

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

ENGINEERING DIVISION

**APPLICATION PROCESSING AND CALCULATIONS**

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**Equipment Location**

Kimberly-Clark Corp.  
2001 E. Orangethorpe Ave.  
Fullerton, California 92634

**PERMIT TO CONSTRUCT**

**TITLE V PERMIT REVISION:**

Application No.534682

PROCESS 1:TISSUE AND TOWEL MFG. SYSTEM 7: AIR POLLUTION CONTROL					
Equipment	Device ID	Connected To	Source Type/ Monitoring Unit	Emissions	Equipment Specific Conditions
CYCLONE, ABBINGTON INC, MODEL 8-1120A, FLOOR SWEEPS AND VACUUM LINE, WITH TWO 40-HP STRIPPING FANS IN COMMON WITH D-69  A/N449327534686	C70	C69		PM:(9)[RULE 404, 2-7-1986] Modification to C69 & C70 to add C96 & C97 and separate into separate permit units	E102.1
BAGHOUSE, ABBINGTON INC, MODEL 6-9760, WITH TWO 40-HP STRIPPING FANS IN COMMON WITH D-70, SIX BAGS, 2'-1"DIA X 10'-3"H EACH, WITH A TOTAL FILTER CLOTH AREA OF 384 FT2.  A/N 449327534686	C69	C64, C65, C66, C67, C68,C70  <b>C97, C98</b>	<b>ADD</b>	PM:(9)[RULE 404, 2-7-1986]	C6.1, D322.1, E102.1
DRUM FILTER NO. 1, AC-CORP, MODEL 7-7, WITH TWO ONE125-HP BLOWERS IN COMMON WITH C65 & C-67, LENGTH: 17FT 4IN; DIA: 8 FT 6 IN, 316 FT2 FILTER AREA  A/N 449327534685	C64	C69		PM:(9)[RULE 404, 2-7-1986]  Modification C64, C65, C97 & C98	D322.1, E102.1
DRUM FILTER NO. 2, AC-CORP, MODEL 7-7, WITH TWO ONE125-HP BLOWERS IN COMMON WITH C64 & C-67, LENGTH: 17 FT 4 IN; DIA: 8FT 6IN; 316 FT2 FILTER AREA.  A/N 449327534685	C65	C69		PM:(9)[RULE 404, 2-7-1986]	D322.1, E102.1

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DRUM FILTER NO. 5, AC-CORP, MODEL 7-7, WITH ONE 75-HP BLOWER, LENGTH: 17 FT 4 IN; DIA: 8FT 6IN; 316 FT2 FILTER AREA.  A/N 449327534685	C97	C64, C65, C69, D71, D72, D73		PM:(9)[RULE 404, 2-7-1986]	D322.1, E102.1
DRUM FILTER NO. 6, AC-CORP, MODEL 7-7, WITH ONE 75-HP BLOWER, LENGTH: 17 FT 4 IN; DIA: 8FT 6IN; 316 FT2 FILTER AREA.  A/N 449327534685	C98	C64, C65, C69, D99, D100, D101		PM:(9)[RULE 404, 2-7-1986]	D29.5, D322.1, E102.1
DRUM FILTER NO. 3, AC-CORP, MODEL 7-7, WITH TWO ONE 75-HP BLOWERS, LENGTH: 17FT 4IN, DIA: 8FT 6IN; 316 FT2 FILTER AREA.  A/N 449327534684	C66	C69-D71, D72, D73, D74, D75, D92, D93, D94.		PM:(9)[RULE 404, 2-7-1986]  <b>REMOVE D71-D75</b>	D322.1, E102.1
DRUM FILTER NO. 4, AC-CORP, MODEL 7-7, WITH TWO ONE 125-HP BLOWERS IN COMMON WITH C64 & C65, LENGTH: 17FT 4IN; DIA: 8FT 6IN, 316 FT2 FILTER AREA.  Reference A/N 449327	C67	C69		PM:(9)[RULE 404, 2-7-1986]	D322.1, E102.1

**Conditions:**

C6.1 the operator shall use this equipment in such a manner that the differential pressure being monitored as indicated below, does not exceed 2.5 inches water column.

To comply with this condition, the operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the filters.

