, bread baking/leavening/proofing, food additives, and facility-wide cleaning operations.

3. Application Chronology:

• August 3, 2020 Application .20A received.

An initial draft of the Title V permit and associated application review were sent to DAQ staff (Mark Cuilla, Tom Anderson, Dena Pittman, Mary Fontana, Sindy Huang, Samir Parekh), AQF staff (Mark Logue, Steve Surovec), and Trinity Consultants staff (Aimee Andrews). For a summary of comments received, see Attachment 1.

XXXX
Public notice / EPA review

XXXX Permit issued.

4. Title V Permit Modifications Following the Previous Permit Renewal:

• February 1, 2016 Permit T15 issued. This was the 1st-time Title V permit for this facility. AQF was previously classified as synthetic minor, but was expanding production and could no longer comply with the emission limits associated with the synthetic minor classification.

• August 16, 2016 Permit T16 issued. This action was a minor modification that changed the products made on the ES-1 baking line and expanded the ES-11 proofing room.

• September 11, 2019 Permit T17 issued. This action was a minor modification that removed references to 02D .0958 from the permit because that rule no longer applies to the facility.

5. Changes to the Existing Permit:

Insert Table of Changes from final permit before issuance

* This refers to the current permit unless otherwise stated

6. Regulatory Overview and Rules Review:

Under the existing permit, AQF is subject to the following State Implementation Plan ("SIP") rules:

- 15A NCAC 02D .0515 "Particulates from Miscellaneous Industrial Processes"
- 15A NCAC 02D .0516 "Sulfur Dioxide Emissions from Combustion Sources"
- 15A NCAC 02D .0521 "Control of Visible Emissions"
- 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" (State-enforceable only)
- 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions" (State-enforceable only)
- 15A NCAC 02Q .0317 "Avoidance Conditions" (PSD Avoidance, MACT Avoidance)
- 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit" (State-enforceable only)
- 40 CFR Part 63, Subpart ZZZZ "Stationary Reciprocating Internal Combustion Engines" (Area Source GACT)

In addition, a discussion of several non-applicable rules is also included below.

a. 02D .0515 "Particulates from Miscellaneous Industrial Processes"

This rule limits particulate matter ("PM") emissions from emission sources that exhaust through a stack, vent, or outlet, and with no other specific PM emission limits. The emission limit is a function of the process rate of the subject emission source. At this facility, each of the baking lines are subject to this rule.

Potential PM emissions from each source were calculated when the 1st-time Title V permit was issued¹. At that time, it was determined that PM emissions from each source were less than the limit in 02D .0515, and that no additional monitoring, recordkeeping, or reporting would be required for AQF to demonstrate compliance with this rule. Continued compliance is expected.

b. 02D 0516 "Sulfur Dioxide Emissions from Combustion Sources"

This rule limits sulfur dioxide (" SO_2 ") emissions from combustion sources for which there are no other SO_2 emission standards. In all cases, the limit is 2.3 pounds of SO_2 per million Btu of heat input. Each oven and generator at this facility are subject to this rule.

The only fuels burned the above-mentioned sources are natural gas and ultra-low sulfur diesel. Based on the emission factors found in chapters 3.2 and 3.4 of AP-42, these fuels are expected to comply with 02D .0516 by default. Therefore, no monitoring, recordkeeping, or reporting is required for AQP to demonstrate compliance with this rule for these sources. Continued compliance is expected.

c. 02D 0521 "Control of Visible Emissions

This rule limits the opacity of non-fugitive visible emissions ("VE") from emission sources that do not have a specific VE limit under other 02D .0500 rules. For sources constructed after 1971 (i.e. each source at this facility), the rule limits opacity in most cases to 20%. At this facility, each of the baking lines are subject to this rule.

The activities at this facility are not expected to produce VE. Therefore, no monitoring, recordkeeping, or reporting is required for AQF to demonstrate compliance with this rule for these sources. Continued compliance is expected.

¹ See page 6 of the application review for the T15 permit, issued February 1, 2016.

d. 02D .1100 "Control of Toxic Air Pollutants" (State-enforceable only)

This rule requires that facilities that emit toxic air pollutants ("TAPs") at rates higher than the thresholds listed in 02Q .0711 demonstrate compliance with the acceptable ambient limits ("AALs") in 02D .1104. Generally, compliance is demonstrated using air dispersion modeling.

This facility has used modeling to demonstrate compliance with ammonia emissions. The most recent modeling demonstration was approved February 25, 2019.

In order to demonstrate compliance, AQF must limit and keep records of ammonium bicarbonate usage at the facility and submit a quarterly report of the recordkeeping activities.

Based on the most recent inspection report, AQF appears to be in compliance with this rule. Continued compliance will be determined with subsequent inspections and reports.

e. 02D .1806 "Control and Prohibition of Odorous Emissions" (State-enforceable only)

This rule requires that facilities not cause or contribute to objectionable odors outside of the facility's property boundary. In the event that DAQ receives substantive odor complaints, DAQ may require AQF to make changes in order to address odorous emissions. Until such time, AQF has no specific compliance requirements under this rule.

f. 02Q .0317 "Avoidance Conditions" (PSD Avoidance and MACT Avoidance)

AQF has accepted enforceable emission limits in order to avoid the applicability of 02D .0530 "Prevention of Significant Deterioration" and 02D .1111"Maximum Achievable Control Technology" (i.e. PSD Avoidance and MACT Avoidance). In order for these rules to not apply, AQF must not be classified as a major source for PSD or for MACT.

In order to avoid being classified as a major source for PSD, AQF has accepted a facility-wide emission limit of 250 tons of volatile organic compounds ("VOC") per year. In order to avoid being classified as a major source of hazardous air pollutants ("HAP"), AQF has accepted a facility-wide limit of 10 tons of any individual HAP and 25 tons of total HAP per year.

