

Air Permit Review

Permit Issue Date:

Region: Fayetteville Regional Office
County: Cumberland
NC Facility ID: 2600009
Inspector's Name: Tom McKinney
Date of Last Inspection: 03/29/2004
Compliance Code: W/In Violation W/regard To Proc Compliance
CDS ID No. 375100009

Facility Data			Permit Applicability (this application only)	
Applicant (Facility's Name): Borden Chemical, Inc. Facility Address: Borden Chemical, Inc. 1411 Industrial Drive Fayetteville, NC 28301 SIC: 2891 / Adhesives And Sealants NAICS: 32552 / Adhesive Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: F, G, H, OOO PSD: PSD Avoidance: VOC NC Toxics: 112(r): Other: Special Order of Consent for MACT and TAPcompliance	
Contact Data			Application Data	
Facility Contact	Authorized Contact	Technical Contact	Application Number: 2600009.04A Date Received: 10/28/2004 Application Type: 1st time TV Application Schedule: State Existing Permit Data Existing Permit Number: 03387/R26 Existing Permit Issue Date: 12/22/2004 Existing Permit Expiration Date: 09/30/2008	
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Review Engineer: Michael Brandon, P.E. Review Engineer's Signature: _____ Date: _____			Comments / Recommendations: Issue 03387/R27 Permit Issue Date: Permit Expiration Date:	

I. Introduction

The U.S. Environmental Protection Agency (EPA) has given interim approval to North Carolina's Title V operating permits program effective on December 15, 1995. This EPA approval triggered the requirements for Title V facilities to submit permit applications to the Division of Air Quality. Title V facilities are required to obtain an operating permit which addresses all applicable regulations under the State Implementation Plan, Federal Implementation Plan, and other provisions of the Clean Air Act (CAA). The Title V Operating Permit will define all of the facility's obligations under the CAA.

This Initial Title V Air Permit application Review intends to convey all pertinent emissions data, rules, policies, and engineering assumptions used to construct the DRAFT Title V operating permit. The primary source of information used to construct the permit is the above referenced air permit application.

II. Background Information

The Title V operating permit replaces an existing Air Quality Construction and Operation Permit No. 03387R26 that was issued on December 22, 2004 and is currently scheduled to expire on September 30, 2008.

Pursuant to 15A NCAC 2Q .0502, Borden Chemicals submitted an initial Title V application to the Division of Air Quality on October 28, 2004. The application was considered complete for processing upon receipt of the in December 2004 action plan quarterly report. The permit is required to go to public notice pursuant to 15A NCAC 2Q .0521.

III. Facility Description

This facility makes produces formaldehyde and urea formaldehyde concentrate using the metallic silver catalyst process and formaldehyde using the metallic oxide catalyst process, urea formaldehyde resin, phenol formaldehyde resin, and hexamethylenetetramine (hexamine).

IV. Statement of Compliance

The facility discovered that they were major for HAP around October 2003 and requested Title V status. The synthetic minor condition was removed from their state construction permit and they were required to submit a complete Title V application by October 2004. However, as the facility was major for HAPs, they developed an action plan with the Fayetteville Regional Office to bring the facility formaldehyde and hexamine operations into compliance with the HON (40 CFR 63, Subpart F, G, and H) and the facility resin production operations into compliance with the Amino/Phenolic resins MACT (40 CFR 63, Subpart OOO). The action plan required quarterly reports of increments of progress and the installation of controls for the resin batch and non-batch processes to achieve compliance with the MACT standards. The latest report, December 2004, indicates that the remaining provisions of the HON that need to implemented are those covered under leak detection and repair (40 CFR 63, Subpart H) and the possible determination of new parametric monitoring temperature values for the operation of the catalytic oxidizer for formaldehyde plant No. 4 (ID No. ES16). The report also states that the Amino/Phenolic resins MACT provisions that remain to be completed include the erection and start up of the aggregate batch vent scrubber (ID No. CD200) and the implementation of leak detection and repair pursuant to referenced MACT Subpart UU. This permit includes provisions for associated the testing of the aggregate batch vent scrubber to determine compliance and parametric monitoring values, for the installation of continuous monitoring equipment, and the implementation of leak detection and repair pursuant to Subparts H and UU.

The DAQ has reviewed the compliance status of this facility and has determined that the facility has exceeded the threshold values for HAP emissions and has been out of compliance as follows:

- A. monitoring, recordkeeping, and reporting requirements of 40 CFR 63 Subpart G since April 22, 1997;
- B. monitoring, recordkeeping, and reporting requirements for heat exchanger and maintenance wastewater pursuant to 40 CFR 63, Subpart F and wastewater requirements of 40 CFR 63, Subpart G since April 22, 1999;
- C. monitoring, recordkeeping, and reporting requirements of 40 CFR 63 Subpart H since October 24, 1994 (assumes major status at this time even though data provided confirms major status only as far back as 1997);
- D. emission limits, testing, monitoring, recordkeeping, and reporting requirements of 40 CFR 63 Subpart OOO since January 20, 2003; and
- E. monitoring, recordkeeping, and reporting requirements of 40 CFR 63 Subpart UU since January 20, 2003.

Although the potential emissions of VOC are 121 tons per year, the facility has not actually exceeded 100 tons per year of actual emissions of VOC or SO₂. Therefore, the facility is not implicated in any PSD applicability issues and is not deemed to be non compliant with Title V requirements based on criteria pollutants.

The applicant has certified that the facility will be in compliance with all applicable requirements as outlined in the "Special Order of Consent" compliance schedule (Section XIII). The applicant has also certified that the facility will be in compliance with any applicable requirements taking effect during the term of the permit and will meet such requirements on a timely basis.

V. Summary of Emission Sources and Control Devices

The following table identifies all emission sources and associated control devices for which the Initial Title V Operating Permit is being issued.

Emission Source ID No.	Emission Source Description	Control/ Recovery Device ID No.	Control Device Description
FORMALDEHYDE PRODUCTION			
FORM12 MACT G (fuel gas system process vent exemptions)	Silver catalyst formaldehyde processes consisting of: two parallel silver catalyst converter sets (each with multiple beds) feeding two methaform columns (overheads go to absorption, bottoms are product) and four sets of primary/secondary absorbers . The overheads of the secondary absorbers are piped to a boiler (12.4 million Btu per hour heat input) as the primary fuel and the bottoms are fed to the primary absorbers. The overheads of the primary absorber are sent to the secondary absorber and the bottoms are fed to the distillation column raw product feed tank (4,000 gallons; ID No. CRF12). The distillation column bottoms are product/reflux and the overhead is sent to the purifier . Purifier overheads are fed back to the catalyst converters and bottoms (methanol) are used as distillation column reflux. Methanol feed is introduced at the purifier.		
CFR12	distillation column raw product feed tank for formaldehyde process (ID No. FORM12)	CVS1 - closed vent system venting to FORM12, FORM3, or ES16 as raw material feed	
HX9A(E4) MACT F 63.104	formaldehyde/cooling tower water plate and frame heat exchanger (Plant 1 of FORM12)	na	na
HX9B(E3) MACT F 63.104	formaldehyde/cooling tower water plate and frame heat exchanger (Plant 1 of FORM12)	na	na
HXT5 MACT F 63.104	cooling tower water shell and methanol tube heat exchanger (Plant 1 of FORM12)	na	na
HXE16 MACT F 63.104	cooling tower water shell and methanol tube heat exchanger (Plant 1 of FORM12)	na	na
HXT1 MACT F 63.104	formaldehyde/cooling tower water plate and frame heat exchanger (Plant 2 of FORM12)	na	na
HXT2 MACT F 63.104	formaldehyde/cooling tower water plate and frame heat exchanger (Plant 2 of FORM12)	na	na
FORM3 MACT G (fuel gas system process vent exemptions)	Silver catalyst formaldehyde processes consisting of: silver catalyst converter (multiple beds) feeding a set of primary/secondary absorbers . The overheads of the secondary absorber are piped to a boiler (20.9 million Btu per hour heat input) as the primary fuel and the bottoms are fed to the primary absorber. The overheads of the primary absorber are sent to the secondary absorber and the bottoms of the primary absorber are fed to the distillation column raw product feed tank (ID No. 16,000 gallons; CFR3). The distillation column bottoms are product and the overhead is sent to the purifier . Purifier overheads are fed back to the catalyst converters and bottoms (methanol) used as distillation column reflux. Methanol feed is introduced at the purifier.		
CFR3	distillation column raw product feed tank for formaldehyde process (ID No. FORM3)	CVS1 - closed vent system venting to FORM12, FORM3, or ES16 as raw material feed	

