

Application Review

Issue Date: Date needed

Region: Asheville Regional Office
County: Caldwell
NC Facility ID: 1400139
Inspector's Name: Christopher Scott
Date of Last Inspection: 07/20/2023
Compliance Code: W / Violation - procedures

Facility Data	Permit Applicability (this application only)
<p>Applicant (Facility's Name): Pregis Innovative Packaging Inc.</p> <p>Facility Address: Pregis Innovative Packaging Inc. 3825 North Main Street Granite Falls, NC 28630</p> <p>SIC: 3086 / Plastics Foam Products NAICS: 32615 / Urethane and Other Foam Product (except Polystyrene) Manufacturing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p>SIP: 15A NCAC 2D .0515,.0516, .0521, .1806, and 02Q .0317 NSPS: NA NESHAP: NA PSD: NA PSD Avoidance: VOC NC Toxics: NA 112(r): isobutane Other: NA</p>

Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	
Willis Vance Maintenance Manager (828) 523-4425 3825 North Main Street Granite Falls, NC 28630	David Brooks Plant Manager (828) 523-4402 3825 North Main Street Granite Falls, NC 28630	David Brooks Plant Manager (828) 523-4402 3825 North Main Street Granite Falls, NC 28630	<p>Application Number: 1400139.23A Date Received: 12/05/2023 Application Type: Renewal Application Schedule: TV-Renewal</p> <p style="text-align: center;">Existing Permit Data</p> <p>Existing Permit Number: 06552/T12 Existing Permit Issue Date: 03/07/2024 Existing Permit Expiration Date: 06/30/2024</p>

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2022	---	1.65	154.27	0.9800	0.1800	0.0023	0.0022 [Hexane, n-]
2021	---	1.39	239.87	0.8100	0.1700	0.0010	0.0010 [Hexane, n-]
2020	---	1.61	102.51	0.9700	0.1800	0.0030	0.0029 [Hexane, n-]
2019	0.0100	3.56	208.35	2.60	0.0100	0.0386	0.0370 [Hexane, n-]
2018	0.0100	3.28	200.95	2.37	0.0200	0.0345	0.0331 [Hexane, n-]

<p>Review Engineer: Jacob Larson</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue: 06552/T13 Permit Issue Date: Date needed Permit Expiration Date: Date needed</p>
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1. Purpose of Application

Pregis Innovative Packaging Inc. (Pregis) currently holds Title V Permit No. 06552T12 with an expiration date of June 30, 2024 for a polyethylene foam packaging manufacturing facility in Granite Falls, Caldwell County, North Carolina. This permit application is for a permit renewal without modification. This renewal application was received on December 05, 2023 or at least six 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.

2. Facility Description

Pregis manufactures polyethylene foam packaging products. Pregis produces low density polyethylene foam using isobutane (non-HAP/VOC) as the blowing agent. The facility produces foam and film packaging products (for protective packaging and furniture packaging), flooring underlayment and foam bags. They currently operate two polyethylene sheet foam extrusion lines. Polyethylene foam sheets are produced by feeding virgin and reclaimed pellets, color pellets, nucleating agent pellets, and blowing agent to the extruders. Formed sheets are allowed to de-gas and then are wound on a roll. Extruder emissions are each routed to a separate thermal oxidizer for Volatile Organic Compounds (VOCs) destruction. The facility previously reported operating 24 hours a day, 7 days a week; and employs approximately 65-70 people.

3. History/Background/Application Chronology

History/Background

March 15, 2019	Pregis was issued Permit No. 06552T09 (1400139.19A) to replace two natural gas-fired direct flame oxidizers (Control Device ID Nos. CD-1 and CD-2) with one natural gas-fired dual chamber regenerative thermal oxidizer (Control Device ID No. CD- RTO), fulfilling Part I of the two-step Title V Significant Modification process for the current Significant Modification Part II under review. Pregis elected to permit this project using the two-step permitting process outlined in 15A NAC 02Q .0501(b)(2) and submitted an application for a Title V Minor Modification Prior to Permit Revision.
July 08, 2019	TV permit renewal issued. Air Permit No. 06552T10 was issued with an expiration date of June 30, 2024.
September 29, 2021	Air Permit No. 06552T11 was issued for minor modification to add alternative operating scenarios for RTO's.
March 07, 2024	Air permit 06552T12 was issued for part II significant modification for construction and operation to replace RTO's.

Application Chronology

December 05, 2024 DEQ received permit application 1400139.23A for Title V renewal.

December 22, 2023 Sent acknowledgment letter indicating that the application for permit renewal was complete.

March 18, 2024 Draft permit and review forwarded for comments to Permitting Supervisor.

March 25, 2024 Comments received from Mark Cuilla, Permitting Chief.

March 25, 2024 Draft permit and review forwarded to the Stationary Compliance Branch for comments. No comments were received April 18, 2024.

