

## Air Permit Review

Permit Issue Date: **July 1, 2008**

<b>Region:</b> Asheville Regional Office	
<b>County:</b> Henderson	
<b>NC Facility ID:</b> 4500259	
<b>Inspector's Name:</b> Patrick Ballard	
<b>Date of Last Inspection:</b> 06/20/2007	
<b>Compliance Code:</b> C/In Comp. With Proc. Req.	
<b>Permit Applicability</b>	
<b>SIP:</b>	2D .0503, .0515, .0516, .0521, .0535, .0614 and .0958; and 2Q .0317
<b>NSPS:</b>	Not Applicable
<b>NESHAP:</b>	2D .1111 (Subparts JJJJ + ZZZZ)
<b>PSD:</b>	Not Applicable
<b>PSD Avoidance:</b>	2Q .0317 to avoid 2D .0530
<b>NC Toxics:</b>	2D .1100 and 2Q .0705
<b>112(r):</b>	Not Applicable
<b>Other:</b>	2D .1806
<b>Application Data</b>	
<b>Application Number:</b> 4500259.06A	
<b>Date Received:</b> 07/31/2006	
<b>Application Type:</b> Renewal/Modification	
<b>Application Schedule:</b> TV-Renewal	
<b>Existing Permit Data</b>	
<b>Existing Permit Number:</b> 03716/T18	
<b>Existing Permit Issue Date:</b> 06/05/2007	
<b>Existing Permit Expiration Date:</b> 05/31/2012	
<b>Comments / Recommendations:</b>	
Issue 03716/T19	
<b>Permit Issue Date:</b>	<b>July 1, 2008</b>
<b>Permit Expiration Date:</b>	<b>June 30, 2013</b>

<b>Facility Data</b>		
<b>Applicant:</b> Wilsonart International, Inc. 80 L.A. White Drive Fletcher, NC 28732		
<b>SIC:</b> 3083 / Laminated Plastics Plate And Sheet		
<b>NAICS:</b> 32613/Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing		
<b>Facility Classification:</b> Before: Title V After: Title V		
<b>Fee Classification:</b> Before: Title V After: Title V		
<b>Contact Data</b>		
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>
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<b>Review Engineer:</b> David Putney		
<b>Review Engineer's Signature:</b>	<b>Date:</b>	

**I Reason for Application:**

Wilsonart International, Inc. (Wilsonart) manufactures high-pressure decorative laminate used primarily as surfaces for countertops, furniture, wall coverings, and store fixtures. The laminates are produced by: (1) treating kraft corestock paper with phenolic resin and treating decorative paper with melamine resin; (2) drying the corestock and decorative paper plies; (3) cutting the laminate plies to desired dimensions; and (4) pressing the plies together to form the final laminated products.

The Permittee submitted application 4500259.06A to (1) renew their air quality permit, (2) modify the permit to include the conditions necessary to comply with the requirements of rule 2D .0614 "Compliance Assurance Monitoring" and (3) demonstrate compliance with the NC toxics program pursuant to rule 2Q .0705(b).

**II Regulatory Review for Individual Source Categories:**

**A. Two natural gas/No. 2 fuel oil-fired boilers (48.5 and 46.5 million Btu per hour maximum heat input rates, ID Nos. ES-BLR1 and ES-BLR2, respectively);**

**One natural gas/No. 2 fuel oil/phenolic treater fumes-fired waste heat boiler (15.65 million Btu per hour maximum heat input rate, ID No. ES-BLR3);**

**One natural gas/No. 2 fuel oil/phenolic treater fumes-fired waste heat boiler (23.0 million Btu per hour maximum heat input rate, ID No. ES-BLR4); and**

**One natural gas/No. 2 fuel oil/laminate waste-fired boiler (19.6 million Btu per hour maximum heat input rate, ID No. ES-BLR5) and associated electrostatic precipitator (3,360 square feet of total collection plate area, ID No. CD-ESP)**

Boilers ES-BLR1, ES-BLR2, ES-BLR3, ES-BLR4 and ES-BLR5 are utilized to generate steam for process and space heating, to control VOC/HAP emissions from the phenolic treaters, and convert laminate waste into usable energy.

Note that the maximum heat input rates of boilers ES-BLR3 and ES-BLR4 and the control scenario of boiler ES-BLR5 given above were altered from that provided in Permit No. 03716T18 in accordance with application 45000259.06A (refer to the letter dated 4/2/08). The Permittee removed the multicyclone (ID No. CD-MC) that was previously installed in series with CD-ESP prior to the stack testing conducted on ES-BLR5 on 9/25/05 (the associated D5 form was provided with the email dated 05/16/08). This change in controls prior to permit modification may have been a violation of DAQ permitting procedures.

NC DAQ files (prior permit reviews, the initial notification for MACT DDDDD and an email from the Permittee dated 5/18/07) include discrepancies in the construction/operational dates and maximum heat inputs for the boilers at this facility. The source of these discrepancies is unknown. Also, DAQ has previously included heat input from phenolic fumes when setting the 2D .0503 limits for these boilers. That is not the case in Permit No. 03716T19 since the phenolic fumes are burned instead of (not in addition to) fuel. The Permittee submitted additional information on these boilers in a letter dated 4/2/08 and an email dated 4/15/08, which is used in this permit review and is summarized in the following table:

ID No.	Construction/Operation Date	Heat Input (million Btu per hour)
ES-BLR1	1979	48.5
ES-BLR2	1985	46.5
ES-BLR3	1979	15.65
ES-BLR4	1982	23.0
ES-BLR5	1984	19.6

Note that ES-BLR3 and ES-BLR4 were modified in 1998 and 1996, respectively, to install low-NO<sub>x</sub> burners. These modifications also changed the maximum rated heat inputs from 16 million Btu per hour for ES-BLR3 and 19.9 million Btu per hour for ES-BLR4 to the values listed above. These changes do affect the allowable emissions under Rule 2D .0503 but are not considered modifications or reconstruction for the purposes of NSPS Subpart Dc since they do not qualify as such (refer to 40 CFR §60.14 and §60.15, respectively).

**i. 2D .0503 “Particulates from Fuel Burning Indirect Heat Exchangers”**

This rule applies to boilers ES-BLR1, ES-BLR2, ES-BLR3, ES-BLR4 and ES-BLR5 and limits the allowable PM emissions (E) from these indirect heat exchangers to those described in the following equations:

$$E = \begin{cases} 0.10 & \text{If } Q \geq 10,000, \\ 0.60 & \text{If } Q \leq 10, \text{ and} \\ 1.090(Q)^{-0.2594} & \text{If } Q \text{ is any other value} \end{cases}$$

Where: E = allowable emissions (lb PM/10<sup>6</sup> Btu), and  
 Q = maximum heat input (10<sup>6</sup> Btu/hr)

In accordance with information provided by the Permittee (as summarized in the table above) and paragraph 2D .0503(e):

For boiler ES-BLR1:  $Q = 48.5 + 16.0 + 19.9 = 84.4$  (10<sup>6</sup> Btu/hr) and  
 $E = 0.34$  (lb PM/10<sup>6</sup> Btu)

For boiler ES-BLR2:  $Q = 48.5 + 46.5 + 16.0 + 19.9 + 19.6 = 150.5$  ( $10^6$  Btu/hr) and  
 $E = 0.30$  (lb PM/ $10^6$  Btu)

For boiler ES-BLR3:  $Q = 48.5 + 46.5 + 15.65 + 23.0 + 19.6 = 153.25$  ( $10^6$  Btu/hr) and  
 $E = 0.30$  (lb PM/ $10^6$  Btu)

For boiler ES-BLR4:  $Q = 48.5 + 46.5 + 16.0 + 23.0 + 19.6 = 153.6$  ( $10^6$  Btu/hr) and  
 $E = 0.30$  (lb PM/ $10^6$  Btu)

For boiler ES-BLR5:  $Q = 48.5 + 16.0 + 19.9 + 19.6 = 104.0$  ( $10^6$  Btu/hr) and  
 $E = 0.33$  (lb PM/ $10^6$  Btu)

These boilers can burn natural gas, No. 2 fuel oil and laminate waste. For the purposes of this review PM emissions from combustion of phenolic treater fumes are considered to be negligible (similar to natural gas or propane). Compliance with this rule while burning the permitted fuels is examined below:

**Natural Gas:** Table 1.4-2 of Supplement D to the 5<sup>th</sup> edition of the AP-42 document predicts total PM emissions of 7.6 (lb/ $10^6$  ft<sup>3</sup>) from natural gas combustion. If we assume a natural gas heat value of 1,020 (Btu/ft<sup>3</sup>) then we can calculate PM emissions of:

$$[7.6 \text{ (lb PM/}10^6 \text{ ft}^3\text{)}]/[1,020 \text{ (Btu/ft}^3\text{)}] = 0.0075 \text{ (lb PM/}10^6 \text{ Btu)}$$

**No. 2 Fuel Oil:** Tables 1.3-1 and 1.3-2 of Supplement E to the 5<sup>th</sup> edition of the AP-42 document predict total PM emissions of 3.3 (lb/ $10^3$  gallons) from No. 2 fuel oil combustion. If we assume a No. 2 fuel oil heat value of 141,000 (Btu/gallon) then we can calculate PM emissions of:

$$[3.3 \text{ (lb/}10^3 \text{ gallons)}]/[141 \text{ (}10^6 \text{ Btu/}10^3 \text{ gallons)}] = 0.0234 \text{ (lb PM/}10^6 \text{ Btu)}$$

**Laminate Waste:** The Permittee conducted stack testing on ES-BLR5 on 9/20/05 while burning laminate waste. The NC DAQ accepted the results of this testing (refer to the SSCB letter dated 11/22/05) which indicated particulate emissions of 0.003 pounds of PM per million Btu of heat input.

