

Air Permit Review

Permit Issue Date: **April 23, 2008**

Region: Raleigh Regional Office
County: Wake
NC Facility ID: 9200782
Inspector's Name: Brian Bland
Date of Last Inspection: 9/26/2007
Compliance Code: W/In Violation W/regard
To Proc Compliance

Facility Data			Permit Applicability		
Applicant (Facility's Name): Column & Post Inc. 8013 Purfoy Road Fuquay-Varina, NC 27526 SIC: 3089 / Plastics Products, Nec NAICS: 326199 / All Other Plastics Product Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: 2D .0958 NSPS: Not applicable NESHAP: 2D .1111 (MACT WWWW) PSD: Not applicable PSD Avoidance: 2Q .0317 to avoid 2D .0531 NC Toxics: 2Q .0705 and 2D .1100 112(r): Not applicable Other: 2D .1806 and 2Q .0317 to avoid MACT PPPP		
Contact Data			Application Data		
Facility Contact	Authorized Contact	Technical Contact	Application Number: 9200782.07A Date Received: 06/28/2007 Application Type: Modification Application Schedule: TV-1st Time Existing Permit Data Existing Permit Number: 09594/R00 Existing Permit Issue Date: 11/16/2006 Existing Permit Expiration Date: 10/31/2011		
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Review Engineer: David Putney Review Engineer's Signature: _____ Date: _____			Comments / Recommendations: Issue 09594/T01 Permit Issue Date: April 23, 2008 Permit Expiration Date: October 31, 2011		

I Reason for Application:

Facility Description: Column & Post, Inc. currently operates a facility that manufactures columns, posts, capitals and bases under Permit No. 09594R00. The products are fabricated from high viscosity, unsaturated polyester resins at this Fuqua-Varina, Wake County, North Carolina facility for use in construction and landscaping. The Permittee described the process as follows:

- A. Resin is pumped from the bulk liquid storage tanks (ID Nos. IBT1 and IBT2) into one or more of the seven mixing tanks (ID Nos. MT1, MT3, MT5, MT9, MT11, MT13 and MT15);
- B. Additives [e.g. catalyst (liquid from a gallon jug) and granite dust (from individual 50 pound bags)] are mixed in with the resin in the mixing tanks to achieve the desired properties;
- C. The resin/additives mixture is dispensed into 5-gallon buckets which are subsequently poured (manually) into molds of various shapes and sizes in the molding area (ID No. MO1);
- D. The molds are spun to force the resin/additives mixture to the outside of the mold. This spinning continues until the product is fully cured; and
- E. The mold is opened and the finished product is removed from the mold.

The Permittee also conducts woodworking operations (i.e. use of hand-held circular saws to build the wooden "masters" which are subsequently used to create the molds), cutting and sanding operations (i.e. use of a band saw to cut finished products to length and a belt sander to smooth the seams out of the finished products), and painting operations (i.e. applying lacquer or water-based latex paint to specialty parts in two dry filter type spray booths).

Permit Modification: The Permittee submitted application 9200782.07A to apply for its initial Title V permit (i.e. Permit No. 09594T01) via the procedures of 2Q .0501(c)(2).

II Regulatory Review:

Particulate emissions from the woodworking operations and the cutting and sanding operations are vented within the building either directly or through small portable bagfilters. Therefore, neither rule 2D .0515 nor 2D .0521 applies to these operations and they are not listed on Permit No. 09594T01 or on the list of insignificant activities.

The two 6,000 gallon capacity bulk storage tanks (ID Nos. IBT1 and IBT2) were included on the list of insignificant activities of Permit No. 09594R00. However, since they are part of the molding operations subject to 40 CFR Part 63, Subpart WWWW, those tanks will be added to Permit No. 09594T01 with ID Nos. BT1 and BT2.

The two painting operations (ID Nos. IP1 and IP2) were also included on the list of insignificant activities of Permit No. 09594R00. However, since emissions from these spray booths must be monitored as part of the avoidance conditions for 2D .0531 and 40 CFR Part 63, Subpart PPPP, these spray booths will be added to Permit No. 09594T01 with ID Nos. P1 and P2.

The Permittee submitted information in a letter dated 12/7/07 indicating that they intend to install a new polyurethane dispensing unit. According to the submitted information, this unit will not emit any regulated pollutants and is therefore exempt from permitting requirements. Therefore, this new unit will not be listed on Permit No. 09594T01 or the list of insignificant activities.

