

Application Review

Issue Date:

Region: Fayetteville Regional Office
County: Cumberland
NC Facility ID: 2600016
Inspector's Name: Evangelyn Lowery-Jacobs
Date of Last Inspection: 06/17/2020
Compliance Code: 3 / Compliance - inspection

<p style="text-align: center;">Facility Data</p> <p>Applicant (Facility's Name): Cargill, Inc. - Fayetteville</p> <p>Facility Address: Cargill, Inc. - Fayetteville 1754 River Road Fayetteville, NC 28312</p> <p>SIC: 2075 / Soybean Oil Mills NAICS: 311222 / Soybean Processing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p style="text-align: center;">Permit Applicability (this application only)</p> <p>SIP: 15A NCAC 02D .0503, .0515, .0516, .0521, .0614, .1806 NSPS: 15A NCAC 02D .0524 (Subparts Dc, DD, IIII) NESHAP: 15A NCAC 02D .1111 (Subparts GGGG, ZZZZ, DDDDD) PSD: PSD Avoidance: 15A NCAC 02Q .0317 NC Toxics: 112(r): Other: VOC SOC (15A NCAC 02D .0530)</p>
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Contact Data			Application Data
<p style="text-align: center;">Facility Contact</p> <p>Terry Crawford EHS Coordinator (910) 223-6606 1754 River Road Fayetteville, NC 28312</p>	<p style="text-align: center;">Authorized Contact</p> <p>Jacob Zoss Facility Superintendent (910) 223-6618 1754 River Road Fayetteville, NC 28312</p>	<p style="text-align: center;">Technical Contact</p> <p>Arun Nagineni Crush Superintendent (910) 223-6600 1754 River Road Fayetteville, NC 28312</p>	<p>Application Number: 2600016.20A Date Received: 06/16/2020 Application Type: Renewal Application Schedule: TV-Renewal</p> <p style="text-align: center;">Existing Permit Data</p> <p>Existing Permit Number: 03903/T47 Existing Permit Issue Date: 11/25/2019 Existing Permit Expiration Date: 03/31/2021</p>

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2018	0.2700	45.30	398.56	38.06	19.55	188.52	188.49 [Hexane, n-]
2017	0.2300	37.91	361.05	31.86	19.39	188.22	188.19 [Hexane, n-]
2016	0.2400	38.44	364.05	32.37	25.18	212.12	212.09 [Hexane, n-]
2015	0.3200	47.59	396.38	39.99	30.00	248.89	248.86 [Hexane, n-]
2014	0.3200	48.82	413.79	40.91	28.81	259.89	259.85 [Hexane, n-]

<p>Review Engineer: Urva Patel</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 03903/T48 Permit Issue Date: Permit Expiration Date:</p>
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1. Purpose of Application:

Currently, Cargill, Inc. holds Title V Permit No. 03903T47 with an expiration date of March 31, 2021. The Title V renewal permit application (**Application No. 2600016.20A**) was received on June 16, 2020, which was at least six months prior to the expiration date of the Title V permit. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

2. Facility Description:

Cargill operates a soybean oil extraction process (Standard Industrial Classification [SIC] Code 2075 – Soybean Processing). Cargill processes soybeans for animal feed and oil at this facility. The processes at the facility are subdivided into six separate operation groups:

- Raw soybean storage and handling;
- Raw soybean processing;
- Oil extraction, meal drying, cooling;
- Oil refining, handling, storage, crude unloading and load out;
- Miscellaneous support sources and boilers; and
- Meal and hull handling, storage and loadout.

