STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0193-AOP-R11 AFIN: 27-00008

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

H.G. Toler & Son Lumber Company, Inc. 10468 AR-229 Leola, Arkansas 72084

3. PERMIT WRITER:

Skylar Redman

4. NAICS DESCRIPTION AND CODE:

NAICS Description:SawmillsNAICS Code:321113

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
	Auministrative Amenument)	
4/21/2025 Minor Mod		Add a cyclone(SN-16)

6. **REVIEWER'S NOTES**:

H.G. Toler & Son Lumber Company, Inc. owns and operates a lumber mill. This minor modification adds one cyclone (SN-16) to the permit. Emission changes are as follows: 8.6 tpy of PM and 3.4 tpy of PM_{10} .

7. COMPLIANCE STATUS:

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

The facility was last inspected on February 26, 2025 with no violations identified. <u>https://echo.epa.gov/detailed-facility-report?fid=110007229515</u>

8. PSD/GHG 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 \geq 100 tpy and on the list of 28 or single pollutant \geq 250 tpy and not on list

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-10	HAPs	NESHAP CCCCCC
SN-13	PM	NSPS Dc
SN-13	HAPs	NESHAP JJJJJJ
SN-15	HAPs	NESHAP IIII NESHAP ZZZZ

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval	Extension Requested	Extension Approval	If Greater than 18 Months without Approval, List Reason for	
Source	Date	Date	Date	Continued Inclusion in Permit	
N/A					

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N (Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Rule 18 requirement.)

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
		N/A

Permit #: 0193-AOP-R11 AFIN: 27-00008 Page 3 of 9

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Division of Environmental Quality procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Division of Environmental Quality has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	$\begin{array}{l} \text{PAER (lb/hr)} = \\ 0.11 \times \text{TLV} \end{array}$	Proposed lb/hr	Pass?
Acrolein	0.229	0.02519	0.1648	No
Arsenic	0.01	0.0011	0.0006	Yes
Beryllium	0.00005	0.0000055	0.0000316	No
Cobalt	0.02	0.0022	0.000187	Yes
Formaldehyde	0.368	0.04048	0.35	No
Hydrogen Chloride	2.98	0.328	0.545	No
Lead	0.05	0.0055	0.00138	Yes
Manganese	0.02	0.0022	0.06	No

Pollutant	TLV (mg/m ³)	$PAER (lb/hr) = 0.11 \times TLV$	Proposed lb/hr	Pass?
Mercury	0.025	0.00275	0.0001	Yes
Methanol	262.086	28.829	1.406	Yes
РОМ	0.2	0.022	0.01	Yes
Styrene	85.202	9.37	0.055	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 Division of Environmental Quality to be one onehundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL $(\mu g/m^3) = 1/100$ of Threshold Limit Value	Modeled Concentration $(\mu g/m^3)$	Pass?
Acrolein	2.29	0.30251	Yes
Beryllium	0.0005	0.00002	Yes
Formaldehyde	15*	0.65071	Yes
Hydrogen Chloride	29.8	0.42541	Yes
Manganese	0.2	0.03867	Yes

*ADEQ approved alternate PAIL

** Emissions of modeled pollutants did not change for Permit #0193-AOP-

R11, so new modeling was not performed

c) 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.

Y

Is the facility exempt from the H₂S Standards If exempt, explain<u>: This facility does not emit H₂S.</u>

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
04	Manufacturer data	PM/PM ₁₀ : 0.009 grains/scf	Cyclone	N/A	42,800 scf/min
05	Manufacturer data	PM/PM ₁₀ : 0.280 grains/scf	Cyclone	N/A	2,710 scf/min
08, 14	Old AP-42	Table 10.4.1 PM: 0.03 grains/scf	None	N/A	
09A- C	NCASI ADEQ	VOC: 3.5 lb/Mbf Total HAP: 0.2955 lb/Mbf	N/A	N/A	
10	AP-42 TANKS EPA 453/ R-94- 002a	Tanks 4.0.9d Hexane: 1.6% Benzene: 0.9% Toluene: 1.3% 2,2,4- Trimethylpentane: 0.8% Xylene: 0.5% Ethyl Benzene: 0.1%	None	N/A	25,000 gallons per year throughput
11	AP-42 13.2.2 AP-42 13.2.2 $ \begin{array}{r} 0.176\\ Unpaved\\ s=3.9\\ W=15 ton\\ Max miles=\\ mi/day\\ 100 wet days, \end{array} $		None	N/A	
12	ADEQ Memo Dated August 22, 2003	PM: 0.0044 lb/ton PM ₁₀ : 0.00034 lb/ton	None	N/A	
13	AP-42 Tables 1.6. AP-42 Tables 1.6. AP-42 Tables 1.6. AP-42 Tables 1.6.		Cyclone	N/A	28.72 MMBtu/hr 600 hp boiler
15	AP-42 3.2-3 Table (7/00)	$\frac{16}{\text{PM}} = 0.157$	Uncontrolled	N/A	Caterpillar 300 hp diesel