The operator shall determine and record the parameter being monitored once every 1 days.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

D29.5 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutants to Be tested	Required Test Method	Averaging Time	Test Location
PM10	Approved District Method	Approved District Averaging Time	Simultaneous inlet and Outlet

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Total PM	Approved District	Approved District	Simultaneous
	inlet		
	Method	Averaging Time	and Outlet

The facility permit holder shall submit the protocol to the AQMD engineer no later than 45 days prior to the proposed test date, and notify the District of the date and time of the test at least 10 days prior to the test.

The test(s) shall be conducted within 90 days after achieving maximum production rate, but no later than 180 days after initial start-up.

The source test results shall be submitted to the District no later than 60 days after the source test was conducted.

The test shall be conducted to determine (1) Control Efficiency, (2) Total Particulate emissions during normal operation in gr/scf and lbs/hr, (3) PM10 emissions during normal operation in lbs/hr, (4) Moisture content, (5) Flow rate, (6) Temperature.

The test shall be conducted to demonstrate compliance with applicable permit conditions, Rules and Regulations.

The operator shall submit two complete copies of the source test report to the District Engineering and Compliance Division.

D322.1 the operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

E102.1 the operator shall discharge dust collected in this equipment only into closed containers.

**PERMIT TO OPERATE  
ADMIN CHANGE**

PROCESS 1:TISSUE AND TOWEL MFG. SYSTEM 7: AIR POLLUTION CONTROL					
Equipment	Device ID	Connected To	Source Type/ Monitoring Unit	Emissions	Equipment Specific Conditions
DRUM FILTER, BARRON, MODEL 9-7, WITH A 125-HP AND A 10-HP BLOWER, LENGTH: 16FT 11IN, DIA: 9FT, 413 FT2 FILTER AREA.  A/N 449327534822	C68	C69, D76, D77, D78, D79, D80, D81, D82, D83		PM:(9)[RULE 404, 2-7-1986]  Admin Change To issue as a separate permit unit	D322.1, E102.1

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**Conditions:**

D322.1 the operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

E102.1 the operator shall discharge dust collected in this equipment only into closed containers.

**PERMIT TO CONSTRUCT  
(New Construction)**

**Equipment Description**

PROCESS 1: TISSUE ANDTOWEL MFG. SYSTEM 11: B2/T2 BATH/TOWEL LINE						
Equipment	Device ID	Connected To	Source Type/ Monitoring Unit	Emissions	Equipment Specific Conditions	
FEEDER, UNWIND, BRETTEG, MODEL 5934-07, 64-HP, MAXIMUM ROLL DIMENSIONS; DIA: 78 INCH X WIDTH: 101 INCH  A/N 534678	D99	C98		PM:(9)[RULE 405, 2-7-1986]	A63.5, A63.6, B59.2, B59.3	
PRESS, EMBOSSER, SCOTT PAPER, 64-HP, 103 MAX WIDTH.  A/N 534678	D100	C98		PM:(9)[RULE 405, 2-7-1986]	A63.5, A63.6, B59.2, B59.3	
ACCUMULATOR, ROLCO, MODEL 329-02, 5-HP, 127 INCH MAX WIDTH  A/N 534678	D101	C98		PM:(9)[RULE 405, 2-7-1986]	A63.5, A63.6, B59.2, B59.3	
CUTTER, PCMC, MODEL 300 SERIES, 17-HP  A/N 534678	D102	NOT VENTED		PM:(9)[RULE 405, 2-7-1986]	A63.5, A63.6, B59.2, B59.3	
PACKAGING MACHINE, WRAPPER, PCMC, MODEL HST200T4D, 3-HP, CASEPACKER, SALWASSER, MODEL M60F, 3-HP  A/N 534678	D103	NOT VENTED		PM:(9)[RULE 405, 2-7-1986]	A63.5, A63.6, B59.2, B59.3	
APPLICATOR, INK JET PRINTERS  A/N 534678	D104				A63.5, A63.6, B59.2, H23.8	

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**CONDITION:**

A63.5 the operator shall limit emissions from this equipment as follows:

VOC less than or equal to 1980 lbs in any one month

For the purpose of this condition, the limit(s) shall be based on the total combined emissions from equipment D27, D71 – D83, D89, D99- D104.

