STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0559-AOP-R6 AFIN: 33-00013

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Unilin Flooring NC, LLC-Columbia Flooring Division State Highway 9 Spur Melbourne, Arkansas 72556

3. PERMIT WRITER:

Patty Campbell, PE

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description:Other Millwork (including Flooring)NAICS Code:321918

5. SUBMITTALS:

7/13/2011 and 8/25/11

6. **REVIEWER'S NOTES**:

Unilin Flooring NC, LLC owns and operates a hardwood flooring mill, Columbia Flooring Division, located at State Highway 9 Spur, Melbourne, Izard County, Arkansas 72556.

This permitting action is necessary to modify the permit as follows:

- 1. Revise Process Description;
- 2. Require a one-time emission stack test of boiler SN-06, no later than 180 days after issuance of this permit, Specific Conditions (SC) #10;
- 3. SN-05 stack test was conducted on November 16, 2010 and so noted in the permit. The next SN-05 stack test is due no later than November 16, 2015;
- 4. Add applicable provisions of 40 CFR 63, Subpart JJJJJJ for SN-05 and SN-06, SC #14 through #20;
- 5. Add a limit for any HAP containing compound with a TLV of 11.3 mg/m³ or higher at SN-10 and SN-21, SC #25 and #26;

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- 6. Allow diesel fuel with a sulfur content no greater than 0.5% by weight, SC #38; and
- 7. Add applicable provisions of 40 CFR 63, Subpart ZZZZ for SN-19, SC #40 through #45.

There are no changes in emissions.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

Current CAO LIS 11-175 has been signed and issued on 9/28/2011.

8. PSD APPLICABILITY:

a. Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N b. Is the facility categorized as a major source for PSD? N Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list? If yes, explain why this permit modification is not PSD?

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
05 & 06	HAPs	NESHAP Subpart JJJJJJ
19	HAPs	NESHAP Subpart ZZZZ

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time.

Non-Criteria Pollutants: 1st Tier Screening (PAER) Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department

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has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m^3) , as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Acetone	1187.1	130.58	26.35	Yes
Acrolein	0.2293	0.0252	0.34056	No
Arsenic	0.0033	0.000363	0.001874	No
Benzene	1.60	0.176	0.35759	No
Chlorine	1.45	0.1595	0.06301	Yes
Dioxins/Furans	0.001	0.00011	0.0001439	No
Formaldehyde	1.50	0.165	3.58902	No
Hydrogen Chloride	2.98	0.328	1.61766	No
Manganese	0.20	0.022	0.13622	No
Methanol	262.1	28.83	140.06	No
Styrene	85.2	9.372	0.161766	Yes
Combined HAPs	112.229	12.345	0.016	Yes

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL $(\mu g/m^3) = 1/100$ of Threshold Limit Value	Modeled Concentration (µg/m ³)	Pass?
Acrolein	2.293	0.167	Yes
Arsenic	0.033	0.00092	Yes

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Pollutant	PAIL $(\mu g/m^3) = 1/100$ of Threshold Limit Value	Modeled Concentration (µg/m ³)	Pass?
Benzene	16.00	0.1748	Yes
Dioxins/Furans	0.01	0.00007	Yes
Formaldehyde	15.0	14.763	Yes
Hydrogen Chloride	29.9	0.791	Yes
Manganese	2.0	0.6659	Yes
Methanol	2620.9	644.795	Yes

Although the 2 boilers are used mutually exclusively, HAPs from both boilers were included in the modeling, a conservative, worst case scenario. Modeling was completed for Air Permit #0559-AOP-R5, issued March 29, 2011.

