

**SIP CONSTRUCTION & OPERATING PERMIT AND TITLE V 502(b)10 CHANGE APPLICATION REVIEW**

Facility Name: **Hollingsworth & Vose Company**

City: Hawkinsville

County: Pulaski

AIRS No.: 04-13-235-00008

Application No.: 18207

Date SIP Application Received: May 14, 2008

Permit No: 2621-235-0008-V-02-2

<b>Program</b>	<b>Review Engineers</b>	<b>Review Managers</b>
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**Introduction**

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and operate and Section 502(b)(10) change to the Part 70 source. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1), 391-3-1-.03(2), and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the permit and is presented in the same general order as the permit amendment. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

**I. Facility Description**

A. Existing Permits

Table 1 below lists the current Title V Permit, all administrative amendments and minor and significant modifications to that Permit, and any 502(b)(10) changes. Comments are listed in Table 2 below.

**Table 1: Current Title V Permit and Amendments**

Permit/Amendment Number	Date of Issuance	Comments	
		Yes	No
2621-235-0008-V-02-0	July 28, 2005	✓	
2621-235-0008-V-02-1	March 27, 2006	✓	

**Table 2: Comments on Specific Permits**

Permit Number	Comments
2621-235-0008-V-02-0	Renewal Title V Operating Permit
2621-235-0008-V-02-1	Significant Modification without Construction for the incorporation of the full requirements of 40 CFR 63 Subpart JJJJ for the operation of Paper Machine 72 (Source Code PM72) and Production Line 76 (Source Code L76).

B. Regulatory Status

1. PSD/NSR/RACT

Hollingsworth & Vose Company is non-major under the regulations of New Source Review (NSR), including Prevention of Significant Deterioration (PSD).

The following limits have been taken to avoid PSD review:

- a. Emissions of volatile organic compounds (VOC) from Production Line 76; Resin/Solvent Tanks TK1, TK2, TK3, TK5, TK6, TK7, and TK8; Additive Tanks AD01 and AD02; and Feed Tank FT01 are limited to less than 250 tons during any twelve consecutive months.
- b. The Permittee must capture and incinerate 98 percent of the mass of all hazardous air pollutants (HAP) delivered to the saturator on Production Line 76.
- c. The Permittee must operate an emissions capture system for Production Line 76 that meets the requirements of a “permanent total enclosure” as specified in Method 204 of the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants.
- d. The Regenerative Thermal Oxidizer RTO on Production Line 76 must destroy no less than 98 percent of the mass of VOC and HAP entering the device.

2. Title V Major Source Status by Pollutant

**Table 3: Title V Major Source Status**

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM <sub>10</sub>	Yes			✓
SO <sub>2</sub>	Yes			✓
VOC	Yes	✓		
NO <sub>x</sub>	Yes			✓
CO	Yes			✓
TRS	Yes			✓
H <sub>2</sub> S	Yes			✓
Individual HAP	Yes	✓		
Total HAPs	Yes	✓		

**II. Proposed Modification**

**A. Description of Modification**

Hollingsworth & Vose Company submitted Application No. 18207, dated May 7, 2008, proposing the construction and operation of a new 32.7 million Btu per hour (MMBtu/hr) boiler, which will fire natural gas as the primary fuel with propane as a backup fuel.

The new boiler, which will serve as the replacement for the existing 33.6 MMBtu/hr Primary Boiler (Source Code B2), will also be named Primary Boiler (Source Code B2).

The installation and startup of the new Primary Boiler will coincide with the shutdown and removal of the existing Primary Boiler. Both the installation of the new Primary Boiler and the removal of the existing Primary Boiler will occur during a planned mill-wide shutdown.

**B. Emissions Change**

Emissions for the proposed new Primary Boiler were calculated using USEPA AP-42 emission factors for the combustion of natural gas and propane. The potential emissions from the new Primary Boiler were determined assuming maximum annual usage of the worst-case fuel for each pollutant. For conservativeness, the actual emissions from the new Primary Boiler were assumed to be equivalent to the potential emissions. Any emissions decreases that may result from the permanent shutdown of the existing Primary Boiler were not considered in calculating the potential and actual emissions due to the proposed modification.