3. History / Background / Application Chronology:

Permit History

April 21, 2016	Air Quality Permit No. 03903T41 issued with an expiration date of March 31, 2021 for renewal of the air permit.
July 13, 2016	Air Quality Permit No. 03903T42 issued with an expiration date of March 31, 2021. This minor modification included the installation of vacuum systems with bag filters.
February 9, 2017	Air Quality Permit No. 03903T43 issued with an expiration date of March 31, 2021. This TV-State Only and Administrative Amendment included removal of 15A NCAC 02D .0705, .0712, .0958, and .1100 air regulations from permit. The modification also removed 15A NCAC 02Q .0515 minor modification paragraph for sources ES-86 and ES-87.
February 9, 2017	Air Quality Permit No. 03903T44 issued with an expiration date of March 31, 2021. This minor modification included the addition of one backup rented natural gas-fired boiler (99.9 million Btu per hour, ID No. ES-43).
October 9, 2018	Air Quality Permit No. 03903T45 issued with an expiration date of March 31, 2021. This .0501(b)(2) Part I Significant Modification and minor modification included changes to the throughput limit of 1.07 million tons per year through the dryer to 1.2 million tons per year and physical modification of the desolventizer-toaster (D/T).
May 28, 2019	Air Quality Permit No. 03903T46 issued with an expiration date of March 31, 2021. It was the consolidation of one .0501(b)(2) Part II Significant Modification and one minor modification.
November 25, 2019	Air Quality Permit No. 03903T47 issued with an expiration date of March 31, 2021. It was consolidation of three minor modifications and one administrative amendment.

Application Chronology

June 16, 2020	Received this application for TV-renewal (2600016.20A).
June 17, 2020	Sent acknowledgement letter indicating that the application (2600016.20A) for Title V permit renewal was complete.
October 1, 2020	Draft permit and technical review sent to Supervisor for internal comment prior to external comment.
May 19, 2021	Draft permit and technical review sent to Applicant, Regional Office, and SSCB for comment prior to public notice and EPA review.
Date, 2021	Draft permit and technical review sent to 30-day public and 45-day EPA review periods,
Date, 2021	Renewed permit issued.

4. Summary of Changes to the Existing Permit (Permit No. 03903T47):

Page No.	Section	Description of Changes
Cover Letter	N/A	<ul style="list-style-type: none"> Updated cover letter with application number, permit numbers, dates, fee class, PSD increment statement, and Director name.
Permit Cover	N/A	<ul style="list-style-type: none"> Inserted new issuance and complete application date, application number, facility information.
Attachment	Insignificant Activity	<ul style="list-style-type: none"> Addition of two 1200 gallon – Foam Suppressant Tanks (ID Nos. IES-106 and IES-107) Revised Emission Source Description of IES-75 Addition of 273 gallon – Gasoline Tank (ID No. IES-108)
Attachment	Table 1 – Consent Decree requirements	<ul style="list-style-type: none"> Added “Extraction Solvent Loss Recordkeeping Table” referenced in Specific Condition 2.3 A.1.e. back to permit. This was inadvertently removed during processing of permit No. 03903T45.
5, 18	Section 1 Table 2.1 F	<ul style="list-style-type: none"> Revised description of Meal Storage Tank (ID No. ES63) from 1000-ton tank to 1100-ton tank
5, 18	Section 1 Table 2.1 F	<ul style="list-style-type: none"> Revised description of Meal Storage Tank (ID No. ES64) from 1000-ton tank to 3000-ton tank
9	2.1 A.3.c	<ul style="list-style-type: none"> Revised visible emission permit condition as per current TVCOND69
12	2.1 B.2.c	<ul style="list-style-type: none"> Revised visible emission permit condition as per current TVCOND69
14	2.1 C.1	<ul style="list-style-type: none"> Revised monitoring and recordkeeping of permit condition as per current TVCOND69
14	2.1 C.2.c	<ul style="list-style-type: none"> Revised visible emission permit condition as per current TVCOND69
15	2.1 D.1.c	<ul style="list-style-type: none"> Revised visible emission permit condition as per current TVCOND69
17	2.1 E.2.c	<ul style="list-style-type: none"> Revised visible emission permit condition as per current TVCOND69
19	2.1 F.2.c	<ul style="list-style-type: none"> Revised visible emission permit condition as per current TVCOND69
20	2.1 G.1.c	<ul style="list-style-type: none"> Revised visible emission permit condition as per current TVCOND69
22	2.1 H.5	<ul style="list-style-type: none"> Removed Permit Condition “Reserved” and revised the numbers of remaining permit condition in the Section 2.1 H
33	2.2 C	<ul style="list-style-type: none"> Revised Permit Condition and its Emission Source list per RTR and MACT rule revisions.
50	2.5 A 2.5 A.1.b	<ul style="list-style-type: none"> Revised table i.e. limit/standards, applicable regulation Revised CAM Monitoring approach: QIP threshold
52	Section 3	<ul style="list-style-type: none"> Updated General Conditions from version 5.3 to current shell version 5.5 (08/25/202)