Table 11 Estimated PTE Annual HAP Emissions Summary

Unilin Flooring NC, LLC -- Columbia Division - Melbourne Facility

HAP	Emision Fac Ibs/MMBti	ctor u	Hourly (d)	Wood-fired Boilers SN-05/06	VOC/HAP Containing products SN- 07/08/09/10/21	Lumber Kilns SN-17	Diesel Storage Tank IA	Diesel Generator SN-19	HAP Total
1,1,1-trichloroethane	3.10E-05	(1)	1.5E-03	6.5E-03					6.5E-03
1,2-Dichloroethane	2.90E-05	(1)	1.4E-03	6.1E-03					6.1E-03
1,2-Dichloropropne	3.30E-05	(1)	1.6E-03	6.9E-03					6.9E-03
2,4-Dinitrophenol	1.80E-07	(1)	8.6E-06	3.8E-05					3.8E-05
4-Nitrophenol	1.10E-07	(1)	5.2E-06	2.3E-05					2.3E-05
Acenaphthene	9.70E-07	(1)	4.6E-05	2.0E-04				1.50E-05	2.2E-04
Acenaphthylene	5.00E-06	(1)	2.4E-04	1.0E-03				2.90E-05	1.1E-03
Acetaldehyde	8.30E-04	(1)	4.0E-02	1.7E-01				8.00E-05	1.7E-01
Acetophenone	3.20E-09	(1)	1.5E-07	6.7E-07					6.7E-07
Acrolein	4.00E-03	(1)	1.9E-01	8.3E-01				2.50E-05	8.3E-01
Anthracene	3.00E-06	(1)	1.4E-04	6.3E-04				3.90E-06	6.3E-04
Antimony	7.90E-06	(2)	3.8E-04	1.6E-03					1.6E-03
Arsenic	2.20E-05	(2)	1.0E-03	4.6E-03					4.6E-03
Benzene	4.20E-03	(1)	2.0E-01	8.8E-01			5.00E- 06	2.50E-03	8.8E-01
Benzo(a)anthracene	6.50E-08	(1)	3.1E-06	1.4E-05				2.00E-06	1.6E-05
Benzo(a)pyrene	2.60E-06	(1)	1.2E-04	5.4E-04				8.20E-07	5.4E-04
Benzo(b)fluoranthene	1.00E-07	(1)	4.8E-06	2.1E-05				3.50E-06	2.4E-05
Benzo(g,h,i)perylene	9.30E-08	(1)	4.4E-06	1.9E-05				1.80E-06	2.1E-05
Benzo(k)fluoranthene	3.60E-08	(1)	1.7E-06	7.5E-06				7.00E-07	8.2E-06
Beryllium	1.10E-06	(2)	5.2E-05	2.3E-04					2.3E-04
bis(2-Ethylhexyl)phthalate	4.70E-08	(1)	2.2E-06	9.8E-06					9.8E-06

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Bromomethane	1.50E-05	(1)	7.1E-04	3.1E-03					3.1E-03
Cadmium	4.10E-06	(1)	2.0E-04	8.6E-04					8.6E-04
Carbon Tetrachloride	4.50E-05	(1)	2.1E-03	9.4E-03			· · · · · ·		9.4E-03
Chlroine	7.90E-04	(1)	3.8E-02	1.6E-01					1.6E-01
Chlorobenzene	3.30E-05	(1)	1.6E-03	6.9E-03			·		6.9E-03
Chloroform	2.80E-05	(1)	1.3E-03	5.8E-03					5.8E-03
Chloromethane	2.30E-05	(1)	1.1E-03	4.8E-03					4.8E-03
Chromium (total)	2.10E-05	(2)	1.0E-03	4.4E-03					4.4E-03
Chrysene	3.80E-08	(1)	1.8E-06	7.9E-06				4.90E-06	1.3E-05
Cobalt	6.50E-06	(2)	3.1E-04	1.4E-03	·····				1.4E-03
Cumene		/			5.22E-03				5.2E-03
Dibezno(a,h)anthracene	9.10E-09	(1)	4.3E-07	1.9E-06				1.10E-06	3.0E-06
Dichloromethane	2.90E-04	(1)	1.4E-02	6.1E-02					6.1E-02
Ehtylbenzene	3.10E-05	(1)	1.5E-03	6.5E-03	9.50E-03		1.00E- 05		1.6E-02
Fluoranthene	1.60E-06	(1)	7.6E-05	3.3E-04				1.30E-05	3.5E-04
Fluorene	3.40E-06	(1)	1.6E-04	7.1E-04				4.10E-05	7.5E-04
Formaldehyde	4.40E-03	(1)	2.1E-01	9.2E-01		7.00E-02		2.50E-04	9.9E-01
Hydrogen Chloride	1.90E-02	(1)	9.1E-01	4.0E+00					4.0E+00
Ideno(1,2,3 c,d)pyrene	8.70E-08	(1)	4.1E-06	1.8E-05				1.30E-06	1.9E-05
Lead	4.80E-05	(2)	2.3E-03	1.0E-02					1.0E-02
Manganese	1.60E-03	(2)	7.6E-02	3.3E-01					3.3E-01
Mercury	3.50E-06	(2)	1.7E-04	7.3E-04					7.3E-04
Methanol						3.05E+00			3.1E+00
Naphthalene	9.70E-05	(1)	4.6E-03	2.0E-02	3.10E-03			4.10E-04	2.4E-02
Nickel	3.30E-05	(2)	1.6E-03	6.9E-03					6.9E-03
Pentachorophenol	5.10E-08	(1)	2.4E-06	1.1E-05					1.1E-05
Phenathrene	7.00E-06	(1)	3.3E-04	1.5E-03				1.30E-04	1.6E-03
Phenol	5.10E-05	(1)	2.4E-03	1.1E-02					1.1E-02
Polychlorinated dibenzo-	1.075.06	(1)		2 55 04					2 55 04
Polychlorinated Dibenzo-	1.67E-06	(1)	7.956E-05	3.5⊑-04					3.3E-04
p-furans (b)	1.87E-09	(1)	8.9E-08	3.9E-07					3.9E-07
Polychlorinated biphynyls	8 14E-09	(1)	3.878E-07	1 7E-06					1.7E-06
Propionaldehvde	6.10E-05	(1)	2.9E-03	1.3E-02					1.3E-02
Pyrene	3.70E-06	(1)	1.8E-04	7.7E-04				1.20E-05	7.8E-04
Selenium	2.80E-06	(2)	1.3E-04	5.8E-04					5.8E-04
Styrene	1.90E-03	(1)	9.1E-02	4.0E-01					4.0E-01
Tetrachloroethene	3.80E-05	(1)	1.8E-03	7.9E-03					7.9E-03
Toluene	9.20E-04	(1)	4.4E-02	1.9E-01	1.90E-03		7.50E- 05	9.00E-04	1.9E-01
Trichloroethene	3.00E-05	(1)	1.4E-03	6.3E-03					6.3E-03
Vinyl Chloride	1.80E-05	(1)	8.6E-04	3.8E-03					3.8E-03
Xylene	2.50E-05	(1)	1.2E-03	5.2E-03	5.02E-02		1.90E- 04	6.20E-04	5.6E-02
HAP Total	HAP Total		1.1E+00	8.07	0.07	3.12	2.80E- 04	0.005	11.27

