

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: **XX/XX/2023**

Region: Raleigh Regional Office
County: Johnston
NC Facility ID: 5100159
Inspector's Name: Dena Pittman
Date of Last Inspection: 06/09/2022
Compliance Code: 3 / Compliance - inspection

<p style="text-align: center;">Facility Data</p> <p>Applicant (Facility's Name): Structural Coatings, Inc. - Clayton</p> <p>Facility Address: Structural Coatings, Inc. - Clayton 8029 US Highway 70 West Clayton, NC 27520</p> <p>SIC: 3441 / Fabricated Structural Metal NAICS: 332312 / Fabricated Structural Metal Manufacturing</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 .0515, 02D .0521, 02D .1111 NSPS: N/A NESHAP: 40 CFR 63, MACT Subpart M PSD: N/A PSD Avoidance: N/A NC Toxics: 15A NCAC 02D .1100 112(r): N/A Other: 15A NCAC 02D .0541, 02D .1806 and 02Q .0512</p>
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Contact Data			Application Data
<p style="text-align: center;">Facility Contact</p> <p>Gary McCart Vice President (919) 553-3034 8029 Highway 70 West Clayton, NC 27520</p>	<p style="text-align: center;">Authorized Contact</p> <p>Gary McCart Vice President (919) 553-3034 8029 Highway 70 West Clayton, NC 27520</p>	<p style="text-align: center;">Technical Contact</p> <p>Neal McElveen Terracon Consultants (704) 594-8912 2701 Westport Road Charlotte, NC 28208</p>	<p>Application Number: 5100159.22A Date Received: 11/23/2022 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 07357/T07 Existing Permit Issue Date: 06/21/2018 Existing Permit Expiration Date: 05/31/2023</p>

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2021	---	---	8.08	---	1.0000	2.78	1.88 [Xylene (mixed isomers)]
2020	---	---	17.46	---	2.10	9.38	8.10 [Xylene (mixed isomers)]
2019	---	---	19.08	---	2.00	9.83	6.94 [Xylene (mixed isomers)]
2018	---	---	25.54	---	1.90	10.67	4.44 [Xylene (mixed isomers)]
2017	---	---	16.70	---	3.40	4.80	3.52 [Xylene (mixed isomers)]

<p>Review Engineer: Jeff Twisdale</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 07357/T08 Permit Issue Date: XX/XX/2023 Permit Expiration Date: XX/XX/2028</p>
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1. Purpose of Application

Structural Coatings, Inc. – Clayton (SCI) currently holds Title V Permit No. 07357T07 with an expiration date of May 31, 2023, for a fabricated metal finishing operation located in Clayton, Johnston County, North Carolina. This permit application is for a permit renewal without modification. The renewal application was received on November 23, 2022, or at least six month 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

SCI cleans and finishes structural steel members such as bridge I-beams and escalator casings. The steel is cleaned using sandblasting operations and coated through painting or metalizing (application of a thin layer of molten metal) operations. The facility has approximately 21 employees and operates one eight-hour shift from 7:00 am to 3:30 pm.

The facility does liquid applied coatings and metalizing for application of industrial coatings for valves and strainers, sheet pile and H-pile and miscellaneous steel fixtures and structures including fabrication. Metalizing or thermal spray is a generic term for a group of coating processes used to apply metallic or nonmetallic coatings. Energy sources are used to heat coating materials to a molten or semi-molten state. The resultant heated particles are propelled (accelerated) toward a prepared surface. Upon impact, a bond is formed with the surface, with subsequent particles causing thickness buildup and then are cooled with a very high cooling rate. The facility uses this metalizing process to coat steel and concrete substrates with zinc or aluminum or a combination of the two metals to create a cathodic protection coating on a substrate.

The facility is a Title V facility because emissions of hazardous air pollutants (HAPs) exceed 10 tons per year (tpy) of any single HAP or 25 tpy of all HAPs combined. In this situation, SCI is a Title V facility specifically because the emissions of xylene exceed 10 tpy.

3. History/Background/Application Chronology/History

June 21, 2018 - Air Quality Permit No. 07357T07 was issued for a Title V renewal.

June 23, 2021 & June 9, 2022 – The facility was inspected by Dena Pittman of the Raleigh Regional Office (RRO).

November 23, 2022 - Permit application 5100159.22A was received for a Title V renewal.

April 21, 2023 – Draft permit and review were sent to Supervisor (Booker Pullen).

April 25, 2023 – Minor comments were received from Supervisor (Booker Pullen).

April 25, 2023– TVEE changes were approved by TVEE Coordinator (Jenny Sheppard).

April 27, 2023 – Draft permit and review were sent to the facility, RRO, and DAQ staff.

