

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: **date, 2011**

Region: Winston-Salem Regional Office
County: Guilford
NC Facility ID: 4100868
Inspector's Name: Ray Stewart
Date of Last Inspection: 04/07/2011
Compliance Code: 3 / Compliance - inspection

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): The Sherwin - Williams Company - Stagecoach Trail Facility Address: The Sherwin - Williams Company - Stagecoach Trail 113 Stagecoach Trail Greensboro, NC 27409 SIC: 2851 / Paints And Allied Products NAICS: 32551 / Paint and Coating Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: 15A NCAC 2D .1111 (40 CFR 63, Subparts CCCCCC and ZZZZ) PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 4100868.11A Date Received: 04/01/2011 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 05755/T17 Existing Permit Issue Date: 07/30/2010 Existing Permit Expiration Date: 12/31/2011
Brian Neal EH & S Manager (336) 292-3000 113 Stagecoach Trail Greensboro, NC 27410	Derek Moore Plant Manager (336) 292-3000 113 Stagecoach Trail Greensboro, NC 27409	Brian Neal EH & S Manager (336) 292-3000 113 Stagecoach Trail Greensboro, NC 27410	
Review Engineer: Mark Cuilla Review Engineer's Signature: Date: date, 2011		Comments / Recommendations: Issue 05755/T18 Permit Issue Date: date, 2011 Permit Expiration Date: date, 2016	

I. Purpose of Application

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (**05755T17**) was issued on **July 30, 2010**, with an expiration date of **December 31, 2015**. The renewal application was received on **April 1, 2011**, or 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.

II. Facility Description

The facility is a manufacturer of lacquers and furniture finishing materials for the office furniture manufacturing industry.

III. History/Background/Application Chronology

January 3, 2007 – Permit **05755T15** issued as a Title V renewal.

July 18, 2007 – Permit **05755T16** issued as a TV State-only modification to replace three mixing tanks (ID Nos. **HSD20, T&S21, and T&S22**).

July 30, 2010 – Permit **05755T17** issued as a minor modification to add two portable paint fillers (**ID Nos. FFL6 and FFL7**).

April 1, 2011 – Permit application **4100868.11A** received as a Title V renewal application. Application deemed complete for processing.

April 7, 2011 – Ray Stewart of the WSRO completed the annual inspection of the facility.

April 13, 2011 – Received WSRO “Comments and Recommendations” document in response to receipt of renewal application.

June 6, 2011 – Mark Cuilla sent email to the Permittee requesting verification of applicability of the area source GACT (40 CFR 63, Subpart 7C) to the permitted equipment (*text of email follows*):

Your facility, by virtue of the MACT avoidance permit condition, is defined as a Title III minor facility. You note this in your permit renewal application. As such, you are potentially subject to the area source GACT, Subpart 7C “Area Source Standards for Paints and Allied Products Manufacturing.” DAQ is currently working on specific permit language to be inserted into permits for applicable sources. As part of the renewal I need to correctly identify on the permit all applicable equipment. The GACT has the following definitions:

Applicability – this rule applies to facilities that perform paints and allied products manufacturing that are an area source of hazardous air pollutants (HAP) emissions and process, use, or generate materials containing one or more the of the following HAP: benzene, Methylene chloride, and compounds of cadmium, chromium, lead, and nickel in amounts greater than 0.1% by weight for carcinogens or 1.0% by weight for non-carcinogens.

Paints and allied products manufacturing process means all the equipment which collectively function to produce a paint or allied product. A process may consist of one or more unit operations. For the purposes of this subpart, the manufacturing process includes any, all, or a combination of, weighing, blending, mixing, grinding, tinting, dilution or other formulation. Cleaning operations, material storage and transfer, and piping are considered part of the manufacturing process.

With these definitions in mind can you confirm which, if any, sources meet the applicability criteria (e.g., process any of the above listed HAPs). I have attached the equipment tables from the current permit. Feel free to amend these tables as you need to in order to correctly identify applicable sources. If you have any questions feel free to contact me or if it turns out that all or none of the equipment is applicable (noting the applicability criteria above) feel free to reply in that manner.