Table 4 below reflects the changes in the potential and actual emissions, calculated as described above, resulting from the proposed modification.

**Table 4: Emissions Change Due to Modification**

<b>Pollutant</b>	<b>Is the Pollutant Emitted?</b>	<b>Net Actual Emissions Increase (Decrease) (tpy)</b>	<b>Net Potential Emissions Increase (Decrease) (tpy)</b>
PM	Yes	1.067	1.067
PM <sub>10</sub>	Yes	1.067 <sup>†</sup>	1.067 <sup>†</sup>
SO <sub>2</sub>	Yes	2.335	2.335
VOC	Yes	0.772	0.772
NO <sub>x</sub>	Yes	29.579	29.579
CO	Yes	11.798	11.798
TRS	No	---	---
H <sub>2</sub> S	No	---	---
Individual HAP	Yes	0.772 <sup>‡</sup>	0.772 <sup>‡</sup>
Total HAPs	Yes	0.772 <sup>‡</sup>	0.772 <sup>‡</sup>

<sup>†</sup> Assumes all PM emitted is PM<sub>10</sub>.

<sup>‡</sup> Assumes all VOC emitted is HAP.

C. Title I Modification

- PSD/NSR Applicability

The pollutant-specific potential emissions increases associated with the proposed modification, as illustrated in Table 4 above, all fall below the respective Prevention of Significant Deterioration (PSD) significance thresholds. Consequently, there are no PSD implications for the proposed modification.

- NSPS Modification

The new Primary Boiler will be subject to the New Source Performance Standard (NSPS) requirements of 40 CFR 60 Subpart Dc. However, because no existing emissions units are undergoing a physical change or a change in method of operation, the proposed modification does not qualify as a modification under NSPS.

- NESHAP Modification

Hollingsworth & Vose Company is not, and will not be as a result of the proposed modification, subject to the requirements of any 40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP). Therefore, the proposed modification does not qualify as a NESHAP modification.

**III. Facility Wide Requirements**

**A. Emission and Operating Caps**

There are no new or modified facility-wide emission and operating caps associated with the modification proposed in Application No. 18207, dated May 7, 2008.

**B. Applicable Rules and Regulations**

There are no new or modified facility-wide rules or regulations associated with the modification proposed in Application No. 18207, dated May 7, 2008.

**C. Compliance Status**

Application No. 18207, dated May 7, 2008, indicates current compliance with all applicable facility-wide rules and regulations.

**D. Operational Flexibility**

The facility has made no requests for facility-wide operational flexibility associated with the modification proposed in Application No 18207, dated May 7, 2008.

**E. Permit Conditions**

There are no new or modified facility-wide permit conditions associated with the modification proposed in Application No 18207, dated May 7, 2008.

**IV. Regulated Equipment Requirements**

A. Brief Process Description

Please see the description as stated above in **II. Proposed Modification – A. Description of Modification.**

B. Equipment List for the New or Modified Process

Because the new Primary Boiler (Source Code B2) is replacing the existing Primary Boiler (Source Code B2), the only change to the equipment list associated with the modification proposed in Application No. 18207, dated May 7, 2008, is the addition of two new reporting conditions.

The table below is also included in the permit amendment associated with this narrative, Title V Permit Amendment No. 2621-235-0008-V-02-2, as Condition No. 3.1.2.

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
B2	Primary Boiler	40 CFR 60 Subpart Dc 391-3-1-.02(2)(d)	3.3.1, 3.3.2, 3.3.8, 3.4.1, 3.4.2, 5.2.2, 6.1.7, 6.2.1, 6.2.18, and 6.2.19*	None	None

\* Generally applicable requirements contained in this permit may also apply to emission units listed above.

C. Equipment & Rule Applicability

- Emission and Operating Caps

There are no new or modified equipment-specific emission and operating caps associated with the modification proposed in Application No. 18207, dated May 7, 2008.