The Permittee again submitted information in a letter dated 1/25/08 indicating that they plan to use small quantities (5 to 10 gallons per year) of a styrene monomer. This material will be applied to synthetic polymeric materials (i.e. putties such as Bondo) to improve “wettability” and provide a smoother finish. These materials are specifically exempted from the MACT associated with this facility (see item g under Applicability in Section A.i. of this document, below). Therefore, this operation is added to the list of insignificant activities of Permit No. 09594T01. Note that Permit No. 09594T01 will require the Permittee to include the VOCs and styrene emissions from this operation in the MRR associated with the NSR avoidance and the NC toxics conditions, respectively (see discussions of NSR under Section C.iv. and TAPs under Section C.ii. of this document, below).

A. Open molding operations utilizing manual resin application including:

- **Two polystyrene resin storage tanks (6,000 gallon capacity, each, ID Nos. BT1 and BT2);**
- **Seven mixing tanks (163 gallon capacity, each, ID Nos. MT1, MT3, MT5, MT9, MT11, MT13 and MT15); and**
- **Molding area (ID No. MO1)**

i. 2D .1111 “Maximum Achievable Control Technology”

This rule applies to the Permittee due to the applicability of 40 CFR Part 63, Subpart WWWW [i.e. the MACT for Reinforced Plastic Composites Production]. This facility is considered a new affected source in accordance with §63.5795(a).

Applicability [§63.5785(a) and §63.5790(c)]

The requirements of Subpart WWWW apply to the seven mixing tanks, the molding area, the cleaning operations, and HAP-containing materials storage. The following activities are specifically excluded from the emission limits and work practice standards:

- a. Application of mold sealing and release agents;
- b. Mold stripping and cleaning;
- c. Repair of parts that are not manufactured at the affected source, including the non-routine manufacturing of parts;

- d. Personal activities that are not part of the manufacturing operations (such as hobby shops on military bases);
- e. Prepreg materials as defined in §63.5935;
- f. Non-gel coat surface coatings;
- g. Application of putties, polyputties and adhesives;
- h. Repair or production materials that do not contain resin or gel coat;
- i. Research and development operations as defined in Section 112(c)(7) of the Clean Air Act;
- j. Polymer casting; and,
- k. Closed molding operations (except for compression/injection molding).

Emission Limits [§63.5799, §63.5805(c), §63.5810(a) or (c) and Tables 1 and 3]

As allowed under §63.5796, the Permittee has opted to utilize the equations in Table 1 of Subpart WWWW to estimate organic HAP emissions (instead of conducting emissions testing). The Permittee previously determined that they do not meet or exceed the emission threshold of 100 tons of organic HAP per year. Therefore, according to §63.5799 and §63.5805(c), the Permittee is required to meet the applicable organic HAP emission limits of Table 3 of Subpart WWWW and the work practice standards of Table 4 of Subpart WWWW.

During the process of issuance of Permit No. 09594R00 the Permittee and NC DAQ agreed that the Permittee owns/operates an open molding operation utilizing manual resin application with closed-mold curing without roll out to produce materials that are not corrosion resistant/ high strength, tooling, low-flame spread/low smoke products, or shrinkage controlled resins. Therefore, the applicable emission factors (pound organic HAP per ton resin) are found in item 1.a.iv of Table 1 of Subpart WWWW as follows:

- If resin <33% organic HAP: $EF = 0.126 \times \%HAP \times 2000 \times 0.5$
- If resin \geq 33% organic HAP: $EF = ([0.286 \times \%HAP] - 0.0529) \times 2000 \times 0.5$

Where: %HAP = the concentration of organic HAP in the resin, in weight percent (e.g. if the resin contains 38.5% organic HAP by weight, then %HAP = 0.385)

Likewise, the applicable organic HAP emission limits are found in item 2.c. of Table 3 of Subpart WWWW as follows:

- 87 pounds organic HAP per ton of resin, on a 12-month rolling average; and
- Organic HAP emissions < 100 tons per calendar year*

The Permittee has two compliance options:

- (1) Paragraph §63.5810(a) allows the Permittee to utilize only resins that meet the emission limit of 87 pounds of organic HAP per ton of resin. If we solve the two above equations for an EF of 87 pounds per ton we find that the Permittee is in compliance with the emission limit if the resins contain \leq 48.91% organic HAP by weight.
- (2) Paragraph §63.5810(c) allows the Permittee to utilize any combination of resins that meet the emission limit of 87 pounds of organic HAP per ton of resin, on a rolling 12-month weighted average. The calculation must be made monthly.