Compliance with this rule is indicated.

For boilers ES-BLR1 through ES-BLR5, Permit No. 03716T19 will include the standard language for the emission limits of 2D .0503 and the methods of testing for compliance (if/when required by DAQ).

Permit No. 03716T19 will not require any additional testing or any monitoring, recordkeeping or reporting (MRR) requirements to demonstrate compliance with 2D .0503 for boilers ES-BLR1 through ES-BLR4 since the permitted fuels are inherently compliant.

Permit No. 03716T19 will not require any additional testing to demonstrate compliance with 2D .0503 for boiler ES-BLR5 since the initial stack testing demonstrated compliance by such a large margin. However, since proper operation of CD-ESP is required in order to comply with this rule, the following MRR will be included:

- CD-ESP must be utilized whenever ES-BLR5 is in use;
- Daily monitoring of CD-ESP primary and secondary voltages and currents, (with an allowance to miss up to 3 observations per semiannual reporting period); and
- Semiannual summary reporting of MRR activities to NC DAQ.

ii. **2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”**

This rule applies to boilers ES-BLR1 through ES-BLR5 and limits the SO<sub>2</sub> emissions from these combustion devices to 2.3 (lb/ $10^6$  Btu).

These boilers can burn natural gas, No. 2 fuel oil and laminate waste. For the purposes of this review SO<sub>2</sub> emissions from combustion of phenolic treater fumes are considered to be negligible and only the paper portion of the laminate waste is assumed to contribute to SO<sub>2</sub> emissions. Compliance with this rule while burning these fuels is examined below:

**Natural Gas:** Table 1.4-2 of Supplement D to the 5<sup>th</sup> edition of the AP-42 document predicts SO<sub>2</sub> emissions of 0.6 (lb SO<sub>2</sub>/10<sup>6</sup> ft<sup>3</sup>) from the combustion of natural gas. Assuming a heat value of 1,020 (Btu/ft<sup>3</sup>) for natural gas we can calculate:

$$[0.6 \text{ (lb SO}_2\text{/10}^6 \text{ ft}^3\text{)}]/[1,020 \text{ (Btu/ft}^3\text{)}] = 0.00059 \text{ (lb SO}_2\text{/10}^6 \text{ Btu)}$$

**No. 2 Fuel Oil:** Table 1.3-1 of Supplement E to the 5<sup>th</sup> edition of the AP-42 document predicts SO<sub>2</sub> emissions of 142S (lb/10<sup>3</sup> gallons) from the combustion of No. 2 fuel oil in small boilers (such as those at this facility), where S is the sulfur content of the fuel oil in weight %. If we assume a heat value of 141,000 (Btu/gallon) and a sulfur content of 0.5% by weight for No. 2 fuel oil we can calculate:

$$[(142)(0.5) \text{ (lb SO}_2\text{/10}^3 \text{ gallon)}][10^3 \text{ (gallon)/141 (10}^6 \text{ Btu)}] = 0.504 \text{ (lb SO}_2\text{/10}^6 \text{ Btu)}$$

**Laminate Waste:** Assuming that only the paper (i.e. wood) portion of the laminate contributes to SO<sub>2</sub> emissions, Table 1.6-2 of Supplement G to the 5<sup>th</sup> edition of the AP-42 document predicts SO<sub>2</sub> emissions of 0.025 (lb SO<sub>2</sub>/10<sup>6</sup> Btu) from wood combustion.

Compliance with this rule is indicated.

For boilers ES-BLR1 through ES-BLR5, Permit No. 03716T19 will include the standard language for the emission limits of 2D .0516 and the methods of testing for compliance (if/when required by DAQ). However, since the permitted fuels are inherently compliant, Permit No. 03716T19 will not require any additional testing or any MRR to demonstrate compliance with 2D .0516 for these boilers.

### iii. 2D .0521 “Control of Visible Emissions”

Boilers ES-BLR1 through ES-BLR5 were manufactured after 7/1/71. Therefore, except for those visible emissions (VEs) occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from these boilers be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

For boilers ES-BLR1 through ES-BLR5, Permit No. 03716T19 will include the standard language for the emission limits of 2D .0521 and the methods of testing for compliance (if/when required by DAQ).

Permit No. 03716T19 will not require any additional testing or any MRR to demonstrate compliance with 2D .0521 for boilers ES-BLR1 through ES-BLR4 since non-compliance while burning the permitted fuels is considered extremely unlikely.

Permit No. 03716T19 will not require any additional testing to demonstrate compliance with 2D .0521 for boiler ES-BLR5 since testing demonstrated compliance by such a large margin (0% opacity by US EPA Method 9 reported by Permittee and accepted by NC DAQ – see SSCB letter dated 11/22/05). However, since proper operation of CD-ESP is probably necessary in order to comply with this rule, Permit No. 03716T19 will require the Permittee to (1) conduct daily monitoring/recordkeeping of VEs from ES-BLR5 (with an allowance to

miss up to 3 observations per semiannual period), and (2) submit semiannual summary reports of these MRR activities to NC DAQ.

**iv. 2D .1100 “Control of Toxic Air Pollutants”**

See discussion in Section III A.i of this document, below.

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

See discussion in Section III A.ii of this document, below.

**vi. 2Q .0317 “Avoidance Conditions”**

See discussion in Section III A.iii of this document, below.

**B. One natural gas-fired emergency generator (100 kW maximum rated power output; ID No. ES-EmGen)**

The emergency generator is used to supply electrical power to this facility if/when the facility cannot get that power from the electric grid. Permit No. 03716T18 included this device on the list of insignificant activities with ID No. I-EmGen. However, since this device is now subject to 2D .1111 (see discussion of that rule below), it will be listed on the equipment list of Permit No. 03716T19 with ID No. ES-EmGen. The Permittee installed this emergency generator in 2001.

No PM emission limits apply to this device [2D .0503 does not apply since it is not an indirect heat exchanger and 2D .0515 does not apply by policy – refer to page5-11 of version S-9 of the Appendices to the NC Air Quality Rules].

**i. 2D .0516 “Sulfur Dioxide Emissions from Combustion Sources”**

This rule applies to the natural gas-fired emergency generator and limits the SO<sub>2</sub> emissions from this combustion device to 2.3 (lb/10<sup>6</sup> Btu). According to information submitted with application 4500259.06A (see letter dated 4/2/08), this emergency generator will emit SO<sub>2</sub> at a rate of 0.0006 (lb SO<sub>2</sub>/10<sup>6</sup> Btu).

Compliance with this rule is indicated.

For this emergency generator, Permit No. 03716T19 will include the standard language for the emission limits of 2D .0516 and the methods of testing for compliance (if/when required by DAQ). However, since the permitted fuel is inherently compliant, Permit No. 03716T19 will not require any additional testing or any MRR to demonstrate compliance with 2D .0516 for this emergency generator.

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

The emergency generator (ID No. ES-EmGen) was manufactured after 7/1/71. Therefore, except for those VEs occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from this source be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

For ES-EmGen, Permit No. 03716T19 will include the standard language for the emission limits of 2D .0521 and the methods of testing for compliance (if/when required by DAQ) but will not require any additional testing or any MRR to demonstrate compliance with 2D .0521 since non-compliance is considered extremely unlikely.

**iii. 2D .0524 “New Source Performance Standards”**

The emergency generator is not subject to 2D .0524. The performance standards for this source category [i.e. spark ignition internal combustion engines – (SI ICE)] are addressed in 40 CFR Part 60, Subpart JJJJ. That rule applies to owners/operators of stationary SI ICE that: [refer to 40 CFR §60.4230(a)]

- Commence construction after 06/12/06 [for emergency engines the applicability is further limited to those manufactured after 01/01/09]; or
- Modify or reconstruct their stationary CI ICE after 06/12/06.