The Permittee responded via email on **June 16, 2011**. They note that the facility is a source of HAPs and uses compounds of chromium in concentrations >0.1%. The facility does not use any of the other materials (benzene, methylene chloride, compounds of cadmium, lead, and nickel) regulated under Subpart 7C. Chromium is only emitted when it is present in solid form, as a powder where it can become airborne and therefore emitted. The Permittee also identified equipment in both the permitted equipment list and list of insignificant sources that emit chromium in solid form. They also clarified that the applicable equipment in the insignificant activities list are laboratory equipment that would use chromium compounds in small quantities that are unlikely to become airborne and emitted.

September 1, 2011 – Draft permit sent to regional office and Permittee for review prior to public notice and EPA review. The Permittee provided comments on draft permit via email on **September 2, 2011**. He noted only minor changes. All were made. The WSRO had no comments on the draft permit.

date, 2011 – Draft permit sent to 30-day public notice and 45-day EPA review.

IV. Permit Modifications/Changes and ESM Discussion

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

Page	Section	Description of Change
Attachment	Insignificant Activities	-added area source GACT designations (7C and ZZZZ) -added asterisked language
Cover	-	-amended dates and permit revision numbers
All	Header	-amended permit revision number
3-5	Equipment table	-added area source GACT designations
6	2.1 A (table)	-clarified equipment/applicable requirement relationships -added MACT avoidance requirement
7	2.1 A.1.b 2.1 A.1.c 2.1 A.1.d 2.1 A.2.b 2.1 A.2.c.ii	-corrected testing rule cross reference -updated monitoring/recordkeeping shell language for uncontrolled particulate sources subject to 15A NCAC 2D .0515 -added “no reporting” language -corrected testing rule cross reference -corrected cross reference
8	2.1 A.2.e 2.1 B	-updated shell reporting language -corrected equipment description (# sources in grouping)
8-9	2.1 B (table)	-added MACT avoidance requirement -added area source GACT requirement (7C)
9	2.1 B.1.a 2.1 B.1.b 2.1 B.1.c 2.1 B.1.c.ii	-added ID numbers -corrected testing rule cross reference -clarified equipment/control device relationships -updated shell monitoring/recordkeeping language
10	2.1 B.1.f 2.1 B.2.b 2.1 B.2.c 2.1 B.2.c.ii	-updated shell reporting language -corrected testing rule cross reference -added ID numbers -corrected cross reference
11	2.1 B.2.e 2.2 A (table)	-updated shell reporting language -added area source GACT requirement (7C)

Page	Section	Description of Change
12	2.2 A.2.c 2.2 A.2.e	-added regulatory citation -added regulatory citation and updated shell reporting language
15	2.2 A.5.d	-modified MACT avoidance reporting language from quarterly to semi-annual
15-18	2.2 A.6	-added area source GACT specific permit language
18-29	General Conditions	-updated general conditions (v3.5)
30	List of Acronyms	-added acronym for CAIR, NAA, and RACT per current shell

Other than the addition of GACT designations to specific applicable equipment, no additional modifications of the equipment descriptions in TVEE were needed as part of this permit renewal.

V. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes

15A NCAC 2D .0521, Control of Visible Emissions

15A NCAC 2D .0958, Work Practices for Sources of Volatile Organic Compounds

15A NCAC 2D .1100, Control of Toxic Air Pollutants

15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions

15A NCAC 2Q .0317, Avoidance Conditions (15A NCAC 2D .1111, Maximum Achievable Control Technology)

15A NCAC 2Q .0711, Emission Rates Requiring a Permit

A regulatory review for these existing requirements will not be included in this document. However as part of this permit renewal, the following regulations (area source GACTs) have been added:

15A NCAC 2D .1111, Maximum Achievable Control Technology (40 CFR 63 Subparts ZZZZ and CCCCCC). These Subparts are applicable to area sources of hazardous air pollutants as discussed below. In addition to this regulation, a reference to 15A NCAC 2Q .0705 has been added to the permit.