5. Compliance Status:

DAQ has reviewed the compliance status of this facility. During the most recent inspection conducted on and June 17, 2020 and September 3, 2020, Evangelyn Lowery-Jacobs of the Fayetteville Regional Office indicated that the facility appeared to be in compliance with all applicable requirements. Additionally, a signed Title V Compliance Certification (Form E5) indicating that the facility was in compliance with all applicable requirements was submitted with Application No. 2600016.20A.

Five-year Compliance History:

- On September 17, 2019, Facility sent NOV response.
- On September 3, 2019, a (Notice of Violation) NOV issued for monitoring and recordkeeping requirements - failure to document the monthly inspections for ES1, ES2, ES4, ES51, ES52, ES53, ES54, and ES86; failure to document the monthly visible emissions observations for ES1, ES2, ES4, ES51, ES52, ES53, ES54, and ES86.
- The facility was inspected on August 13, 2019 and appeared to be in Violation of their air quality permit during the inspection.
- The facility was inspected on March 15, 2018 and appeared to be in compliance with all applicable air quality regulations.
- On November 14, 2017, a (Notice of Violation) NOV issued for deficient monitoring and late startup notification.
- On September 1, 2017, NOV issued for failure to provide supplemental information for a permit application when that additional information was discovered. This related to the de-rating of a temporary boiler (ID No. ES43).
- On August 15, 2017, NOV issued for deficient monitoring and recordkeeping for bagfilter inspections.
- On March 21, 2017, NOV issued for deficient monitoring and recordkeeping for bagfilter (ID No. BF9) and vacuum systems (ID Nos. ES86 and ES87).
- The facility was inspected on January 18, 2017 and appeared to be in compliance with all applicable air quality regulations.
- The facility was inspected on March 1, 2016 and appeared to be in compliance with all applicable air quality regulations.
- The facility was inspected on November 19, 2014 and appeared to be in compliance with all applicable air quality regulations.
- The facility was inspected on February 20, 2014 and appeared to be in compliance with all applicable air quality regulations.

6. New/Modified Equipment/Changes in Emissions:

This application is submitted as Title V – renewal. Except as noted below, no changes were requested with this permit application.

Cargill is requesting to administratively amend the source descriptions of ES63 and ES64 to reflect the correct tank sizes [see Form A2 in Attachment 1-Permit application No. 2600016.20A]. Note, the emissions associated with these sources are not changing since the emissions are based on the dust collector size and not the tank size.

Cargill is also requesting to add some insignificant activities: addition of two additional 1,200-gallon foam suppressant tanks (IES-106 and IES-107). These tanks will store the same foam suppressant stored in the two existing (IES-103 and IES-104) but have a slightly smaller capacity. There are no emissions of hazardous air pollutant (HAP) or toxic air pollutants (TAP), and any emissions of volatile organic compounds (VOC) will be negligible. Therefore, no changes in air emissions are expected.