ES-EmGen was manufactured in 2001. Further, the Permittee has indicated that this source has not been modified or reconstructed since 06/12/06. Therefore, the emergency generator **is not subject** to this regulation.

**iv. 2D .1100 “Control of Toxic Air Pollutants”**

This emergency generator is considered a “combustion source” as defined at 2Q .0703(6) and therefore is currently exempt from the requirement to conduct toxics demonstrations pursuant to 2Q .0702(a)(18).

**v. 2D .1111 “Maximum Achievable Control Technology”**

The emergency generator is subject to 2D .1111 due to the applicability of 40 CFR Part 63, Subpart ZZZZ (i.e. the MACT for reciprocating internal combustion engines - RICE). The Permittee indicates an operational date of 2001 for ES-EmGen. Therefore, in accordance with §63.6590(a)(1)(ii), ES-EmGen is considered an existing affected source and, in accordance with §63.6590(b)(3), does not have to meet the requirements of Subparts ZZZZ or A (no initial notification is necessary). Permit No. 03716T19 is modified to show applicability of Subpart ZZZZ but indicate that there are **no applicable requirements** associated with this rule.

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

See discussion in Section III A.ii of this document, below.

**vii. 2Q .0317 “Avoidance Conditions”**

See discussion in Section III A.iii of this document, below.

**C. One phenolic treater process (ID No. ES-TRT1) consisting of:**

- **One double coater;**
- **Three day tanks (250 gallon capacity, each); and**
- **One enclosed steam-heated convection oven section exhausting to a natural gas/No. 2 fuel oil/phenolic treater fumes-fired waste heat boiler (15.65 million Btu per hour maximum heat input; ID No. ES-BLR3);**

**One phenolic treater process (ID No. ES-TRT2) consisting of:**

- **One double coater;**
- **Two day tanks (250 gallon capacity, each); and**
- **One enclosed steam-heated convection oven section exhausting to a natural gas/No. 2 fuel oil/phenolic treater fumes-fired waste heat boiler (23.0 million Btu per hour maximum heat input; ID No. ES-BLR4); and**

**Two melamine resin treaters (ID Nos. ES-MTR1 and ES-MTR2), each consisting of one coating station and one enclosed steam-heated convection oven section**

The phenolic treater processes apply a phenol-formaldehyde resin solution to a web of brown craft paper (via roll-coating). This craft paper makes up the core of the decorative laminate. According to the 6/20/07 inspection report, the roll-coating is conducted within a negative pressure hood and the steam-heated convection ovens are totally enclosed except for the paper inlet and outlet openings. Both the hoods and the ovens are vented (as combustion make-up air) to the waste heat boilers (ES-BLR3 and ES-BLR4), however, the overall operation is not located within a permanent total enclosure.

The melamine resin treater processes are used to create the scratch resistant topcoat of the decorative laminate. The process involves roll-coating a web of printed and clear overlay paper with a solution of melamine-formaldehyde resin. This web is then fed through a steam-heated dryer. Both the melamine resin treaters and dryers are totally enclosed and vented through dedicated roof vents.

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

This rule applies to the two phenolic treater processes and the two melamine resin treaters and limits the allowable PM emissions (E) from these sources to those described in the following two equations:

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

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

Due to the nature of these operations (roll-coating), very little PM emissions are expected (i.e. only the condensable portion of the VOCs emitted). Also, whatever condensable PM is emitted from the phenolic treaters is vented through boilers ES-BLR3 and ES-BLR4 and destroyed (refer to discussion of 2D .1111 below). Therefore, Permit No. 03716T19 will include the standard language for the emission limits of 2D .0515 and testing (if/when required by DAQ) but, since compliance by a comfortable margin is expected, will not require any additional testing to demonstrate compliance for these sources.

The MRR requirements associated with 2D .0515 in Permit No. 03716T19 for these sources will include maintaining production records for inspection by DAQ personnel upon request. No reporting is required for these sources under 2D .0515.

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

This rule is not applied directly to the phenolic treater processes since those sources vent through ES-BLR3 and ES-BLR4 and their VEs are monitored with the VEs from those boilers. The melamine resin treaters were manufactured after 7/1/71. Therefore, except for those VEs occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from these sources be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

For the melamine resin treaters Permit No. 03716T19 will include the standard language for the emission limits of 2D .0521 and the methods of testing for compliance (if/when required)

but will not require any additional testing or any MRR requirements to demonstrate compliance with 2D .0521 since non-compliance is considered extremely unlikely.

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

This rule applies to the operations in this facility that use VOCs as solvents, carriers, material processing media, etc. (i.e. the phenolic treater processes and the melamine resin treaters) 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. 03716T19 will include the standard language for the work practice standards and MRR associated with this rule.

**iv. 2D .1100 “Control of Toxic Air Pollutants”**

See discussion in Section III A.i of this document, below.

**v. 2D .1111 “Maximum Achievable Control Technology”**

See discussion in Section III B.i of this document, below.

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

See discussion in Section III A.ii of this document, below.

**vii. 2Q .0317 “Avoidance Conditions”**

See discussion in Section III A.iii of this document, below.

**D. One carpenter shop (ID No. ES-C5) and associated simple cyclone (56 inches in diameter; ID No. CD-C5);**

**One laminate sanding waste collection system (ID No. ES-LSWC) and four associated bagfilters (2712, 1846, 3014 and 3016 square feet of filter area; ID Nos. CD-BF1 through CD-BF4, respectively); and**

**One laminate waste storage silo (ID No. ES-BF5) and associated bagfilter (460 square feet of filter area; ID No. CD-BF5)**

The laminate material is cut to the desired dimensions and sanded to the desired finish. The resulting waste material is collected via a laminate sanding waste collection system and deposited in a storage silo. Note that rule 2D .0512 “Particulates from Wood Products Finishing Plants” is not applied to these sources since the emissions are not “caused by the working, sanding, or finishing of wood.”

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

This rule applies to the carpenter shop, the laminate sanding waste collection system and the laminate waste storage silo. Note that Rule 2D .0515 limits the allowable PM emissions (E) from these sources to those described in the following two equations:

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

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

The table below summarizes the relevant information for these sources (as provided in application 4500259.06A) and indicates compliance with this rule, after controls.

To obtain this data the Permittee assumed that (1) 5% of the laminate material is removed during the sanding process, (2) all of the removed material is PM<sub>10</sub>, (3) the bagfilters achieve 99% control efficiency on the removed material, and (4) the cyclone achieves 85% control

efficiency on the removed material. For the purposes of this review, assumptions (1) and (2) are also applied to the carpenter shop operations.

Source	Process Weight Rate (P)	Allowable Emissions (E)	Predicted Emissions (lb PM/hour)	
			No Control	Control
CD-BF1	1.20	4.63	120.0	1.20
CD-BF2	0.95	3.96	95.0	0.95
CD-BF3	0.95	3.96	95.0	0.95
CD-BF4	0.93	3.91	93.0	0.93
CD-BF5	0.75	3.38	0.2	0.002
CD-C5	0.20	1.39	3.91	0.59

For the carpenter shop, the laminate sanding waste collection system and the laminate waste storage silo Permit No. 03716T19 will include the standard language for the emission limits of rule 2D .0515 and testing (if/when required by DAQ) but, since compliance with this rule by a comfortable margin is expected after control, will not require any additional testing to demonstrate compliance for these sources.

Permit No. 03716T19 will include the following MRR requirements for the carpenter shop, the laminate sanding waste collection system and the laminate waste storage silo and their associated controls associated with rule 2D .0515:

- Annual internal inspections and recordkeeping of the bagfilters for structural integrity;
- Monthly external visual inspections and recordkeeping of the ductwork and dust collectors for leaks; and
- Semiannual summary reporting of these MRR activities to NC DAQ.

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

The carpenter shop, the laminate sanding waste collection system and the laminate waste storage silo were manufactured after 7/1/71. Therefore, except for those VEs occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from these sources be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

For the carpenter shop, the laminate sanding waste collection system and the laminate waste storage silo, Permit No. 03716T19 will include the following associated with 2D .0521:

- The standard language for the emission limits of, and the methods of testing for compliance (if/when required by DAQ) with this rule;
- Monthly observations and recordkeeping of visible emissions; and
- Semiannual summary reporting of these MRR activities to NC DAQ.

**iii. 2D .0614 “Compliance Assurance Monitoring”**

**Applicability [§64.2]:** This rule applies to the laminate sanding waste collection system due to the applicability of 40 CFR Part 64 “Compliance Assurance Monitoring” (CAM). In accordance with §64.2(a) this regulation applies to the laminate sanding waste collection system since this source:

- (1) Is subject to an emission standard that is not exempt under §64.2(b)(1) for a regulated pollutant (i.e. the 2D .0515 limits for PM/PM<sub>10</sub>);
- (2) Uses control devices (i.e. bagfilters CD-BF1 through CD-BF4) to comply with that emission standard; and
- (3) Has before-control potential emissions of the regulated pollutant in excess of the threshold for being considered major for Title V. The table below summarizes the before-control and after-control potential PM/PM<sub>10</sub> emissions from these sources according to information provided in application 4500259.06A.