* Although not technically an emission limit, if the Permittee emits \geq 100 tons of organic HAP per calendar year, then the Permittee must notify NC DAQ of this fact in the next semiannual compliance report. In this case, the Permittee remains subject to the work practice standards of Table 4 of Subpart WWWW, and, unless the Permittee also applies for a one-time exemption in accordance with §63.5805(e), the Permittee will then be required to comply with the emission limits of §63.5805(d) and Table 5 of Subpart WWWW within 3 years of submittal of that semiannual compliance report. Those emission limits are:

- At least 95% reduction, by weight, of organic HAP emissions; or
- 5 pounds of organic HAP emissions per ton of resin, on a rolling 12-month weighted average (i.e. item 2.c. of Table 5). Again, the calculation must be made monthly.

Work Practice Standards [§63.5805(c), §63.5835(a) and Table 4]

The following Work Practice Standards of Subpart WWWW apply to the Permittee:

- Do not use cleaning solvents that contain HAP except that organic HAP-containing cleaners may be used to clean cured resin from application equipment;
- Keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials (bulk HAP-containing materials storage tanks may be vented as necessary for safety);
- Mixer covers shall have no visible gaps present except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation;
- Close mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety; and
- Keep mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels (containers of 5 gallons or less may be open when active mixing is taking place or when they are actively being used to apply resin).

Monitoring [§63.5797, §63.5799(c), §63.5810(a) and (c), and Tables 1 and 3]

The Permittee may demonstrate compliance with the emission limits via any of the four methods allowed under §63.5810. The Permittee conducts only one molding operation and one resin application method. Therefore, the options presented in §63.5810(b) and §63.5810(d) are not applicable to this facility, as currently permitted. The monitoring requirements applicable to this facility include:

- §63.5810(a): Demonstrate that each individual resin, as applied, meets the applicable emission limit in Table 3 of Subpart WWWW; or
- §63.5810(c): Each calendar month demonstrate that the rolling 12-month weighted average organic HAP emissions meet the applicable emission limit in Table 3 of Subpart WWWW.

According to §63.5799(c), the Permittee must perform calculations to determine whether organic HAP emissions from molding operations are greater than or equal to 100 tons per year. Also, pursuant to §63.5810, the Permittee must perform calculations to show compliance with the applicable emissions limit of Table 3 of Subpart WWWW. The Permittee must perform these calculations within 30 days after the end of each month.

The Permittee shall calculate the organic HAP emissions from the molding operations during the previous 12 consecutive calendar months utilizing the following Equation 1 and shall calculate the weighted average organic HAP emission factor from the molding operations during the previous 12 consecutive calendar months utilizing the following Equation 2:

$$E_M = \sum_{j=1}^n (EF_j \times R_j) \div 2,000 \quad \text{Equation 1}$$

$$EF_{Ave} = \frac{\sum_{j=1}^n (EF_j \times R_j)}{\sum_{j=1}^n R_j} \quad \text{Equation 2}$$

Where: E_M = Total organic HAP emissions from molding operations during the previous 12 consecutive calendar months, in units of tons

EF_{Ave} = Average organic HAP emission factor for molding operations during the previous 12 consecutive months, in units of pounds per ton of resin

R_j = Total usage of resin “j” in molding operations during the previous 12 consecutive calendar months, in units of tons

n = Total number of resins utilized in molding operations during the previous 12 consecutive calendar months

EF_j = Organic HAP emission factor for resin “j” in units of pounds per ton of resin

= $([0.286 \times \%HAP] - 0.0529) \times 2000 \times 0.5$ If resin “j” contains $\geq 33\%$ organic HAP, by weight

= $0.126 \times \%HAP \times 2000 \times 0.5$ If resin “j” contains $< 33\%$ organic HAP, by weight

Where: %HAP = Organic HAP weight percent (e.g. if the resin contains 38.5% organic HAP by weight, then %HAP = 0.385)

The Permittee may use information provided by the material manufacturer (e.g. formulation data and MSDS) to determine the organic HAP content of resins and gel coats provided they comply with the requirements of §63.5797.

Note that Subpart WWWW does not explicitly require monitoring/recordkeeping for the work practice standards except that §63.5915(d) requires the Permittee to “keep a certified statement that they are in compliance with the work practice standards of Table 4.”