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

NSPS – The Permittee is not currently subject to any New Source Performance Standards. This permit renewal does not affect this status.

NESHAPS/MACT/112j – The Permittee currently operates under a facility-wide Maximum Achievable Control Technology standards avoidance condition. This condition limits emissions of any single hazardous air pollutant (HAP) to less than 10 tons per year and to less than 25 tons per year for any combination of HAPs. The Permittee is required to calculate and record monthly HAP emissions using consumption records of all HAP-containing materials. Quarterly reporting is required. As part of this permit renewal, the reporting requirement will be modified from quarterly to semi-annual per current DAQ reporting guidance.

Because the facility is classified as a Title III minor (by virtue of permit restrictions), applicability to the area source GACTs under Part 63 should be addressed. The following two standards were found to be applicable to current sources:

1. 40 CFR 63, Subpart ZZZZ – The Permittee currently operates one existing diesel-fired emergency generator (152 Hp; **ID No. IES-EG1**) listed on the current list of insignificant activities. The applicable area source GACT (40 CFR 63, Subpart ZZZZ) requirements for this source are as follows:

RICE NESHAP Summary of Requirements¹ for Existing Emergency Compression Ignition Stationary Engine ≤500 HP Located at Area Sources of HAP constructed before 6/12/2006

Your compliance date is **May 3, 2013**.

Emission Limitations: 63.6603, Table 2d

63.6603:

- (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.
 - (1) change oil and filter every 500 hours of operation or annually, whichever comes first,
 - (2) inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and
 - (3) inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Operating Limitations: No Requirements

Fuel Requirements: No Requirements

Performance Tests: No Requirements

Monitoring, Installation, Collection, Operation and Maintenance Requirements: 63.6625(e), (f), (h), (i)

- (e) You must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- (f) You must install a non-resettable hour meter if one is not already installed.
- (h) You must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to this subpart apply.
- (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in item 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the

engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

Initial Compliance: No Requirements

Continuous Compliance: 63.6605, 63.6640

§63.6605

- (a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
- (b) At all times you must operate and maintain any affected source and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

§63.6640

- (a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.
 - (1) operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions, or
 - (2) develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650.
- (c) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.
- (f) Requirements for emergency stationary RICE.
 - (1) You must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
 - (i) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness

testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

- (iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

Notification Requirements: No Requirements

Recordkeeping Requirements: 63.6655, except 63.6655 (c)

§ 63.6655

- (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5).
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
 - (2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
 - (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
 - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE according to your own maintenance plan;

- (f) You must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

Reporting Requirements: Footnote 2 of Table 2d

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

General Provisions (40 CFR part 63)- Table 8: Yes, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).

Because this source qualifies as an insignificant activity (potential emissions less than five tons per year), it will remain on this insignificant activities list as part of this permit renewal. The renewed permit includes a link to the DAQ website identifying the applicable requirements above.

2. 40 CFR 63, Subpart CCCCCC – The Permittee is subject to this Subpart if you own or operate a facility that performs paints and allied products manufacturing that is an area source of hazardous air pollutant (HAP) emissions and processes, uses, or generates materials containing the following HAP: benzene, Methylene chloride, and compounds of cadmium, chromium, lead, and nickel. Paints and allied products are defined in 63.11607 as any material such as a paint, ink, or adhesive that is intended to be applied to a substrate and consists of a mixture of resins, pigments, solvents, and/or other additives and are produced by physical means, such as blending and mixing, as opposed to chemical synthesis means, such as reactions and distillation.