Source ID No.	Potential Emissions (ton/year)	
	Before Control	After Control
CD-BF1	526	5.3
CD-BF2	416	4.2
CD-BF3	416	4.2
CD-BF4	407	4.1

**Monitoring [§64.3, §64.6 and §64.7]:**

- (1) **Indicators:** The Permittee submitted a CAM plan with application 4500259.06A. That CAM plan states that the Permittee will use the presence of any visible emissions at the exhaust points of bagfilters CD-BF1 through CD-BF4 (monitored via “Method 22-like” observations) as the primary indicator for these sources.
- (2) **Frequency:** The after-control potential emissions of PM<sub>10</sub> from the laminate sanding waste collection system are less than the major source threshold. Therefore, in accordance with §64.3(a)(b)(4)(iii), Permit No. 03716T19 will require the Permittee to monitor the chosen indicator at least once per day.
- (3) **Bypass:** The laminate sanding waste collection system is configured such that bypass of the associated control devices (ID Nos. CD-BF1 through CD-BF4) is not possible. Therefore, monitoring of indicators of bypass described in §64.3(a)(2) does not apply to the laminate material sanders.
- (4) **Indicator Range:** There should be no visible emissions from the laminate sanding waste collection system at the exhaust points of bagfilters CD-BF1 through CD-BF4 if those control devices are operating properly. An excursion is defined as the presence of visible emissions and triggers inspection, corrective action and recordkeeping requirements.
- (5) **QA/QC Practices:** The observer must be familiar with Method 22 and follow a Method 22-like procedure. Observations of visible emissions must be made while the associated sources are in operation.

Also, the Permittee is required to conduct monthly external inspections of the ductwork and associated bagfilters for leaks and annual internal inspections of the bagfilters for structural integrity.

**Recordkeeping [§64.9(b)]:** The Permittee is required to maintain records of the visual Method 22-like observations and any corrective actions taken.

**Reporting [§64.9(a)]:** The Permittee must submit semiannual summary reports of the monitoring to NC DAQ. The report must clearly identify any excursions (if applicable) and identify their duration and cause (including unknown cause).

**Quality Improvement Plan (QIP) [§64.8]:** The observation of six or more excursions during a consecutive six-month period will trigger the requirement for the Permittee to develop a QIP for the laminate material sanders and associated bagfilters.

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

See discussion in Section III A.ii of this document, below.

**E. Seven laminate presses (ID Nos. ES-PR1 through ES-PR7)**

After the webs have been treated, dried, and cut to the correct shape/size, they are moved to the assembly area. Here the materials are made ready for pressing by stacking the appropriate number of sheets of treated kraft paper, barrier paper, kraft padding and wax paper into “sandwiches” on rolling tables. These “sandwiches” are then stacked (separated by stainless steel sheets such that the presses are filled. The “sandwiches” are then placed under high pressure and temperature in the laminate presses to transform them into sheets of laminate plastic. After pressing, the laminate sheets are removed from the presses and separated from the stainless sheets which are later reused in the presses.

**i. 2D .0521 “Control of Visible Emissions”**

The laminate presses were manufactured after 7/1/71. Therefore, except for those visible emissions (VEs) occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that the 6-minute average VEs from these sources be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as that VE does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as those VEs do not also exceed 87% opacity.

For the seven laminate presses, Permit No. 03716T19 will include the following MRR requirements associated with 2D .0521:

- The standard language for the emission limits of, and the methods of testing for compliance (if/when required by DAQ) with this rule (additional testing to demonstrate compliance is not required for the seven laminate presses since non-compliance is considered unlikely for this type of source);
- Monthly observations of visible emissions; and
- Semiannual summary reporting of MRR activities to NC DAQ.

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

See discussion in Section III A.i of this document, below.

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

See discussion in Section III A.ii of this document, below.

**iv. 2Q .0317 “Avoidance Conditions”**

See discussion in Section III A.iii of this document, below.

**F. Four melamine resin storage tanks (6,000 gallons storage capacity, each, ID Nos. ES-STM1 through ES-STM4);**

**Three phenolic resin storage tanks (20,000 gallons storage capacity, each, ID Nos. ES-STP1 through ES-STP3);**

**Two No. 2 fuel oil storage tanks (100,000 gallons storage capacity, each, ID Nos. ES-STD2 and –STD3);**

**One No. 2 fuel oil storage tank (30,000 gallons storage capacity, ID No. ES-STD1); and  
One isopropyl alcohol storage tank (3,000 gallons storage capacity, ID No. ES-STIA1)**

The No. 2 fuel oil tanks supply fuel to the boilers; the melamine resin storage tanks contain raw material for the melamine resin treaters; and the phenolic resin storage tanks contain raw material for the phenolic treater processes. The isopropyl alcohol storage tank is also associated with the phenolic treater processes. Although it has been removed from service, the Permittee wishes to keep the isopropyl alcohol storage tank on the permit.

**i. 2D .0521 “Control of Visible Emissions”**

This rule requires that the Permittee “prevent, abate and control emissions generated from fuel burning operations and industrial processes where an emission can reasonably be expected to occur...” The permit writer believes that visible emissions cannot *reasonably* be expected to occur from these storage tanks. Therefore, although included in Permit No. 03716T18, rule 2D .0521 **is not applied** to these sources in Permit No. 03716T19.

**ii. 2D .0524 “New Source Performance Standards”**

According to the review associated with Permit No. 03716R14, the Permittee installed the “large” No. 2 fuel oil storage tanks (ID Nos. ES-STD2 and -STD3) in 1980. However, these tanks are not subject to “Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984” because No. 2 fuel oil is excluded from the definition of petroleum liquids provided in §60.111a. Therefore, 2D .0524 **does not apply** to No. 2 fuel oil storage tanks ES-STD2 and ES-STD3.

The isopropyl alcohol storage tank (ID No. ES-STIA1) and the four melamine resin storage tanks (ID Nos. ES-STM1 through ES-STM4) have storage capacities beneath the threshold for applicability of “Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984” (i.e. 40 CFR Part 60, Subpart Kb) and **are therefore not subject**.

Previous versions of this permit have applied this rule to the “small” No. 2 fuel oil storage tank (ID No. ES-STD1) and the three phenolic resin storage tanks (ID Nos. ES-STP1 through ES-STP3). According to the review associated with Permit No. 03716T16, the Permittee installed ES-STD1 in 1992 and ES-STP1 through ES-STP3 in 1993. However, on 10/15/03 the EPA revised NSPS Subpart Kb such that it does not apply to tanks with:

- (1) Capacities less than 75 m<sup>3</sup> (i.e. 19,817 gallons),
- (2) Capacities greater than or equal to 151 m<sup>3</sup> (i.e. 39,898 gallons) that store liquids with maximum true vapor pressures of less than 3.5 kPa, or
- (3) Capacities of greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> that store liquids with maximum true vapor pressures of less than 15.0 kPa.

Maximum true vapor pressure is defined §60.111b as “... the equilibrium partial pressure exerted by the volatile organic compounds ... at the local maximum monthly average temperature as reported by the National Weather Service ...” For Fletcher, North Carolina, the maximum monthly average temperature is 84.1 °F (refer to Attachment A).

According to Table 7.1-2 of the Fifth Edition of the AP-42 document (dated 11/06), No. 2 fuel oil has a vapor pressure of 0.016 kPa at 90 °F (refer to Attachment B). Further, according to information provided by the Permittee (refer to email dated 5/21/07, Attachment C) the vapor pressure of the phenolic resin at 84.1 °F is 12.7 kPa. Therefore,

NSPS Subpart Kb **does not apply** to the No. 2 oil storage tank (ID No. ES-STD1) or the phenolic resin storage tanks (ID Nos. ES-STP1 through ES-STP3) and, although listed as applicable to these tanks in Permit No. 03716T18, rule 2D .0524 is not applied to these sources in Permit No. 03716T19.

**iii. 2D .1100 “Control of Toxic Air Pollutants”**

See discussion in Section III A.i of this document, below.

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

See discussion in Section III A.ii of this document, below.

**v. 2Q .0317 “Avoidance Conditions”**

See discussion in Section III A.iii of this document, below.

**G. One flyash waste transfer and storage operation (ID No. ES-BIN) and associated cartridge filter (810 square feet of filter area, ID No. CD-FCC)**

The flyash waste transfer and storage operation is utilized to collect and store flyash from boiler ES-BLR5 for subsequent off-site disposal.

