

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

Permit Issue Date: **date, 2008**

**Region:** Winston-Salem Regional Office  
**County:** Davidson  
**NC Facility ID:** 2900257  
**Inspector's Name:** Brent Rockett  
**Date of Last Inspection:** 08/20/2007  
**Compliance Code:** 3/In Compliance - Inspection

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>		
<b>Applicant (Facility's Name):</b> Kimberly Clark Corporation  <b>Facility Address:</b> Kimberly Clark Corporation 389 Clyde-Fitzgerald Road Linwood, NC 27299  <b>SIC:</b> 2297 / Nonwoven Fabrics <b>NAICS:</b> 31323 / Nonwoven Fabric Mills  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V			<b>SIP:</b> <b>NSPS:</b> <b>NESHAP:</b> <b>PSD:</b> <b>PSD Avoidance:</b> <b>NC Toxics:</b> <b>112(r):</b> <b>Other:</b>		
<b>Contact Data</b>			<b>Application Data</b>		
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<b>Application Number:</b> 2900257.08A <b>Date Received:</b> 06/20/2008 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 05635/T09 <b>Existing Permit Issue Date:</b> 05/10/2004 <b>Existing Permit Expiration Date:</b> 04/30/2009		
Eddie Motsinger Environmental Coordinator (336) 248-7332 389 Clyde-Fitzgerald Rd. Linwood NC, 27299	Thomas Wagar Mill Manager (336) 248-7300 389 Clyde-Fitzgerald Rd. Linwood NC, 27299	Eddie Motsinger Environmental Coordinator (336) 248-7332 389 Clyde-Fitzgerald Rd. Linwood NC, 27299			
<b>Review Engineer:</b> Mark Cuilla		<b>Comments / Recommendations:</b>			
<b>Review Engineer's Signature:</b> <b>Date:</b> <b>date, 2008</b>		<b>Issue</b> 05635/T10 <b>Permit Issue Date:</b> <b>date, 2008</b> <b>Permit Expiration Date:</b> <b>date, 2013</b>			

**I. Purpose of Application**

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (**05635T09**) was issued on **May 10, 2004**, and is currently scheduled to expire on **April 30, 2009**. The renewal application was received on **June 20, 2008**, or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

In addition to the renewal of the Title V air permit, the Permittee has requested that the four drum filters (**ID Nos. L2DF1 through L2DF4**) associated with non-woven material line 2 (**ID No. LX2**) be removed from the permit as this equipment has been removed from the facility.

**II. Facility Description**

Kimberly-Clark Corporation makes non-woven fabric for use in disposable diaper liners and in medical gowns. The facility operates four non-woven lines, one burnout oven, and one boiler as permitted sources.

### III. History/Background/Application Chronology

**June 20, 2008** – Permit application **2900257.08A** was received for the renewal of the existing Title V air permit.

**July 10, 2008** – Received WSRO comments and recommendations of air permit application from Brent Rockett.

**July 15, 2008** – DRAFT permit sent to Permittee, Regional Office, Title V Coordinator for comment prior to public notice and EPA review. Permittee returned a “no comment” email **June 18, 2008**. WSRO returned a “no comment” email **July 9, 2008**.

**July 23, 2008** – Brent Rockett of WSRO completed unannounced facility inspection. Based on his visual observations, the facility appeared to be operating in compliance with Air Quality Standards and regulations. He did have three permit issues (see Section IX of this Document for a discussion).

**Date, 2008** – DRAFT sent to 30-day public notice and 45-day EPA review prior to issuance.

### IV. Permit Modifications/Changes and ESM Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Page(s)	Section	Description of Change(s)
Cover	-	-amended all dates and permit revision numbers
All	Header	-amended permit revision number
3-4	Equipment Table	-removed reference to control equipment ( <b>ID Nos. L2DF1 through L2DF4</b> ) per Permittee request
5	2.1 A.1.b 2.1 A.2.b	-updated shell condition to add new testing ref 2D .2601 -updated shell condition to add new testing ref 2D .2601
6	2.1 A.3.b 2.1 A.4	-updated shell condition to add new testing ref 2D .2601 -corrected rule citation
7	2.1 B	-removed reference to control equipment ( <b>ID Nos. L2DF1 through L2DF4</b> ) per Permittee request
7-8	2.1 B (table)	-added ID clarifications where needed
8	2.1 B.1.b 2.1 B.1.c 2.1 B.1.d	-updated shell condition to add new testing ref 2D .2601 -removed MRR for end-dated control equipment -added ID Nos
9	2.1 B.2.b 2.1 B.3.b 2.1 B.3.c	-updated shell condition to add new testing ref 2D .2601 -updated shell condition to add new testing ref 2D .2601 -updated shell condition to add new testing ref 2D .2601
11	2.1 C.1.b 2.1 C.2.b 2.1 C.2.c	-updated shell condition to add new testing ref 2D .2601 -updated shell condition to add new testing ref 2D .2601 -updated shell condition to add new testing ref 2D .2601
12	2.2 A.1.c 2.2 A.1.d	-added rule citation -added rule citation
13	2.2 A.1.e	-added rule citation
15-24	General Conditions	-updated shell conditions (v2.22.1)

The following table represents the modifications/additions/deletions to ESM:

<b>Current Language</b>	<b>Proposed Change</b>
One drum filter (160.2 square feet of filter area, <b>ID No. L2DF1</b> )	End-date per Permittee
One drum filter (160.2 square feet of filter area, <b>ID No. L2DF2</b> )	End-date per Permittee
One drum filter (160.2 square feet of filter area, <b>ID No. L2DF3</b> )	End-date per Permittee
One drum filter (160.2 square feet of filter area, <b>ID No. L2DF4</b> )	End-date per Permittee
Seven Polymer pellet storage silos ( <b>ID No. I4</b> )	<i>Ten</i> polymer pellet storage silos ( <b>ID No. I4</b> )