As indicated above in Section III of this Document, the Permittee has confirmed that the facility is a source of HAPs and uses compounds of chromium in concentrations >0.1%. The facility does not use any of the other materials (benzene, methylene chloride, compounds of cadmium, lead, and nickel) regulated under Subpart 7C. Chromium is only emitted when it is present in solid form, as a powder where it can become airborne and therefore emitted. The following equipment has been identified as applicable sources subject to this Subpart:

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	Control Device Description
HSD11 HSD40 HSD1, HSD7, HSD8, and HSD10 HSD20 HSD6	Eight high speed disperser (HSD) vessels as follows: One 400 gallon capacity One 500 gallon capacity Four 660 gallon capacity One 1,000 gallon capacity One 1,400 gallon capacity	CD1	One cartridge-type bagfilter (6,000 square feet of filter area)
HLM2	One high/low mixer (660 gallon capacity)	CD1	One cartridge-type bagfilter (6,000 square feet of filter area)
T&S3, T&S4, and T&S9 T&S12, T&S13, and T&S23 T&S30 T&S27, T&S28, and T&S29 T&S25 T&S21 and T&S22 T&S15 and T&S24 T&S14, T&S16, and T&S17 T&S26 T&S31 T&S32 and T&S33 T&S34 and T&S35 T&S36 and T&S37	Twenty-six thin and shade (T&S) tanks as follows: Three 660 gallon capacity Three 1,100 gallon capacity One 1,200 gallon capacity Three 1,400 gallon capacity One 2,000 gallon capacity Two 2,200 gallon capacity Two 3,000 gallon capacity Three 4,000 gallon capacity One 6,500 gallon capacity One 6,800 gallon capacity Two 5,000 gallon capacity Two 3,000 gallon capacity Two 3,000 gallon capacity	CD1	One cartridge-type bagfilter (6,000 square feet of filter area)
UVT1 and UVT2 UVT3 and UVT4	Ultraviolet light curable paint manufacturing operations and processes consisting of the following: Two blending tanks (250 gallon capacity each) Two blending tanks (500 gallon capacity each)	CDUV1	One bagfilter (3,000 square feet of filter area)

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	Control Device Description
PM31 PM81 and PM82 PM101, PM102, PM103, PM104, PM107, PM108, and PM109 PM131 and PM132 PM181, PM182, PM183, PM184, and PM185 PM258 and PM259 PM301, PM302, PM303, and PM304 PM351 PM&T1 PM251 PM305	Portable mixing tanks as follows: One 30 gallon capacity Two 80 gallon capacity Seven 100 gallon capacity Two 130 gallon capacity Five 180 gallon capacity Two 250 gallon capacity Four 300 gallon capacity One 330 gallon capacity One 235 gallon capacity (mix and thin) One 250 gallon capacity One 300 gallon capacity	CDUV1	One bagfilter (3,000 gallon capacity)

Section 2.2 A.6 has been added as follows:

6. **15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY** - For these sources (ID Nos. HSD1, HSD6, HSD7, HSD8, HSD10, HSD11, HSD20, HSD40, HLM2, T&S3, T&S4, T&S9, T&S12 through T&S17, T&S21 through T&S37, UVT1 through UVT4, PM31, PM81, PM82, PM101 through PM104, PM107 through PM109, PM131, PM132, PM181 through PM185, PM251, PM258, PM259, PM301 through PM305, PM351, and PM&T1), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart CCCCCC, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing", including Subpart A "General Provisions." This rule applies to facilities that perform paints and allied products manufacturing that are an area source of hazardous air pollutant (HAP) emissions and process, use, or generate materials containing one or more of the following HAP: benzene, methylene chloride, and compounds of cadmium, chromium, lead, and nickel in amounts greater than 0.1% by weight for carcinogens or 1.0% by weight for non-carcinogens.
 - a. Compliance Dates - The Permittee shall achieve compliance with the applicable provisions in this permit condition by **December 3, 2012**.
 - b. Standards and Compliance Requirements (Particulate Control) - For each affected source, the Permittee shall comply with the following requirements. These requirements apply at all times.
 - i. Addition of dry pigments or solids that contain target metal HAP to process vessels OR to the grinding or milling process device:
 - A. Operate a capture system that minimizes fugitive particulate emissions and route them to a control device with visible emissions of less than 10% opacity. The opacity requirement does not apply to particulate control devices that do not vent to the atmosphere; OR
 - B. Add pigments and solids to vessels in liquid, slurry, or paste form.
 - ii. Grinding and milling of materials containing the target metal HAP:

- A. Capture particulate emissions and route them to a control device with visible emissions of less than 10% opacity. The opacity requirement does not apply to particulate control devices that do not vent to the atmosphere; OR
 - B. Fully enclose the grinding and milling equipment during this process; OR
 - C. Ensure that the pigments and solids are in the solution during the grinding and milling.
- c. Initial Particulate Control Device Inspection - The Permittee shall conduct an initial inspection of each particulate control device according to the following requirements:
- i. The Permittee shall conduct the initial inspection by **June 1, 2013**.
 - ii. For each dry particulate control system, the Permittee shall visually inspect the system ductwork and dry particulate control unit for leaks. The Permittee shall also inspect the inside of each dry particulate control unit for structural integrity and condition.
 - iii. An initial inspection of the internal components of the particulate control system is not required if there is a record that an inspection meeting the requirements of this subsection has been performed within the past 12 months and any maintenance actions have been resolved.
- d. Initial Particulate Control Device Compliance Test Requirements –
- i. The Permittee shall conduct the initial compliance test by **June 1, 2013**.
 - ii. For each particulate control device, the Permittee shall conduct a visible emission test consisting of three 1-minute test runs using Method 203C (40 CFR part 51, appendix M). The visible emission test runs shall be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. If the average test results of the visible emissions test runs indicate opacity greater than 10%, the Permittee shall take corrective action and retest within 15 days.
 - iii. At least 45 days prior to performing the required emissions testing, the Permittee shall submit a testing protocol to the Regional Supervisor, DAQ for review and approval. All testing protocols shall be approved by the DAQ prior to performing such tests; and
 - iv. To afford the Regional Supervisor, DAQ, the opportunity to have an observer present, the Permittee shall PROVIDE the Regional Office, in WRITING, at least 7 days notice of any required performance test.
 - v. The results of this test shall be submitted with the Notification of Compliance Status.
- e. Ongoing Particulate Control Device Inspection and Testing Requirements –
- i. Dry Particulate Control System Inspection Requirements: The Permittee shall inspect and maintain each dry particulate control system according to the following requirements.
 - A. The Permittee shall conduct weekly visual inspections of any flexible ductwork for leaks.
 - B. The Permittee shall conduct inspections of the rigid, stationary ductwork for leaks, and the interior of the dry particulate control unit for structural integrity and to determine the condition of the fabric filter (if applicable) every 12 months.
 - ii. Ongoing Visual Testing Requirements for Particulate Control Systems: For each particulate control device, the Permittee shall conduct a 5-minute visual determination of emissions from the particulate control device every 3 months using Method 22 (40 CFR part 60, appendix A–7). The visible emission test shall be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. If visible emissions are observed for two minutes of the required 5-minute observation period, the Permittee shall conduct a Method 203C (40 CFR part 51, appendix M) test within 15 days of the time when visible emissions were observed. The Method 203C test will consist of three 1-minute test runs and shall be performed during the addition of dry pigments and solids

containing compounds of cadmium, chromium, lead, or nickel HAP to a process vessel or to the grinding and milling equipment. If the Method 203C test runs indicate greater than 10% opacity visible emissions, the Permittee shall comply with the following:

- A. The Permittee shall take corrective action and retest using Method 203C within 15 days. The Method 203C test will consist of three 1-minute test runs and shall be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. The Permittee shall continue to take corrective action and retest each 15 days until a Method 203C test indicates an opacity equal to or less than 10% opacity.
 - B. The Permittee shall prepare a deviation report in accordance with §63.11603(b)(3) for each instance in which the Method 203C opacity results were greater than the limitation in §63.11601(a)(5).
 - C. The Permittee shall resume the visible determinations of emissions from the particulate control device in accordance with the requirements of this section 3 months after the previous visible determination.
- f. Recordkeeping Requirements - In accordance with 40 CFR 63.11602 and 63.11603, the Permittee shall maintain records of the following:
- i. Copies of the Initial Notification of Applicability, the Notification of Compliance Status, and each Annual Compliance Certification Report.
 - ii. The Permittee shall record the following information for each inspection and testing activity:
 - A. The date, place, and time;
 - B. Person conducting the activity;
 - C. Technique or method used;
 - D. Operating conditions during the activity;
 - E. Results; and
 - F. Description of correction actions taken.
 - iii. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record onsite for at least 2 years after the date of each recorded action according to §63.10(b)(1). The Permittee may keep the records offsite for the remaining 3 years.
- g. Reporting Requirements - In addition to the notification requirements of the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
- i. An Initial Notification of Applicability including a description of the affected sources shall be submitted in accordance with 40 CFR 63.1160(a) by **June 1, 2010**.
 - ii. A Notification of Compliance Status shall be submitted on or before **June 3, 2013**. The notice shall contain the following information:
 - A. The company's name and address;
 - B. A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification, a description of the method of compliance (i.e., compliance with management practices, installation of a wet or dry scrubber) and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart.
 - C. A copy of the initial particulate control device compliance test, if applicable.

- iii. An Annual Compliance Certification report shall be prepared by January 31 of each year. This report does not need to be submitted unless a deviation from the requirements of this subpart has occurred. If a deviation has occurred during the year, each annual compliance certification report shall be submitted along with the deviation report, and postmarked no later than February 15. The report shall contain the following information:
- A. Company name and address;
 - B. A statement in accordance with §63.9(h) of the General Provisions that is signed by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart; and
 - C. Date of report and beginning and ending dates of the reporting period.
 - D. Deviation Report - If a deviation has occurred during the reporting period, the Permittee shall include a description of deviations from the applicable requirements, the time periods during which the deviations occurred, and the corrective actions taken. This deviation report shall be submitted along with the annual compliance certification report.
3. 40 CFR 63, Subpart JJJJJ – The Permittee currently operates one natural gas-fired comfort heat boiler (**ID No. IES-B1**) listed on the insignificant activities list that must be analyzed for the area source GACT for Industrial, Commercial, and Institutional Boilers (40 CFR 63, Subpart JJJJJ) because it meets the source applicability in the Subpart. Per 63.11195(e), “a gas-fired boiler as defined in this Subpart is not subject to this Subpart and to any requirements in this Subpart.” The permit renewal does not affect this status.

Additional combustion sources and ovens are also listed on the insignificant activities list. These sources are not required to be analyzed for 6J applicability because they are either not fuel fired or are not boilers as defined by the Subpart. This permit renewal does not affect this status.

PSD – The Permittee is not currently subject to any Prevention of Significant Deterioration requirements. This permit renewal does not affect this status.

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 renewal does not affect this status.