- Applicable Rules and Regulations

40 CFR 60 Subpart Dc, “Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units”, applies to each steam generating unit for which construction, modification, or reconstruction commences after June 9, 1989, and that has a maximum design heat input capacity of 100 million Btu per hour (MMBtu/hr) or less but greater than or equal to 10 MMBtu/hr. The new Primary Boiler (Source Code B2), rated at 32.7 MMBtu/hr, has a construction date of 2008 and is, therefore, subject to the requirements of NSPS Subpart Dc based on the construction date and the maximum heat input capacity. The new boiler will fire only natural gas as the primary fuel with propane as the backup fuel. Consequently, Hollingsworth & Vose Company is only required to submit the initial notification of the dates of construction and actual startup as specified in 40 CFR 60.48c(a) and to maintain records of the amount of each fuel burned in the new boiler during each day as specified in 40 CFR 60.48c(g)(1).

Georgia Rule 391-3-1-.02(2)(d), “Fuel-burning Equipment”, applies to any facility using fuel-burning equipment, including boilers. Although there are no emission thresholds that trigger applicability for Georgia Rule (d), the Rule requires that the amount of particulate matter (PM) emitted from fuel-burning equipment not exceed the value calculated using the appropriate equation presented in the Rule based on the heat input capacity and the date of construction or modification of the fuel-burning equipment. Georgia Rule (d) also requires that any visible emissions emitted from fuel-burning equipment constructed or modified after January 1, 1972, not equal or exceed 20 percent opacity except for one six-minute period per hour or not more than 27 percent opacity. The new Primary Boiler (Source Code B2) is subject to Georgia Rule (d).

Georgia Rule 391-3-1-.02(2)(g), “Sulfur Dioxide”, applies to any facility using fuel-burning equipment, including boilers. Although there are no emission thresholds that trigger applicability for Georgia Rule (g), the Rule requires that fuel-burning equipment with a heat input capacity below 100 million Btu per hour (MMBtu/hr) not fire fuel containing more than 2.5 percent sulfur by weight. The new Primary Boiler (Source Code B2) is subject to Georgia Rule (g); however, the requirements of this Rule are effectively subsumed by the requirement that the new Primary Boiler fire only natural gas or propane.

**D. Compliance Status**

Application No. 18207, dated May 7, 2008, indicates current compliance with all applicable equipment-specific rules and regulations.

**E. Operational Flexibility**

The facility has made no requests for equipment-specific operational flexibility associated with the proposed modification.

**F. Permit Conditions**

There are no new or modified equipment-specific permit conditions associated with the modification proposed in Application No 18207, dated May 7, 2008.

In replacing the existing Primary Boiler, the new Primary Boiler will be subject to the same requirements and will assume the same naming convention, Primary Boiler (Source Code B2). Consequently, all applicable emission and operating standards, including those of 40 CFR 60 Subpart Dc and Georgia Rules 391-3-1-.02(2)(d) and 391-3-1-.02(2)(g), are set forth in existing conditions. Thus, it will not be necessary to modify any existing conditions that set forth emissions and operating standards to include the new Primary Boiler. However, all applicable existing conditions are included in this narrative for completeness.

Existing Condition No. 3.3.1 sets forth the general applicability of 40 CFR 60 Subpart Dc for the operation of the Primary Boiler (Source Code B2) and the Heat Recovery Boiler (Source Code B3).

Existing Condition No. 3.3.2 limits the fuels fired in the Primary Boiler (Source Code B2) to only natural gas and propane.

Existing Condition No. 3.3.8 is the general applicability statement for 40 CFR 60 Subpart A.

Existing Condition No. 3.4.1 limits the particulate matter (PM) emissions from the Primary Boiler (Source Code B2), the Secondary Boiler (Source Code B1), or the Heat Recovery Boiler (Source Code B3) to the allowable rate determined using the listed equation.