In order to demonstrate compliance with the VOC and HAP limits, AQF must calculate facility-wide VOC and HAP emissions on a monthly basis. The existing permit includes a specific equation for calculating VOC and HAP emissions comparable to the respective limits. AQF must also keep records of VOC and HAP emission calculations and submit reports twice per year.

Based on the most recent inspection report, AQF appears to be in compliance with the PSD Avoidance and MACT Avoidance requirements. Continued compliance will be determined with subsequent inspections and reports.

Note that because this facility is not a major source for MACT, rules that apply exclusively to major sources (e.g. 40 CFR Part 63, Subpart DDDDD) do not apply to this facility by default.

g. 02Q .0711 "Emission Rates Requiring a Permit" (State-enforceable only)

This rule allows facilities that emit TAPs to avoid performing air dispersion modeling if the facility-wide emission rate is less than the toxic permit emission rates ("TPERs") listed in 02Q .0711. Based on previous emission reviews, this facility emits acetaldehyde and ethyl acetate at rates below their respective TPERs.

In order to show that no modeling demonstration is required for these pollutants, AQF must keep records of TAP emissions that show the TPERs are not exceeded. No reporting is required.

Based on the most recent inspection report, AQF appeared to be in compliance with this rule. Continued compliance will be determined during subsequent inspections.

h. 40 CFR Part 63, Subpart ZZZZ "Stationary Reciprocating Internal Combustion Engines" (Area Source GACT)

This rule applies to stationary internal combustion engines. The requirements of the rule depend on several factors. For the purposes of this rule, the diesel-fired emergency generator (ID No. IS-EG1) is:

- Existing;
- Located at an area source of HAP;
- Emergency-use only;
- Compression ignition; and
- Capacity less than 500 horsepower

For this category of engine, the rule's general requirements are:

- Operate only during periods of emergency, maintenance, testing, or as allowed by §63.6640(f);
- Perform regular oil and oil filter changes (or use an oil analysis program);
- Perform regular air filter changes;
- Perform regular inspections of belts and hoses;
- Operate with good work practices; and
- Install a non-resettable hour meter

Based on the most recent inspection report, AQF appeared to be in compliance with this rule. Continued compliance will be determined during subsequent inspections.

Note that this rule only applies to a source included in the list of insignificant activities. Such sources are not referenced in the body of the Title V permit. Therefore, the Title V permit does not include a specific condition for this rule.

i. Nonapplicable Rules:

There are several SIP and Federal rules that could potentially apply at this renewal, but ultimately do not.

1. <u>15A NCAC 02D .0524 "New Source Performance Standards" and 40 CFR Part 60, Subpart IIII "Stationary Compression Ignition Internal Combustion Engine"</u>

This rule applies to stationary internal combustion constructed after July 11, 2005. The emergency generator (ID No. IS-EG1) was constructed before this date. Therefore, this rule does not apply.

2. 02D .0614 "Compliance Assurance Monitoring" ("CAM"; 40 CFR Part 64)

This rule incorporates the requirements of 40 CFR Part 64 into North Carolina's SIP. CAM applies to individual emission sources that use control devices to comply with emission limits. This facility does not employ any control devices. Therefore, CAM does not apply to this facility.

3. 02D .0900 "Volatile Organic Compounds" and 02D .1400 "Nitrogen Oxides" (a.k.a. "RACT")

Per 02D .0902(f) and 02D .1402(c) and (d), the RACT rules generally apply to locations designated as nonattainment for ozone. Wake County is not such an area, and therefore no RACT rules apply.

4. 02D .2100 "Risk Management Program" (a.k.a. "§112(r)", "Section 112(r) of the Clean Air Act")

According to Form A3 of the renewal application submitted by AQF, this facility does not store any materials above their respective thresholds in 40 CFR 68.130. Therefore, this facility is not required to submit a Risk Management Plan and has no specific requirements under 02D .2100. Note that other requirements under §112(r) (such as the General Duty Clause) may apply to this facility.

7. Emissions Review

This permit renewal is not expected to impact potential emissions from this facility. For a historical review of emissions from this facility, see page 1 of this review.

8. Compliance Status and Other Regulatory Concerns:

- o This facility was most recently inspected on August 13, 2019 by Stanley Williams. AQF appeared to be in compliance with the Title V permit during that inspection.
- Some permit applications require the facility to submit a zoning consistency determination, an application fee, and/or a Professional Engineer's seal. However, none of these are required for Title V permit renewals.
- o Since the previous Title V permit renewal, AQF has been issued two Notices of Violation:
 - February 26, 2018 NOV issued for exceeding ammonia emission limits included in the permit under 02D .1100. As a result, AQF submitted new emission modeling demonstrating that the ammonia AAL under 02D .1104 was not exceeded.
 - May 17, 2019 NOV issued for a late report. This issue was resolved on June 14, 2019.

9. Public Notice and EPA Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

10. Recommendations

Issue permit 06816T18.

Attachment 1 to Review of application 9200504.20A Austin Quality Foods, Inc

Summary of Comments Received on Initial Draft of Title V permit 06816T18

• Mark Cuilla, by email on September 14, 2020

The email indicated typos in the draft permit and application review.

Response: The indicated typos were corrected.

• Mary Fontana, by email on September 22, 2020

1. The email indicated typos in the draft permit and application review.

Response: The indicated typos were corrected.

2. The email asked "Could we get a table of Title V emissions for this facility?"

Response: Actual emission data is available on the first page of the application review. A review of potential emissions from this facility isn't necessary given that the facility is already demonstrating compliance with each emission limit in the permit.