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These sums are the totals of all HAPs emitted at the Unilin - Columbia Flooring - Melbourne Facility.

(1) Factors from AP42 Chapter 1.6 Table 1.6-3 Emission Factors for

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Speciated Organic Compounds from Wood Residue Combustion (September 2003)

(2) Factors from AP42 Chapter 1.6 Table 1.6-4 Emission Factors for Trace Elements from Wood Residue Combustion (September 2003)
(a) Includes Hepta, Hexa, Octa, Penta, (2,3,7,7) Tetra, and Tetrachlrodibenzo-

p-dioxins (b) Includes Hepta, Hexa, Octa, Penta,(2,3,7,7) Tetra, and Tetrachlrodibenzo-

(b) includes hepta, hexa, Octa, Fenta, (2,3,7,7) retta, and retractinoobenzop-furans

. (c) Includes Deca, Di, Hexa, Hepta, Octa, Mono, Penta, Tetra and Trichlorobiphenyl

(d) Estimated hourly emissions lb/hr = (MMBtu/hr max rating for boilers) x (emission factor [lb/MMBtu])

Maximum PTE hourly boiler fuel combustion (MMBtu/hr) = 47.64

(e) Estimated annual PTE in tons per year = (hourly emission) x (8760)/2000 Other Modeling: None.

Odor: None.

H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards If exempt, explain: Y/N

Pollutant	Threshold value	Modeled Concentration (ppb)	Pass?
H_2S	20 parts per million (5-minute average*)	N/A	
	80 parts per billion (8-hour average) residential area	N/A	
	100 parts per billion (8-hour average) nonresidential area	N/A	