To ensure compliance with the monthly Volatile Organic Compound (VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

- (1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).
- (2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.
- (3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VOC-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.
- (4) The operator shall retain all purchase invoices for all VOC-containing material used or stored at the facility, and all waste manifests for all waste VOC-containing material removed from the facility, for five years.

A63.6 the operator shall limit emissions from this equipment as follows:

VOC less than to 900 lbs in any one month

For the purpose of this condition, the limit(s) shall be based on the total combined emissions from equipment D99, D100, D101, D102, D103 & D104

To ensure compliance with the monthly Volatile Organic Compound (VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

- (1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).
- (2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.

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- (3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VOC-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.
- (4) The operator shall retain all purchase invoices for all VOC-containing material used or stored at the facility, and all waste manifests for all waste VOC-containing material removed from the facility, for five years.

B59.2 the operator shall not use the following materials in this device:

MATERIALS CONTAINING TACS IDENTIFIED IN AQMD RULE 1401, AS AMENDED 9/10/2010, EXCEPT HEXANE(CAS#110-54-3), IPA(CAS#67-63-0), ETHYLENE OXIDE(CAS#75-21-8), MEK(CAS#78-93-3), METHANOL(CAS#67-56-1), 1,4 DIOXANE(CAS#123-91-1), ARSENIC (CAS#7440-38-2), LEAD(CAS#7439-92-1), ETHYLENE GLYCOLS(CAS#107-21-1,CAS#109-86-4, CAS#111-76-2),FORMALDEHYDE(CAS#50-00-0),ACETALDEHYDE(CAS# 75-07-0), MERCURY(CAS#7439-97-6), CADMIUM(CAS#7440-43-9), HEX. CHROME(CAS# 18540-29-9), ACRYLIC ACID(CAS#79-10-7), TDI(CAS# 584-84-9 & 98-08-7)

B59.3 the operator shall only use the following material(s) in this device:

coatings and adhesives in the process, excluding maintenance materials, with a voc content of 5 weight percent or less.

**PERMIT TO CONSTRUCT  
Modification**

**Equipment Description**

PROCESS 1: TISSUE AND TOWEL MFG. SYSTEM 8: B1/T1 BATH/TOWEL LINE					
Equipment	Device ID	Connected To	Source Type/ Monitoring Unit	Emissions	Equipment Specific Conditions
FEEDER A/N 343197 534681	D71	<del>C66</del> C97		PM:(9)[RULE 405, 2-7-1986]	A63.5, B59.2, B59.3
PRESS A/N 343197 534681	D72	<del>C66</del> C97		PM:(9)[RULE 405, 2-7-1986]	A63.5, B59.2, B59.3
ACCUMULATOR, REWIND A/N 343197 534681	D73	<del>C66</del> C97		PM:(9)[RULE 405, 2-7-1986]	A63.5, B59.2, B59.3
CUTTER A/N 343197 534681	D74	<del>C66</del> NOT VENTED		PM:(9)[RULE 405, 2-7-1986]	A63.5, B59.2, B59.3
PACKAGING MACHINE A/N 343197 534681	D75	<del>C66</del> NOT VENTED		PM:(9)[RULE 405, 2-7-1986]	A63.5, B59.2, B59.3

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APPLICATOR, INK JET PRINTERS	D89					A63.5, B59.2
A/N <del>343197</del> <u>534681</u>						

**CONDITION:**

A63.5 the operator shall limit emissions from this equipment as follows:

VOC less than or equal to 1980 lbs in any one month

For the purpose of this condition, the limit(s) shall be based on the total combined emissions from equipment D27, D71 – D83, D89, D99 –D104.

To ensure compliance with the monthly Volatile Organic Compound (VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

- (1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).
- (2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.
- (3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VOC-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.
- (4) The operator shall retain all purchase invoices for all VOC-containing material used or stored at the facility, and all waste manifests for all waste VOC-containing material removed from the facility, for five years.

