

TITLE V APPLICATION REVIEW

Facility Name: Kimberly-Clark, LaGrange Mill

City: LaGrange

County: Troup

AIRS #: 04-13-285-00048

Application #: TV- 9004

Date Application Received: October 9, 1996

Date Application Deemed

Administratively Complete: April 22, 1997

Date of Draft Permit:

Permit No: 2297-285-0048-V-01-0

Program	Review Engineers	Review Managers
SSPP/ASU	Heather Abrams	Sam Buckles
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TOXICS	NA	NA

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Title V operating permit. 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 proposed pursuant to: (1) Section 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 primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to Kimberly-Clark, LaGrange Mill and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the methods for determining compliance with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: Kimberly-Clark, LaGrange Mill
2. Parent/Holding Company Name: Kimberly-Clark Corporation
3. Previous and/or Other Name(s): Not Applicable
4. Facility Location:

Kimberly-Clark, LaGrange Mill
1300 Orchard Hill Road
LaGrange, Georgia 30217

5. Attainment or Non-attainment Area Location

The facility is located in an attainment area.

6. Class I Area Impacts

The facility is not located within 100 km of a Class I area.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current permits (including Part 71 permits), as amended, issued to the facility. Based on a comparative review of Item 19 in Section 1.10 of the Title V application and the “Permit” files on the facility found in the Air Protection Branch office, comments are listed in Table 2 below.

Table 1: List of Current Permits, as Amended

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
2297-141-11519	2/16/95, 6/9/97	X	

Table 2: Comments on Specific Permits

Permit Number	Comments
2297-141-11519	Amended to allow the removal of 10 drum filters.
2297-141-11391	Revoked by 2297-141-11519.
2297-141-8880	Revoked by 2297-141-11391.

D. Process Description

1. SIC Code

2297 - Non-woven Fabrics

2. Description of Products

Kimberly-Clark produces a non-woven web material which is wound unto rolls for sale or further processed to produce hospital gowns, sheets and pillowcases.

3. Overall Facility Process Description

The raw material for this process is polymer pellets which are purchased from a different company. The polymer pellets are melted in an extruder and pumped to a spinning system where the polymer is cooled and stretched into continuous filaments by a process air system. The cooled filaments are collected and air-formed into a non-woven web on a moving form wire. The resulting material web is then bonded in an on-line hot oil filled calendar roll. It may be treated in an on-line web treater prior to being wound on rolls for sale. It can also be converted into finished products such as hospital gowns, sheets and pillowcases.

There are three lines that operate as described above.

4. Overall Process Flow Diagram - See Section 5.0 of Title V Application TV-9004.

E. Regulatory Status

1. PSD

The facility is potentially a “major” source under PSD/NSR regulations, but has taken limits to remain as a “minor” source and avoid a PSD review. They have accepted a 250 ton per year limit.

The facility has also accepted a 100 ton per year limit on the Web Treater coating operations to avoid Georgia Rule 391-3-1-.02(x).

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?		
		Major Source Status	Major Source requesting SM Status	Non-Major Source Status
PM	Y			✓
PM ₁₀	Y			✓
SO ₂	Y			✓
VOC	Y	✓		

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NO _x	Y			✓
CO	Y			✓
TRS	N			✓
H ₂ S	N			✓
Individual HAP	Y			✓
Total HAPs	Y			✓

3. MACT Standards

Not Applicable

4. Program Applicability

Program Code 6 - PSD: no
Program Code 8 - Part 61 NESHAP: no
Program Code 9 - NSPS: no
Program Code M - Part 63 NESHAP: no
Program Code V - Title V: yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

Kimberly-Clark has accepted a 250 tpy limit on VOCs. This limit was for PSD avoidance. The facility has the potential to emit approximately 470 tpy of VOC. The facility list their actual as 137 tpy in their Title V application. The anticipated actual for the next five years is 114.30 tpy of VOC. Kimberly-Clark is only major for VOC emissions.

B. Applicable Rules and Regulations:

There are no applicable rules or regulations pertaining to the facility as a whole other than the PSD avoidance limit.

C. Compliance Status:

The facility has indicated in their Title V application that they are in compliance.