Recordkeeping [§63.5895(c) and (d), §63.5915(c) and (d), and §63.5920]

The Permittee does not utilize a control device to comply with Subpart WWWW. Therefore, §63.5895(a) and (b) do not apply. The following recordkeeping requirements do apply:

- If the Permittee elects to demonstrate compliance via §63.5810(c) [i.e. by meeting the emission limit of Table 3 of Subpart WWWW on a rolling 12-month weighted average] then, in accordance with §63.5895(c), the Permittee must collect and maintain records of resin usage, operation where resin is used, and organic HAP content of resin.

Since the Permittee only conducts one resin application method, resin usage records may be based on resin purchase records.

- If the Permittee elects to demonstrate compliance via §63.5810(a) [i.e. by utilizing only resins that individually meet the emission limit of Table 3 of Subpart WWWW] then, in accordance with §63.5895(d), only records of resin organic HAP content and application methods must be maintained.

However, if the Permittee changes resin materials or application method, and that change results in a situation where the resin exceeds its applicable emission limit in §63.5810(a) and Table 3 of Subpart WWWW, the Permittee must immediately begin collecting resin and gel coat usage records and determining compliance status using the 12-month rolling averaging option of §63.5810(c).

Note again that Subpart WWWW does not explicitly require monitoring/recordkeeping for the work practice standards except that §63.5915(d) requires the Permittee to “keep a certified statement that they are in compliance with the work practice standards of Table 4.”

Compliance [§63.5835(a) and (c), §63.5900(a)(2) and Table 15]

The Permittee does not utilize an add-on control device or vapor suppressants to comply with Subpart WWWW, therefore the general compliance requirements and the continuous compliance requirements are as follows:

General Compliance Requirements:

- §63.5835(a): Be in compliance at all times with the emissions limits and work practice standards in Tables 3 and 4 of Subpart WWWW;
- §63.5835(c): Always operate and maintain the affected source according to the provisions of §63.6(e)(1)(i) (i.e. “in a manner consistent with safety and good air pollution control practices for minimizing emissions”);
- §63.5925: The Permittee must also be in compliance with the applicable portions of the General Provisions of 40 CFR Part 63 as summarized in Table 15 to Subpart WWWW.

Continuous Compliance Requirements:

- §63.5900(a)(2): Demonstrate compliance with organic HAP emission limits by either:
 - Maintaining an organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Table 3 on a 12-month rolling average [refer to §63.5805(c), §63.5810(c) and Table 3], and/or
 - Including in each semiannual compliance report a statement that individual resins, as applied, meet the appropriate organic HAP emission limits [refer to §63.5805(c), §63.5810(a) and Table 3].

Reporting [§63.5805(e), §63.5895(d), §63.5900(b), §63.5910, §63.5920 and Table 14]

The Permittee has already met the initial notification requirements of §63.5905 and Table 13 (see Initial Notification Form, dated 10/30/06) and initial compliance reporting requirements of §63.5800, §63.5910(b)(1) and (2), and Table 2 of Subpart WWWW (see Notification of Compliance Status, dated 10/30/06). Therefore, those requirements are not included in Permit No. 09594T01.

Since the Permittee does not utilize control devices to comply with Subpart WWWW, the requirements involving startup, shutdown and malfunction reports, continuous monitoring systems and/or continuous emissions monitoring systems are not applicable and are not included in Permit No. 09594T01.

The Permittee is required to submit semiannual compliance reports to the RRO of NC DAQ that include [pursuant to §63.5910(c) and Table 14 of Subpart WWWW, unless otherwise specified], as applicable:

- Company name and address;
- Statement by a responsible official with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
- Statement that the Permittee has exceeded the 100 ton organic HAP per year emission threshold [§63.5805(e) and §63.5910(f)];
- If the Permittee is complying with Subpart WWWW via §63.5810(a) [i.e. utilizing only resins that individually meet the emission limit of 87 pounds of organic HAP per ton of resin] - A list of resins that individually meet the emission limit and their application methods [§63.5895(d)];
- Statement that the Permittee has changed compliance options since the last semiannual compliance report [§63.5910(i)]; and
- Date of the report and beginning and ending dates of the reporting period; and either:
 - A statement that there were no deviations during the reporting period if:
 - (1) There were no deviations from the emission limitation(s) that apply, and
 - (2) There were no deviations from the work practice standards that apply.