B59.2 the operator shall not use the following materials in this device:

MATERIALS CONTAINING TACS IDENTIFIED IN AQMD RULE 1401, AS AMENDED 9/10/2010, EXCEPT HEXANE(CAS#110-54-3), IPA(CAS#67-63-0), ETHYLENE OXIDE(CAS#75-21-8), MEK(CAS#78-93-3), METHANOL(CAS#67-56-1), 1,4 DIOXANE(CAS#123-91-1), ARSENIC(CAS#7440-38-2), LEAD(CAS#7439-92-1), ETHYLENE GLYCOLS(CAS#107-21-1,CAS#109-86-4, CAS#111-76-2), FORMALDEHYDE(CAS#50-00-0), ACETALDEHYDE(CAS# 75-07-0), MERCURY(CAS#7439-97-6), CADMIUM(CAS#7440-43-9), HEX. CHROME(CAS# 18540-29-9), ACRYLIC ACID(CAS#79-10-7), TDI(CAS# 584-84-9 & 98-08-7)

B59.3 the operator shall only use the following material(s) in this device:

coatings and adhesives in the process, excluding maintenance materials, with a voc content of 5 weight percent or less.

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**Background**

Kimberly-Clark's Fullerton, California tissue mill is a combined manufacturing and distribution site. The manufacturing process includes pulpers, mixing tanks, two tissue machines, two steam heated rotating drum dryers, two gas fired hoods, multiple-ply winders, towel winders, tissue rewinders, tissue folders, two gas fired boilers, flexographic printing presses, a rotogravure coater, a water treatment facility, and dust collection systems. The facility is a NOx and SOx RECLAIM facility. The plant operates 24 hours per day, 365 days per year.

Application no. 534682 has been submitted as a Title V/RECLAIM permit revision to incorporate the changes made by the following applications.

Kimberly Clark's facility permit under process 1, system 7 air pollution control equipment had a single permit unit consisting of five drum filters, a cyclone and a bag house. It was determined that the cyclone/bag house actually does not vent the paper lines and is used to clean and maintain the drum filters. As a drum filter loads up with particulate, a vacuum head vented to the cyclone, continuously vacuums the drum filter surface and collects the large particles into a closed container. The remaining exhaust is sent to the baghouse which is shaken periodically to clean the bags. The dust is emptied into a closed container and disposed of. Kimberly Clark submitted on April 4, 2012 several applications which will be used to break up the existing air pollution control system under process 1, system 7 into five separate permit units as shown in the following table:

Application No.	Equipment Description	Device ID	Action
534822	Drum Filter <500ft2	C68	Admin Change
534684	Drum Filter <500ft2	C66	Admin Change
534685	Drum Filter >500ft2	C64, C65, C97 & C98	Modification to vent T2/B2 & T1/B1 lines
534686	Cyclone/baghouse	C69, C70	Modification
449327	Drum Filter < 500ft2	C67	No Action

The existing Towel/bath line under Process 1, System 8, Devices D71-D75, will have the exhaust changed from vented to C66 to C97(DF5 unit). There is no change to the process and existing caps will remain in effect. The change in venting will not cause an emission increase. The new line Towel/bath line will be vented to C98(DF6 unit). The cutter/packaging machines were never vented to the drum filters. The facility permit will be amended to reflect this correction. There are some changes in the blower configurations which are noted in the descriptions above. The VOC emissions will be capped under the same conditions as the other paper lines. The applications submitted are shown below:

Application No.	Equipment Description	Device ID	Action
534678	New T2 towel/B2 line	D99 – D101	New Construction
534681	Existing T1 towel/B2	D71-D73	Modification P/C

This is a RECLAIM Cycle 2 and Title V facility. The proposed project is considered as a "de minimus" significant permit revision to this facility Title V permit.

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District records indicate that during the last two years Kimberly Clark was issued a Notice to Comply. NC E00498 was issued on 12/07/2010 to ensure correct entry of calibration gas values into the CEMs. The issue was resolve by 12/17/2010 and Kimberly Clark is in full compliance as of 5/25/2012.

**Process Description:**

Kimberly Clark uses the control equipment to capture particulate matter as paper is being unwound, embossed and rewound. Each nip and roller in this process may liberate cellulose fibers from the web which also creates a housekeeping problem and a fire hazard.

Nine hoods are proposed to vent the new towel/bath line. Three hoods for the unwind, three hoods for the rewind, a hood for the embosser and two floor sweeps with a total exhaust capacity of 20,000 cubic feet per minute. C98 will be equipped with a 75-hp exhaust blower used at different points in the process to remove particulate matter created by the process.