Emission Source ID No.	Emission Source Description	Control/ Recovery Device ID No.	Control Device Description
HX2 MACT F 63.104	formaldehyde/cooling tower water plate and frame heat exchanger (Plant 3, ID No. FORM3)	na	na
HX6 MACT F 63.104	cooling tower water shell and methanol tube heat exchanger (Plant 3, ID No. FORM3)	na	na
HX7C MACT F 63.104	cooling tower water shell and formaldehyde tube heat exchanger (Plant 3, ID No. FORM3)	na	na
HX8 MACT F 63.104	formaldehyde/cooling tower water plate and frame heat exchanger (Plant 3, ID No. FORM3)	na	na
STORE1MAF1 through STORE1MAF3 MACT G STVG2 and STORE1FORM1 through STORE1FORM14 MACT G STVG2	three methaform storage tanks; 16,195 gallons each 14 formaldehyde (various blends) storage tanks; 16,195 gallons each	CVS1 closed vent system venting through the overflow tank (10,000 gallons; ID No. OVT) to FORM12, FORM3, ES16 as raw material feed	
ES16 NSPS VV NSPS III MACT G PVG1	Metal Oxide Catalyst Formaldehyde Process consisting of: two sets of vaporizer/ reactor/after cooler feeding the adsorption column . Column overhead is vented to the front end of the process and control. Column bottoms are product.	CVS2 MACT G 63.148 CD17	closed vent system venting from absorption column to catalytic oxidizer with electric startup
HX7 MACT F 63.104	urea formaldehyde concentrate/cooling tower heat exchanger (Plant 4, ID No. ES16)	na	na
HX8A MACT F 63.104	formaldehyde/cooling tower heat exchanger (Plant 4, ID No. ES16)	na	na
HX8B MACT F 63.104	formaldehyde/cooling tower heat exchanger (Plant 4, ID No. ES16)	na	na
HX10 MACT F 63.104	formaldehyde/cooling tower heat exchanger (Plant 4, ID No. ES16)	na	na
HX11 MACT F 63.104	formaldehyde/cooling tower heat exchanger (Plant 4, ID No. ES16)	na	na
FORMEQLK MACT H	pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems (required by MACT H) in HAP service		
MOSTORE 1A through MOSTORE1C MACT G STVG2	Three urea formaldehyde concentrate storage tanks; 67,686 gallons each	CD200	scrubber (to be determined)

Emission Source ID No.	Emission Source Description	Control/ Recovery Device ID No.	Control Device Description
MOSTORE1D and MOSTORE1E MACT G STVG2	Two 50 %wt formaldehyde storage tanks; 67,686 gallons each		
MOSTORE 2 MACT G STVG2	50 %wt formaldehyde storage tank; 25,031 gallons		
UW1	urea/water tank; 20,306 gallon	CD41	PM spray tower scrubber; six gallon per minute minimum water injection
UW2	urea/water tank; 20,306 gallon	CD43	PM spray tower scrubber; six gallon per minute minimum water injection
HEXAMINE PRODUCTION			
HRE MACT G PV2, WW2	hexamethylenetetramine reactor with liquid ring vacuum pump; five tons per hour nominal rate	CDSC2	tray tower scrubber; 11 gallons per minute minimum water injection rate
HDRY	hexamethylenetetramine direct, natural gas-fired rotary dryer (0.4 million Btu per hour heat input; five ton per hour nominal rate)		
ESOT1 MACTG SVG2	hexamine process water recycle tank; 21,757 gallons	na	na
ESOT2 MACTG SVG2	hexamine process water recycle tank; 23,311 gallons	na	na
ESOT3 MACTG SVG2	hexamine process water recycle tank; 19,363 gallons	na	na
RO MACTG WW (TO BE DETERMINED)	reverse osmosis hexamine filtration for reactor process water	na	na
ESCT1 MACTG SVG2	hexamine concentrate water recycle tank; 12,956 gallons	na	na
ESCT2 MACTG SVG2	hexamine concentrate water recycle tank; 12,956 gallons	na	na
ESLH1 MACTG SVG2	liquid hexamine tank; 30,728 gallons	na	na
ESLH2 MACTG SVG2	liquid hexamine tank; 30,728 gallons	na	na
ESDS MACTG SVG2	hexamine distillate tank; 10,364 gallons	na	na

Emission Source ID No.	Emission Source Description	Control/ Recovery Device ID No.	Control Device Description
HEXAEQLK MACT H	pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems (required by MACT H) in HAP service		
RESIN PRODUCTION			
BR2 MACT 000 NRBPV 63.1408	urea/formaldehyde No. 2 batch reactor (17,000 gallon) with internal heat transfer coils and reflux condenser	CVS3 MACT 000/SS 63.983 CD200	closed vent system venting to scrubber (to be determined)
BR2DRT MACT 000 NRBPV 63.1408	distillate receiving tank for reflux condenser on batch reactor No. 2		
FWTBR2 MACT 000 NRBPV 63.1408	weigh tank (12,000 gallons) for batch reactor No. 2		
BR3 MACT 000 RBPV 63.1408	urea/formaldehyde No. 3 batch reactor (15,000 gallons) with internal heat transfer coils and reflux condenser		
BR3DRT MACT 000 NRBPV 63.1408	distillate receiving tank for reflux condenser on No. 3 batch reactor		
FWTBR3 MACT 000 NRBPV 63.1408	weigh tank (10,000 gallons) for No. 3 batch reactor		
VST2/3	liquid ring vacuum seal water tank (11,000 gallons) for batch reactors No. 2 and No. 3 vacuum systems		
BR4 MACT 000 RBPV 63.1408	phenol/formaldehyde No. 4 batch reactor (18,000 gallons) with internal heat transfer coils and reflux condenser		
VST4	liquid ring vacuum seal water tank for No. 4 batch reactor vacuum system		
BR4DRT MACT 000 NRBPV 63.1408	distillate receiving tank for reflux condenser on No. 4 batch reactor	CD104	PM spray tower scrubber with mist eliminator; 10 gallons per minute water injection
ES103	"ready to use" mixing tank; 3,000 gallons Non-HAP Service Only		
BREQLK MACT 000 63.1410	pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems in HAP service, and control devices or closed vent systems (required by MACT UU) for batch reactor No. 2, No. 3 and No. 4		
ES24	urea weighing and conveying operation for BR2	CD24	fabric filter 172 square feet of filter area