Or [§63.5910(d) and §63.5900(b)]:

- The total operating time of each affected source during the reporting period; and
- Information on the number, duration, and cause of deviations, as applicable, and the corrective action taken.

B. Two dry filter-type spray booths (ID Nos. P1 and P2)

i. 2D .0515 “Particulates from Miscellaneous Industrial Processes”

This regulation applies to the two spray booths and limits the allowable PM emissions (E) from these sources to those described in the following two equations:

$$\begin{array}{ll} E \leq 4.10(P)^{0.67} & \text{If } P \leq 30 \text{ (ton/hr), or} \\ E \leq 55.0(P)^{0.11} - 40 & \text{If } P > 30 \text{ (ton/hr)} \end{array}$$

where: P = the process weight rate (ton/hr), and
E = allowable emissions (lb PM/hr)

According to information in the Permittee’s file, these spray booths have process rates well below 30 tons per hour. Permit No. 09594T01 will include the standard language for the emission limits and testing (if/when required by DAQ) associated with 2D .0515 for these sources but will not require any additional testing due to the infrequent use of the spray booths and since non-compliance is considered highly unlikely due to the presence of the dry filters on the spray booths and. The associated monitoring, recordkeeping and reporting (MRR) in Permit No. 09594T01 will require the Permittee to conduct monthly inspections of the dry filters, maintain records of the inspections and any corrective actions, and submit semiannual summary reports to DAQ.

ii. 2D .0521 “Control of Visible Emissions”

All equipment installed at this facility was manufactured after 7/1/71, and is therefore limited by this regulation to 6-minute average visible emissions opacities of 20% or less during normal operations. Permit No. 09594T01 will include the standard language for the emission limits and testing (if/when required by DAQ) associated with 2D .0521 for these sources but will not require any additional testing due to the infrequent use of the spray booths and since non-compliance is considered highly unlikely due to the presence of the dry filters on the spray booths. The associated MRR in Permit No. 09594T01 will require the Permittee to conduct monthly inspections of the dry filters, maintain records of the inspections and any corrective actions, and submit semiannual summary reports to DAQ.

C. Facility-wide affected sources

i. 2D .0958 “Work Practices for Sources of Volatile Organic Compounds”

This rule applies to operations that use VOCs as solvents, carriers, material processing media, etc. and requires the Permittee to follow certain procedures when using or storing the VOC-containing materials or cleaning or draining the equipment used to apply these materials. Permit No. 09594T01 will include the standard language for the work practice standards and MRR associated with this rule (i.e. monthly visual inspections, monthly recordkeeping, and semiannual reporting) for the facility-wide affected sources.

ii. 2D .1100 “Control of Toxic Air Pollutants”

The Permittee submitted a modeling analysis (received by NC DAQ on 10/13/06) to demonstrate compliance with the NC Toxics Program. This analysis was reviewed and approved by Jerry Freeman of NC AQAB (see memo dated 11/3/06). The analysis treats the facility as a volume source with styrene emissions of 101.88 pounds per hour. The Permittee utilized the AERMOD model which indicated maximum ambient impacts of 97% of the

AAL. The Permittee did not propose to change emissions of any NC TAPs with Application No. 9200782.07A. Therefore, the toxics analysis submitted on 10/13/06 is still valid for this facility and compliance with this section is indicated provided the permit stipulations are met. The MRR stipulations of Permit No. 09594R00 require the Permittee to:

- a. Limit facility-wide styrene emissions to 102.0 pounds per hour;
- b. Limit styrene content of the resin to less than 38.29% by weight;
- c. Calculate the hourly emissions of styrene;
- d. Maintain a daily record of the highest hourly styrene emission rate for each day; and
- e. Submit quarterly reports of the daily maximum hourly styrene emission rates.

Application No. 9200782.07A includes a request (also submitted to NC DAQ via email on 11/06/06) to increase or remove the limit on styrene content of resin (i.e. requirement II.C.ii.b. above). The styrene content limit in the resin will not be included in the condition of Permit No. 09594T01 designed to ensure compliance with NC toxics since it (i.e. a resin styrene-content limit) is not required to demonstrate compliance with 2D .1104. That is, it is possible to have a resin styrene content in excess of 38.29% by weight and still be in compliance with the 102 pound per hour styrene emission limit (and, therefore, 2D .1104). Conversely, it is possible for the Permittee to violate the styrene AAL under 2D .1104 while utilizing a resin with a styrene content below 38.29% by weight.