The dust captured by these drums are removed one section at a time by a stripper fan or vacuum nozzle. The cleaning process is triggered when a pressure differential measured across the drum filter hits a set maximum. The vacuum tracks across the drum filter removing the dust collected from the paper lines. The dust is collected by six Abbington 6-9760 bags filters that can handle 8000 cfm total. These bags exhaust into a large baghouse room which recirculates back into the facility.

The bag filter cleaning cycle is performed on one bag at a time. The reversed flow of air in the bag pulls dust off the inside of the bag for approximately 15 seconds. The bottom valve is closed and the top reopened. The dust is discharged to a cyclone which empties automatically into a dumpster that is checked daily and emptied when necessary. The exhaust air recirculates back within the facility.

**Emissions Calculations**

Operating Schedule:

24hrs/day, 365 days/year

No emissions are attributed to the Drum Filter

The applicant submitted emissions data as follows:

The Particulate Emissions data submitted by the applicant form Kimberly-Clark's South Carolina, Beech Island facility shows that the Bath tissue line emits 0.249 lbs/hr which is being used as an assumption for the purposes of emissions calculation.

PM10 Data Chester, NC tissue machine

&lt;PM less than 10 microns 40.5%

&gt;PM greater than 10 microns 59.5%

Total Particulate: Application 534678 B2/T2 /Bath/Towel Line

Hourly:

R1 = 0.249 lbs PM/hr

R2 = 0.249lbs PM/hr(1-0.95) = 0.01245 lbs PM/hr

Daily:

R1 = 0.249 lbs PM/hr(24hrs/day) = 5.976 lbs PM/day

R2 = 5.976lbs PM/day(1-0.95) =0.299lbs PM/day

Annually:

R2 = 108.76 lbs PM/yr

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PM10:  
 Hourly:  
 $R1 = 0.249 \text{ lbs PM/hr}(0.405 \text{ fraction } < \text{PM10}) = 0.101 \text{ lbs PM10/hr}$   
 $R2 = 0.101 \text{ lbs PM10/hr}(1-0.95) = 0.00504 \text{ lbs PM10/hr}$

Daily:  
 $R1 = 0.101 \text{ lbs PM10/hr}(24 \text{ hrs/day}) = 2.424 \text{ lbs PM10/day}$   
 $R2 = 2.424 \text{ lbs PM10/day}(1-0.95) = 0.121 \text{ lbs PM10/day}$

30-day average  
 $R2_{ave} = 0.0 \text{ lbs/day}$

PM emissions from this line will be vented to filters C64 and C65 for additional PM control after being vented through filter C98. PM emissions from filters C64 and C65 will be released into the manufacturing room.

VOC emissions:  
 The company uses a superlow VOC adhesive applied to the cardboard core(roll).  
 Average use is 30 pounds per month.  
 Hourly:  
 $1 \text{ lb/day}/24 \text{ hrs/day} = 0.042 \text{ lbs/hr}$

Equipment Cap  
 VOC limitation = <30 lbs/day  
 Hourly:  
 $1.25 \text{ lbs/hr @ } 24 \text{ hrs/day}$

Inkjet Printers:  
 VOC emissions are bubbled under A63.5 and A63.6.  
 30 lbs/day maximum.  
 $R1 = R2 = 1.25 \text{ lbs/hr}$

VOC emissions from this new line is limited to 900 pound per month and is also bubbled under condition No. A63.5. The applicant will manage the VOC emissions between the adhesive and inkjet printer operation.

Application 534681

T1 Towel/B1 Line

The modification to this line will involve the change in the venting from filter C66 to filter C97. Both filters are identical and have the same efficiency. No other changes are being made to this line. The proposed modification will have no change in emissions

**Risk Assessment:**

Application no. 534678 & 534681

RISK Assessment:

Contaminant	CAS #	Amount (lbs/yr),(lbs/hr)
Hexane	110-54-3	0.10, 1.145e-05
IPA	67-63-0	0.595, 1.65e-04
Ethylene oxide	75-21-8	6.0E-05, 6.868e-09
Methyl Ethyl Ketone	78-93-3	1.670E-01, 1.911e-05