Emission Source ID No.	Emission Source Description	Control/ Recovery Device ID No.	Control Device Description
UWC2	urea weighing and conveying operation for BR3	CDBF2	fabric filter 172 square feet of filter area
ES26	urea weighing and conveying operation for BR4	CD26	fabric filter 172 square feet of filter area
PT1, PT2	two 25,000 gallon phenol tanks; 14.48 kPa @149F	na	na
RTF1 through RTF8	eight 16,000 gallon resin storage tanks	na	na
RTF9	10,000 gallon resin/diethylene glycol storage tank	na	na
RTF10	10,000 gallon resin storage tank	na	na
RTF11 through RTF 37	27-30,000 gallon resin storage tanks	na	na
RTF38	15,000 gallon resin storage tank	na	na
RTF39	25,000 gallon resin storage tank	na	na
RTF40	20,000 gallon resin storage tank	na	na
TRANSFER OPERATIONS			
RLOAD1 MACT G TOG1	railcar methaform product load out (two arms)	CVS1 MACT G 63.148 closed vent system venting through the overflow tank (10,000 gallons; ID No. OVT) to formaldehyde processes (FORM12, FORM3, or E16) as raw material feed	
RLOAD2 MACT G TOG1	railcar formaldehyde product load out (two arms)		
TLOAD1A MACT G TOG1	tank truck formaldehyde mixed product load out (one arm)		
TLOAD1B	tank truck urea formaldehyde resin and phenol/formaldehyde resin load out	na	na
RLOAD3 MACT G TOG2	railcar urea formaldehyde concentrate product load out (two arms)	CD200	scrubber (to be determined)
TLOAD2A MACTG TOG2	tank truck urea formaldehyde concentrate product load out (one arm)		
TLOAD2B	tank truck urea formaldehyde resin , and phenol formaldehyde resin load out	na	na
TLOAD3A MACTG TOG2	tank truck hexamine load out	na	na
TLOAD3B	tank truck urea formaldehyde resin, phenol formaldehyde resin, and wax product load out	na	na
RLOAD4 MACTG TOG2	rail car hexamine load out	na	na
TLOAD4	tank truck urea formaldehyde resin and phenol formaldehvide resin load out.	na	na

Emission Source ID No.	Emission Source Description	Control/ Recovery Device ID No.	Control Device Description
	and receiving for caustic, temulose, beet molasses, and phenol		
TLOAD5	tank truck urea formaldehyde resin and phenol formaldehyde resin load out, and receiving for aqueous ammonia	na	na
TLOAD6	tank truck urea formaldehyde resin and phenol formaldehyde resin load out	na	na
OTHER			
METH1 NSPS Kb MACT G STG1	methanol storage No. 1 internal floating roof (two seals one mounted above the other) tank; 254,715 gallons	na	na
METH2 NSPS Kb MACT G STG1	methanol storage tank No. 2 internal floating roof (two seals one mounted above the other) tank; 254,715 gallons	na	na
ES105 NSPS Kb MACT G STG1	methanol/water distillate internal floating roof (two seals one mounted above the other) tank; 25,700 gallon	na	na
WWTP	waste water treatment plant	na	na
ES3 PSD AVOIDANCE	boiler No. 3; natural gas, No. 4, No. 5, No. 6 fuel oil-fired; 20.9 million Btu per hour input	na	na
ES4 PSD AVOIDANCE	boiler No. 4; natural gas, No. 4, No. 5, No. 6 fuel oil-fired; 20.9 million Btu per hour input	na	na

VI. Emission Source-by-Source Evaluation

A. Formaldehyde Production

silver catalyst formaldehyde process (ID No. FORM12) venting as fuel gas to boiler

silver catalyst formaldehyde process (ID No. FORM3) venting as fuel gas to boiler

1. Description

Formaldehyde plants No. 1 and No. 2 are integrated to operate simultaneously. The three formaldehyde plants No. 1, No. 2, and No. 3 (ID Nos. FORM12 and FORM3) produce formaldehyde blends. The emissions from these complex process units are used as a fuel gas in boilers used to support the process.

2. Applicable Regulatory Requirements

The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	emissions from the process shall be at all times be ducted to the process fuel gas system and combusted in the respective boiler.	15A NCAC 2D.1111 40 CFR 63, Subpart G
PM	particulate emissions shall not exceed 0.35 pounds per million Btu heat input	15A NCAC 2D.0503
SO ₂	sulfur dioxide emissions shall not exceed 2.3 pounds per million Btu heat input	15A NCAC 2D .0516
visible emissions	visible emissions shall not exceed 40 percent opacity	15A NCAC 2D .0521
HAP	start up, shut down and malfunction (See Section VII. A.1. Multiple Emission Sources)	15 A NCAC 2D .1111 40 CFR 63, Subpart A
HAP	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.3. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **15A NCAC 2D .1111: 40 CFR 63 Subpart G, OHAP from SOCM1**

i. Regulatory Analysis

The Permittee is required to reduce emissions of total organic hazardous air pollutants by 98 weight percent or to a concentration of 20 parts per million by volume, whichever is less stringent. However, there are no testing, monitoring, recordkeeping or reporting requirements when the gaseous emissions are used as a fuel gas. Leak detection and repair pursuant to Subpart H may apply if the fuel gas system is in HAP service. The regulation implies compliance with this standard when a fuel gas system is employed. There are no bypasses to the atmosphere for the fuel gas system.

ii. Testing, Monitoring, Recordkeeping, and Reporting Requirements
none

b. **15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT**

EXCHANGERS

- i. Regulatory Analysis
Emissions of particulate matter from the combustion of formaldehyde process gases that are discharged from the tail gas boilers into the atmosphere shall not exceed 0.35 pounds per million Btu heat input.
 - ii. Testing, Monitoring, Recordkeeping, Reporting Requirements
Accountability of particulate emissions from these process heaters using formaldehyde plant tail gas as fuel is not necessary because the fuel is a clean light gas that produces little, if any, particulate emission.
- c. **15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**
- i. Regulatory Analysis
Emissions of sulfur dioxide from these process heaters shall not exceed 2.3 pounds per million Btu heat input.
 - ii. Testing, Monitoring, Recordkeeping, Reporting Requirements
Accountability of particulate emissions from the boilers using formaldehyde plant tail gas as fuel is not necessary because the fuel is a clean light gas that produces little, if any, sulfur dioxide emission.
- d. **15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**
- i. Regulatory Analysis
Visible emissions from the process heaters shall not be more than 40 percent opacity when averaged over a six-minute period.
 - ii. Testing, Monitoring, Recordkeeping, Reporting Requirements
Accountability of particulate emissions from these process heaters using formaldehyde plant tail gas as fuel is not necessary because the fuel is a clean light gas that produces little, if any, visible emission.

**B. Formaldehyde Production - Group 1 Process Vent
 metal oxide catalyst formaldehyde process (ID No. ES16) with catalytic oxidizer (ID No. CD17)**

1. Description
Formaldehyde plant No. 4 (ID No. ES16) produces formaldehyde blends and urea formaldehyde concentrate. A catalytic oxidizer controls emissions.
2. Applicable Regulatory Requirements
The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAP	The Permittee shall reduce HAP emissions by 98 percent by weight or to a concentration of 20 ppm by volume, whichever is less stringent. [40 CFR 63.113(2)]	15A NCAC 2D .1111 40 CFR 63, Subpart G
VOC	98 wt percent or 20 ppmv control - Superseded. A Group 1 process vent that is also subject to 40 CFR Part 60, Subpart III is required to comply only with 40 CFR 63, Subpart G. [40 CFR 63.110(d)]	15A NCAC 2D .0524 40 CFR 60, Subpart III NSPS for VOC from SOCOMI Air Oxidation Units
VOC	Leak Detection and Repair - Superseded. All equipment subject to this NSPS will be monitored in accordance with 40 CFR 63, Subpart H. [40 CFR 63.160(c)]	15A NCAC 2D .0524 40 CFR 60, Subpart VV NSPS for Equipment leaks of VOC from the SOCOMI
HAP	start up, shut down and malfunction (See Section VII. A.1. Multiple Emission Sources)	15 A NCAC 2D .1111 40 CFR 63, Subpart A
HAP	Leak Detection and Repair of Vapor Collection/Closed Vent Systems (40 CFR 63.148)	15 A NCAC 2D .1111 40 CFR 63, Subpart G.