iii. 2D .1806 “Control and Prohibition of Odorous Emissions”

This rule applies to the seven mixing tanks and the molding area and requires the Permittee to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility’s boundary. The Permittee is required to avoid such a situation by implementing management practices or installing and operating odor control equipment, when necessary. Permit No. 09594T01 will include the standard language associated with this rule for the facility-wide affected sources.

iv. 2Q .0317 “Avoidance Conditions”

NSR: The Permittee commenced operations in Wake County in January of 2005. Wake County was designated as non-attainment for ozone at that time. In order to avoid the applicability of rule 2D .0531 “Sources in Nonattainment Area”, the Permittee requested that Permit No. 09594R00 include an avoidance condition for that rule that limits facility-wide VOC emissions to less than 100 tons per consecutive 12-month period. This condition will be carried over into Permit No. 09594T01 and include the following MRR: daily calculation and recordkeeping of VOC emissions; semiannual reporting of monthly VOC emissions for each of the prior 17 months; and the total VOC emissions of each 12-consecutive month period ending within the reporting period.

NESHAP: In order to avoid the applicability of the NESHAP for Surface Coating of Plastic Parts and Products (i.e. 40 CFR Part 63, Subpart PPPP), the Permittee requested that Permit No. 09594T01 include an avoidance condition that limits facility-wide application of HAP-containing coatings to plastic parts or products to less than 100 gallons per year [refer to the 1/16/08 email from Gary Saini of RTP Env. Associates, Inc., consultant for Column & Post, Inc.]. The Permittee applied 34 gallons of HAP-containing coatings from September 2006 through August 2007 (see the letter from Column & Post, Inc. dated 10/9/07).

v. 2Q .0705 “Existing Facilities and SIC Calls”

In accordance with 2Q .0704(c) and 2Q .0705(b)(1), the Permittee submitted a toxics evaluation to demonstrate compliance with the NC toxics program at this facility on 10/13/06. The two TAPs evaluated were styrene and methyl ethyl ketone (MEK). MEK is

emitted at rates below the associated TPERs and is included for informational purposes in a summary table in the condition associated with 2Q .0705. Styrene is emitted at a rate above the TPER and is addressed under rule 2D .1100 (see discussion above).

Note that information submitted to RRO, dated 10/9/07, also indicates that both toluene and xylene are emitted at rates below their respective TPERs. Therefore, these two TAPs are added for informational purposes to the summary table mentioned above in the condition associated with 2Q .0705.

III NSPS/NESHAP/PSD/Toxics/112(r)/CAM/RACT Applicability:

NSPS: No sources at this facility are subject to New Source Performance Standards. The NSPS for VOL storage tanks (i.e. 40 CFR Part 60, Subpart Kb) does not apply. The bulk storage tanks and mix tanks are below the capacity threshold of that rule.

NESHAP: The Permittee is subject to the NESHAP for Reinforced Plastic Composites Production (i.e. 40 CFR Part 63, Subpart WWWW). Refer to the discussion of rule 2D .1111 in Section II.A.i of this document, above, for more information.

The Permittee is not subject to the NESHAP for Surface Coating of Plastic Parts and Products (i.e. 40 CFR Part 63, Subpart PPPP) because the Permittee does not meet the applicability criteria of §63.4481(b). Specifically, the Permittee does apply HAP-containing coatings to plastic products (in the two spray booths) but does not utilize 100 gallons per year or more of those coatings [see the discussion of 2Q .0317 (NESHAP avoidance) in Section II.C.iv of this document, above].

PSD/NSR: This facility is located in a nonattainment area for ozone and has the uncontrolled potential to emit >100 tons of VOC per consecutive 12-month period. To avoid being classified as major for NSR purposes the Permittee has previously accepted an avoidance condition for VOC [refer to the discussion of 2Q .0317 (NSR avoidance) in Section II.C.iv of this document, above, for more information].

Toxics: The Permittee demonstrated compliance with the NC toxics program via an evaluation submitted on 10/13/06 [refer to the discussions of 2D .1100 and 2Q .0705 in Sections II.C.ii and II.C.v of this document, above, respectively, for more information].

Application 9200782.07A does not affect the emission rates of any TAPs and, therefore, does not trigger a toxics review.

112(r): This facility does not use, handle, or store any regulated materials onsite in quantities in excess of the associated thresholds and is therefore not subject to the requirements of this regulation.

CAM: This facility is not subject to CAM requirements since the Permittee does not utilize any control devices to comply with an emission standard.