April 27, 2023 – No comments were received from the facility (Gary McCart) and RRO (Dena Pittman).

May 1, 2023 – DRAFT permit was sent to public notice and EPA for review prior to issuance.

4. Permit Modifications/Changes and TVEE Discussion

The following changes* were made to Air Permit No. 07357T07:

Page No.	Section	Description of Changes
Throughout	All	Updated all tables, dates, and permit revision numbers. Permit was updated with the latest Permit Shell 7.0.
5	2.1 A.1 Table and 2.1 A.1.a.	Updated 15A NCAC 02D .0515 limits/standards in Table and A.1.a. Removed Last MACT/Air toxics citation 15A NCAC 02Q .0705 form Table that was previously removed after Permit No. 07357T06
6	2.1 A. 1.c.iii.	Replaced language with the noncompliance statement for 02D .0521 if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made
6	2.1 A.1.e.	Removed old duplicative language regarding reporting requirement
18	2.1 B. 2.c.iii.	Replaced language with the noncompliance statement for 02D .0521 if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made
18	2.1 B.2.e.	Removed old duplicative language regarding reporting requirement
19	2.1 C. 1.c.iii.	Replaced language with the noncompliance statement for 02D .0521 if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made
19	2.1 C.1.e.	Removed old duplicative language regarding reporting requirement
23	3	Relocated Insignificant Activities to new section
24 - 32	4	Updated General Conditions to latest version (6.0, 01/07/2022)

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.

This permit renewal is without modification, and minor changes to the Title V Equipment Editor were approved.

5. Regulatory Review

The facility currently complies with the following regulations:

A. 15A NCAC 02D .0515: "Particulates from Miscellaneous Industrial Processes"

SCI still utilizes panel filters (ID Nos. CD-PF-1 and CD-PF-2) for its painting (coating) operations (ID Nos. ES-PO1 and ES-PO2) as well as a panel filter (ID Nos. CD-PF-3) for its metalizing operations (ID Nos. ES-MO1 and ES-MO2). These filters are in place to collect overspray from the coating/metalizing process and are used to meet the PM emission standard of 15A NCAC 02D .0515. These sources are applying a coating to very heavy steel structures (i.e., bridge I-beams) where very generous allowable emission rates are calculated for 02D .0515. Assuming only 1 ton per hour of material was being coated yields an allowable emission rate 4.1 pounds per hour while the maximum hourly controlled emission rate is 3.0 pounds per hour based on calculations from the 07357R03 permit review. There have been no changes to the processing rates and emissions rates for the above sources. The regulatory requirement language has been updated where required to the latest version being used by DAQ. Continued compliance is expected with this regulation.

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

SCI still utilizes panel filters (ID Nos. CD-PF-1 and CD-PF-2) for its painting (coating) operations (ID Nos. ES-PO1 and ES-PO2) as well as a panel filter (ID Nos. CD-PF-3) for its metalizing operations (ID Nos. ES-MO1 and ES-MO2). These filters are in place to collect overspray from the metalizing process and are used to meet the 20 percent opacity limit of 15A NCAC 02D .0521. SCI also utilizes outdoor sandblasting operation (ID No. ES-OSBO) prior to coating/metallicizing. There have been no changes to the processing rates and emissions rates for the above sources. The regulatory requirement language has been updated where required to the latest version being used by DAQ. Continued compliance is expected with this rule, since these operations have been in existence as currently configured since 2002.

C. 15A NCAC 02D .0541: “Control of Emissions from Abrasive Blasting” State-enforceable only

Prior to coating and metalizing, SCI utilizes outdoor sandblasting operation (ID No. ES-OSBO) which is subject to 02D .0541 that explicitly states that the source shall comply with 02D .0521. It also states that “for the purposes of this Rule, the visible emissions reading for abrasive blasting performed outside a building shall be taken at a spot approximately one meter above the point of abrasive blasting with a viewing distance of approximately five meters.” No changes have been made to this operation. Continued compliance is expected.

D. 15A NCAC 02D .1100: “Control of Toxic Air Pollutants” State-enforceable only

See Section 7. below for details.

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

See Section 6. below for details.

F. 15A NCAC 02D .1806: “Control and Prohibition of Odorous Emissions” State-enforceable only

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 expected.

G. 15A NCAC 02Q .0512: “Permit Shield and Application Shield”

The Permittee is shielded from the following nonapplicable requirements [15A NCAC 02Q .0512(a)(1)(B)].

15A NCAC 02D .0614 does not apply to these sources (**ID Nos. ES-MO1 and ES-MO2**) since each source’s potential pre-control emissions do not exceed the major source thresholds for that pollutant. [40 CFR 64.2(a)(3)]

15A NCAC 02D .0614 does not apply to these sources (**ID Nos. ES-PO1 and ES-PO2**) since each source is subject to an emission limit pursuant to Section 112 of the Act and therefore exempt per 40 CFR 64.2(b)(1)(i).