Regulated Pollutant	Limits/Standards	Applicable Regulation
	(See Section VII. A.2. Multiple Emission Sources)	
HAP	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.3. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3.. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **40 CFR 63, SUBPART G, GROUP 1 PROCESS VENT REQUIREMENTS**

i. Regulatory Analysis

The Permittee shall reduce emissions of total organic hazardous air pollutants by 98 weight percent or to a concentration of 20 parts per million by volume, whichever is less stringent. This control will be achieved with an electrically started catalytic oxidizer. The Permittee is allowed one excursion per semi annual reporting period. Each excursion beyond the allowed exception shall be a violation. Excursions include temperature averages outside of the allowable parameters as well as insufficient monitoring data. There are no bypasses to the atmosphere for the closed vent system.

ii. Testing Requirements

Testing was conducted pursuant to NSPS requirements for SOCOMI air oxidation reactors. Retesting will only be necessary should new operating temperature parameters need to be determined based daily average compliance versus the three hour average compliance necessary for NSPS compliance.

iii. Monitoring Requirements

The Permittee is presently required to continuously monitor catalytic oxidizer bed inlet temperature and the temperature rise across the catalyst bed. Two sets of minimum temperature operating parameters were determined for two operating scenarios, which are production of formaldehyde blends and production of urea formaldehyde concentrate. However, NSPS provides a 28 °C leeway for compliance for the inlet temperature and a 20 percent compliance leeway for the minimum temperature rise across the catalyst bed. The MACT does not. Therefore, the Permittee is required to meet temperature parameters without the leeway on a daily average basis, but may continue to meet the temperature parameters on a three hour average basis with leeway if retesting is completed by December 31, 2005 to provide new temperature parameters for MACT (i.e., daily average) monitoring purposes.

iv. Recordkeeping Requirements

Continuous measurements of temperature are required (at least four per hour) and the Permittee is required to maintain daily average values. Records must also be kept regarding monitor system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; source and monitor start-ups, shutdowns, and malfunctions; and periods of non-operation of the chemical manufacturing process unit

v. Reporting Requirements

The Permittee is required to report all excursions, included when monitoring data is not collected.

C. Formaldehyde Production - Subpart F Heat Exchange Systems

Six Heat Exchanger Systems for formaldehyde process FORM12 (ID Nos. HX9A, HX9B, HXT5, HXE16, HXT1, and HXT2)
Four Heat Exchanger Systems for formaldehyde process FORM3 (ID Nos. HX2, HX6, HX7C, and HX8)

Five Heat Exchanger Systems for formaldehyde process ES16 (ID Nos. HX7, HX8A, HX8B, HX10, and HX11)

1. Description

These are noncontact heat exchangers whose cooling water may become contaminated with process fluids containing HAPs that would ultimately be released to the atmosphere should there be a leak between the two fluid systems. Systems whose process fluid could become contaminated with the cooling water in the event of a leak are not covered.

2. Applicable Regulatory Requirements

The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAP	Heat Exchanger leak detection and repair	15A NCAC 2D.1111 49 CFR 63, Subpart F
HAP	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.3. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F

a. **40 CFR 63.104: HEAT EXCHANGE SYSTEM REQUIREMENTS**

i. Regulatory Analysis

There are 15 heat exchange systems that are in HAP service that could leak process fluids into the cooling water, which would ultimately end up on the atmosphere. The remaining systems were modified to increase coolant pressures such that the coolant is leaked to the process fluid, or the exchangers are not in HAP service.

ii. Monitoring Requirements

The Permittee is required to monitor the exchangers monthly for the first six months and quarterly thereafter to detect leaks. A leak is determined by a statistically significant difference in HAP concentration of the inlet and outlet cooling water.

iii. Recordkeeping Requirements

The Permittee is required to maintain records of

- (A) monitoring data indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination;
- (B) records of any leaks detected and the date the leak was discovered;
- (C) the dates of efforts to repair leaks; and
- (D) the method or procedure used to confirm repair of a leak and the date repair was confirmed.

iv. Reporting Requirements

Semi annual reporting of leaks, leak repair, and any delay of leak repair.

D. Formaldehyde Production - Subpart H (LDAR) Process Equipment Groups

MEOH Tanks, Plant 1, Plant 2, P3 process area

Pumps, agitators, pressure relief devices, open-ended valves or lines, valves, connectors, instrumentation systems, compressors, and sampling connection systems (ID No. FORMEQLK) and Plant 4 (ID No. ES16)

Pumps, agitators, pressure relief devices, open-ended valves or lines, valves, connectors, instrumentation systems in VOC service, compressors, sampling connection systems in VOC service and subject to 40 CFR 60, Subpart VV.

Hexamine Production - Subpart H Process Equipment Group-Hexa

Pumps, agitators, pressure relief devices, open-ended valves or lines, valves, connectors, instrumentation systems, compressors, and sampling connection systems (ID No. FORMEQLK)

1. Description

These are equipment that are in organic hazardous air pollutant service, which means that the gases, vapors, or fluids contained in these equipment contain at least five percent by weight organic HAP.

2. Applicable Regulatory Requirements

The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	Equipment Leak Detection and Repair	15A NCAC 2D .1111 (40 CFR 63, Subpart H)
HAP	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.3. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **15A NCAC 2D .1111: NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY - Subpart H**

i. Regulatory Analysis

These are specific procedures for leak detection and repair of process equipment in HAP service to prevent HAPs from entering the environment from leaking equipment including: pumps, agitators, pressure relief devices, open-ended valves or lines, valves, connectors, instrumentation systems, compressors, and sampling connection systems. These requirements take the place of NSPS VV requirements with the caveat that VOC be treated as HAPs. The equipment was subdivided into process groups for the intent of maintaining separate recordkeeping and monitoring requirements for each group. There were no compressors, sampling connection systems, surge tanks, bottoms receivers, or closed vent systems found to be affected equipment. However, the LDAR requirements were included for compressors and sampling connection systems that may be added at a later date without permit revision. It is anticipated that the addition of surge vessel, bottoms receivers, or closed vent systems will require permit modification.

- ii. **Monitoring Requirements**
 The Permittee is required to monitor all equipment with instrumentation, by visual inspection, or both. All equipment that is difficult or hazardous to inspect is to be identified for inspection at some point in time. The frequency of monitoring is weekly for pumps, and from monthly to once per year for valves dependant on the number and frequency of leaks detected for each group of equipment, monthly for agitators, and every year or every two years for connectors. The remaining equipment inspection is as needed for pressure release and as discovered by random visual inspection for equipment in heavy liquid service.
- iii. **Recordkeeping Requirements**
 Record of all visual and instrument monitoring, leaking equipment, and repairs is to be maintained by the Permittee.
- iv. **Reporting Requirements**
 Semi annual reporting of leaks and leak repairs.

E. Formaldehyde Production

urea water tank (ID No. UW1) with wet scrubber (ID No. CD41)
 urea water tank (ID No. UW2) with wet scrubber (ID No. CD43)

Resin Production

ready to use mix tank (ID No. ES103) with wet scrubber (ID No. CD104)
 urea weighing and conveying for BR2 (ID No. ES24) with fabric filter (ID No. CD24)
 urea weighing and conveying for BR3 (ID No. UWC2) with fabric filter (ID No. CDBF2)
 urea weighing and conveying for BR4 (ID No. ES26) with fabric filter (ID No. CD26)

- 1. **Description**
 These are mixing operations involving non-HAP compounds. The Permittee has stated that the "ready to use mix tank " had been used to mix materials containing HAP but will no longer do so. A wet scrubber controls particulate emissions from these processes.
- 2. **Applicable Regulatory Requirements**
 The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	particulate emissions shall not exceed the rate prescribed by the process weight equation for process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pounds per hour, and P = process weight in tons per hour	15A NCAC 2D .0515
visible emissions	visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants	15A NCAC 2 D.1100

Regulated Pollutant	Limits/Standards	Applicable Regulation
	(See Section VII. B.4. Multiple Emission Sources)	

- a. **15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**
 - i. **Regulatory Analysis**
 These are sources of particulate, VOC, HAP and TAP emissions. Each source must comply with the process weight rate determined emission limit. These operations are conducted in a batch mode. It is anticipated that these sources will comply with the allowable limits because of the use of control equipment and because the short duration of emissions averaging over an entire hour.
 - ii. **Monitoring Requirements**
 The Permittee is required to verify daily that water is flowing to the scrubbers when a source is in operation. Monthly equipment visual inspection is required to ensure the integrity of duct work and equipment.
 - iii. **Recordkeeping Requirements**
 The Permittee is required to maintain records of all inspections and equipment repair.
 - iv. **Reporting Requirements**
 Semi annual reports require a summary of monitoring activity and any equipment repair.

