

STATEMENT OF BASIS

For the issuance of Air Permit # 0193-AOP-R10 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: Sawmills
NAICS 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
10/23/2023	Minor Mod	Add an emergency diesel generator (SN-15)

6. REVIEWER'S NOTES:

This minor modification adds Emergency Diesel Generator SN-15. Permitted emission changes are as follows: an increase in 0.1 tpy of PM/PM₁₀, an increase in 0.1 tpy of SO₂, an increase in 0.1 tpy of VOC, an increase in 0.3 tpy of CO, an increase in 0.3 tpy of NO_x, and an increase of 0.01 tpy of total HAPs.

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 28, 2023. There were no violations identified.

https://echo.epa.gov/detailed-facility-report?fid=110007229515&ej_type=sup&ej_compare=US

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 ≥ 100 tpy and on the list of 28 or single pollutant ≥ 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 Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for 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.)

If yes, are applicable requirements included and specifically identified in the permit? N
If not, explain why.

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason
N/A		

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		

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)	PAER (lb/hr) = 0.11 × TLV	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
Mercury	0.025	0.00275	0.0001	Yes
Methanol	262.086	28.829	1.406	Yes
POM	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 one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL (µg/m ³) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/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-R10, 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.

Is the facility exempt from the H₂S Standards

Y

If exempt, explain: This facility does not emit H₂S.

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	Unpaved: s=3.9 W=15 tons Max miles= 6 mi/day 100 wet days/year	None	N/A	
12	ADEQ Memo Dated August 22, 2003	PM: 0.0044 lb/ton PM ₁₀ : 0.00034 lb/ton	None	N/A	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
13	AP-42 Tables 1.6-1, 1.6-2, 1.6-3, and 1.6-4	<u>lb/MMBtu:</u> PM: 0.35 PM ₁₀ : 0.32 SO ₂ : 0.025 VOC: 0.017 CO: 0.60 NO _x : 0.22 Lead: 4.8E-5 Total HAP: 3.6E-2	Cyclone	N/A	28.72 MMBtu/hr 600 hp boiler
15	AP-42 3.2-3 Table (7/00)	<u>lb/MMBtu</u> PM = 0.157 PM ₁₀ = 0.157 SO ₂ = 0.182 Formaldehyde = 2.10E-7 VOC = 0.392 CO = 3.325 NO _x = 2.699	Uncontrolled	N/A	Caterpillar 300 hp diesel <u>1.68966</u> <u>MMBtu/hr</u> Emergency 100 hr/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
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

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
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	<p>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 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;</p> <p>b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;</p> <p>c. Inspect all hoses and belts every 500 hours of operation, or annually, whichever comes first, and replace as necessary.</p>	As stated	No

19. OPACITY:

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

20. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

21. GROUP A INSIGNIFICANT ACTIVITIES:

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

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Diesel Storage Tank	A-3	0	0	0.001	0	0	0	0

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-R9

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: H.G. Toler & Son Lumber Company, Inc.
 Permit Number: 0193-AOP-R10
 AFIN: 27-00008

\$/ton factor	28.14	Annual Chargeable Emissions (tpy)	215.21
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 Minor Source General Permit	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	0.6
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		77.7	77.8	0.1	0.1	77.8
PM ₁₀		73.9	74	0.1		
PM _{2.5}		0	0	0		
SO ₂		3.2	3.3	0.1	0.1	3.3
VOC		106	106.1	0.1	0.1	106.1
CO		75.5	75.8	0.3		
NO _x		27.7	28	0.3	0.3	28
Lead	<input checked="" type="checkbox"/>	0.01	0.01	0	0	0.01

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Formaldehyde	<input type="checkbox"/>	0	0.01	0.01		
Total HAP	<input type="checkbox"/>	21.64	21.65	0.01		