RACT: This facility is not located in the areas listed in either paragraph 2D .0902(f) or 2D .1402(d). Therefore, existing source RACT requirements are not applicable or discussed here.

IV Application Fee:

No fee is required for the issuance of an initial Title V permit. The Permittee submitted the appropriate fee of \$8,576 with application 9200782.05A (i.e. the application for the 15A NCAC Section 2Q .0300 permit for this facility).

V Compliance Status:

The Permittee has received NOV's on 07/25/07 (for using a resin that exceeded the resin styrene content limit of 38.29% by weight – a violation of a NC toxics condition) and 05/23/07 (for late reporting associated with the NC toxics program) and an NOV/NRE on 01/06/06 (for operating this facility prior to obtaining an air quality permit). All of the NOV's and the NRE have been resolved.

The Permittee was most recently inspected on 9/26/07 by Brian Bland of the RRO and appeared to be operating in compliance with air quality standards and regulations at that time.

VI Zoning Consistency:

No zoning consistency determination is required for the issuance of the initial Title V permit requested via application 9200782.07A since no modification is involved. Note that the Permittee did submit a zoning consistency determination with application 9200782.05A (i.e. the application for the 15A NCAC Section 2Q .0300 permit for this facility).

VII Miscellaneous:

Public Participation: In accordance with 2Q .0521, NC DAQ must provide the opportunity for public participation prior to the issuance of a Title V permit (such as that represented by application 9200782.07A). NC DAQ met this obligation with the public notice posted on 3/07/08.

EPA & Affected States Review: In accordance with 2Q .0522, NC DAQ must provide EPA staff the opportunity to review the proposed Title V permit for this facility. NC DAQ met this obligation by sending the EPA a copy of Proposed Permit No. 09594T01 and the associated permit review on 3/07/08 [note that no States meet the definition of “Affected State” as provided in 2D .0503(1)].

Certification by Responsible Official: In accordance with 2Q .0520, David Szilezy (i.e. the President and responsible official for Column & Post, Inc.) provided the required certification on Form E5 of application 9200782.07A.

VIII Permit Review:

A draft version of Permit No. 09594T01 was sent to the Permittee and the RRO for a review and comment period on 2/06/08. The RRO recommended issuance of the draft version of the permit (see email from Amy Alexander of the RRO dated 2/12/08). The Permittee requested several changes to the draft version of the permit and the associated review (see email dated 2/19/08). Some, but not all, of the requested changes were made to the draft version of the permit and associated review in response to comments received from the Permittee. The changes made include correction of typos, reproducing equations from MACT WWW verbatim (as opposed to using simplified versions), inclusion of clarifying statements and simplification of the MRR associated with rules 2D .0515 and 2D .0521 applied to the spray booths. Refer to Attachment A to this document for a summary of the Permittee’s comments and requested changes and the DAQ responses.

IX Recommendation:

The Title V Permit application for the Column & Post, Inc. facility located at 8013 Purfoy Road in Fuquay-Varina, Wake County, North Carolina has been reviewed by NC DAQ personnel to determine compliance with all applicable procedures and requirements. NC DAQ personnel have determined that this facility is complying with, or will achieve compliance with, all applicable requirements as specified in Permit No. 09594T01.

Issuance of Permit No. 09594T01 is recommended.