Per Permit Renewal application submittal, the following changes were requested (see Form A 1, A2 for more details):

Equipment to be ADDED:

Insignificant Activities:

Emission Source ID No.	Emission Source Description
IES-106	Foam Suppressant Tanks (1200 gallon)
IES-107	Foam Suppressant Tanks (1200 gallon)
IES-108	Gasoline Tank (273 gallon)

Equipment to be MODIFIED:

Emission Source ID No.	Proposed Emission Source Description	Previous Permit Emission Source Description
ES63	Meal storage tank (1,100-ton tank, 13,333 bushels per hour or 400 tons per hour unloading rate)	Meal storage tank (1,000-ton tank, 13,333 bushels per hour or 400 tons per hour unloading rate)
ES64	Meal storage tank (3,000-ton tank, 13,333 bushels per hour or 400 tons per hour unloading rate)	Meal storage tank (1,000-ton tank, 13,333 bushels per hour or 400 tons per hour unloading rate)

Equipment to be REMOVED:

N/A

- On June 11, 2021, Ms. Megan Featherling requested addition of of 273-gallon gasoline tank (ID No. IES-108) with submission of emission summary as follows:

Emission Summary		
Annual Throughput, gal	3,278	Annual Emissions 0.11
Annual Turnovers	12.00	
Month	Emissions, lbs	Emissions, tons
Jan	6.23	0.003
Feb	7.06	0.004
Mar	10.37	0.005
Apr	15.30	0.008
May	22.15	0.011
Jun	34.19	0.017
Jul	44.74	0.022
Aug	37.99	0.019
Sep	21.74	0.011
Oct	13.69	0.007
Nov	8.99	0.004
Dec	6.48	0.003

This source (**ID No. IES-108**) qualifies as insignificant activities due to amount of emissions pursuant to 15A NCAC 02Q .0503(8). An insignificant activity means any activity

“...whose emissions potential emission of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, i.e., potential uncontrolled emissions, are each no more than five tons per year and whose potential emissions of hazardous air pollutants before air pollution control devices, are each below 1 000 pounds per year.”

Uncontrolled emissions of VOC from the proposed emission sources are less than five tons per year as shown in the calculations above. No permit is required for installation and operation of this equipment.

- Following Table 1 “Extraction Solvent Loss Recordkeeping Table (Attachment N of CD) was added back to Cargill’s permit due to inadvertently being removed during issuance of Permit No. 03093T45.

Table 1 “Extraction Solvent Loss Recordkeeping Table”

Date	Oilseeds Processed (tons)		Solvent Loss (gallons)		Malfunction Period Solvent Loss (gallons)		Adjusted Solvent Loss (gallons)		Adjusted Solvent Loss Ratio (gallons/ton)	
	Month	12-Month	Month	12-Month	Month	12-Month	Month	12-Month	Month	12-Month

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Notes: Date refers to the Permittee's operating month

- The data for the oilseeds processed is on an "as received" basis (i.e. before any processing of the oilseeds)
- The data in the columns labeled "Month" are the values for the Permittee's operating month
- The data in the columns labeled "12-Month" are the rolling average values for the 12 most recent operating months
- The Permittee may adjust solvent loss for malfunctions only if:
 - (1) the malfunction results in a shutdown of the solvent extraction system; and
 - (2) cumulative solvent losses during malfunction periods do not exceed 4,000 gallons in a 12-operating month rolling period

The following table may be used for the recordkeeping described in Specific Condition 2.3 A.1.e of this permit.

Facility-Wide Emissions Summary

Pollutant	Potential Emissions – Form D1 (Before controls / Limitations)	Potential Emissions – Form D1 (After controls / Limitations)
	Tons per year (tpy)	
Particulate Matter (PM)	11797.11	186.94
PM<10 µm (PM ₁₀)	712.25	37.13
PM<2.5 µm (PM _{2.5})	256.58	16.06
Sulfur dioxide (SO ₂)	0.66	0.66
Nitrogen oxides (NO _x)	110.30	110.30
Carbon monoxide (CO)	92.88	92.88
Volatile Organic Compounds (VOC)	6569.37	<487.4
Lead	5.7E-04	5.7 -04
Hazardous Air Pollutants (HAP)		
Largest Individual HAP (n-Hexane)	4130.57	302.19
GREENHOUSE GASES (GHG)		
CO ₂ Equivalent (CO ₂ e)		130,400

7. Regulatory Review

Unless specifically noted, a detailed discussion of the following list of permit conditions is not included as applicability status has not changed. The facility is expected to be in continued compliance.