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

This rule limits the allowable PM emissions (E) from the flyash waste transfer and storage operation (ID No. ES-BIN) 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)

From the review associated with Permit No. 03716T18 we find that for the flyash waste transfer and storage operation the process weight rate (P) is 0.004 ton per hour and the allowable emissions (E) are 0.1 pounds of PM per hour. That review also provides an actual PM emission rate estimate of 0.008 pounds of PM per hour.

Compliance with this rule is indicated.

For the flyash waste transfer and storage operation Permit No. 03716T19 will include the standard language for the emission limits of rule 2D .0515 and testing (if/when required by DAQ) but, since compliance with this rule by a comfortable margin is expected after control, will not require any additional testing to demonstrate compliance.

Permit No. 03716T19 will include the following MRR requirements for the flyash waste transfer and storage operation associated with 2D .0515:

- Monthly external visual inspections of the ductwork and dust collector for leaks;
- Annual internal inspections of the dust collector for structural integrity; and
- Semiannual summary reporting of MRR activities to NC DAQ.

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

The flyash waste transfer and storage operation was manufactured after 7/1/71. Therefore, except for visible emissions (VEs) occurring during startup, shutdown and malfunctions that are regulated under rule 2D .0535, paragraph (d) of this rule requires that 6-minute average VEs from the flyash waste transfer and storage operation (ID No. ES-BIN) be less than or equal to 20% opacity with the following exceptions:

- One six-minute average VE per hour may exceed 20% opacity as long as it does not also exceed 87% opacity; and
- Up to four six-minute average VEs per 24-hour period may exceed 20% opacity as long as they do not also exceed 87% opacity.

For the flyash waste transfer and storage operation, Permit No. 03716T19 will include the following MRR requirements associated with 2D .0521:

- The standard language for the emission limits of, and the methods of testing for compliance (if/when required by DAQ) with this rule;
- Monthly observations of visible emissions; and
- Semiannual summary reporting of MRR activities to NC DAQ.

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

See discussion in Section III A.ii of this document, below.

**III Regulatory Review for Multiple Source Categories:**

**A. Facility-Wide Affected Sources:**

**i. 2D .1100 “Control of Toxic Air Pollutants”**

The Permittee submitted a last MACT/NC Toxics demonstration pursuant to 2Q .0705(b) on 12/05/05. That demonstration was reviewed and approved by the AQAB (refer to the 09/08/06 memo from Jerry Freeman) and indicated compliance with Section 2D .1100 at potential emission rates. Since the Permittee demonstrated compliance at potential emission rates, Permit No. 03716T19 will not include any MRR for 2D .1100.

The submittal indicates that this facility emits three TAPs (formaldehyde, glycol ether and phenol) at rates above their associated TPERs and that all other TAPs are emitted by “combustion sources” [as defined at 2Q .0703(6)] and are therefore currently exempt from the NC Toxics program by 2Q .0702(a)(18).

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

This rule requires the Permittee to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility’s boundary. The Permittee does not have a history of non-compliance with this rule – therefore, Permit No. 03716T19 includes only the standard shell condition associated with this rule.

**iii. 2Q .0317 “Avoidance Conditions” to avoid  
2D .0530 “Prevention of Significant Deterioration”**

The Permittee requested (in previous applications) the addition of PSD avoidance conditions to their air quality permit to limit facility-wide VOC and SO<sub>2</sub> emissions to less than 250 tons per consecutive 12-month period, each.

**SO<sub>2</sub> Emissions:** The PSD avoidance condition associated with SO<sub>2</sub> emissions in Permit No. 03716T18 only addresses emissions from boilers ES-BLR1 through ES-BLR5 and limits the No. 2 fuel oil combustion in those sources to a total of no more than 6,900,000 gallons per consecutive 12-month period. We estimate the limited potential SO<sub>2</sub> emissions from these sources, using the same fuel assumptions listed in Section II A.ii of this document, above, (i.e. no SO<sub>2</sub> from phenolic fumes and laminate waste SO<sub>2</sub> is equal to that of wood) as:

Fuel Oil:

$$\left[ (142)(0.5) \left( \frac{\text{lb SO}_2}{10^3 \text{ gallons}} \right) \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] \left[ \frac{6,900(10^3 \text{ gallons})}{\text{year}} \right] = 245.0 \left( \frac{\text{ton SO}_2}{\text{year}} \right)$$

Natural Gas:

$$\left[ 153.25 \left( \frac{10^6 \text{ Btu}}{\text{hour}} \right) \right] \left[ \frac{8,760 \text{ hours}}{\text{year}} \right] \left[ 0.6 \left( \frac{\text{lb SO}_2}{10^6 \text{ ft}^3} \right) \right] \left[ \frac{\text{ft}^3}{1,020 \text{ Btu}} \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] = 0.4 \left( \frac{\text{ton SO}_2}{\text{year}} \right)$$

Laminate Waste:

$$\left[ 19.6 \left( \frac{10^6 \text{ Btu}}{\text{hour}} \right) \right] \left[ \frac{8,760 \text{ hours}}{\text{year}} \right] \left[ 0.025 \left( \frac{\text{lb SO}_2}{10^6 \text{ Btu}} \right) \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] = 2.1 \left( \frac{\text{ton SO}_2}{\text{year}} \right)$$

Since ES-EmGen is now listed on the permit (due to MACT applicability) it will be listed as a contributor to facility-wide SO<sub>2</sub> emissions in the PSD avoidance condition of Permit No. 03716T19. Using information submitted by the Permittee (refer to 2D .0516 discussion of in Section II B.i of this document, above) we can estimate the potential SO<sub>2</sub> emissions from ES-EmGen as follows:

$$\left[ 1.7 \left( \frac{10^6 \text{ Btu}}{\text{hour}} \right) \right] \left[ 8,760 \left( \frac{\text{hours}}{\text{year}} \right) \right] \left[ 0.0006 \left( \frac{\text{lb SO}_2}{10^6 \text{ Btu}} \right) \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] \cong 0.005 \left( \frac{\text{ton SO}_2}{\text{year}} \right)$$

The limit on No. 2 fuel oil combustion in Permit No. 03716T18 is sufficient to limit SO<sub>2</sub> emissions to less than 250 tons per consecutive 12-month period regardless of emissions from combustion of natural gas in ES-BLR1 through ES-BLR5 and ES-EmGen and/or laminate waste in ES-BLR5. Therefore, the PSD avoidance condition associated with SO<sub>2</sub> emissions in Permit No. 03716T19 will not include any MRR requirements associated with ES-EmGen or natural gas/laminate waste fuel use in any equipment.

The MRR requirements in the PSD avoidance condition associated with SO<sub>2</sub> emissions in Permit No. 03716T18 requires the Permittee to maintain monthly records of No. 2 fuel use and SO<sub>2</sub> emissions and submitting quarterly summary reports to NC DAQ. This reporting frequency is changed to semiannual in Permit No. 03716T19.

**VOC Emissions:** The PSD avoidance condition associated with VOC emissions in Permit No. 03716T18 only addresses emissions from the two phenolic treater processes. In Permit No. 03716T19, this condition is changed to also address emissions from the storage tanks, the emergency generator, the melamine resin treaters, the presses and boilers ES-BLR1 through ES-BLR5.

**Storage Tanks:** Application 4500259.06A indicates that the storage tanks at this facility have the potential to emit 0.94 tons of VOC per year.

**ES-EmGen:** The Permittee submitted additional information to this Office, dated 4/2/08, that indicates ES-EmGen emits 0.349 pounds of VOC per hour of operation. Therefore, assuming potential operation of 500 hours per year, we can estimate potential VOC emissions from ES-EmGen as follows:

$$\left[ 0.349 \left( \frac{\text{pounds}}{\text{hour}} \right) \right] \left[ \frac{500 \text{ hours}}{\text{year}} \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] \cong 0.1 \left( \frac{\text{ton VOC}}{\text{year}} \right)$$

**Melamine Resin Treaters:** Application 4500259.06A indicates that the melamine resin treaters have the potential to emit 35.9 tons of VOC per year, each.