- b. **15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**
 - i. **Regulatory Analysis**
 Visual emissions from each source may not exceed 20 percent opacity. Compliance with this limitation is anticipated due to the use of control equipment.
 - ii. **Monitoring Requirements**
 The Permittee is required monitor emissions from each source once per month to verify that no abnormal emission is occurring.
 - iii. **Recordkeeping Requirements**
 The Permittee is required to maintain records of all inspections.
 - iv. **Reporting Requirements**
 Semi annual reports require a summary of monitoring activity and any anomalies.

F. Hexamine Dryer (ID No. HDRY) with wet scrubber (ID No. CDSC2)

1. Description

Ammonia and formaldehyde are contacted in the reactor to produce hexamethylenetetramine (a.k.a. hexamine or hexa). The solution is separated from the precipitate in the centrifuge and the powder sent to the dryer and the centrate is recycled to the process. A wet scrubber is used to control particulate emissions fro this dryer.

2. Applicable Regulatory Requirements

The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	particulate emissions shall not exceed the rate prescribed by the process weight equation for process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pounds per hour, and P = process weight in tons per hour	15A NCAC 2D .0515
SO ₂	Sulfur dioxide emissions shall not exceed 2.3 pounds per million Btu heat input.	15A NCAC 2D .0516
visible emissions	visible emissions shall not exceed 40 percent opacity	15A NCAC 2D .0521
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES**

i. Regulatory Analysis

This source must comply with the process weight rate determined emission limit. Maximum emissions based on five tons per hour potential throughput are about 12 pounds per hour of PM. Emissions after control are estimated to be about 0.35 pounds per hour. As this is a direct fired source, 15A NCAC 2D .0503 does not apply.

ii. Monitoring Requirements

The Permittee is required to verify daily that water is flowing to the scrubbers when a source is in operation. Monthly equipment visual inspection is required to ensure the integrity of duct work and equipment.

iii. Recordkeeping Requirements

The Permittee is required to maintain records of all inspections and equipment repair.

iv. Reporting Requirements

Semi annual reports require a summary of monitoring activity and any equipment repair.

b. **15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

i. Regulatory Analysis

Emissions from this natural gas-fired source are limited to 2.3 pounds per million Btu heat input. Since there are no contribution from the raw material heated, compliance will be achieved.

- ii. Monitoring, Recordkeeping, and Reporting Requirements
 None of the above is required for natural gas firing.
- c. **15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS**
 - i. Regulatory Analysis
 Visual emissions from each source may not exceed 40 percent opacity. Compliance with this limitation is anticipated due to the use of control equipment.
 - ii. Monitoring Requirements
 The Permittee is required monitor visible emissions every month to verify that no abnormal emission is occurring.
 - iii. Recordkeeping Requirements
 The Permittee is required to maintain records of all inspections.
 - iv. Reporting Requirements
 Semi annual reports require a summary of monitoring activity and any anomalies.

**G. ^aHexamine Reactor (ID No. HRE) - Group 2 Process Vent, Group 2 wastewater
^bReverse Osmosis hexamine filter (ID No. RO) - Group 2 wastewater**

1. Description
 Ammonia and formaldehyde are contacted in the reactor to produce hexamethylenetetramine (a.k.a. hexamine or hexa). The solution is separated from the precipitate in the centrifuge and the powder sent to the dryer and the centrate is recycled to the process. A bleed stream from the reactor is sent to the reverse osmosis unit where a hexamine concentrated stream is created for use at the wax plant. Permeate from the RO is sent to waste water treatment the group designation of this water is to be determined. The vacuum pump seal water was determined to be a Group 2 waste water because it contacts group 1 process vent emissions. This vacuum pump is considered to be a part of the reactor and so the seal water discharge is considered to emanate from the reactor. However, the reactor does not directly discharge any waste water.
2. Applicable Regulatory Requirements
 The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAP ^a	The Permittee shall maintain a TRE greater than 4.0 for the group 2 process vent	15A NCAC 2D .1111 40 CFR 63, Subpart G
HAP ^a	The Permittee shall retain records for the group 2 wastewater sources	15A NCAC 2D .1111 40 CFR 63, Subpart G
HAP ^b	The Permittee determine the wastewater group designation for the reverse osmosis hexamine filter (ID No. RO) and request permit modification pursuant to Section 2.3 Schedule of Compliance to incorporate applicable requirements.	15A NCAC 2D .1111 40 CFR 63, Subpart G
HAP ^{ab}	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.3. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F
VOC ^{ab} PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC ^{ab}	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor ^{ab}	Odor Control	15A NCAC 2D.1806

Regulated Pollutant	Limits/Standards	Applicable Regulation
	(See Section VII. B.3. Multiple Emission Sources)	
TAP ^{ab}	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **40 CFR 63, SUBPART G, GROUP 2 PROCESS VENT REQUIRTEMENTS**

- i. Regulatory Analysis
 The Permittee has determined that a TRE greater than four for this source of HAP emissions will be maintained. The estimated potential TRE is 401. No control is required.
- ii. Monitoring, Recordkeeping, and Reporting Requirements
 The Permittee is required to maintain records of the TRE calculations and any process changes that might affect the TRE value. The Permittee must report any TRE changes as a result of process changes

b. **40 CFR 63, SUBPART G, GROUP 2 WASTE WATER REQUIREMENTS**

- i. Regulatory Analysis
 The Permittee has determined that the waste water from these sources does not contain sufficient HAP to classified other than a Group 2 waste water. No treatment or control is required.
- ii. Monitoring, Recordkeeping, and Reporting Requirements
 The Permittee is required to maintain records of the determination of flow and HAP concentrations and any process changes that might affected the determination. The Permittee must report any change in Group designation as a result of process changes.

H. Resin Production - Aggregate Batch Vent Stream

wet Scrubber (ID No. CD200) on:
 three reactors (ID Nos. BR2, BR3, and BR4)
 three distillate receiving tanks (ID Nos. BR2DRT, BR3DRT, and BR4DRT), and
 two formaldehyde weight tank (ID Nos. FWTBR2, FWTBR3).

- 1. Description
 Reactors No. 1 and No. 1 produce urea formaldehyde resins. Reactor No. 3 produces phenol formaldehyde resins. The Permittee has decided to control both reactor batch process vent and non reactor batch process vents under the aggregate batch vent compliance option. A scrubber will be used to control HAP emissions from these sources. The specifics of the scrubber operating requirements and parameters are to be determined under actual operating conditions.
- 2. Applicable Regulatory Requirements
 The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAP	Reduce HAP emissions by 83 percent or to less than or equal to 50 ppmv, whichever is less stringent.	15 A NCAC 2D .1111 40 CFR 63, Subpart OOO
HAP	start up, shut down and malfunction (See Section VII. A.1. Multiple Emission Sources)	15 A NCAC 2D .1111 40 CFR 63, Subpart A
HAP	Closed Vent System Equipment and Operating Requirements [40 CFR 63.983] (See Section VII. A.2. Multiple Emission Sources)	15 A NCAC 2D .1111 40 CFR 63, Subpart OOO/SS
VOC	VOC emissions shall not exceed 100 tons ner	15A NCAC 2Q .0317

Regulated Pollutant	Limits/Standards	Applicable Regulation
PSD AVOIDANCE	consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **40 CFR 63, Subpart OOO, NESHAP for MANUFACTURE OF AMINO/PHENOLIC RESINS**

i. Regulatory Analysis

The Permittee shall reduce organic HAP emissions by 83 weight percent or to a concentration of less than or equal to 50 ppmv, whichever is less stringent, on a continuous basis. The Permittee has proposed to achieve compliance with this limitation with the use of a wet scrubber. The type of scrubber has not yet been specified, but the facility is obligated to complete construction of the unit and commence operation by the end of June 2005. The operating parameters and the addition of any chemical additive will be determined during testing. There are no bypasses to the atmosphere for closed vent system.

ii. Testing Requirements

Testing is required to be completed as outlined in the schedule of compliance pursuant to the Special Order of Consent. During the testing, operating parameters will be established for continuous monitoring.

iii. Monitoring Requirements

The liquid to gas ratio or liquid flow rate as appropriate for the type of scrubber to be employed will be continuously monitored along with scrubber pH as necessary. Compliance will be determined based on daily averages of monitored parameters. A request to incorporate these parameters is required to be submitted to the DAQ pursuant to the Schedule of Compliance.

iv. Recordkeeping Requirements

The Permittee is required to maintain daily average values for the monitored parameters, any equipment or monitor down time, start ups, shut downs, and malfunctions, and periods in which insufficient monitoring data is acquired.

v. Reporting Requirements

The Permittee is required to report any daily average values for the monitored parameters that are outside of the establish limits and periods in which insufficient monitoring data is acquired.