2.1 Permitted Emission Sources and Associated Air Pollution Control Devices:

- A. Raw Soybean Storage and Handling Operations consisting of:**
 Rail unloading system (ID No. ES1) with bagfilter (ID No. 1C)
 Truck unloading system (ID No. ES2) with bagfilter (ID No. 2C)
 Bean cleaning operation (ID No. ES4) with cyclones (ID No. C106), bean aspirator cyclone (ID No. C108), and bagfilter (ID No. BF106)
 Direct-fired pre-cleaned soybean dryer (ID No. ES82)
 Soybean storage silos (ID Nos. ES51, ES52, ES53, and ES54) with four bagfilters (one each, ID Nos. BF32, BF33, BF34, and BF35)
 Vacuum systems (ID Nos. ES86 and ES87) used for housekeeping purposes controlled by bagfilters (ID No. BF86 and BF87, respectively)
 Bean Cleaner Feed Leg (ID No. ES306) associated with Dust Collector (ID No. CPV306)

1. Applicable Regulatory Requirements:

- 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 .0524 “New Source Performance Standards (40 CFR Part 60 Subpart DD)”
- 15A NCAC 02Q .0317 “Avoidance Conditions” for 15A NCAC 02D .0530 (for PM)
- 15A NCAC 02D .1111 “Maximum Achievable Control Technology (40 CFR 63, Subpart GGGG)”

2. Changes:

- 15A NCSC 02D .0515: Due to the addition of MRR for the uncontrolled dryer (ID No. ES82), it was revised per current shell guidance and the facility is required to keep production records as incorporated into the renewed permit.

B. Raw Soybean Processing Operations consisting of:

Bean cracking process (ID No. ES5) with bagfilter (ID No. BF41)

Soybean flaker process A and soybean flaker process B (ID Nos. ES6) with cyclone (ID No. 6C)

Secondary dehulling (ID No. ES12) with two simple cyclones (ID Nos. C12B and C12C) and bagfilter (ID No. BF65)

Scale for weighing soybean throughput (ID No. ES33) with one dust collector (ID No. CPV33)

Whole bean storage bin (ID No. ES39) with simple cyclone (ID No. C12A) and bagfilter (ID No. BF65)

Primary Dehulling (ID No. ES65) with two simple cyclones in parallel (ID No. C65A and C65B)

controlled by bagfilter (ID No. BF65) installed on the exhausts of these cyclones

Vertical seed conditioner (ID No. ES83) – combination heater and dryer controlled by one high efficiency cyclone (ID No. CY83)

Screw conveyor (ID No. ES30) transports soybean meal “flakes” to extraction process (ID No. ES31A)

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0515 “Particulates from Miscellaneous Industrial Processes”
- 15A NCAC 02D .0521 “Control of Visible Emissions”
- 15A NCAC 02D .1111 “Maximum Achievable Control Technology (40 CFR 63, Subpart GGGG)”

2. Changes:

- 15A NCSC 02D .0515: Due to the addition of MRR for the uncontrolled screw conveyor (ID No. ES30), it was revised per current shell guidance and the facility is required to keep production records as incorporated into the renewed permit.

C. Meal Drying and Cooling Operations consisting of:

Steam heated soybean meal dryer and cooler (ID No. ES15) controlled by four cyclones in parallel (ID No. CY15A through CY15D)

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0515 “Particulates from Miscellaneous Industrial Processes”
- 15A NCAC 02D .0521 “Control of Visible Emissions”
- 15A NCAC 02D .1806 “Control and Prohibition of Odorous Emissions” (State-enforceable only)
- 15A NCAC 02Q .0317 “Avoidance Conditions” for 15A NCAC 02D .0530 (for VOC)
- 15A NCAC 02D .1111 “Maximum Achievable Control Technology (40 CFR 63, Subpart GGGG)”

D. Soybean Oil/Hexane Solvent Extraction and Oil Desolventizing Process consisting of:

Soybean oil/hexane solvent extraction process (ID No. ES31A) controlled by a packed column mineral oil absorber – ceramic saddle (ID No. CD31)