March 25, 2024 Draft permit and review forwarded to the Ashville Regional Office for comments. No comments were received May 14, 2024.

March 25, 2024 Draft permit forwarded to the applicant for comments. After follow-up email sent on May 14, 2024, no comments were received May 15, 2024.

May 17, 2024 Draft permit and permit review forwarded to public notice.

XXXX xx, 2024 Public comment period ends. ___ comments received.

XXXX xx, 2024 EPA comment period ends. ___ comments received.

XXXX xx, 2024 Permit issued.

4. Permit Modifications/Changes and TVEE Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Page No.	Section	Description of Changes
--	Cover page and throughout permit	<ul style="list-style-type: none"> Updated all dates and permit revision numbers.
2	Table of Contents	<ul style="list-style-type: none"> Removed section 2.2 Permit Shield Added Section 2.2 Multiple Emission sources
7-9	2.1 A. 4 and 5	<ul style="list-style-type: none"> Removed condition .1806 from section 2.1 Removed PSD Avoidance Condition from Section 2.1 Adjusted paragraph and reference numbering
10	Section 2.2	<ul style="list-style-type: none"> Added section 2.2 Facility Wide Affected sources to permit Added 02D .1806 condition to Section 2.2 Added 112(r) condition to permit Added PSD Avoidance Condition to Section 2.2

This permit renewal is without modification, and no changes to the Title V Equipment Editor are needed.

5. Regulatory Review

The facility is currently subject to the following regulations:

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 .1806, Control and Prohibition of Odorous Emissions (State-enforceable only)
15A NCAC 02Q .0317, Avoidance Conditions (for 15A NCAC 2D .0530, Prevention of Significant Deterioration)

A brief regulatory review for all of the above listed requirements will be included in this document below and in section VI.

15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Process

This regulation establishes an allowable emission rate for particulate matter (PM) from any stack, vent, or outlet resulting from any industrial process for which no other emission control standards are applicable. The regulation applies to Total Suspended Particulate (TSP) or PM less than 100 micrometers (μm). The allowable emission rate is calculated using the following equation:

$$E=4.10 \times P^{0.67} \text{ for } P < 30 \text{ tph}$$

Where: E = allowable emission rate in pounds per hour (lb/hr)
P = process weight rate tons per hour (tph)

The facility is required to keep production records such that the process rate “P” in tph, as specified by the formula above can be derived for both foam extrusion lines (ID Nos. ES-1 and ES-2). No reporting is required. Continued compliance with this standard is expected.

15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources

This regulation limits Sulfur Dioxide (SO_2) emissions to no greater than 2.3 pounds per million British thermal unit (lb/million Btu) of heat input for combustion sources that are unaffected by SO_2 limits in other state or Federal regulations. This regulation applies to the combustion operations of the control device (ID CSD-RTO). Due to the low concentrations of sulfur in natural gas (NG); no monitoring, recordkeeping, or reporting is required to demonstrate compliance with this standard. Continued compliance with this standard is expected.

15A NCAC 02D .0521, Control of Visible Emissions

Visible emission (VE) standards provided in this regulation are applicable to potential VE emissions from any stack, vent, or outlet. This regulation limits visible emissions to no more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in an hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. To ensure compliance, once a month the Permittee shall observe the emissions point(s) of these sources (ID Nos. ES-1 and ES-2) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The results of monitoring (inspection and maintenance) shall be maintained in a logbook. Summary reports are required to be submitted semi-annually. Continued compliance with this standard is expected.

15 NCAC 02D .1806, Control and Prohibition of Odorous Emissions (State-enforceable only condition)

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility’s boundary. Continued compliance is anticipated.

15A NCAC 02Q .0317, Avoidance Conditions (for 15A NCAC 02D .0530 “Prevention of Significant Deterioration”)

Pregis is currently subject to a less than 250 tons per year (tpy) PSD Avoidance Condition for Volatile Organic Compounds (VOCs).

The facility became subject to a Prevention of Significant Deterioration (PSD) avoidance requirement during processing of their renewal application for Permit No. 06552T07 issued on October 29, 2007. During that renewal process, a PSD avoidance requirement was added to establish a 250-tons per year (tpy) facility-wide emission limit. The review for that renewal application indicates facility emissions were:

VOC Emissions	tons per year (tpy)
Potential uncontrolled	870.30
Potential controlled	171.94
Expected actual	148.81

VOC annual emission inventory information for 2018 through 2022 are noted in this review header above. All remain below the 250 tpy limit.

As part of the minor modification request issued as Title V Permit No. 06552T09, the existing less than 250 tpy PSD Avoidance Condition for VOCs was modified to include the new RTO (ID No. CD-RTO) along with a Primary and Alternative Operating Scenario (Please refer to review for issued Permit No. T09 for complete details).

No changes are necessary under this permit renewal. Continued compliance is anticipated.

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

NSPS

The facility is not currently subject to any New Source Performance Standards. This permit renewal does not change the facility’s NSPS status.