I. Resin Production - Leaks from Equipment Groups

Reactor 2, Reactor 3, Reactor 4 area

pumps, agitators, sampling connection systems, pressure relief devices, open-ended valves or lines, valves, connectors, instrumentation systems, compressors, and sampling connection systems in organic HAP service

1. Description
 These are equipment that are in organic hazardous air pollutant service, which means that the gases, vapors, or fluids contained in these equipment contain at least five percent by weight organic HAP.
2. Applicable Regulatory Requirements
 The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	Equipment Leak Detection and Repair	15A NCAC 2D .1111 (40 CFR 63, Subpart OOO) (40 CFR 63, Subpart UU)
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. 40 CFR 63, Subpart OOO/UU NESHAP for the Amino/Phenol Resins Manufacturing Industry

- i. Regulatory Analysis
 These are specific procedures for leak detection and repair of process equipment in HAP service to prevent HAPs from entering the environment from leaking equipment including: pumps, agitators, pressure relief devices, open-ended valves or lines, valves, connectors, and instrumentation systems. There are no compressors or sampling connection systems in HAP service. However, LDAR requirements were added for compressors and sampling connection systems added at a later date without permit modification. It is anticipated that permit modification will be required for the addition of closed vent systems will required permit modification. The equipment was subdivided into process groups for the intent of maintaining separate recordkeeping and monitoring requirements for each group.
- ii. Monitoring Requirements
 The Permittee is required to monitor all equipment with instrumentation, by visual inspection, or both. All equipment that is difficult or hazardous to inspect is to be identified for inspection at some point in time. The frequency of monitoring is weekly for pumps, and from quarterly for valves, monthly for agitators, and every year or every four years for connectors. The remaining equipment inspection is as needed for pressure release and as discovered by random visual inspection for equipment in heavy liquid service.
- iii. Recordkeeping Requirements
 Record of all visual and instrument monitoring, leaking equipment, and repairs is to be maintained by the Permittee.
- iv. Reporting Requirements
 Semi annual reporting of leaks and leak repairs.

J. TRANSFER OPERATIONS - 40 CFR 63, Subpart G-Group 1

rail car methaform product load out (two loading arms; ID No. RLOAD1)
rail car formaldehyde product load out (two loading arms; ID No. RLOAD2)
tank truck formaldehyde mixed product load out (one loading arm; ID No. TLOAD1A)

1. Description

This is equipment used to transfer material with sufficient HAP concentration and vapor pressure to require control as a Group 1 transfer operation. These loading arms exist at transfer stations with multiple loading arms for various products, not all of which require controls as a group 1 transfer operation. The Permittee has determined that emissions will be recycled to a formaldehyde process as a means of control.

2. Applicable Regulatory Requirements

The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAP	Vapors shall be collected and vented to the formaldehyde processes at all times	15A NCAC 2D .1111 40 CFR 63, Subpart G
HAP	start up, shut down and malfunction (See Section VII. A.1. Multiple Emission Sources)	15 A NCAC 2D .1111 40 CFR 63, Subpart A
HAP	Leak Detection and Repair of Vapor Collection and Closed Vent Systems - 40 CFR 63.148 (See Section VII. A.2. Multiple Emission Sources)	15 A NCAC 2D .1111 40 CFR 63, Subpart G.
HAP	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.3. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **40 CFR 63, Subpart G, Group 1 Transfer Operation Requirements**

i. Regulatory Analysis

Emissions from the transfer operations will be recycled to one of four formaldehyde production units. This will fulfill the control requirements for these sources. The transfers will be limited to trucks meeting the DOT certifications for vapor tightness. There are no bypasses to the atmosphere for closed vent system.

ii. Monitoring, Recordkeeping, and Reporting Requirements

The Permittee is required to monitor the tank truck vapor tightness certifications and the fact that the stream is being routed to a formaldehyde process. Reporting is not required.

K. STORAGE TANKS - 40 CFR 63, Subpart G-Group 1
internal floating roof methanol storage tank (ID No. METH1)
internal floating roof methanol storage tank (ID No. METH2)
internal floating roof methanol distillate storage tank (ID No. ES105)

1. Description
 Storage tanks used to store methanol for the production of formaldehyde and for addition to various products as a stabilizer. Each of the tanks employ and fixed roof with an internal floating roof and each internal floating roof has dual seals.
2. Applicable Regulatory Requirements
 The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOC	[40 CFR 63.110(b)] A group 1 storage vessel that is also subject to the provision of 40 CFR 60, Subpart Kb is required to comply only with the provisions of 40 CFR , Subpart G.	15A NCAC 2D .0524 40 CFR 60, Subpart Kb
HAP	Each tank shall maintain a fixed roof with an internal floating roof.	15A NCAC 2D .1111 40 CFR 63.119, Subpart G
HAP	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.4. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

a. **40 CFR 63, Subpart G, Group 1 Storage Tank Requirements**

- i. Regulatory Analysis
 Each tank shall operating and maintaining a fixed roof and internal floating roof. The internal floating roof shall consist of two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof.
- ii. Monitoring Requirements
 An internal inspection of the tank and the floating roof will be conducted every time the tank is emptied and degasses or every five years unless an external inspection is conducted annually. The internal inspection may then be conducted at ten year intervals unless the tank is emptied and degassed.
- iii. Recordkeeping Requirements
 Records of each inspection are required including any failure detected during the inspection.
- iv. Reporting Requirements
 Reports of inspections conducted, any failures discovered, and repairs performed are required semi annually.

L. Formaldehyde Production

- ^athree methaform storage tanks (ID Nos. STORE1MAF1 through STORE1MAF3)
- ^a14 formaldehyde storage tanks (ID Nos. STOREFORM1 through STORE1FORM14)
- ^a50% formaldehyde storage tank (ID No. MOSTORE2)
- ^athree urea formaldehyde concentrate storage tanks (ID Nos. MOSTORE1A through MORETSTORE1C)
- ^atwo 50% formaldehyde storage tanks (ID No. MOSTORE1D through MOSTORE1E)

Hexamine Production

- ^athree hexamine process water recycle tanks (ID Nos. ESOT1, ESOT2, and ESOT3)
- ^atwo hexamine concentrate water recycle tanks (ID Nos. ESCT1 and ESCT2)
- ^atwo liquid hexamine tanks (ID Nos. ESLH1 and ESLH2)
- ^ahexamine distillate tank (ID No. ESDS)

Resin Production

- ^btwo phenol tanks (ID Nos. PT1 and PT2)
- ^b39 resin storage tanks (ID Nos. RTF1 through RTF8 and RTF10 through RFT40)
- ^bresin/diethylene glycol storage tank (ID No. RTF9)
- ^btwo liquid ring vacuum seal water tanks (ID Nos. VST2/3 and VST4)