**Boilers:** The boilers burn No. 2 fuel oil, natural gas and laminate waste. For the purposes of this review the EPA emission factor for VOC emissions from woodwaste combustion is also used to estimate VOC emissions from laminate waste combustion. The most recent versions of the AP-42 document provide emission factors for No. 2 fuel oil, natural gas and

woodwaste in Tables 1.3-3, 1.4-2 and 1.6-3, respectively. For conservatism we will ignore any “double counting” of VOC emissions from boilers ES-BLR3 and ES-BLR4 (i.e. since the testing conducted on ES-TRT1 and ES-TRT2 included the contributions from these boilers – see Section III B.i of this document, below). Using these emission factors and restricting No. 2 fuel oil combustion to 6,900,000 gallons per consecutive 12-month period as required by the PSD avoidance condition for SO<sub>2</sub>, we can estimate VOC emissions from these boilers as follows:

Fuel Oil:

$$\left[ 0.2 \left( \frac{\text{lb VOC}}{10^3 \text{ gallons}} \right) \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] \left[ \frac{6,900(10^3 \text{ gallons})}{\text{year}} \right] = 0.7 \left( \frac{\text{ton VOC}}{\text{year}} \right)$$

Natural Gas:

$$\left[ 153.25 \left( \frac{10^6 \text{ Btu}}{\text{hour}} \right) \right] \left[ \frac{8,760 \text{ hours}}{\text{year}} \right] \left[ 5.5 \left( \frac{\text{lb VOC}}{10^6 \text{ ft}^3} \right) \right] \left[ \frac{\text{ft}^3}{1,020 \text{ Btu}} \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] = 3.6 \left( \frac{\text{ton VOC}}{\text{year}} \right)$$

minate Waste:

$$\left[ 19.6 \left( \frac{10^6 \text{ Btu}}{\text{hour}} \right) \right] \left[ \frac{8,760 \text{ hours}}{\text{year}} \right] \left[ 0.017 \left( \frac{\text{lb VOC}}{10^6 \text{ Btu}} \right) \right] \left[ \frac{\text{ton}}{2,000 \text{ lb}} \right] = 1.5 \left( \frac{\text{ton VOC}}{\text{year}} \right)$$

**Presses:** Application 4500259.06A indicates that the seven presses have the combined potential to emit 21.3 tons of VOC per year.

**Phenolic Treater Processes:** The Permittee conducted testing on these sources on 5/10/06 to verify compliance with MACT JJJJ and the PSD avoidance condition associated with VOC emissions (see Section III B.i of this document, below). That testing was reviewed and approved by the AQAB (see letter from Paula Hemmer dated 11/29/06). That testing indicated overall removal efficiencies (i.e. including both fugitive and controlled emissions) of 99.06% for ES-TRT1/ES-BLR3 and 95.98% for ES-TRT2/ES-BLR4.

**Miscellaneous Sources:** Application 4500259.06A indicates that certain miscellaneous sources included on the list of insignificant activities attached to Permit No. 03716T19 (i.e. the phenolic resin ink tank, the S-85 treater, maintenance shop degreasing and plate buffing) emit small amounts of VOCs. These sources reportedly have the combined potential to emit about 5 tons of VOC per year.

The PSD avoidance condition associated with VOC emissions in Permit No. 03716T19 will account for the emissions from the storage tanks, ES-EmGen, miscellaneous sources and boilers ES-BLR1, ES-BLR2 and ES-BLR5 by “backing out” their potential contributions. The Permittee is required to control VOC emissions from the phenolic treater processes as required by MACT JJJJ and conduct MRR on the presses, the melamine resin treaters and the phenolic treater processes (including the emissions from ES-BLR3 and ES-BLR4). These MRR requirements include:

- Monitoring/recordkeeping of the capture and control systems’ operating parameters as required under MACT JJJJ (see discussion in Section III B.i, below);
- Monthly monitoring of the amount of VOC-containing materials consumed in the melamine resin treaters and the phenolic treater processes and calculation of the associated VOC emissions (both monthly emissions and emissions over the consecutive 12-month period ending with that month);
- Semiannual submittal of summary reports of the MRR requirements to NC DAQ.

**B. Phenolic treater process (ID No. ES-TRT1) and associated natural gas/No. 2 fuel oil/phenolic treater fume-fired boiler (15.95 million Btu per hour maximum heat input rate; ID No. ES-BLR3);**

**Phenolic treater process (ID No. ES-TRT2) and associated natural gas/No. 2 fuel oil/phenolic treater fume-fired boiler (23.0 million Btu per hour maximum heat input rate; ID No. ES-BLR4); and**

**Two melamine resin treaters (ID Nos. ES-MTR1 and ES-MTR2):**

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

**Applicability** [40 CFR §63.3290]

This facility meets the applicability criteria of §63.3290 and is therefore subject to the requirements of 40 CFR Part 63, Subpart JJJJ (i.e. the NESHAP for Paper and Other Web Coating). Specifically, the two phenolic treater processes and the two melamine resin treaters are subject to the relevant requirements.

**Compliance Date** [40 CFR §63.3330(a)]

According to §63.3310 the two phenolic treater processes and the two melamine resin treaters are existing sources. Therefore, in accordance with §63.3330(a), the compliance date for the Permittee is 12/05/05.

**Standards** [40 CFR §63.3310 and §63.3320]

According to §63.3320(b), the Permittee must limit the organic HAP emissions to:

- (1) No more than 5 percent of the organic HAP applied for each month (95 percent reduction); or
- (2) No more than 4 percent of the mass of coating materials applied for each month; or
- (3) No more than 20 percent of the mass of coating solids applied for each month; or
- (4) Operate an oxidizer to control organic HAP emissions such that the outlet organic HAP concentration is no greater than 20 parts per million by volume by compound on a dry basis and the efficiency of the capture system is 100 percent.

**Testing/Notifications** [40 CFR §63.9, §63.3360 and §63.3400]

The Permittee previously completed the testing and notification requirements. The testing was completed on 5/10/06 and the associated report was approved by SSCB (refer to memo from Paula Hemmer, dated 11/29/06).

That testing indicated that boiler ES-BLR3 achieved an organic HAP destruction efficiency of 99.83% at a combustion temperature of 1,352 °F and boiler ES-BLR4 achieved an organic HAP destruction efficiency of 96.18% at a combustion temperature of 1,397 °F. That testing also indicated a capture efficiency of 99.24% at a capture duct gas flow rate of 8,998 scfm for ES-TRT1 and a capture efficiency of 99.79% at a capture duct gas flow rate of 13,452 scfm for ES-TRT2. Combined, these data indicate overall organic HAP removal efficiencies of 99.06% and 95.98% for ES-TRT1 and ES-TRT2, respectively.

**Compliance Methods**

**(1) *Phenolic treater processes:*** [40 CFR §63.3370(h), §63.3370(k) and §63.3370(l)]

The phenolic treater processes are considered existing, always-controlled work stations for which the Permittee has opted to demonstrate compliance via §63.3370(h) and (k). That is, the Permittee must demonstrate that the actual monthly organic HAP emission rate is less than the monthly allowable organic HAP emission rate. Compliance for the two phenolic treater processes is indicated if:

- a. The Permittee monitors each thermal oxidizer (i.e. boilers ES-BLR3 and ES-BLR4) in accordance with §63.3350(e) and the monitoring indicates that each thermal oxidizer

was operated such that the operating parameter (i.e. combustion temperature) was greater than the value established via §63.3360(e) [i.e. 1,352 °F for ES-BL3 and 1,397 °F for ES-BL4] for each 3-hour period during the month;

- b. The Permittee monitors each capture system in accordance with §63.3350(f) and the monitoring indicates that each capture system was operated such that the operating parameter (i.e. capture duct gas flow rate) was above the value established via §63.3350(f) [i.e. 8,998 scfm for ES-TRT1 and 13,452 scfm for ES-TRT2; checked by the boiler operator once per shift]; and
- c. The monthly organic HAP emission rate [as calculated using Equation 12 found in §63.3370(i)(viii)] is less than the allowable organic HAP emission rate [as calculated using equation 13a found in §63.3370(l)(5)] for each phenolic treater process during the month.

(2) **Melamine resin treaters:** [40 CFR §63.3370(c)(3) and §63.3370(c)(5)(ii)]

The melamine resin treaters are considered existing, never-controlled work stations for which the Permittee has opted to comply with Subpart JJJJ by using only as-applied compliant materials to comply with §63.3320(b)(2). Compliance for the two melamine resin treaters is indicated if:

- a. The Permittee calculates the monthly average organic HAP content of all as-applied coating materials utilized in each of the two melamine resin treaters via Equation 4 of §63.3370(c)(3); and
- b. The monthly average organic HAP content of all as-applied coating materials utilized in the two melamine resin treaters is no more than 0.04 kg organic HAP per kg coating material applied.

**Monitoring** [40 CFR §63.3350(e) and (f)]

According to §63.3350(e) the Permittee must conduct the following monitoring for each of the thermal oxidizers:

- (1) Install, calibrate, operate and maintain a continuous temperature monitoring system (CTMS) according to the manufacturer's specifications. The CTMS must be equipped with a temperature sensor located in the combustion zone of the combustion chamber and a continuous recorder;
- (2) Operate the CTMS such that it:
  - a. Completes  $\geq 1$  cycle of operation per 15-minute period and has an accuracy of the greater of  $\pm 1\%$  of the temperature monitored or  $\pm 1$  °C;
  - b. Is maintained in proper working order at all times (except for malfunctions, repairs and zero/span calibration checks);
  - c. Is either successfully calibrated or replaced at least once every 3 months; and
  - d. Collects valid data during  $\geq 90\%$  of the hours during which the associated thermal oxidizer operated. Valid data is data that complies with §63.3350(e)(3), (4) and (7).
- (3) Determine the hourly average of the valid CTMS readings; and
- (4) Determine the rolling 3-hour average of all recorded valid CTMS readings (using  $\geq 2$  of the 3 hourly averages for that period) for each operating period.