NESHAP/MACT

The facility is not currently subject to any Maximum Achievable Control Technology (MACT) Standards. The facility is classified as a Title III minor facility with no 112(d) avoidance conditions required. This permit renewal does not affect this status.

PSD

The facility remains a Prevention of Significant Deterioration (PSD) minor source and the facility is currently subject to a PSD avoidance condition as described in Section 5 above. This permit renewal does not affect this status.

112(r)

Pregis is subject to the 112(r) “Prevention of Accidental Releases” requirements because it stores isobutane. The foam manufacturing process uses isobutane as a blowing agent, which is received by truck and stored at the facility in two pressure vessels, then transferred from the storage vessels to the blowing area via piping. Isobutane is a regulated flammable substance under the EPA Risk Management Program (RMP) Chemical Accident Prevention rule (40 CFR 68).

As required under 112(r), the facility submitted an updated Risk Management Plan (RMP) to EPA pursuant to 40 CFR 68.190 on February 2024. The facility must revise and update its RMP every five years thereafter. No changes are necessary under this permit renewal. Continued compliance is anticipated.

CAM

The CAM rule (40 CFR 64; 15A NCAC 02D .0614) applies to each pollutant specific emissions unit (PSEU) at major TV facilities that meets all three following criteria:

- the unit is subject to any (non-exempt: e.g. pre November 15, 1990, Section 111 or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- the unit uses any control device to achieve compliance with any such emission limitation or standard.
- The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source (i.e., 100 tons per year for criteria pollutants or 10/25 tons per year for HAPs).

40 CFR 64 requires that a CAM plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold and uses a control device to meet an applicable standard. CAM applicability was previously established under the renewal permit T07; however, under renewal permit T10, CAM was reevaluated and removed. Due to this facility having a 250 tpy VOC PSD Avoidance limit, they are exempt from CAM applicability per 40 CFR 64.2(b)(1)(v).

Facility remains exempt from 02D .0614 CAM due to the emissions cap as discussed above as long as the PSD Avoidance Condition remains in place. This status does not change as a result of this renewal.

7. Facility Wide Air Toxics

The facility is not currently subject to a facility wide toxics condition and has not triggered a toxics review. This permit modification does not affect this status.

8. Facility Emissions Review

The facility-wide potential emissions do not change under this TV permit renewal. Actual emissions for criteria pollutants and HAPs for the years 2018 through 2022 are provided in the header of this permit review.

9. Compliance Status

DAQ has reviewed the compliance status of Pregis. During the most recent inspection, conducted on July 20, 2023 by Christopher Scott of ARO, the facility appeared to be in compliance with all applicable requirements. The facility's Annual Compliance Certification was received on January 31, 2024 and indicated compliance with all applicable requirements in 2023.

10. 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 provided to the public under 02Q .0521 above. No affected states or local agencies are within 50 miles of this facility.

11. Other Regulatory Considerations

- A P.E. seal is NOT required for this renewal application.
- A zoning consistency determination is NOT required for this renewal application.
- A permit fee is NOT required for this renewal application.
- EPA has promulgated a rule (88 FR 47029, July 21, 2023), with an effective date of August 21, 2023, removing the emergency affirmative defense provisions in operating permits programs, codified in both 40 CFR 70.6(g) and 71.6(g). EPA has concluded that these provisions are inconsistent with the EPA's current interpretation of the enforcement structure of the CAA, in light of prior court decisions¹. Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions involving affirmative defenses² and will harmonize the EPA's treatment of affirmative defenses across different CAA programs.

As a consequence of this EPA action to remove these provisions from 40 CFR 70.6(g), it will be necessary for states and local agencies that have adopted similar affirmative defense provisions in their Part 70 operating permit programs to revise their Part 70 programs (regulations) to remove these provisions. In addition, individual operating permits that contain Title V affirmative defenses based on 40 CFR 70.6(g) or similar state regulations will need to be revised.

¹ NRDC v. EPA, 749 F.3d 1055 (D.C. Cir. 2014).

² In newly issued and revised New Source Performance Standards (NSPS), emission guidelines for existing sources, and NESHAP regulations, the EPA has either omitted new affirmative defense provisions or removed existing affirmative defense provisions. See, e.g., National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Final Rule, 80 FR 44771 (July 27, 2015); National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule, 80 FR 72789 (November 20, 2015); Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Final Rule, 81 FR 40956 (June 23, 2016).

Regarding NCDAQ, it has not adopted these discretionary affirmative defense provisions in its Title V regulations (15A NCAC 02Q .0500). Instead, DAQ has chosen to include them directly in individual Title V permits as General Condition (GC) J.

Per EPA, DAQ is required to promptly remove such impermissible provisions, as stated above, from individual Title V permits, after August 21, 2023, through normal course of permit issuance.

12. Recommendations

The permit renewal application for Pregis Innovative Packaging Inc. located in Granite Falls, Caldwell County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 06552T13.