Desolventizer – Toaster (ID No. ES31B) controlled by a packed column mineral oil absorber – ceramic saddle (ID No. CD31)

Two underground hexane storage tanks (ID Nos. ES29A and ES29B) controlled by a packed column mineral oil absorber – ceramic saddle (ID No. CD31)

Floor Sweep Fans (ID No. ES32)

1. Applicable Regulatory Requirements:

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

- 15A NCAC 02D .1806 “Control and Prohibition of Odorous Emissions” (State-enforceable only)
- 15A NCAC 02Q .0317 “Avoidance Conditions” for 15A NCAC 02D .0530 (for VOC)
- 15A NCAC 02D .1111 “Maximum Achievable Control Technology (40 CFR 63, Subpart GGGG)”

E. Refinery Support Services consisting of:

Fine clay receiving operation consisting of a clay truck unloading area and the clay receiving tank bin vent (ID No. ES25) with bagfilter (ID No. BF12)

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0515 “Particulates from Miscellaneous Industrial Processes”
- 15A NCAC 02D .0521 “Control of Visible Emissions”

F. Meal and Hull Handling, Storage and Loadout Operations consisting of:

Meal and hull loading truck station (ID No. ES3B) controlled by bagfilter (ID No. BF232)

Meal grinding operation consisting of meal grinding, sifting and conveying process (ID No. ES11) controlled by bagfilter (ID No. BF9)

Hull grinding operation fed by primary and secondary dehulling operations (ID No. ES18A) controlled by bagfilter (ID No. BF41) installed on the exhaust from two cyclones in parallel (ID Nos. CY9 and CY10)

Hull storage tank 60 (ID No. ES27) controlled by dust collector (ID No. CPV 60)

Hull storage tank 61 (ID No. ES61) controlled by dust collector (ID No. CPV 61)

Meal storage tank (ID Nos. ES62) controlled by dust collector (ID No. CPV62)

Meal storage tank (ID Nos. ES63) controlled by dust collector (ID No. CPV63)

Meal storage tank (ID Nos. ES64) controlled by dust collector (ID No. CPV64)

Meal conveyor (ID No. ES316) controlled by dust collector (ID No. CPV316)

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0515 “Particulates from Miscellaneous Industrial Processes”
- 15A NCAC 02D .0521 “Control of Visible Emissions”
- 15A NCAC 02D .1111 “Maximum Achievable Control Technology (40 CFR 63, Subpart GGGG)”

2. Changes:

- During facility review, following made a comment for **ID Nos. CPV60 and CPV61** “Part of the project described in Minor Modification Application No. 2600016.19B – Permit No. 03903T47 (i.e., controlling ES27 and ES61 by CPV60 and CPV61 instead of BF72) has not been completed. ES27 and ES61 remain connected to bagfilter BF72. Cargill is still planning to complete this portion of the project in the future. For these units, Cargill continues to comply with the requirements of BF72 of Title V Permit No. 03903T46 “. The Department has accepted this comment and included it as footnote at the bottom of Section 1: Table.

G. Oil Refinery (ID No. ES34) Operation (both Fayetteville & Non-Fayetteville) consisting of:

Refinery building, deodorizer, storage tanks, truck loading area and refinery sump

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0521 “Control of Visible Emissions”
- 15A NCAC 02D .1806 “Control and Prohibition of Odorous Emissions” (State-enforceable only)
- 15A NCAC 02Q .0317 “Avoidance Conditions” for 15A NCAC 02D .0530 (for VOC)

H. Landfill gas and natural gas-fired boiler (ID No. ES41)

Natural Gas/Landfill Gas-fired boiler (ID No. ES80)

Natural Gas-fired boiler (ID No. ES43)

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0503 “Particulates from Fuel Burning Indirect Heat Exchangers”
- 15A NCAC 02D .0516 “Sulfur Dioxide Emissions from Combustion Sources”
- 15A NCAC 02D .0521 “Control of Visible Emissions”
- 15A NCAC 02D .0524 “New Source Performance Standards (40 CFR Part 60 Subpart Dc)”