CAM – 40 CFR 64 requires that a continuous assurance monitoring 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 following table indicates the current equipment/control device relationships:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
HSD11 HSD40 HSD1, HSD7, HSD8, and HSD10 HSD20 HSD6	Eight high speed disperser (HSD) vessels as follows: One 400 gallon capacity One 500 gallon capacity Four 660 gallon capacity One 1,000 gallon capacity One 1,400 gallon capacity	CD1	One cartridge-type bagfilter (6,000 square feet of filter area)
HLM2	One high/low mixer (660 gallon capacity)	CD1	One cartridge-type bagfilter (6,000 square feet of filter area)
T&S3, T&S4, and T&S9 T&S12, T&S13, and T&S23 T&S30 T&S27, T&S28, and T&S29 T&S25 T&S21 and T&S22 T&S15 and T&S24 T&S14, T&S16, and T&S17 T&S26 T&S31 T&S32 and T&S33 T&S34 and T&S35 T&S36 and T&S37	Twenty-six thin and shade (T&S) tanks as follows: Three 660 gallon capacity Three 1,100 gallon capacity One 1,200 gallon capacity Three 1,400 gallon capacity One 2,000 gallon capacity Two 2,200 gallon capacity Two 3,000 gallon capacity Three 4,000 gallon capacity One 6,500 gallon capacity One 6,800 gallon capacity Two 5,000 gallon capacity Two 3,000 gallon capacity Two 3,000 gallon capacity	CD1	One cartridge-type bagfilter (6,000 square feet of filter area)
UVT1 and UVT2 UVT3 and UVT4	Ultraviolet light curable paint manufacturing operations and processes consisting of the following: Two blending tanks (250 gallon capacity each) Two blending tanks (500 gallon capacity each)	CDUV1	One bagfilter (3,000 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
PM31 PM81 and PM82 PM101, PM102, PM103, PM104, PM107, PM108, and PM109 PM131 and PM132 PM181, PM182, PM183, PM184, and PM185 PM258 and PM259 PM301, PM302, PM303, and PM304 PM351 PM&T1 PM251 PM305	Portable mixing tanks as follows: One 30 gallon capacity Two 80 gallon capacity Seven 100 gallon capacity Two 130 gallon capacity Five 180 gallon capacity Two 250 gallon capacity Four 300 gallon capacity One 330 gallon capacity One 235 gallon capacity (mix and thin) One 250 gallon capacity One 300 gallon capacity	CDUV1	One bagfilter (3,000 gallon capacity)

The following table outlines the specific permit conditions for each source/control device arrangement and if the control device is installed to comply with that requirement:

Emission Source ID No(s).	Control Device ID No(s).	Permit Condition(s)*	Control Equipment Installed to Meet Permit Limit?
HSD1, HSD6, HSD7, HSD8, HSD10, HSD11, HSD20, HSD40, HLM2, T&S3, T&S4, T&S9, T&S12 through T&S17, and T&S21 through T&S37	CD1	15A NCAC 2D .0515 15A NCAC 2D .1111	Particulates. Yes Hazardous air pollutants. Yes

Emission Source ID No(s).	Control Device ID No(s).	Permit Condition(s)*	Control Equipment Installed to Meet Permit Limit?
UVT1 through UVT4, PM31, PM81, PM82, PM101 through PM104, PM107 through PM109, PM131, PM132, PM181 through PM185, PM251, PM258, PM259, PM301 through PM305, PM351, and PM&T1	CDUV1	15A NCAC 2D .0515 15A NCAC 2D .1111	Particulates. Yes Hazardous air pollutants. Yes

* The following permit conditions, where applicable, are not included in the CAM analysis:

1. 15A NCAC 2D .0521 – This regulation limits visible emissions to specific opacity levels based on equipment manufacture date. Visible emissions are not criteria pollutants subject to CAM analysis.
2. 15A NCAC 2D .1100 – This regulation defines State-enforceable emission limits for toxic air pollutants. These emission limits are not criteria pollutants subject to CAM analysis.
3. 15A NCAC 2D .1806 – This regulation limits odorous emissions. Odors are state-enforceable limits and are not criteria pollutants subject to CAM analysis.
4. 15A NCAC 2D .0958 – This regulation establishes work practice standards for sources of volatile organic compounds. Work practice standards are not emission limits subject to CAM analysis.
5. 15A NCAC 2Q .0711 – This regulation defines State-enforceable emission limits for toxic air pollutants. These emission limits are not criteria pollutants subject to CAM analysis.
6. 15A NCAC 2Q .0705 – This regulation defines State-enforceable emission limits for toxic air pollutants; specifically, requires compliance with NC Air Toxics by the same compliance date for the last known MACT/GACT applicable to the facility (excluding combustion sources). These emission limits are not criteria pollutants subject to CAM analysis.