Transfer Operations

- ^bthree truck load out stations for urea formaldehyde resin and phenol formaldehyde resin (ID Nos. TLOAD1B, TLOAD2B, and TLOAD6)
- ^btank truck urea formaldehyde resin, phenol formaldehyde resin, and wax load out (ID No. TLOAD3B)
- ^btank truck urea formaldehyde resin and phenol formaldehyde resin load out, and receiving for caustic, temulose, beet molasses, and phenol (ID No. TLOAD4)
- ^btank truck urea formaldehyde resin and phenol formaldehyde resin load out, and receiving of aqueous ammonia (ID No. TLOAD5)
- ^crailcar urea formaldehyde concentrate product load out (ID No. RLOAD3) vented to scrubber (ID No. CD200)
- ^ctank truck urea formaldehyde concentrate product load out (ID No. TLOAD2A) vented to scrubber (ID No. CD200)
- ^ctank truck hexamine load out (ID No. TLOAD3A)
- ^crail car hexamine load out (ID No. RLOAD4)

Other

- ^bwaste water treatment plant (ID No. WWTP)
- ^bprocess waste water holding pond for hexamine production (ID No. HWD)

1. Description
 Tankage for various equipment is used to store raw material, intermediates, recycle material, and/or final product. Loading racks are used for shipping product and receiving raw materials. Waste water holding areas are as specified and may be emission sources for TAP evaluation.
2. Applicable Regulatory Requirements
 The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAP ^a	recordkeeping for group 2 storage tanks	15A NCAC 2D.1111 40 CFR 63, Subpart G
HAP ^c	recordkeeping for group 2 transfer racks	15A NCAC 2D.1111 40 CFR 63, Subpart G
HAP ^{ac}	Maintenance Wastewater Requirements-40 CFR 63.105 (See Section VII. A.3. Multiple Emission Sources)	15A NCAC 2D.1111 40 CFR 63, Subpart F

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOC ^{ab} PSD AVOIDANCE	VOC emissions shall not 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317
VOC ^{abc}	Work Practice Standards for Sources of VOC (See Section VII. B.2. Multiple Emission Sources)	15A NCAC 2D.0958
odor ^{abc}	Odor Control (See Section VII. B.3. Multiple Emission Sources)	15A NCAC 2D.1806
TAP ^{abc}	Toxic Air Pollutants (See Section VII. B.4. Multiple Emission Sources)	15A NCAC 2 D.1100

- a. **40 CFR 63, Subpart G, Group 2 Storage Vessel Requirements**
 - i. **Regulatory Analysis**
There are no requirements for Group 2 storage vessels. The HAP content of each vessel did not meet the vapor pressure required to be classified as a Group 1 storage vessel.
 - ii. **Monitoring, Recordkeeping, Reporting Requirements**
The Permittee is required to keep the storage vessel dimensions and capacity on hand. No other monitoring or recordkeeping is required.
- b. **40 CFR 63, Subpart G, Group 2 Transfer Operation Requirements**
 - i. **Regulatory Analysis**
There are no requirements for Group 2 transfer operations. The HAP content of each transfer operation did not meet the vapor pressure required to be classified as a Group 1 transfer operation vessel.
 - ii. **Monitoring, Recordkeeping, Reporting Requirements**
The Permittee is required to keep the analysis demonstrating the design and actual annual throughput of the transfer rack, documentation of the weight-percent organic HAP's in the liquid loaded (e.g., analyses of the material and engineering calculations), and an analysis documenting the annual rack weighted average HAP partial pressure of the transfer rack.

M. Boiler No. 3 (ID No. ES3) and boiler No. 4 (ID No. ES4)

1. **Description**
These are natural gas and residual fired boilers used for process heat.
2. **Applicable Regulatory Requirements**
The following provides a summary of limits and/or standards for the emission source(s) described above. A review of the information in the application was performed to ensure the appropriate limits and associated calculations used to show compliance were correct.

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Particulate emission shall not exceed 0.39 pounds per million Btu heat input.	15A NCAC 2D .0503
SO ₂	Sulfur dioxide emissions shall not exceed 2.3 pounds per million Btu heat input	15A NCAC 2D .0516
visible emissions	Visible emissions shall not exceed 40 percent opacity.	15A NCAC 2D .0521
SO ₂ PSD AVOIDANCE	Sulfur dioxide emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total. [This is a facility wide emission limit. Compliance is based on boiler	15A NCAC 2Q .0317

Regulated Pollutant	Limits/Standards	Applicable Regulation
	emissions from fuel oil as the sole source of SO ₂ emissions.]	
VOC PSD AVOIDANCE	VOC emissions shall not 100 tons per consecutive 12-month period, rolling monthly total. (See Section VII. B.1. Multiple Emission Sources)	15A NCAC 2Q .0317

- a. **15A NCAC 2D .0503: Particulates from Fuel Burning Indirect Heat Exchangers**
 - i. **Regulatory Analysis**
Emissions of particulate matter from the combustion of natural gas, No. 4, No. 5, and No. 6 fuel oils that are discharged from these sources into the atmosphere shall not exceed 0.39 pounds per million Btu heat input. This should be achieved with proper operation during the combustion of gas and liquid fossil fuels.
 - ii. **Monitoring, Recordkeeping, and Reporting Requirements**
No monitoring, recordkeeping, or reporting is required for the combustion of natural gas, No. 4, No. 5, and No. 6 fuel oils.

- b. **15A NCAC 2D .0516: Sulfur dioxide Combustion Sources**
 - i. **Regulatory Analysis**
Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. This limit will not be exceeded provided the sulfur content of residual oil remains below 2.1 percent by weight.
 - ii. **Monitoring Requirements**
The Permittee is required to monitor the sulfur content of all fuel oils received by way of supplier certification.
 - iii. **Recordkeeping Requirements**
The Permittee is required to maintain records of sulfur content of all fuel oils received by way of supplier certification.
 - iv. **Reporting Requirements**
The Permittee is report semi annually the sulfur content of all fuel oils received.

- c. **15A NCAC 2D .0521: Control of Visible Emissions**
 - i. **Regulatory Analysis**
Visible emissions from the boilers shall not be more than 40 percent opacity when averaged over a six-minute period. Compliance is anticipated with proper operation of the boiler
 - ii. **Monitoring Requirements**
The Permittee is required to monitor visible emissions daily when burning residual fuels to detect any emissions above normal.
 - iii. **Recordkeeping Requirements**
Record of all visible emission inspections is required.
 - iv. **Reporting Requirements**
The Permittee is required to report semi annually the results of visible emissions inspections when abnormal emissions required a Method 9 test to demonstrate compliance, and the result of that test.

- d. **15A NCAC 2Q .0317: PSD Avoidance Condition for Major Source Classification**
 - i. **Regulatory Analysis**
In order to avoid applicability of 15A NCAC 2D .0530(g), the boilers No. 3 and No. 4 (ID Nos. ES3 and ES4) shall discharge into the atmosphere less than 100 tons of sulfur dioxide per consecutive 12-month period, rolling monthly total. This is a facility wide limit. However, only the boilers are significant contributors. The remaining contributions are from natural gas combustion and no addition contributions are expected from any of the raw materials processed.

- ii. **Monitoring Requirements**
 The Permittee must monitor the amount of residual fuel fired in the boilers and the respective sulfur content.
- iii. **Recordkeeping Requirements**
 The amount and sulfur content of each residual fuel fired in each boiler must be maintained and a monthly tally of sulfur dioxide emissions from the boilers calculated.
- iv. **Reporting Requirements**
 The semi annual report requires total calculated sulfur dioxide emissions from the boilers for each of the most recent 17 months and the six 12 month rolling totals of emissions for that reporting period.