D. Operational Flexibility:

Not Applicable

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E. Permit Conditions:

Condition 2.1.1 limits the facility to 250 tpy VOC to avoid PSD.

III. Regulated Equipment Requirements

A. Brief Process Description:

The existing operation at Kimberly-Clark consists of three spunbound and meltblown processes (SMS I - Source Code LG1, SMS II - Source Code LG3, and SMS III - Source Code LG2). The only difference in the processes is that SMS III will have four spunbound extruders while SMS I and SMS II will only have 3 spunbound extruders.

In the first section of the process (spunbound), polymer pellets are melted in an extruder system and pumped into a spinning system where the polymer is cooled and stretched into continuous filaments by process air systems. The cooled, stretched filaments are collected and air formed into a web on a moving forming wire.

In the second section of the process (meltblown), polymer pellets are melted in an extruder system and pumped through dies, stretched into fine filaments, chopped into short, non-continuous lengths and collected/air formed on the moving forming wire which is carrying the spunbound web from the previous section.

The third forming section is identical to the first in that an additional spunbound layer is formed on the web from the previous sections.

The composite web is then bonded in a calendar and a treatment solution applied with a print treater to impart improved and/or additional physical attributes. The solution treatment is a highly active ingredient formulation with a low application rate so no drying of the web prior to winding into rolls is required.

B. Equipment List for the Process:

Unit ID	Unit Description	Rules/Regulations	Applicable Conditions	APCD*
GB01	Main Process Boiler	391-3-1-.02(2)(d)2(ii)	None	None
PST1	Propane Storage Tank	None	None	None
B001	Beringer Oven No. 1	None	3.2.1, 5.2.1, 5.3.1	None
B002	Beringer Oven No. 2	None	3.2.1, 5.2.1, 5.3.1	None
B003	Beringer Oven No. 3	None	3.2.1, 5.2.1, 5.3.1	None
WKT1	WEKO Treater No. 1	None	None	None
WKT2	WEKO Treater No. 2	None	None	None
DST1	Dip & Squeeze Treater	None	None	None
	Degreaser	391-3-1-.02(2)(ff)	3.4.1, 5.3.1	None

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LG1	SMS I Process	The facility has accepted a 100 tpy limit to avoid Rule 391-3-1-.02(2)(x)	3.2.2, 6.2.2, 6.2.3	Meltblown Filter Houses - S11F, S12F, S13F
LG2	SMS II Process	The facility has accepted a 100 tpy limit to avoid Rule 391-3-1-.02(2)(x)	3.2.2, 6.2.2, 6.2.3	Meltblown Filter Houses - S21F, S22F, S23F
LG3	SMS III Process	The facility has accepted a 100 tpy limit to avoid Rule 391-3-1-.02(2)(x)	3.2.2, 6.2.2, 6.2.3	Meltblown Filter Houses - S32F, S33F, S34F, S35F

* APCD - Air Pollution Control Device

C. Equipment & Rule Applicability:

The Main Process Boiler (GB01) is not subject to NSPS Dc since the boiler was constructed prior to the NSPS construction date. It is subject to Georgia Rule 391-3-1-.02(2)(d)2(ii) - Fuel Burning Equipment. The boiler is rated at 12.6 million BTU/hr and was constructed in 1983. However, since it only burns either natural gas or propane, no limits are necessary.

The Beringer Ovens (B001, B002 and B003) are not subject to any rules or regulations. The ovens are electric and the only emissions are VOCs produced during the heating of the polymer residue on the parts. The ovens are used as cleaning devices for process equipment. The ovens are limited to 2.54 pounds VOC per hour from each oven. This limit was put in place to help the facility avoid PSD review. Compliance is determined by the scrubber parameters for the ovens.

The Web Treater coating operation is processes SMS I, SMS II, and SMS III. The facility has accepted a 100 tpy cap to avoid Georgia Rule 391-3-1-.02(2)(x). The Web Treater operations are also subject to Georgia Rule 391-3-1-.02(2)(e).

