

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0957-AOP-R19 AFIN: 46-00005

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Cooper Tire & Rubber Company
3500 East Washington Road
Texarkana, Arkansas 71854

3. PERMIT WRITER:

Andrea Sandage

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Tire Manufacturing (except Retreading)
NAICS Code: 326211

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
2/2/2021	Renewal	Usage change - ink, thinner, cement, solvent, paint, removed fuel oil option, corrected low NO _x boiler emissions

6. REVIEWER'S NOTES:

Cooper Tire & Rubber Company (AFIN: 46-00005) operates a tire manufacturing facility located at 3500 East Washington Road, Texarkana, AR 71854. Cooper submitted an application to renew the Title V permit with the following modifications.

- Reduce Tread Markers (GR-08) ink usage from 3000 gallons/yr to 2800 gallons/yr. Increase thinner usage from 100 gallons/yr to 200 gallons/yr

- Increase Tire Building Area (SN-67) cement usage from 650 gallons/yr to 750 gallons/yr. Decrease solvent usage from 2000 gallons/yr to 1800 gallons/yr
- Reduce Tire Inspection/Repair Area (SN-68 & SN-106) paint usage from 2500 gallons/yr to 1500 gallons/yr. Increase solvent usage from 650 gallons/yr to 700 gallons/yr
- Remove alternate operating scenario to burn fuel oil from Boiler # 1 (SN-53) and Boiler #4 (SN-89).
- Update the Insignificant Activities List – Removed 1,000 gallon Fuel Oil Day Tank, Removed from service two 30,000 gallon Fuel Oil Storage Tanks (#27, #28)
- Correct emissions for Boiler #5 (SN-55a) and Boiler # 4 (SN-89) due to low NO_x burners.

The total permitted emission increases include 8.4 tpy CO, 0.03 tpy Xylene and 6.36 tpy Total HAPs/Other HAPs. Total emission decreases include 4.5 tpy PM/PM₁₀, 65.8 tpy SO₂, 21.7 tpy NO_x and 0.0037 tpy Lead Compounds.

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 March 20, 2019 and determined to be in compliance. No areas of concern were identified.

A review of ECHO indicates that the facility had one (1) Informal Enforcement Actions and one (1) Formal Enforcement Action in the last five (5) years.

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? **Y**

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

This permit modification does not increase any of the pollutants by an amount that would be considered a significant modification by PSD standards.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
GR-03 & GR-04	All Listed	NSPS Subpart BBB
SN-89	Opacity and SO ₂	NSPS Subpart Dc
SN-140 and SN-141	HAP	NESHAP ZZZZ
SN-55a	No specific standards have been set for natural gas-fired sources	NSPS Subpart Dc
		NESHAP Subpart DDDDD
SN-133	VOC	PSD

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
none				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N

12. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

13. 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.

The facility has been reviewed under the NCAP strategy which includes any single NCAP HAP with emissions equal to or greater than 10 tpy or a TLV less than 1 mg/m³.

Emergency equipment emissions are included in the evaluation of the DeMinimis level HAPs but are not modeled per ADEQ guidance.

The facility emits HAPs related to incomplete combustion and rubber processing.

Chargeable HAPs included in Fee Sheet calculations - Methylene Chloride and Tetrachloroethene.

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/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
2-Chloroacetophenone	0.316	0.0348	2.3006E-04	Pass
4-Methyl-2-Pentanone (MIBK)*	81.900	9.0090	4.7615E+00	Pass
Acrolein	0.229	0.0252	5.2488E-02	Model
Dibenzofuran	0.200	0.0220	2.0557E-03	Pass
Formaldehyde	0.370	0.0407	1.7302E-02	Pass
Hexachlorobutadiene	0.240	0.0264	2.4662E-02	Pass
Lead (Pb) Compounds	0.050	0.0055	3.3176E-03	Pass
Xylene*	434.192	47.7611	4.0386E+00	Pass
Arsenic	0.010	0.0011	4.6122E-05	Pass
Beryllium	0.000	0.0000	2.7673E-06	Pass
Chromium Compounds (Cr III)	0.500	0.0550	2.0054E-02	Pass
Cadmium	0.002	0.0002	4.0911E-04	Model
Cobalt	0.020	0.0022	1.4442E-03	Pass
Manganese	0.020	0.0022	8.7632E-05	Pass
Mercury	0.010	0.0011	5.9959E-05	Pass
Nickel (Ni) Compounds	0.100	0.0110	1.8560E-02	Model
Selenium	0.200	0.0220	5.5347E-06	Pass
POM - Total	0.200	0.0220	1.8355E-07	Pass