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Methanol	67-56-1	1.2894E-01, 1.476e-05
1,4 Dioxane	123-91-1	6.0E-05, 6.868e-09
Arsenic	7440-38-2	5.0E-05, 5.723e-09
Lead	7439-92-1	3.802E-03, 4.352e-07
Ethylene Glycol	107-21-1	8.856, 1.014e-03
Ethylene Glycol Monomethyl Ether	109-86-4	1.03E-03, 1.182e-07
Ethylene Glycol Butyl Ether	111-76-2	2.04, 2.34e-04
Trivalent Chrome compounds	18540-29-9	3.23, 3.697e-04
Formaldehyde	50-00-0	9.75E-01, 1.116e-05
Acetaldehyde	75-07-0	3.251E-02, 3.721e-06
Mercury	7439-97-6	3.752E-03, 4.295e-07
Cadmium	7440-43-9	3.752E-03, 4.295e-07
Hex Chrome	18540-29-9	3.752E-03, 4.295e-07
Acrylic Acid	79-10-7	1.3E-04, 1.49e-08
Toluene 2,4 Diisocyanate	584-84-9	1.0E-05, 1.14e-09
Toluene 2,6 Diisocyanate	98-08-7	1.0E-05, 1.14e-09

The toxic materials listed will be added for all towel/bath lines and the multifolders. The existing TACs of hexane and IPA will not be changed

The increase in materials containing toxics resulted in the following Tier 2 MICR:

Residential	Commercial
2.17E-07	3.10E-07
Passes	Passes

The Hazard Index for all targeted organs was less than 1.0. Compliance with Risk requirements is expected.

**Evaluation & Rule Review**

Rule 212 (c)(1): This section requires a public notice for all new or modified permit units that emit air contaminants located within 1,000 feet from the outer boundary of a school.

No public notice is required since no school is located within 1,000 ft from the above site.

Rule 212 (c)(2): This section requires a public notice for all new or modified facilities that have on-site emission increases exceeding any of the daily maximums as specified by Rule 212(g).

The proposed project will result in an emission increase for the entire facility. However, A Rule 212(c) (2) notice will not be triggered since the emission increase is not above the daily maximum specified in Rule 212(g).

Rule 212(c)(3): This section requires a public notice for all new or modified permit unit with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in MICR greater than 1E-6 per permit unit or greater than 10E-6 per facility.

The proposed project will not result in an emission that will exceed a MICR of one in a million or a HIC/HIA of 1.0. Public notice is not required under this section of the rule.

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Rule 212(g): This section requires a public notice for all new or modified sources that result in emission increases exceeding any of the daily maximums as specified by Rule 212(g).

The emission increase due to the addition of this process will not exceed the daily maximum as specified in Rule 212(g). The equipment will be capped with a limit of less than 30bs VOC per day. The following summarizes the emission increase:

	Maximum Daily Emissions					
	<u>ROG</u>	<u>NO<sub>x</sub></u>	<u>PM<sub>10</sub></u>	<u>SO<sub>2</sub></u>	<u>CO</u>	<u>Pb</u>
Emission increase	<30	0	0	0	0	0
MAX Limit (lb/day)	<b>30</b>	<b>40</b>	<b>30</b>	<b>60</b>	<b>220</b>	<b>3</b>
Compliance Status	Yes	Yes	Yes	Yes	Yes	Yes

A public notice is not required since the emission increase is not above the VOC threshold.

Rule 401: With proper maintenance and good operating practices, compliance with this rule is expected.

Rule 402: With proper maintenance and good operating practices, compliance with this rule is expected.

Rule 404: 20,000cfm per drum filter, 0.0125 lbs PM/hr controlled  
 $0.0125 \text{ lb PM/hr} \times (60 \text{ min/hr}) \times (7000 \text{ gr/lb}) = 1.46 \text{ gr/min}$   
 $1.46 \text{ gr/min} / (20,000 \text{ cuft/min}) = 0.000073 \text{ gr/cuft}$   
 0.000073 gr/cuft is less than the minimum requirement of 0.0598gr/cuft @ 21,190cfm as required by this rule. Compliance is expected.

Rule 405: 0.99 lb/hr is the most stringent limit for this rule. Calculated total PM emissions from this line is estimated at 0.0125 lb/hr. Compliance with this rule is expected.