The Degreaser is subject to Georgia Rule 391-3-1-.02(2)(ff) - Solvent Metal Cleaning. The degreaser does not use a listed solvent; therefore it is not subject to 40 CFR 63 Subpart T. The degreaser is an open top vapor degreaser and has a 30 gallon capacity. It uses "Safety Kleen Premium Solvent." A copy of the MSDS can be found in Attachment A.

D. Compliance Status:

The facility has indicated in their Title V application that they are in compliance.

E. Operational Flexibility:

Not Applicable

F. Permit Conditions:

Condition 3.2.1 limits the three Beringer Ovens to 2.54 pounds VOC per hour from each oven. This limit was put in to assure the facility remained below the 250 tpy cap on VOCs for the facility.

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Condition 3.2.2 limits the web treater operations to 100 tons per year of VOC emissions. This limits the web treater operations out of Georgia Rule 391-1-3-.02(2)(x) - VOC Emissions from Fabric and Vinyl Coating.

Condition 3.4.1 states the operating practices for the degreaser as specified in Georgia Rule 391-3-1-.02(2)(ff) - Solvent Metal Cleaning.

Condition 3.4.2 requires the facility to use a solvent degreaser that does not contain hazardous air pollutants.

IV. Requirements for Testing (with Associated Record Keeping and Reporting)

A. General Testing Requirements:

The permit does not presently contain any requirements for testing. The permit does specify that a performance test may be required at anytime upon request by EPD to determine compliance with the emissions limits contained in Section 3.0 and test methods for measuring emissions are listed in Condition 4.1.3. Should the division at any time require an emission test to comply with the emission limits identified in Conditions 3.2.1 and 3.2.2, the test methods specified under Condition 4.1.3 are to be used for the purpose of quantifying emissions.

B. Specific Testing Requirements

Not Applicable

V. Requirements for Monitoring (with Associated Record keeping and Reporting)

A. General Monitoring Requirements:

Not Applicable

B. Specific Monitoring Requirements

1. Equipment Group: There are three spray chamber scrubber systems one on each Beringer Oven (source codes B01, B02, and B03). The scrubber flow rate on each is required to be monitored no less than once per shift during the operation of the ovens by Condition 5.2.1 of the Permit. There has been a low flow limit for each scrubber set at .30 gpm. This low flow limit was set by the facility from normal operations data collection.
2. Individual Equipment: The Main Process Boiler (GB01) is subject to the Georgia Rule 391-3-1-.02(d)2(ii) - Fuel Burning Equipment. The boiler burns only propane and natural gas and only inconsequential emissions of particulate matter emissions and opacity would occur. The likelihood of a violation is minimal, therefore, there is no monitoring with respect to this emission limit required for this boiler.

Record Keeping and Reporting Requirements

Records, including identification of any deviations from applicable monitoring triggers, the cause of such

occurrence and the corrective action taken are required to be kept by the Permittee and reporting are required to be done on a semiannual/annual basis. The permit specifies that these records will form the basis of the compliance certification to be submitted on an annual basis.

VI. Other Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements:

The standard general requirements are included in the permit. The Permittee is required to notify the Division within seven (7) days of any deviations from the applicable requirements.

B. Specific Record Keeping and Reporting Requirements:

1. Plant wide: The Permittee is required to keep records on a daily basis of all materials containing volatile organic compounds used.
2. Individual Equipment: The degreaser is subject to Georgia Rule 391-3-1-.02(ff) - Solvent Metal Cleaning. The Permittee is required to keep a daily operations log to assure compliance with those applicable sections of Condition 3.4.1 of the Permit. Any operation not meeting with these requirement shall be considered a deviation and must be recorded.
3. Equipment Groups: The Permittee is required to calculate VOC emissions on a monthly basis for the meltblown/spunbound laminating processes (Source Codes SMS I, SMS II, SMS III) by using the daily operating parameters and VOC containing materials usages for the meltblown/spunbound laminating processes to assure compliance with Condition 3.2.2 of the Permit. The facility is also required to calculate the total monthly VOC emissions including the Berringer Ovens.