*To determine the 5-minute average use the following equation

 $Cp = Cm (t_m/t_p)^{0.2}$ where

Cp = 5-minute average concentration Cm = 1-hour average concentration

 $t_m = 60 \text{ minutes}$

 $t_p = 5$ minutes

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12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01, 02, 03	EF from informal testing event performed at SN-03 on 8/11/2003 & engineering judgment	01/04 Test result = 0.0016 grains/dscf PM conservatively used <u>EF = 0.01 gr/dscf PM</u>	<u>SN-01</u> Pneumafil Baghouse model #135- 448-10 Fabric Filter <u>SN-02, 03</u> Carter Day Baghouses model #RFJ-376 Fabric Filters	99.9% each	Emissions calculated based on exhaust air flow of individual baghouses @8,760 hrs/yr Rated air flow SN-01 = 17.06 ft/sec – 20,500 scfm SN-02, 03 = 20.07 ft/sec – 20,100 scfm installed 1979 Unilin assumes 100% of PM is PM ₁₀ .
05/06	Criteria EF from test HAP EF from AP-42 Chapter 1.6 Tables 1.6-3 ¹ & 1.6-4 ² (9/03)	$\frac{ bs/hr}{PM/PM_{10} = 25.0}$ $SO_2 = 1.0$ $VOC = 0.7$ $CO = 21.7$ $NO_X = 18.3$ $\frac{ bs/MMBtu/hr}{^{1}Acrolein - 4.00E-03}$ $^{2}Arsenic - 2.20E-05$ $^{1}Benzene - 4.20E-03$ $^{1}Chlorine - 7.90E-04$ $^{1}Formaldehyde - 4.40E-03$ $^{1}HCl - 1.90E-02$ $^{2}Lead - 4.80E-05$ $^{2}Manganese - 1.60E-03$ $^{1}Dixions - 1.70E-06$ $^{1}Furans - 1.90E-03$	Zurn flyash arrestor, multi-clone	80-90% 85% for PM 63% for PM10	Wood fired Boilers SN-05 – Deltak Boiler = <u>47.64 MMBtu/hr</u> SN-06 – Keeler Boiler = 37.5 MMBtu/hr Boilers operated mutually exclusive, 1 @ a time. SN-05 @ 8,760 hrs/yr SN-06 @ 1 hr/yr Actual is about 80/20 but conservatively estimated larger boiler SN-05 ops 100% SN-06 HAPs lb/hr
07, 08, 09, 10, 21	Mass Balance for Finishing Dept Materials	MSDS & actual usage Max 1. MMBF/hr w/12 kilns at capacity	None	N/A	<u>VOC & HAP-</u> <u>containing Materials</u> <u>in Finishing Dept.</u> Assumes 100% of VOCs & HAPs emitted

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SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
17	VOC ¹ - Brian W. Beakler, et al "Quantification VOCs kin-drying Red Oak & White Oak Lumber" (11/07) Formaldehyde ² & Methanol ² – OR State Univ. "Small Scale Kiln Study Utilizing Ponderosa Pine, . White Fir" (9/20/00)	Lumber Kiln Throughput = 50 MMBF of lumber / 12 consecutive mos. $\frac{Lb/mbf}{VOC} = 0.256^{1}$ Formaldehyde = 0.0028 ² Methanol = 0.122 ²	None	N/A	 @8,760 hrs/yr, 12 kilns, limited by throughput MBF x 1000 = MMBF 1 - worst case, red oak range 0.154 - 0.356 = 0.256 lb/mbf VOC (both white & red are dried) 2 - used white fir emission factor since oak not included
19	AP-42 Chap 3.4-1 (10/96)	$\frac{lbs/hp-hr}{PM/PM_{10} = 0.0007}$ SO ₂ = 0.00405 ¹ VOC = 0.000705 CO = 0.0055 NO _X = 0.0240	None	N/A	Emergency Diesel Generator Engine 981 hp [Large] @1000 hrs/yr max 100% of PM is PM ₁₀ . ¹ Sulfur content of diesel fuel is 0.5% x 0.00809 lbs/hp-hr = 0.00405 lbs/hp-hr EF
20	AP-42 Chap 9.9.1-1 (03/03)	<u>lbs/ton</u> PM = 0.086 PM10 = 0.029 Max 1 truck/hr @ max 25 tons/truck Max 100 trucks/mo = 2,500 tons/mo x 12 mos = 30,000 tons/yr	None	N/A	 AP-42 is for Grain Truck Shipping as substitute for wood waste. The facility can only load one truck per hour. Historical data (last 5 yrs show max 96 loads/mo in 10/07.

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources:

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SN	Pollutants	Test Method	Test Interval	Justification	
05 Boiler	РМ	5 and 202	Once every 5 years or iftest	§19.702 and	
	PM_{10}	201A and 202	fails, two consecutive annual		
	СО	10	test, no later than	§19.901	
	NO _X	7E	November 16, 2015.		
	РМ	5 and 202	One-time Test due no later	\$19.702 and	
06	PM ₁₀	201A and 202	than 180 days after issue of		
Boiler	СО	10	emissions are greater than SN-	§19.901	
	NO _X	7E	US emissions		

14. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

There are no CEMS or other monitoring equipment.

15. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
05	Performance Tests	PM, PM_{10} , CO and NO_X limits	Every 5 years or if failed 2 consecutive successful tests	Y
06	Performance Test	PM, PM_{10} , CO and NO_X limits	One-time	Y
05/06	Boilers Manufacturer's Specification	Maintain for life of units	On-going	N

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SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
05/06	Hourly Operation of SN-05 & 06	Maximum of 1-hour during periods of start-up/shutdown. Records shall indicate date & time of start-up and shutdown for each boiler	As –performed, no limit other than max 1-hr each occurence	N
05/06	Multi-clone fly ash arrestors Manufacturer's Specification	Maintain for life of units	On-going	N
05/06	Tune-ups	Must be completed as specified in §63.11223 (b)(1) through (7).	Biennially or no more than 25 months after previous tune-up. If unit not operating on the required date, tune-up must be conducted within 1 week of start-up	N
05/06, Facility	Energy Assessment performed by a qualified Energy Assessor	Must be completed according to §63.11214(c.) and Table 2 to Subpart JJJJJJ of Part 63, item #4, (1) through (7) and be performed by March 21, 2014.	One time	N
05/06, Facility	Energy Assessment (above)	Maintain Report for life of Facility	On-going	N
05/06	Initial Notification of Compliance Status	Initial due by 9/17/2011. Include the §63.11225(a)(4) certifications.	Initial, one time	Y
05/06	Annual Notification of Compliance Status with NESHAP Subpart JJJJJJ	Include the §63.11225(a)(4) certifications. Include completion of boiler tune-up, date, signed, as appropriate, per §63.11214(b)	Annually, prepare by 3/1 each year and received by ADEQ by 3/15 each year	Y

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SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
05/06	Work practices, emission reduction measures, and management practices required by §63.11214	 Identify Boiler, date of tune- up, tune-up procedures followed, manufacturer's specs Document fuel type Occurrence and duration of malfunction Corrective action taken 	Annually	N
7-10 & 21	VOC, HAP & acetone content	Various	Monthly	Y
17	Lumber Kiln-dried Throughput	50 million (MM) board feet (BF) of Lumber per 12 month rolling totals	Monthly	Y
19	Operating Hours of Diesel Generator	1,000 operating hours per 12 month rolling totals	Monthly	N
19	Diesel Fuel	Combust diesel fuel with a sulfur content no greater than 0.5% by weight	On-going	N
20	Wood Waste Truck Loadout	 2,500 tons of Wood Waste per month [equivalent to 100 trucks loaded per month] 30,000 tons of Wood Waste per 12 month rolling totals 	Monthly	Y

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 02, 03	5%	§18.501 and A.C.A.	Weekly Observation
05, 06, 19	20%	§19.503 and A.C.A.	Daily Observation
20	10%	§18.501 and A.C.A.	Weekly Observation
Off-site	5%	§18.501 & A.C.A.	Observation

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17. DELETED CONDITIONS:

No conditions were deleted.

18. GROUP A INSIGNIFICANT ACTIVITIES:

	A	Emissions (tpy)						
Source Name		PM/ PM ₁₀	SO ₂	VOC	со	NO _X	HAPs	
							S	Tot
One Diesel Fuel Storage Tank, 10,000 gallon capacity (formerly SN-18)	A-3	0.0	0.0	0.003	0.0	0.0	-	2.80E-04
Five Electric UV Ovens	A-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Four Wood Storage Silos	A-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #	
0559-AOP-R5	

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

Paula[']Parker, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Facility Name: Unilin-Columbia Flooring Permit Number: 0559-AOP-R6 AFIN: 33-00013

\$/ton factor Permit Type	22.65 Modification	Annual Chargeable Emissions (tpy) Permit Fee \$	<u>263.84</u> 1000
Minor Modification Fee \$	500		
Minimum Modification Fee \$	1000		
Renewal with Minor Modification \$	500		
Check if Facility Holds an Active Minor Source or Minor Source General Permit	in the second seco		
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0		
Total Permit Fee Chargeable Emissions (tpy) Initial Title V Permit Fee Chargeable Emissions (tpy)	0		

HAPs not included in VOC or PM:

Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride

Revised 08-30-11

Air Contaminants:

All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensible PM, H2S in TRS, etc.)

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
РМ	V	134.1	134.1	0	0	134.1
PM ₁₀	L	133.3	133.3	0		
SO ₂	v	6.3	6.3	0	0	6.3
VOC	R	17.8	17.8	0	0	17.8
со	<u> </u>	97.6	97.6	0		
NO _X	R	91.2	91.2	0	0	91.2
Acrolein		0.83	0.83	0		
Arsenic	Γ	0.01	0.01	0		
Benzene	r.	0.88	0.88	0		
Chlorine		0.16	0.16	0	0	0.16
Dioxin/Furans	D	0.01	0.01	0		
Formaldehyde	T .	0.99	0.99	0		
Hydrogen Chloride		4	4	0	0	4
Lead	F	0.01	0.01	0		
Manganese	.	0.33	0.33	0		
Methanol		3.05	3.05	0		
Styrene	C	0.4	0.4	0		
Combined HAPs	r	0.08	0.08	0		
Acetone		10.28	10.28	0	0	10.28