- 15A NCAC 02D .1111 “Maximum Achievable Control Technology (40 CFR 63, Subpart DDDDD)”

I. Two – 399 brake horsepower (297.5 kW) Diesel-fired Emergency Fire Pumps (ID Nos. ES84 and ES85)

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0516 “Sulfur Dioxide Emissions from Combustion Sources”
- 15A NCAC 02D .0521 “Control of Visible Emissions”
- 15A NCAC 02D .0524 “New Source Performance Standards (40 CFR Part 60 Subpart III)”
- 15A NCAC 02D .1111 “Maximum Achievable Control Technology (40 CFR 63, Subpart ZZZZ)”

8. NSPS, NESHAP/MACT, NSR/PSD, 112(r), CAM

NSPS

This facility is subject to New Source Performance Standards (NSPS), 40 CFR 60. However, this permit renewal does not affect this status.

- 40 CFR Part 60 Subpart Dc for Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units – The natural gas and landfill gas-fired boilers (ID Nos. ES-41, ES-43, and ES-80) boilers at this facility are subject to this regulation.
- 40 CFR Part 60 Subpart DD for Standards of Performance for Grain Elevators – Direct-fired pre-cleaned soybean dryer (ID No. ES-82) is subject to this regulation.
- 40 CFR Part 63 Subpart IIII for Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – Two diesel-fired emergency fire pumps (ID Nos. ES84 and ES85) are subject to this regulation.

NESHAP/MACT

This facility is a major source for HAPs emissions and is subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63. However, this permit renewal does not affect this status.

- 40 CFR Part 63 Subpart GGGG for National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production – The Raw Soybean Storage and Handling Operations; Raw Soybean Processing Operations; Meal Drying and Cooling Operations; Soybean Oil/Hexane Solvent Extraction and Oil Desolventizing Process; Meal and Hull Handling, Storage and Loadout Operations are all subject to this regulation. The current permit includes detailed Subpart GGGG language as it applies. The permit condition MACT GGGG was revised to be consistent with the formatting of other similar permits (basically removing MACT tables and replacing with paragraph structure). This permit condition MACT GGGG also includes March 18, 2020 and November 19, 2020 revisions, including the following:
 - Compliance dates of Existing and new sources § 63.2834
 - Emission requirements § 63.2840
 - Compliance with HAP emission standards § 63.2850
 - Compliance Plan § 63.2851
 - Startup, Shutdown, and Malfunction (SSM) Plan § 63.2852
 - Determine actual solvent loss § 63.2853
 - Determine quantity of oilseed processed § 63.2855
 - Notifications § 63.2860 (revision on November 19, 2020)
 - Reporting § 63.2861
 - Recordkeeping § 63.2862

<u>Heading</u>	<u>Previous Heading</u>	<u>Revised/Same</u>
Applicability		Revised
Definitions and Nomenclatures		Same
Regulated Pollutants		Same

Compliance Dates for Existing Sources		Same
Emission Limits / Work Practice Standard	Emission Requirements	Revised
Compliance requirements	Compliance requirements – How do I comply with the HAP emission standards	Revised – Table was removed
Monitoring and Recordkeeping	Monitoring, Recordkeeping, and Reporting	Revised
Notifications and Reporting	Notifications and Reporting	Revised

- 40 CFR Part 63 Subpart ZZZZ for National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines – Two Diesel-fired Emergency Fire Pumps (**ID Nos. ES84 and ES85**) are subject to this regulation.
- 40 CFR Part 63 Subpart DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters – The natural gas and landfill gas-fired boilers (**ID Nos. ES-41, ES-43, and ES-80**) at this facility are subject to this regulation.

NSR/PSD

The facility is a major source under the Federal Prevention of Significant Deterioration (PSD) program. The facility currently has PSD avoidance conditions for VOCs and PM. However, this permit renewal does not affect these triggered pollutants.

112(r)

This facility is NOT subject to the requirements of the Chemical Accident Release Prevention Program, Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above applicability thresholds. But the facility is subject to the General Duty requirements of 112(r).