VII. Specific Requirements

A. Operational Flexibility

Not Applicable

B. Alternative Requirements

Not Applicable

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C. Insignificant Activities

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel.	1
	Stationary engines burning natural gas, LPG, and/or diesel fueled generators used for emergency peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	2
	Stationary engines burning natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	1
Maintenance, Cleaning and Housekeeping	Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	1
Laboratories and Testing	Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	2
Industrial Operations	Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that: i) Activity is performed indoors; and ii) No significant fugitive particulate emissions enter the outdoor atmosphere; and iii) No visible emissions enter the outdoor atmosphere.	1
Storage Tanks and Equipment	All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	4
	Pressurized vessels designated to operate in excess of 30 psig storing a petroleum fuel.	1
	Portable drums, barrels and totes provided that the volume of each container does not exceed 550 gallons.	60
	All chemical storage tanks used to store a chemical with true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	3

D. Temporary Sources

Not Applicable

E. Short-Term Activities

A rental 1500 CFM, drive screw, diesel fueled, compressor is used approximately 12 hours per year to provide mill air during cooling tower maintenance.

F. Compliance Schedule/Progress Reports

Not Applicable

G. Emissions Trading

Not Applicable

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H. Acid Rain Requirements

Not Applicable

I. Prevention of Accidental Releases

The facility indicated applicability for propane (CAS 74-98-6).

J. Stratospheric Ozone Protection Requirements

The facility indicated applicability to 40 CFR 82.

K. Pollution Prevention

Not Applicable

L. Specific Conditions

Not Applicable

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

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Closing Block: We have reviewed and recommend issuance of draft Permit No. 2297-285-0048-V-01-0

Program	Review Engineers	Dates	Review Managers	Dates
SSPP/ASU				
SSCP/ASU				
ISMP				
TOXICS				

Stationary Source Permitting Program Manager

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Addendum to Title V Permit

Kimberly-Clark submitted comments on draft Title V permit 2297-285-0048-V-01-0. the following is a discussion of the comments and responses.

Section 3.1 - Emission Units

Comment: Reference to the meltblown houses on emission units LG1, LG2 and LG3 should be deleted. These drum filters have been removed as provided for in Air Quality Permit 2291-141-11519.

Response: The drum filters have been deleted from Table 3.1 in the permit.

Section 3.2.2

Comment: The 100 ton per year limitation to avoid Rule 391-3-1-.02(2)(x) should be on the web treaters (Source Codes WKT1, WKT2 and DST1) instead of LG1, LG2 and LG3.

Response: The condition has been changed to show the correct source codes for the web treaters.

Section 4.1 - General Testing

Comment: The facility has requested the statement "unless a time extension is approved be the department in advance" be added for the submittal of test results. They have also requested the VOC test method be listed as Method 25A.

Response: The facility may request an extension at any time for submitting test results. Extensions are granted depending on the circumstances. The requested statement will not be added to the condition. As for the test method, Method 25 is the reference method. The facility may use Method 25A as it falls under Method 25 for VOC testing.

Section 6.2.1

Comment: The facility has requested a clarification on the statement, "and the weight of any material disposed of as waste." They have interpreted it to mean the subtraction of the materials VOC emission from the total quantity consumed.

Response: The facility is required to maintain records on the amount of VOC containing material disposed of as waste. This amount is subtracted out from the total quantity.

Section 6.2.4

Comment: The requirements of condition 3.4.1 do not imply tasks relevant to a daily operations log. The facility requests this condition be deleted.

Response: Condition 3.4.1 does not contain requirements that would be maintained in a daily log. Therefore, Condition 6.2.4 has been deleted.

Section 7.1 and 7.2

Comment: EPA has authorized implementation of the Title V permitting system to the Georgia Environmental Protection Division. the facility requests that allowable operation and off-permit changes be submitted to the Georgia EPD instead of the department and EPA.

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Response: For Operational Flexibility, the Clean Air Act 502(b)(10) and Rule 391-3-1-.03(10)(b)5. require notification be sent to both the Division and EPA. For Off-Permit Changes, Rule 391-3-1-.03(10)(b)6. require notification go to both the Division and EPA.

Section 8.14

Comment: The facility is requesting to submit the compliance certification to the Division only.

Response: The compliance certification must be submitted to both the Division and EPA as specified in 40 CFR 70.6(c)(5)(iv).