## V. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 2D .0503, Particulates from Fuel Burning Indirect Heat Exchangers  
 15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes  
 15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources  
 15A NCAC 2D .0521, Control of Visible Emissions  
 15A NCAC 2D .0524, New Source Performance Standards (40 CFR 60, Subpart Dc)  
 15A NCAC 2D .0958, Work Practices for Sources of Volatile Organic Compounds  
 15A NCAC 2D .1100, Control of Toxic Air Pollutants  
 15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions  
 15A NCAC 2Q .0711, Emission Rates Requiring a Permit

A regulatory review for the existing sources will not be included in this document.

## VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

**NSPS** – The Permittee currently operates on natural gas-fired boiler subject to the New Source Performance Standards (40 CFR 60, Subpart Dc). To ensure compliance, the Permittee is required to maintain records of the amounts of fuel fired during each month. This permit renewal does not affect this status.

**NESHAPS/MACT** – The facility is classified as a Title III minor facility; therefore, MACT does not apply. This permit renewal does not affect this status.

**PSD** – The facility is not currently required to comply with any Prevention of Significant Deterioration requirements. This permit renewal does not affect this status.

**112(r)** – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect this status.

**CAM** – 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. With the request to remove all currently permitted control devices from the permit as part of this renewal, the facility no longer meets CAM applicability requirements.

**VII. Facility Wide Air Toxics**

The Permittee is required to comply with modeled emissions rates per 15A NCAC 2D .1100 for the following toxic air pollutants: arsenic, benzene, cadmium, chromium VI, Di(2-ethylhexyl)phthalate, Methylene chloride, and n-hexane from its four non-woven material lines. To ensure compliance, each line is limited to a maximum process rate as specified by the permit. This permit renewal does not affect this status.

The Permittee has also made a demonstration that the following hazardous air pollutants do not exceed the Toxic Pollutant Emission Rate as defined in 15A NCAC 2Q .0711: carbon disulfide, carbon tetrachloride, Chlorobenzene, chloroform, ethylene dichloride, formaldehyde, methyl chloroform, methyl ethyl ketone, phenol, styrene, toluene, and xylene. A permit modification is required if facility-wide emissions prior to an exceedance of any of these limits. This permit renewal does not affect this status.

**VIII. Facility Emissions Review**

The following table represents the latest years emission inventory from the facility:

<b>Pollutant(s)</b>	<b>2006 Actual Emissions (tpy)</b>	<b>2007 Actual Emissions (tpy)</b>
CO	8.54	7.64
NO <sub>x</sub>	9.60	9.24
PM <sub>10</sub>	6.88	6.75
SO <sub>2</sub>	0.10	0.09
VOC	68.3	67.52
Total HAP/TAP	2.91	3.11

**IX. Stipulation Review**

Mr. Brent Rockett of the WSRO noted no required permit modifications as part of this permit renewal and noted in his August 27, 2007 facility inspection report that the facility appeared to be operating in compliance with Air Quality standards and regulations.

It should be noted that some natural gas-fired emission units are subject to MRR requirements for visible emissions. This is not the customary practice. However, the WSRO has commented (and specifically requested during the initial Title V permitting process) that they be included. The Regional Office notes that the visible emissions that are seen from these sources are not from combustion but are from particulate matter and condensing VOC matter released from the heating of materials and coatings used in the manufacturing itself. Therefore, MRR is justified.

The following items were indicated as permit issues in the July 23, 2008 WSRO inspection report:

1. Machine LX2 is equipped with four drum filters (labeled as No. 2, 3, 4, and 5). The facility has requested that these be removed in their permit renewal because none of the other three machines, which process the same type materials, have filters installed on them. *Filters have been removed as part of the renewal. This position was supported by the WSRO in a July 9, 2008 email response.*
2. The boilerplate shows that the Cleaver Brooks boiler is rated at 12.247 million Btu per hour maximum heat input rate instead of the 12.8 million as permitted. *No modification in permitted Btu rating is needed in this case. The permitted equipment is subject to NSPS, Subpart Dc as well as NC State SIP requirements. No change in emission limits or requirements are expected with the modification of the permit description.*
3. The facility has added three additional pellet storage silos to the seven silos already listed as insignificant activities in the permit. These three new silos will need to be addressed in the permit review. *The Permittee has confirmed the installation of these three silos. Eddie Motsinger of Kimberly Clark writes in his July 11, email response that "these will be insignificant sources, the silos hold polypropylene pellets that are about 1/8" in diameter and we have had no problems with dust particles. The potential pollutant could be particulate matter but, we have no information or calculations on how much. We have never seen any emissions of dust from the silos and assume that we are well below the 5tpy." These assumptions are supported by RCO. The renewed permit will be modified to include a total of 10 pellet storage silos now operating at the facility.*

#### **X. Public Notice/EPA and Affected State(s) Review**

Pursuant to 15A NCAC 2Q .0521, a notice of the DRAFT Title V 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. Pursuant to 15A NCAC 2Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. The Forsyth and Mecklenburg County Local Programs are affected areas within 50 miles of the facility.

#### **XI. Conclusions, Comments, and Recommendations**

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

WSRO recommends issuance of the permit and **was presented** with a DRAFT permit prior to notice and issuance (See History Section of this Document for a listing of dates).

RCO concurs with WSRO's recommendation to issue the renewed air permit.