Compliance Assurance Monitoring (CAM)

The facility is currently subject to CAM.

Pursuant to 40 CFR 64.2, the provisions of the Compliance Assurance Monitoring (CAM) rule are applicable to emission units that meet all the following criteria:

- Criteria #1: The unit is subject to an emission limitation AND uses a control device to achieve compliance with the limit;
- Criteria #2: The unit has pre-control potential emissions that are equal to or greater than 100% of the amount (in tpy) required for a source to be classified as a major source; and,
- Criteria #3: The unit is not exempt under 40 CFR 64.2(b).

Emission Unit	Criteria #1: Does the Source Use a Control Device?	Criteria #2: Pre-control PTE ≥100% of major source thresholds?	Criteria #3: Exempt Under 40 CFR 64.2(b)?	CAM Source?
ES4	Yes (PM10)	Yes	No	Yes
ES5	Yes (PM10)	Yes	No	Yes
ES65	Yes (PM10)	Yes	No	Yes
ES12	Yes (PM10)	Yes	No	Yes
ES6	Yes (PM10)	Yes	No	Yes
ES11	Yes (PM10)	Yes	No	Yes

This permit renewal was revised as per current CAM guidance. Per latest EPA CAM guidance (<https://www3.epa.gov/tnemc01/cam/camfaq1r1004.pdf> pages 6&7), the QIP threshold is five excursions in a six month reporting period (it used to be 10). The facility is expected to be in continued compliance.

9. Facility-Wide Air Toxics:

The current permit does not include modeled emission rates. Toxics were removed during application processing of Permit No. 03903T43. This permit renewal application does not trigger air toxics review or request any changes of emission limits. No further air toxics evaluation is required at this time.

10. Facility Emission Review:

Actual emissions for 2014 through 2018 are reported in the header of this permit review.

11. Facility comments on drafts review

Facility Comments:

- The Department has accepted this comment and included it under the Section 1 Table with **: Dust Collector (**ID No. CPV60 and CPV61**): Part of the project described in Minor Modification Application No. 2600016.19B (i.e., controlling **ES27** and **ES61** by **CPV60** and **CPV61** instead of **BF72**) has not been completed. ES27 and ES61 remain connected to bagfilter **BF72**. Cargill is still planning to complete this portion of the project in the future. For these units, Cargill continues to comply with the requirements of Title V Permit No. 03903T46.
- The facility commented and requested to add Reporting requirements 2.2 C.1.k.vi and vii. The Department has consulted with SSCB (Mr. Gary Saunders) on this request. The Department has accepted the addition of following two paragraphs in the MACT GGGG reporting requirements:

vi. Claims of EPA system outage. *If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (vi)(A) through (G) of this section.*

(A) *You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either EPA's CEDRI or CDX systems.*

(B) *The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.*

(C) *The outage may be planned or unplanned.*

(D) *You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.*

(E) *You must provide to the Administrator a written description identifying:*

(i) *The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;*

(ii) *A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;*

(iii) *Measures taken or to be taken to minimize the delay in reporting; and*

(iv) *The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.*

(F) *The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.*

(G) *In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.*

vii. Claims of force majeure. *If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (vi)(A) through (E) of this section.*

(A) *You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or*

terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

- (B) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.*
- (C) You must provide to the Administrator:*
 - (i) A written description of the force majeure event;*
 - (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;*
 - (iii) Measures taken or to be taken to minimize the delay in reporting; and*
 - (iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.*
- (D) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.*
- (E) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.*

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

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. Virginia and Forsyth County local program are affected state and local program within 50 miles of the facility.

13. Other Regulatory Considerations:

- A Permit Application fee is NOT required for Permit Application No. 2600016.20A.
- A P.E. Seal is NOT required for Permit Application No. 2600016.20A.
- A 30-day public notice and 45-day EPA review is required for Permit Application No. 2600016.20A as noted above.
- A Zoning Determination is NOT required for Permit Application No. 2600016.20A.

14. Recommendations/Conclusion:

TBD