VII. Multiple Emission Source Limits

A. Affected Facilities Pursuant to 40 CFR 63, Subparts F, G, H, and OOO/UU/SS

The above emission sources are subject to these limits and/or standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	Startup, Shutdown, Malfunction	15A NCAC 2D .1111 (40 CFR 63, Subpart A)
HAPs	Leak Inspection for vapor collection and closed vent systems-40 CFR 63.148 and 40 CFR 63.983/Subpart SS	15A NCAC 2D .1111 40 CFR 63, Subpart G, OOO/SS
HAP	Maintenance Wastewater Requirements-40 CFR 63.105	15A NCAC 2D.1111 40 CFR 63, Subpart F

1. 40 CFR 63.6(e)(3): Start up, Shut Down and Malfunction Plan

This is a general requirement for all MACT affected facilities to ensure that the Permittee is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation). The plan must address monitoring equipment as well as process and control equipment. The plan is dynamic in that it may be revised by the facility or at the request of the DAQ should it be determined that it does not adequately address all SSM issues relating to the affected equipment. Reporting requirements include semi annual periodic reports that procedures of the plan were consistently followed and immediate reports anytime the plan is not followed.

2. 15A NCAC 2D .1111 [40 CFR 63.148 and 40 CFR 63.983]: Leak Inspection for Vapor Collection and Closed Vent Systems

As may be required by the specific permit provision, this provision requires the Permittee to ensure that the emissions collection system and associated ducting/piping are not allowing emissions to unintentionally bypass the control device. Ducting requires an initial and annual leak inspections using instrumentation. Hard piping requires only initial inspection. Recordkeeping and semi annual reporting is required for all inspections, any leaks detected, and any leak repair (or why a leak was not repaired).

3. 15A NCAC 2D .1111 [40 CFR 63.105]: Maintenance Wastewater Requirements

This is a general requirement for all MACT affected facilities that the Permittee develop a plan to handle waste water generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The plan is an additional part of the SSM plan and follows the recordkeeping and reporting requirements of the SSM plan.

B. Facility Wide

The above emission sources are subject to these limits and/or standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOC PSD AVOIDANCE	VOC emissions shall not exceed 100 tons per consecutive 12-month period, rolling monthly total.	15A NCAC 2Q .0317
VOC	Work Practice Standards for Sources of VOC	15A NCAC 2D.0958
odor	State Enforceable Only The Permittee shall prevent odorous emissions	15A NCAC 2D .1806
TAPS	State Enforceable Only The Permittee shall limit facility wide emissions of formaldehyde.	15A NCAC 2D .1100

1. **15A NCAC 2Q .0317: PSD AVOIDANCE CONDITION for MAJOR SOURCE CLASSIFICATION**
 This permit requirement applies facility wide and limits emissions of VOC to less than 100 tons per consecutive 12 month period, rolling total calculated monthly. The condition allows the Permittee to assume a potential emission for the less sources and calculate an emissions for the fewer greater emission sources based on production rate and established emissions factors, or calculate emissions for each source. Calculations of VOC emissions from the facility must be performed on a monthly basis. Recordkeeping includes the raw data used to develop the monthly emissions as well as documentation of the procedure used for that month. Semi annual reports require the result of the previous 17 monthly emission calculations as well as the six rolling totals calculated for each of the months during the semi annual period.

2. **15A NCAC 2D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS**
 This permit requirement applies facility wide and provides housekeeping and work practice standards to prevent fugitive emissions of VOC to the atmosphere. Monthly inspections are required to ensure the work practice and housekeeping standards are being implemented. Records of inspections are required and semi annual reporting of deviations.

3. **15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**
 This "state enforceable only" permit requirement applies facility wide and prohibits the Permittee from operating the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary. This provision has no recordkeeping or reporting requirement and is complaint based. It is not likely that any complaints will be received from this facility as a rendering plant is located next door.

4. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT**
 This "state enforceable only" permit requirement applies facility wide and requires the Permittee to evaluate formaldehyde impact at the plant boundary and submit application to incorporate specific equipment emission limits in accordance with the SOC and permit Schedule of compliance. The facility was allowed to forgo a new demonstration of formaldehyde impact for the last construction permit because:
 - a. they were not sure of the emission rates after implementation of control;
 - b. the control was needed ASAP for MACT compliance;
 - c. the emissions would be less after the use of controls for the controlled sources;
 - d. the only emission parameters changed for the sources affected by the modification were stack location and parameters;
 - e. the impacts were not near the AAL; and
 - f. a re-assessment of emissions from un-affected existing sources as well as previously un-addressed sources is necessary.

VIII. Schedule of Complinace

Compliance Deadlines Contained in the "Special Order of Consent"

Activity	Date
Complete Group 1 Loading Rack Vent System Construction and submit NCS information to DAQ.	July 15, 2005
Implement Group 1 Loading Rack Start-up Shut-down Malfunction Plan changes.	August 15, 2005
Conduct an initial and annual inspection of the closed vent system that routes the loading rack exhaust to the front end of the process. (The portion of the system that is under vacuum does not require an inspection.)	December 1, 2005
<p>If the daily average values, established pursuant to testing for 40 CFR 60, Subpart III, can not be achieved, the catalytic oxidizer (ID No. CD17) for No. 4 formaldehyde plant (ID No. ES16) shall establish new minimum temperatures for catalyst bed inlet and temperature differential across the catalyst bed through a stack test.</p> <p>a. If necessary, stack test conducted.</p> <p>b. If necessary, stack test report and permit application to modify the parameters, as well as any required NCS-related information pertaining to Plant 4, submitted to DAQ.</p> <p>In the interim period, the Permittee will demonstrate compliance based on a three-hour average and the following parametric values:</p> <p>a. a minimum catalyst bed inlet temperature of 197 °C when producing formaldehyde and 203 °C when producing urea formaldehyde concentrate; and</p> <p>b. a minimum temperature differential across the catalyst bed of 218 °C when production formaldehyde and 212 °C when producing urea formaldehyde concentrate.</p>	<p>Stack test due: March 1, 2006</p> <p>Permit application due: May 15, 2006</p>
Conduct an initial and annual inspection of the closed vent system that routes the Plant 4 exhaust to the catalyst oxidizer.	May 31, 2005
*Generate additional information to verify initial group status determination of hexamine wastewater streams.	Re-determination of waste water Group due: October 31, 2005
Complete construction and startup of the scrubber (ID No. CD200).	October 1, 2005
Complete stack testing of scrubber (ID No. CD200).	July 1, 2006
Submit to DAQ (i) stack test report for scrubber (ID No. CD200), (ii) permit application incorporating the stack test results from scrubber (ID No. CD200), and (iii) NCS related information.	October 2, 2006
Develop and implement the SSMP for resin operations.	October 2, 2006
Complete facility wide assessment of compliance with acceptable ambient concentrations of toxic air pollutants (15A NCAC 2D.1100) and submit to DAQ a permit application to modify the Title V permit to include parameters from the modeling.	October 31, 2006

* If the waste water is determined to be Group 1 the Permittee shall provide permit applications as necessary to update the permit to incorporate applicable requirements including the installation of any treatment equipment and selected control options not later than December 31, 2005. However, if the waste water is determined to be group 2, no action is necessary until the next permit revision to modify the permit group designation.

IX. General Conditions

The General Conditions section of the Title V Operating Permits lists additional applicable rule requirements that the Permittee must adhere to, as with any other permit condition. These requirements in general are common to all Title V facilities. The general conditions include provisions such as annual fee payment, permit renewal and expiration, transfer of ownership or operation, property rights, submission of documents, inspections and entry procedures, reopen for cause, and severability.

X. Insignificant Activities

The insignificant activities listed in the application have been reviewed and verified. Because an emission source or

activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.

XI. Public Notice

Pursuant to 15A NCAC 2Q .0521, a notice of the draft Title V Operating Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30 day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list, and EPA.

XII. Recommendations

The initial Title V application for Borden Chemical, Inc. has been reviewed by the DAQ to determine compliance with all procedures and requirements under 15A NCAC 2Q .0500 and 40 CFR Part 70. The DAQ has made a preliminary determination that the facility will achieve compliance as specified in the permit with all applicable requirements. Therefore, the DAQ is proposing to issue the Title V Operating Permit upon completion of the public comment period and the EPA review.