Existing Condition No. 3.4.2 limits the opacity from the Primary Boiler (Source Code B2), the Secondary Boiler (Source Code B1), or the Heat Recovery Boiler (Source Code B3) to 20 percent over a six-minute average, except one six-minute average of not more than 27 percent.

**V. Testing Requirements (with Associated Record Keeping and Reporting)**

**A. Individual Equipment**

There are no new or modified equipment-specific testing requirements or conditions associated with the modification proposed in Application No. 18207, dated May 7, 2008.

**B. Equipment Groups (all subject to the same test requirements)**

There are no new or modified equipment group-specific testing requirements or conditions associated with the modification proposed in Application No. 18207, dated May 7, 2008.

**VI. Monitoring Requirements (with Associated Record Keeping and Reporting)**

**A. Individual Equipment**

There are no new or modified equipment-specific permit conditions associated with the modification proposed in Application No 18207, dated May 7, 2008.

In replacing the existing Primary Boiler, the new Primary Boiler will be subject to the same requirements and will assume the same naming convention, Primary Boiler (Source Code B2). Consequently, all applicable monitoring requirements, including those of 40 CFR 60 Subpart Dc and Georgia Rules 391-3-1-.02(2)(d) and 391-3-1-.02(2)(g), are set forth in existing conditions. Thus, it will not be necessary to modify any existing monitoring conditions to include the new Primary Boiler. However, all applicable existing monitoring conditions are included in this narrative for completeness.

Existing Condition No. 5.2.2.a sets forth the daily fuel usage monitoring requirements of 40 CFR 60 Subpart Dc for the Primary Boiler (Source Code B2).

**B. Equipment Groups (all subject to the same monitoring requirements)**

There are no new or modified equipment group-specific monitoring requirements or conditions associated with the modification proposed in Application No. 18207, dated May 7, 2008.

**VII. Other Record Keeping and Reporting Requirements**

There are no new or modified equipment-specific permit conditions associated with the modification proposed in Application No 18207, dated May 7, 2008.

In replacing the existing Primary Boiler, the new Primary Boiler will be subject to the same requirements and will assume the same naming convention, Primary Boiler (Source Code B2). Consequently, it will not be necessary to modify any existing record keeping requirements of 40 CFR 60 Subpart Dc set forth in existing conditions to include the new Primary Boiler. However, all applicable existing conditions are included in this narrative for completeness. In addition, two new reporting conditions were added to include the applicable notification requirements of 40 CFR 60 Subpart Dc.

Existing Condition No. 6.1.7.b.iii describes an exceedance as any period of process operation during which a fuel other than natural gas or propane is fired in the Primary Boiler (Source Code B2).

Existing Condition No. 6.2.1 require the facility to maintain records of the amount of each fuel fired in the Primary Boiler (Source Code B2) during each day.

New Condition No. 6.2.18 requires the facility to submit notification of actual startup of the Primary Boiler (Source Code B2), as required under 40 CFR 60.7 and 40 CFR 60.48c(a).

New Condition No. 6.2.19 requires that the notification of actual startup required by Condition No. 6.2.18 must also include the following information listed in 40 CFR 60.48c(a): the design heat input capacity of the Primary Boiler (Source Code B2), the identification of the fuel to be fired, and the anticipated annual capacity factor based on all fuels fired and based on each fuel fired.

**VIII. Specific Requirements**

A. Operational Flexibility

Not Applicable.

B. Alternative Requirements

Not Applicable.

C. Insignificant Activities

Not Applicable.

D. Temporary Sources

Not Applicable.

E. Short-Term Activities

Not Applicable.

F. Compliance Schedule/Progress Reports

Not Applicable.

G. Emissions Trading

Not Applicable.

H. Acid Rain Requirements

Not Applicable.

I. Prevention of Accidental Releases

The proposed modification does not change the source's applicability.

J. Stratospheric Ozone Protection Requirements

The proposed modification does not change the source's applicability.

K. Pollution Prevention

Not Applicable.

L. Specific Conditions

Not Applicable.