Rule 442: The emissions from the inkjet printers are not subject to any Reg. 11 rules which would put them under the facility VOC emissions 887 lbs/month. The inkjet printers are very efficient and use much less than this equipment cap. Compliance with this rule is expected.

Rule 1130: The inkjet printers are not subject to the requirements of this rule. The VOC emissions are to be accounted for under Rule 442.

Rule 1168: The adhesive used to manufacture the cardboard rolls and tack on the tissue to the rolls ranges from 0.0 to 0.0084 lbs per gallon.  
 For general maintenance of machinery, Kimberly Clark uses a cyanoacrylic adhesive which is exempt under 1168 and a gasket sealant which is less than 250 grams per liter.

Rule 1171: The clean-up operations use an aerosol cleaner which is exempt under 1171 based on their usage of 43 ounces per month. The other clean-up material used is simple green with a voc content of 0.066 lbs per gallon which meets the 25 grams per liter. Compliance with this rule is expected.

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REG XIII: New Source Review.  
1303(a) BACT:

REG XIII: New Source Review.  
1303(b) States that a new permit unit must meet each of the following requirements if there is an emission increase:

1) BACT

The particulate filter systems will satisfy BACT requirements. The equipment is subject to a VOC cap and concentration limiting condition of less than 5wt% VOC. Compliance with BACT is expected.

2) Modeling:

The preliminary screening analysis require the PM<sub>10</sub> emissions to be less than 0.41lbs/hr PM<sub>10</sub>. The estimated PM<sub>10</sub> emission are 0.0124 lbs/hr. This equipment is not a NO<sub>x</sub> source and there are no modeling requirements for VOC. Compliance is expected.

3) Emission Offsets:

No offsets are required. The VOC emissions are capped at 1980 lbs/month for the three Towel/bath lines, two multifolders and the inkjet printers. Compliance is expected. PM<sub>10</sub> emission increase from the new line is negligible.

4) Facility Compliance:

This facility is in compliance with all District Rule and Regulations.

5) Major Polluting Facilities:

The proposed project is not considered a major modification to a major polluting facility.

Rule 1401: Toxics: Rule 1401 contains the following requirements:

1) *(d)(1) MICR and Cancer Burden* - The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:

- (A) an increased MICR greater than one in one million ( $1.0 \times 10^{-6}$ ) at any receptor location, if the permit unit is constructed without T-BACT;
- (B) an increased MICR greater than ten in one million ( $1.0 \times 10^{-5}$ ) at any receptor location, if the permit unit is constructed with T-BACT;
- (C) a cancer burden greater than 0.5.

2) *(d)(2) Chronic Hazard Index* - The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

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3) (d)(3) *Acute Hazard Index* - The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

The increase in materials containing toxics resulted in the following Tier 2 MICR:

Residential	Commercial
2.17E-07	3.10E-07
Passes	Passes

The Hazard Index for all targeted organs was less than 1.0. Compliance with Risk requirements is expected.

REG. XX: This equipment is not a source of NOX. Compliance with this Regulation is expected.

REG. XXX

The proposed project is considered as a “de minimis significant permit revision” to the Title V permit renewed to this facility on October 6, 2009. Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases on non-RECLAIM pollutants or hazardous air pollutants (HAP) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NOx	40
PM10	30
Sox	60
CO	220

To determine if a project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is the 3<sup>rd</sup> permit revision to the Title V renewal permit issued to this facility on October 6, 2009. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

Revision	HAP	VOC	NOx	PM <sub>10</sub>	SOx	CO
Revisions Total	0	0	1	0	0	-7
Revision # 3 Application No. 534678, 681, 684-686 & 534822 to install a new towel/bath line and modify the dust collection system to vent the new line and change the venting of an existing	0	0	0	0	0	0

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towel/bath line.						
Revisions Cumulative	0	0	1	0	0	-7
Maximum Daily	30	30	40	30	60	220

\* RECLAIM pollutant, not subject to emission accumulation requirements

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or HAPs and a "minor permit revision" for RECLAIM pollutants.

**RECOMMENDATION**

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimis significant permit revision", it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not raise any objections within the review period, a revised Title V permit will be issued to this facility.