The permit was last renewed **January 3, 2007**. CAM was found not to be applicable at that time (see Ken Babb’s permit review – **05755T15**). Since that renewal the permit has been modified twice as follows:

1. **05755T16** – This modification replaced three tanks (**ID Nos. HSD20, T&S21, and T&S22**). Two tanks were replaced with larger units (~85,000 gallons per year additional throughput potential, each). This equates to an estimated 4.7 tons per year increase in VOC emissions. Each of these sources is controlled by bagfilter (**ID No. CD-1**). This bagfilter has a corresponding production limit of less than 65,000 gallons of coating material per day to comply with a methyl ethyl ketone limit. The expected increase in production plus the current production rate were determined to be below this production limit. CAM was determined not to be applicable to this modification.
2. **0577T17** – This modification was to add two portable paint fillers (**ID Nos. FFL6 and FFL7**). These sources are uncontrolled; therefore CAM is not applicable to this modification.

VII. Facility Wide Air Toxics

The Permittee is currently subject to modeled emission rates for methyl ethyl ketone on a source-by-source basis per 15A NCAC 2D .1100. To ensure compliance with the emission limits, the Permittee is required to limit the facility's production rate to less than 65,000 gallons of coating material per day. Daily recordkeeping and quarterly reporting are required by the current air permit. This permit renewal does not affect this status.

The Permittee has also made a demonstration that emissions of ammonia, Chlorobenzene, cresol, ethyl acetate, formaldehyde, methyl isobutyl ketone, phenol, toluene, and Xylene are each below their respective toxic permit emission rate (TPER). The Permittee is required to submit a permit application and obtain a permit prior to exceeding any of the listed TPERs. This permit renewal does not affect this status.

As noted above, the facility is classified as a Title III minor source of hazardous air pollutants (by virtue of permit restrictions) and as such, is required to comply with any applicable area source GACTs as noted above. Per 15A NCAC 2Q .0705, Existing Facilities and SIC Calls, a Permittee would be required to submit a permit application to comply with 15A NCAC 2D .1100 within six months after the promulgation of the last MACT or GACT, excluding the MACT or GACT for combustion sources, known to apply to the facility or by **January 1, 1999**, whichever is later. The Permittee shall be in compliance with 15A NCAC 2D .1100 by the same deadline that it is required to comply with the last MACT or GACT. However, per a **September 16, 2008** policy memo from Keith Overcash, Director DAQ, the term "or GACT" is being removed from 15A NCAC 2D .0704, .0705, and .0706 by the memo while rule modifications make their way through the rulemaking process. This modification eliminates an "unintended and perhaps unnecessary burden to small sources...not in the overall interest of the state air toxics program." As of the date of this permit renewal, the modified rule has not been promulgated; therefore, the policy memo still removes the need to comply with NC air toxics by the same compliance date of the last known GACT to apply to the facility. This permit renewal does not affect this status.

VIII. Facility Emissions Review

There is no change in emissions for this renewal.

The following table represents the latest years' emission inventories from the facility:

Pollutant(s)	2008 Actual Emissions (tpy)	2009 Actual Emissions (tpy)
CO	0.23	0.46
NO _x	0.27	0.54
PM ₁₀	0.51	0.41
SO ₂	-	0.002
VOC	81.10	59.32
Total HAP/TAP	22.69	15.94

IX. Stipulation Review

The facility was last inspected by Ray Stewart of the WSRO on **April 7, 2011**. At that time, the facility appeared to be in compliance with the permit and applicable DAQ regulations.

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

Pursuant to 15A NCAC 2Q .0521, a notice of the DRAFT Title V Permit shall be made (via DAQ website). 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 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .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 2Q .0521 above. The state of Virginia and the Forsyth County Local Program are each affected areas within 50 miles of the facility.

XI. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

WSRO recommends issuance of the permit and was presented with a DRAFT permit prior to notice and issuance.

RCO concurs with WSRO's recommendation to issue the renewed air permit.