Attachment A: Modifications to DRAFT Permit No. 09594T01 and Review

Permittee Comment/Request	Condition/Location of Modification	NC DAQ Response
1. The Permittee pointed out that the plant location is Fuquay-Varina	First paragraph of the review on page 1, under “Facility Description”	Typo corrected: “Fuquay Varina” has been changed to “Fuquay-Varina”
2. The Permittee prefers to have the equations of MACT WWW copied as-is from the MACT e.g. instead of “126 x %HAP” use “0.126 x %HAP x 2000 x 0.5”	Pages 3 and 5 of the review and 8, 9 and 12 (conditions 2.2 A.2.c.i, 2.2 A.4.b.i, 2.2 B.1.d.i and 2.2 B.1.d.ii of DRAFT permit)	These equations have been changed to the versions included in MACT WWW
3. The Permittee pointed out that the HAP emission factors are found in item 1.a.iv of MACT WWW	Second paragraph under “Emission Limits” on page 3 of the review	Typo corrected: “item 1.a.vi” has been changed to “item 1.a.iv”
4. The Permittee requested addition of a clarifying statement	Under the second bullet under “Emission Limits” on page 3 of the review	Added the following clarifier to the review: “Where: %HAP = the concentration of organic HAP in the resin, in weight percent (e.g. if the resin contains 38.5% organic HAP by weight, then %HAP = 0.385)”
5. The Permittee objects to the requirement to maintain production records of spray booths to verify compliance with rule 2D .0515	Page 7 of review and 4 of DRAFT permit (condition 2.1 A.1.c of DRAFT permit)	The requirement for maintaining production records for the spray booths has been removed
6. The Permittee requests quarterly monitoring of spray booth dry filters condition to verify compliance with rule 2D .0515 (as opposed to monthly as required in the DRAFT permit)	Page 7 of review and 4 of DRAFT permit (condition 2.1 A.1.d of DRAFT permit)	The method of verification of compliance with 2D .0515 is changed to monitoring of the spray booth’s filters – however, monthly inspections are required (as opposed to quarterly as requested by the Permittee)
7. The Permittee requests quarterly monitoring of spray booth dry filters condition to verify compliance with rule 2D .0521 (as opposed to VE monitoring each day of spray booth operation as required in the DRAFT permit)	Page 7 of review and 5 of DRAFT permit (conditions 2.1 A.2.c and 2.1 A.2.d of the DRAFT permit)	The method of verification of compliance with 2D .0521 is changed to monitoring of the spray booth’s filters – however, monthly inspections are required (as opposed to quarterly as requested by the Permittee). Note that the permit condition actually references the MMR associated with 2D .0515 (they are identical).

Permittee Comment/Request	Condition/Location of Modification	NC DAQ Response
8. The Permittee is not sure that they could violate rule 2D .1100 while using resins with < 38.29% styrene content (i.e. the previous limit)	On page 8 of the review - the last sentence in the discussion of rule 2D .1100	No changes made in response to this comment. For illustration – if the Permittee used 4 tons of a resin with 36% styrene content in one hour, then the styrene emissions from molding would be 200 pounds per hour, in violation of the current NC toxics limit of 102 pounds per hour
9. The Permittee pointed out typos in the non-molding styrene monitoring for compliance with 2D .1100	Page 10 of DRAFT permit (condition 2.2 A.4.b.ii of DRAFT permit)	Typos corrected: references to “calendar month” values changed to values per “hour”
10. The Permittee requested semiannual reporting for 2D .1100	Page 10 of DRAFT permit (condition 2.2 A.4.d of DRAFT permit)	This modification is not made - GS 143-215.65 authorizes quarterly reporting for any permit conditions addressing 15A NCAC 2D .1100
11. Not applicable (i.e. the Permittee did not request this change)	Page 11 of DRAFT permit (condition 2.2 B.1.c.ii of DRAFT permit)	Modify text to refer to EF _j “as calculated at conditions 2.2 B.1.d.i and/or 2.2 B.1.d.ii” (as opposed to solving those equations for a styrene content of 48.91% as currently in permit)
12. The Permittee requested the addition of a conditional statement to the requirement for monthly calculation of HAP emissions for the operations subject to MACT WWWW such that this requirement only applies if the Permittee chooses to comply via use of “compliant resins” only	Page 12 of DRAFT permit (condition 2.2 B.1.d.ii of DRAFT permit)	This modification is not made – the monthly HAP emission calculations are required regardless of chosen compliance option since the Permittee must inform DAQ whether or not the organic HAP emissions exceed 100 tons per consecutive 12-month period pursuant to §63.5805(e), §63.5910(f) and DRAFT permit condition 2.2 B.1.g.vi.
13. The Permittee requested changing the “non-compliance” statement associated with the monitoring associated with MACT WWWW to refer to “... organic HAP emission factor limit listed in Section 2.2 B.1.c.i. or ii of this permit.” (i.e. add the “or ii.” portion of statement)	Page 12 of DRAFT permit (i.e. the paragraph that immediately precedes condition 2.2 B.1.e of the DRAFT permit)	This change is not made – the Permittee is not in violation of MACT WWWW by exceeding the organic HAP emission factor for individual resins (as cited in condition 2.2 B.1.c.ii of the DRAFT permit) unless they also violate the weighted average organic HAP emission factor (as cited in condition 2.2 B.1.c.i of the DRAFT permit) for the molding operations for a consecutive 12-month period. Note that the DRAFT permit is modified such that the cited paragraph is now 2.2 B.1.d.iv.