According to §63.3350(f) the Permittee must conduct the following monitoring for each of the capture systems:

- (1) Develop a site-specific monitoring plan (plan) that identifies the operating parameter to be monitored (and the appropriate range of values) to ensure that the capture efficiency

achieved during the initial compliance test is maintained. The Permittee has developed the required plan. That plan requires capture system monitoring/recordkeeping as summarized in the table below:

Frequency	Monitoring/Recordkeeping Requirement(s)		
Once per shift	Capture duct gas flow rate		
Once per month	Pitot tube visual inspection	Pitot tube line purge	Pressure transducer calibration
Once per quarter	Thermocouple calibration	Pitot tube leak check	
Once per Pitot tube	Pitot tube geometric calibration		

- (2) Conduct all capture system monitoring in accordance with the plan;
- (3) Review/update the plan at least annually; and
- (4) Make the plan available during NC DAQ inspections.

**Recordkeeping/Reporting** [40 CFR §63.3340, §63.3400 and §63.3410]

The Permittee must maintain records, on a monthly basis, of:

- (1) All measurements needed to demonstrate compliance with Subpart JJJJ, including:
  - Control device and capture system monitoring data;
  - Organic HAP content data;
  - Volatile matter and coating solids content data;
  - Overall control efficiency determination; and
  - Material usage, organic HAP usage, volatile matter usage, coating solids usage and compliance demonstrations using these data.
- (2) Data specified in §63.10(c), including:
  - The date and time identifying each period during which the CTMS was inoperative (except for low-level and high-level checks);
  - The date and time identifying each period during which the CTMS was out of control [as defined at §63.8(c)(7)];
  - The date and time identifying each period of excess emissions and operation below the values established during the 5/10/06 testing;
  - The nature and cause of any CTMS malfunction (if known); and
  - The corrective actions taken, preventive measures adopted, and/or nature of repairs or adjustments to the CTMS in response to a CTMS malfunction or period during which a CTMS was inoperative or out of control.

The Permittee must maintain a startup, shutdown, and malfunction plan (SSMP) for the Phenolic treater processes and associated control devices.

The Permittee must submit the following reports:

- (1) Semiannual compliance reports that include the following information:
  - Company name and address;
  - Statement by a responsible official with that official's name, title and signature certifying the accuracy of the content of the report;

- Date of report and beginning and ending dates of the reporting period; and either
  - A statement that there were no deviations from the emission limitations during the reporting period and that no CTMS was inoperative, inactive, malfunctioning, out-of-control, repaired or adjusted; or
  - The total operating time of each affected source during the reporting period; information on the number, duration and cause of deviations (if applicable) and the corrective actions taken; and information on the number, duration and cause for CTMS downtime (if applicable) other than downtime associated with zero and span and other calibration checks.
- (2) Startup, shutdown and malfunction reports as specified in §63.10(d)(5) - except that a separate startup, shutdown and malfunction report is not required if the relevant information is included with the semiannual compliance report.

#### **IV NSPS/NESHAP/PSD/Toxics/112(r)/CAM/RACT Applicability:**

**NSPS:** The storage tanks at this facility are not subject to the NSPS for VOL storage vessels (i.e. 40 CFR Part 60, Subparts Ka and Kb). The storage tanks at this facility are all excluded from applicability of these rules based on capacity, construction date, contents and/or vapor pressure of contents (refer to the discussion of 2D .0524 in Section II F.ii of this document, above).

The emergency generator at this facility is not subject to the NSPS for SI ICE (i.e. 40 CFR Part 60, Subpart JJJJ) because it pre-dates that rule (refer to the discussion of 2D .0524 in Section II B.iii of this document, above).

The boilers at this facility are not subject to the NSPS for small boilers (i.e. 40 CFR Part 60, Subpart Dc) because the boilers at this facility pre-date this regulation (see the discussion in Section II A of this document, above).

**NESHAP:** Sources at this facility are subject to 40 CFR Part 63, Subparts JJJJ (i.e. the NESHAP for Paper and Other Web Coating) and ZZZZ (i.e. the NESHAP for Reciprocating Internal Combustion Engines - RICE). Subpart JJJJ applies to the two phenolic treater processes (ID Nos. ES-TRT1 and ES-TRT2) and the melamine resin treaters (ID Nos. ES-MTR1 and ES-MTR2) and Subpart ZZZZ applies (with no applicable requirements) to the emergency generator (ID No. ES-EmGen). Detailed permit language has been added to Permit No. 03716T19 for MACT JJJJ. Refer to the discussions in Sections III B and II B.v of this document, above, for more details.

The Permittee was previously considered subject to Subpart DDDDD (i.e. the NESHAP for Industrial/Commercial/Institutional Boilers and Process Heaters). The DC courts vacated that regulation and it is not included as an applicable regulation in Permit No. 03716T19.

**Toxics:** DAQ received the “last-MACT” toxics demonstration for this facility on 12/05/05. That demonstration showed compliance with the AALs at potential emission rates (see discussion in Section III A.i, above, for more details). The permit modification associated with that toxics demonstration has been “rolled into” renewal application 4500259.06A (i.e. this renewal of Air Quality Permit No. 03716T18).

**PSD:** This facility does not fall into one of the “named” PSD categories but does have the potential to emit >250 tons of SO<sub>2</sub> and VOCs, each, per consecutive 12-month period. To avoid being classified as major for PSD purposes the Permittee has accepted (via previous applications) PSD avoidance conditions for these pollutants. Specifically, facility-wide SO<sub>2</sub> and VOC emissions are limited to < 250 tons per consecutive 12-month period (see discussion in Section III A.iii, above, for more details). Application 4500259.06A is a permit renewal without equipment modification and does not affect potential emissions of SO<sub>2</sub> or VOCs. Therefore, neither increment tracking nor PSD review is triggered at this time.

**112(r):** According to Section A3 of permit application 4500259.07A, 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 other than general duty. Note that the formaldehyde utilized at this facility does not count toward the threshold values of this rule as it applies for the “mixture exemption” provided at 40 CFR §68.115(b)(1).

**CAM:** The requirements of 2D .0614 “Compliance Assurance Monitoring” apply to the four laminate material sanders at this facility and are added to Permit No. 03716T19 (see the discussion in Section II D.iii of this document, above, and Attachment D for more details).

**RACT:** The Permittee is not located within one of the areas listed in 2D .0902(f) or 2D .1402(d) and, therefore, is not subject to the RACT requirements for VOCs or NO<sub>x</sub> emissions.

**V Permit Modifications/Changes:**

The following table summarizes the changes in Permit No. 03716T19 resulting from Permit Application No. 4500259.06A:

Old Page(s)	New Page(s)	Condition/Item	Description of Change(s)
<b>Part I</b>			
Global	Global	N/A	<ul style="list-style-type: none"> <li>• Change permit revision number to T19</li> <li>• Change the issuance/effective dates of the permit</li> <li>• Amend the application number and complete date</li> <li>• Update monitoring associated with 2D .0521</li> </ul>
3 - 4	3 - 4	Equipment List	<ul style="list-style-type: none"> <li>• Show MACT JJJ applies to melamine treaters and phenolic treater processes;</li> <li>• Remove NSPS Kb for the three phenolic resin storage tanks;</li> <li>• Remove the asterisks and associated language for ES-BIN, CD-FCC and CD-ESP;</li> <li>• Change descriptions of the laminate material and waste handling system and the phenolic treater processes for clarity and correctness;</li> <li>• Move ES-PhRI and ES-Platebuffer to insignificant activities list and show existence of wet scrubber;</li> <li>• Remove multicyclone CD-MC; and</li> <li>• Add emergency generator ES-EmGen</li> </ul>
5 - 9	5 - 7	2.1 A	<ul style="list-style-type: none"> <li>• Combine all boilers ES-BLR1 through ES-BLR5 into Section 2.1 A;</li> <li>• Modify table to reflect applicability of 2D .1100 and 2Q .0705 (for ES-BLR3 and ES-BLR4 only); and 2Q .0317 (for all boilers);</li> <li>• Remove multicyclone CD-MC; and</li> <li>• Correct boiler heat inputs and 2D .0503 limits</li> </ul>
5 - 6	N/A	2.1 A.1	<ul style="list-style-type: none"> <li>• Remove MRR requirements for CD-MC; and</li> <li>• Modify the boiler 2D .0503 PM emission limits</li> </ul>
6	N/A	2.1 A.1.d (03716T18)	Remove requirement to establish “normal” ranges and the MRR requirements associated with inlet and outlet temperatures of CD-ESP
N/A	8	2.1 B	Add a permit section for ES-EmGen