Permit #: 0193-AOP-R11 AFIN: 27-00008 Page 6 of 9

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		$PM_{10} = 0.157$ $SO_2 = 0.182$			<u>1.68966</u> MMBtu/hr
		Formaldehyde =			Emergency
		2.10E-7			100 hr/yr
		VOC = 0.392			
		CO = 3.325			
		$NO_X = 2.699$			
16	AP-42	PM = 0.200 gr/dscf			2,671 dscfm
16	AP-42	PM10 = 0.08 gr/dscf			3,750 hours/yr

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
		N/A		

17. MONITORING OR CEMS:

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

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
		N/A		

18. 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)
09A-C	Lumber Throughput	58.7 Million Board Ft/yr	Monthly	Yes
10	Gasoline Throughput	25,000 Gallons/yr	Monthly	Yes
12	Hog Fuel Throughput	42,149 tons/rolling 12 month period	Monthly	Yes

Permit #: 0193-AOP-R11 AFIN: 27-00008 Page 7 of 9

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
13	Amount of fuel combusted	N/A	Monthly	No
13	Boiler tune-up parameters (concentrations of CO and oxygen)	N/A	Biennially	If requested by Administrator
13	Records as specified in §63.11225(c)(1) through (7)	N/A	As Needed	As Needed
14	Hours of operation	3750 per rolling 12 month	Monthly	Yes
15	Compliance with NESHAP Subpart ZZZZ	Applicable emission & operating limitations, no later than October 19, 2013	Monthly	No
15	Non-emergency operation: maintenance checks and readiness testing	Any operation other than emergency operation, for 50 hours per year, which count towards the 100 hours/calendar year maintenance and testing	As occurs	No
15	Subpart ZZZZ of Part 63 – monitoring results, maintenance log	Operating limitations and other requirements apply at all times.	As occurs – Report any deviation	Yes
15	Maintenance Logs	a. Change oil and filter every 500 hours of op or annually, whichever occurs first. The permittee has the option to utilize an oil analysis	As stated	No

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
		program as		
		described in		
		§63.6625(j) in		
		order to extend		
		the specified oil		
		change		
		requirement in		
		Table 2C of		
		Subpart ZZZZ of		
		Part 63, items #6,		
		footnote 2;		
		b. Inspect		
		spark plugs		
		every 1,000		
		hours of		
		operation or		
		annually,		
		whichever		
		comes first, and		
		replace as		
		necessary;		
		c. Inspect		
		all hoses and belts		
		every 500 hours		
		of operation, or		
		annually,		
		whichever comes		
		first, and replace		
		as necessary.		
16	Hours of	3750 per rolling	Monthly	Yes
10	operation	12 month	within	105

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
13	20%	Reg.19.503	Daily Observation
04, 05, 08, 12, 14, 16	10%	Department Guidance	Weekly Observation
15	20%	§18.501 & A.C.A.	Yearly Observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

Permit #: 0193-AOP-R11 AFIN: 27-00008 Page 9 of 9

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source	Croup A	Emissions (tpy)						
Source	Group A Category	PM/PM ₁₀	SO ₂	VOC	СО	NO	HA	Ps
Name	Category	PIVI/PIVI10	302	VUC	CO	NO _x	Single	Total
Diesel								
Storage	A-3	0	0	0.001	0	0	0	0
Tank								

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #	
0193-AOP-R10	

APPENDIX A - EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Facility Name: H.G. Toler & Son Lumber Company, Inc. Permit Number: 0193-AOP-R11 AFIN: 27-00008

\$/ton factor	28.14	Annual Chargeable Emissions (tpy)	223.81
Permit Type	Minor Mod	Permit Fee \$	500
Minor Modification Fee \$	500		
Minimum Modification Fee \$	1000		
Renewal with Minor Modification \$	500		
Check if Facility Holds an Active Minor Source or Mino	or		
Source General Permit			
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0		
Total Permit Fee Chargeable Emissions (tpy)	8.6		
Initial Title V Permit Fee Chargeable Emissions (tpy)			

HAPs not included in VOC or PM:

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

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
PM		77.8	86.4	8.6	8.6	86.4
PM_{10}		74	77.4	3.4		
PM _{2.5}		0	0	0		
SO ₂		3.3	3.3	0	0	3.3
VOC		106.1	106.1	0	0	106.1
со		75.8	75.8	0		
NO _X		28	28	0	0	28

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit		Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Lead	•	0.01	0.01	0	0	0.01
Formaldehyde		0.01	0.01	0		
Total HAP		21.65	21.65	0		