See the Compliance Assurance Monitoring (CAM) in Section 6. below for details.

The sources at this facility will continue to be subject to the above regulations. There have been no changes made to the sources nor the requirements of these regulations since the last renewal. Continued compliance is expected.

6. NSPS, NESHAP/MACT, PSD, Attainment Status, 112(r), CAM:

New Source Performance Standards (NSPS)

The facility is not currently subject to any NSPSs. This permit renewal does not affect this status.

Maximum Achievable Control Technology (MACT)

The applicant is classified as a major source of HAP emissions subject to the MACT standard for Surface Coating of Miscellaneous Metal Parts (40 CFR 63, Subpart Mmmm) because the application of protective coatings to fabricated steel products has the potential to emit HAP (xylene) greater than 10 tpy. The facility has been submitting semi-annual reports meeting the general use emission limit of 2.6 lb HAP per gallon solid per 40 CFR 63.3890(b). Continued compliance with the MACT is expected.

Prevention of Significant Deterioration (PSD)

The facility is not currently subject to any PSD requirements. The largest criteria pollutant (VOC) emissions do not have the potential to emit greater than 250 tpy; therefore, SCI is not considered to be a major stationary source for PSD purposes. This permit renewal does not affect this status.

Attainment Status and Increments

Johnston County is in attainment of the National Ambient Air Quality Standards (NAAQS) per 40 CFR 81.334 “Designation of Areas for Air Quality Planning Purposes.” The minor PSD Baseline dates for Johnston County have been triggered for PM₁₀ and SO₂ emissions. There is no change in emissions of said pollutants from this renewal application.

112(r)

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

Compliance Assurance Monitoring (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 continuous Compliance Assurance Monitoring (CAM) plan be developed for all equipment located at a major facility that have pre-controlled emissions above the major source threshold and use a control device to meet an applicable standard. The facility operates three panel filters, one each on the two painting operations (ID Nos. ES-PO1 and ES-PO2) and one on the collective stack for the metalizing operations (ID Nos. ES-MO1 and ES-MO2). During the permit review for Permit No. 07357R03, CAM was determined not to be applicable to any of the above sources. Since the painting operations are subject to MACT Subpart M published on August 22, 2001, CAM does not apply to those sources. For the non-MACT applicable sources (metalizing operations), PM pre-controlled emissions are not emitted in quantities greater than the major source threshold (100 tpy), and a control device is not used for the outdoor sandblasting operation. There have been no additional emission source/control devices added since this CAM applicability determination. Therefore, CAM does not apply. This permit renewal does not change the facility’s CAM status.

7. Facility-wide Air Toxics

All sources of toxic air pollutants (TAPs) from SCI are subject to MACT Subpart M. North Carolina G.S. 143-215.107(a) exempts emission sources subject to MACT standards from NC Air Toxics regulations provided their emissions do not “present an unacceptable risk to human health,” in accordance with G.S. 143-215.107(b) as codified on May 1, 2014. During the processing of Air Permit Application No. 5100159.07A, the facility’s TAPs emissions were found to be in compliance with the AALs (acceptable ambient level) concentration. The report for the latest inspection performed on June 9, 2022, stated that electronic purchase and consumption records are maintained weekly while noting that production levels have remained like those in recent years. This permit renewal does not affect this status, and continued operation will not pose an unacceptable risk to human health.

8. Facility Emissions

The facility-wide potential emissions will not change under this TV permit renewal. Actual emissions for criteria pollutants and HAPs for the years 2017 through 2021 are provided in the header of this permit review.

9. Compliance Status

The facility has received several notices of violation in the past twelve years, the most recent being February 25, 2020. The violations were related to late reporting, incomplete annual compliance certification, failing to perform recordkeeping, non-compliance with Title V monitoring, record keeping, or reporting requirements and late annual reporting and exceeding 10 tpy of a single HAP.

The report for the latest inspection performed June 9, 2022 by Ms. Dena Pittman of the Raleigh Regional Office states that the facility “was in compliance with all applicable air regulations and permit stipulations.”

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

A 30-day public notice period and a 45-day EPA review period are required for this significant modification (renewal) of the Title V permit. 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. No affected states or local agencies are within 50 miles of this facility.

11. Other Regulatory Considerations

A zoning consistency determination is NOT required for this renewal application.

A professional engineer’s seal is NOT required for this renewal application.

A permit fee is NOT required for this renewal application.

12. Recommendations

The permit renewal application for Structural Coatings, Inc. (SCI), located in Clayton, Johnston 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. 07357T08.