Old Page(s)	New Page(s)	Condition/Item	Description of Change(s)
9	9	2.1 C	<ul style="list-style-type: none"> <li>Modify the descriptions of the two phenolic treater processes for clarity and correctness;</li> <li>Correct the maximum rated heat inputs for boilers ES-BLR3 and ES-BLR4; and</li> <li>Modify table to reflect applicability of 2D .1100</li> </ul>
11	10 – 11	2.1 C.3	Update section addressing 2D .0958 to include MRR
10 - 11	20 – 21	2.1 C.3.a-f (03716T18)	Move MRR requirements associated with 2Q .0317 (PSD avoidance for VOCs) to Section 2.2 A.4 and modify the associated MRR
12	12	2.1 D	<ul style="list-style-type: none"> <li>Modify the descriptions of the laminate material sanders and waste handling system for clarity and to more accurately reflect these operations; and</li> <li>Modify table to reflect applicability of 2D .0614</li> </ul>
N/A	14	2.1 D.3	Add the requirements of rule 2D .0614 (i.e. CAM) for the four laminate material sanders to permit
14	15	2.1 E	Modify table to reflect applicability of 2D .1100 and 2Q .0317 (PSD avoidance for VOCs)
14 - 15	16 - 17	2.1 F	<p>Replace the storage tanks' MRR requirements with the flyash waste transfer operation MRR since:</p> <ul style="list-style-type: none"> <li>The tanks are not considered subject to 2D .0521;</li> <li>Tanks ES-STP1 through ES-STP3 are no longer considered subject to 2D .0524 (NSPS Kb); and</li> <li>2D .1100 and 2D .1806 are addressed facility-wide in Sections 2.2 A.1 and A.2, respectively</li> </ul>
16	N/A	2.1 G.2.c (03716T18)	Remove requirement to establish “normal” for visible emissions from ES-BIN
17 - 18	18 – 21	2.2 A	Modify section to address those regulations that apply to facility-wide sources
17 - 18	18 – 19	2.2 A.1	Modify section to include requirements for 2D .1100 (NC toxics) and move requirements of 2Q .0317 (PSD avoidance for SO <sub>2</sub> ) to Section 2.2 A.3
N/A	19	2.2 A.2	Add section for requirements of 2D .1806 (odorous emissions)
17 – 18	19 – 20	2.2 A.3	Include requirements of 2Q .0317 (PSD avoidance for SO <sub>2</sub> ) in this section and modify the MRR
10 - 11	20 - 21	2.2 A.4	Add section for requirements of 2Q .0317 (PSD avoidance for VOCs)
N/A	22 - 26	2.2 B	Add MRR requirements associated with rule 2D .1111 (MACT Subpart JJJJ) for the melamine treaters and phenolic treater processes
19	N/A	2.2 C (03716T18)	Remove this section of permit (the requirements of rule 2D .1806 were moved to Section 2.2 A.2)
19 - 26	27 - 34	3	Update General Conditions to current shell
<b>Part II</b>			
28 - 30	N/A	Sections 1-3	Remove Part II of permit

Note: Condition/Item is as listed in Permit No. 03716T19 unless otherwise stated.

## VI Title V Permit History:

The following table provides a very brief summary of Title V permit revisions for this facility:

Permit No.	Issuance Date	Description of Revision
03716R14	04/05/01	<ul style="list-style-type: none"><li>• Renewal of permit;</li><li>• Replace 2 multicyclones on boiler ES-BLR5 with a Core Separator;</li><li>• Remove the waste foil bailer and associated cyclone from the permit;</li><li>• Add the plate buffer, two 100,000 gallon No. 2 fuel oil storage tanks, a phenolic resin ink mixing tank, a parts washer, and the carpenter shop and associated cyclone to the permit; and</li><li>• Change rating of emergency generator from 50 kW to 100 kW</li></ul>
03716R15	10/31/01	Reinstall the two multicyclones on boiler ES-BLR5 (removed via Permit No. 03716R14) in series with the Core Separator
03716T16	12/05/01	Issuance of initial Title V permit
03716T17	02/18/05	Replace the Core Separator and one of the two multicyclones on boiler ES-BLR5 with an electrostatic precipitator
03716T18	06/05/07	<ul style="list-style-type: none"><li>• Add ES-BIN and CD-FCC; and</li><li>• Remove the applicability of NSPS Subpart Kb to ES-STD1</li></ul>
03716T19	07/01/08	<ul style="list-style-type: none"><li>• Renewal of permit;</li><li>• Addition of CAM and MACT JJJJ/ZZZZ requirements; and</li><li>• Remove CD-MC; add ES-EmGen; and move sources ES-Platebuffer and ES-PhRI from equipment list to the list of insignificant activities</li></ul>

## VII Compliance Status:

The facility was most recently inspected on 6/20/07 by Patrick Ballard and appeared to be operating in compliance with air quality standards and regulations during that inspection.

## VIII Zoning Consistency:

A zoning consistency determination request is not required for permit modifications that do not include equipment and/or process modifications (such as application 4500259.06A).

## IX Application Fee:

DAQ received an application fee of \$834 for application 4500259.06A from the Permittee on 10/25/06. That was the appropriate fee (renewal and NC toxics is free, but not the modification for CAM and MACT) for a Title V facility at that time.

## X Permit Review:

**Draft Permit:** A draft version of Permit No. 03716T19 and the associated review were sent to the Permittee and the ARO for a review and comment period on 04/28/08. In response to the comments received the following changes were made in Proposed Permit No. 03716T19:

- The description of ES-TRT1 was changed in both documents to reflect that the dip tank formerly associated with this source was removed in 11/07;
- Removal of 2D .0521 MRR requirements for ES-TRT1 and ES-TRT2 (these sources vent only through ES-BLR3 and ES-BLR4 that have VEs monitored elsewhere in the permit);
- The laminate sanding waste collection system (except for the silo) was grouped together for increased operational flexibility (the sources were listed individually in the draft version); and
- Several administrative changes, including:

- Correction of the allowable PM emission limits for boilers ES-BLR2, ES-BLR3, ES-BLR4 and ES-BLR5 (these limits were correct in the review but transposed in the permit);
- Removal of 2D .0521 MRR requirements for boilers ES-BLR1 through ES-BLR4 (these requirements apply only to ES-BLR5 – this was correct in the review but not the permit);
- Clarifying that, under 2Q .0317 to avoid 2D .0530 for SO<sub>2</sub> emissions, fuel oil used in the boilers must be *monitored* but not necessarily *metered* (as stated in the draft permit);
- Correct the regulatory citations associated with PSD avoidance in the limits/standards summary tables found 2.1 E and 2.2 A; and
- Clarifying the applicability of 2D .0958.

**Proposed permit:** DAQ-RCO Permits section sent a proposed version of Permit No. 03716T19 and the associated review to the Permittee, the ARO, the EPA, and the Affected States on 05/15/08. As a result of the comments received on these documents, the following changes were made to Proposed Permit No. 03716T19:

List changes here

## XI Miscellaneous:

**Control Change for ES-BLR5:** The control scenario of ES-BLR5 has changed such that CD-MC is no longer utilized (see discussion in Section II A, above). The Permittee submitted the required Form D5 for this change on 05/16/08 – see email of that date).

**Insignificant Activities:** Application 4500259.06A indicates that the phenolic resin ink tank and plate buffing qualify as insignificant activities under 2Q .0503(8). Therefore, these sources are added to the list of insignificant activities attached to Permit No. 03716T19.

**Certification by Responsible Official:** In accordance with 2Q .0520, Tim Gwennap (i.e. the responsible official for Wilsonart International, Inc.) provided the required certification on Form E5 of application 4500259.06A.

**Public Participation:** In accordance with 2Q .0521, NC DAQ must provide the opportunity for public participation during the renewal of a Title V permit (such as that represented by application 4500259.06A). NC DAQ met this obligation with the public notice posted in the add the name of the publishing paper, the county of publication and the date of publication.

**EPA & Affected States Review:** In accordance with 2Q .0522, NC DAQ must provide EPA and Affected States [as defined at 2Q .0503(1)] staff the opportunity to review a proposed renewal of this Title V permit. NC DAQ met this obligation by sending those agencies a copy of Proposed Permit No. 03716T19 and the associated review on 05/15/08.

## XII Recommendation:

The Title V Permit renewal application for the Wilsonart International, Inc. facility in Fletcher, Henderson 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 or will achieve compliance with all applicable requirements as specified in Permit No. 03716T19.

Issuance of Permit No. 03716T19 is recommended.