*Total emissions > 10 tpy

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 ($\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Acrolein	2.29	0.919	Pass
Cadmium	0.02	0.00178	Pass
Nickel	1.00	0.3575	Pass

a) H₂S Modeling:

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 for hydrogen sulfide.

14. CALCULATIONS:

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
GR-01	RMA Testing AP-42 Table 1.4-1,2,3,4	lb/lb rubber: 4.02E-04 PM 3.91E-05 VOC lb/lb silica: 1.69E-02 VOC RTO Nat. Gas Factors 7.6 lb PM/MMCF 0.6 lb SO ₂ /MMCF 5.5 lb VOC/MMCF 84 lb CO/MMCF 100 lb NO _x /MMCF	Baghouse RTO – Mixer #8 only	PM 95% VOC 98% destruction 85% capture	30 ton/hr; 220,000 tpy standard rubber throughput 1.46 ton/hr; 7,000 tpy silica throughput for mixer #7 & #9 1.88 ton/hr; 9,000 tpy silica throughput for mixer #8 Master pass Silica VOC – 65.7% Second&Final Pass Silica VOC – 34.3% RMA is the Rubber Manufacturers Association.
GR-03	MSDS NSPS	PM: 8% solids 10% overspray VOC: 7.5 gr/tread	None	None	
GR-04	Stack Test	PM: 0.0015 lb/tire VOC: 2 gr/tire	None	None	
GR-05	RMA	PM: 0.05 lb/tire VOC: 1.59E-2 lb/lb rubber	Baghouse	95.8%	
GR-06	RMA	PM: 0.10 lb/tire VOC: 1.59E-2 lb/lb rubber	Baghouse	99.2%	
GR-08	MSDS	VOC: 6.52 lb/gal ink 9.11 lb/gal thinner	None	None	
SN-07	AP-42 11.24-2	PM: 0.12 lb/ton	Baghouse	95%	
SN-53	AP-42	Standard Natural Gas	None	None	uncontrolled
SN-55a	AP-42	Standard Natural Gas	None	None	Low NO _x burners
SN-59	AP-42 Table 6.1.4	0.20 PM/ton Carbon Black	Dust Collector	95%	

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
SN-60	AP-42 Table 6.1.4	0.20 PM/ton Carbon Black	Dust Collector	95%	
SN-67	MSDS	VOC: 6.26 lb/gal (solvent) 6.28 lb/gal (cement)	None	None	
SN-68 SN-106	MSDS	VOC: 6.26 lb/gal (solvent) 0.10 lb/gal (paint)	None	None	Paint Density 10.0 lb/gal
SN-89	AP-42	Standard Natural Gas 97.3 MMBTU/hr 8760 hrs/yr (NG) 95.4 MCF/hr (NG) Nat. Gas Factors 7.6 lb PM/MMCF 0.6 lb SO ₂ /MMCF 5.5 lb VOC/MMCF 84 lb CO/MMCF 50 lb NO _x /MMCF	None	None	Low NO _x burners
SN-108	RMA	VOC 1.1E-04 lb lb rubber 2.57E-02 lb/lb silica	None	None	30 ton/hr; 220,000 tpy standard rubber throughput 3.33 ton/hr; 16,000 tpy silica throughput 70% of rubber, milled 33% silica rubber milled
SN-109	RMA	VOC 1.23E-05 lb/lb rubber 2.79E-04 lb/lb silica	None	None	30 ton/hr; 220,000 tpy standard rubber throughput 3.33 ton/hr; 16,000 tpy silica throughput 100% of mixed and silica rubber is extruded
SN-110	RMA	30 ton/hr 40% of rubber, calendered 5.59E-5 lbcompd#2/lbrubber	None	None	
SN-111	RMA	VOC: 3.37E-4 lb/lb rubber	None	None	
SN-121	MSDS	VOC 6.0 lb/gal	None	None	
SN-140 and SN-141	AP-42	See Section 3.3 Tables 3.3-1 and 3.3-2	None	None	500 hrs/yr each SN-140 2 MMBtu/hr SN-141 3 MMBtu/hr

15. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
133	VOC Opacity	25A 9	Once every 60 months	Insure PSD compliance

16. 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)
133	RTO Minimum *Temperature - 1500°F	Device to continuously measure and record temperature	Continuously while operating	N

*The temperature of the RTO is initially set at 1500°F and may be lowered or raised depending upon stack testing required in the permit.

17. RECORDKEEPING REQUIREMENTS:

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

Source	Recorded Item	Limit (as established in permit)	Frequency	Report (Y/N)
Plantwide	Final Rubber Processed (Mixed & Imported)	220,000 tons/yr	Monthly	Y
SN-51, SN-134	Silica Usage	7,000 tons/yr	Monthly	Y
SN-133	Silica Usage	9,000 tons/yr	Monthly	Y
Plantwide	Silica Usage	16,000 tons/yr	Monthly	Y
SN-133	Temperature of RTO	≥1500°F	Continuously while operating	N
SN-133 RTO	Description of why the RTO Bypass Stack was opened, reason for the outage of the RTO system, and the corrective actions taken	The permittee may only operate the RTO Bypass Stack RTO has an emergency outage, equipment malfunction, or is undergoing preventative maintenance.	Whenever the RTO Bypass Stack is opened	Y
GR-03, GR-04, GR-05, GR-06	Treads/Tires Processed	12,000,000 treads/yr	Monthly	Y
GR-03	VOC Emissions per Tread	7.5 grams/tread/month	Monthly	Y

Source	Recorded Item	Limit (as established in permit)	Frequency	Report (Y/N)
GR-04	VOC Emissions of Inside Paint	1.0 grams/tread/month	Monthly	Y
	VOC Emissions of Outside Paint	1.0 grams/tread/month	Monthly	Y
GR-08	Ink Throughput	2,800 gallons/yr	Monthly	Y
	Solvent Throughput	200 gallons/yr	Monthly	Y
	Ink/Thinner VOC Content	Listed in Table	Annually	N
SN-55a	Type of fuel burned and quantity of fuel burned	-	Monthly	Y
SN-59 SN-60	Carbon Black	80,000 Tons Total both sources	Monthly	Y
SN-67	Cement	650 Gallons	Monthly	Y
	Solvent	1,800 Gallons	Monthly	Y
	Solvent & Cement VOC Content	Listed in Table	Monthly	N
SN-68, SN-106	Solvent	700 Gallons	Monthly	Y
	Paint	1,500 gallons	Monthly	Y
	Solvent & Paint VOC Content	Listed in Table	Annually	N
SN-121	All HAP containing material usage	1.17 tpy Glycol ethers 0.09 tpy Toluene 0.09 tpy Xylene	Monthly	Y
Plant	All VOC containing material usage	464 tpy VOC	Monthly	Y
	MSDS (VOC & HAP Contents)	----	As needed	N
SN-140 and SN-141	Hours of operation	500 hours per calendar year	Per Event	Y

18. OPACITY:

SN	Opacity %	Justification	Compliance Mechanism
GR-01 (RTO), GR-03 through GR-06, and GR-09	20	Division of Environmental Quality Guidance	Weekly observation Daily during off-line maintenance

SN	Opacity %	Justification	Compliance Mechanism
07	20	Division of Environmental Quality Guidance	Weekly observation
53	5	Division of Environmental Quality Guidance-NG	Burn only Nat. Gas
55a	5	Division of Environmental Quality Guidance for natural gas	EPA Method 9 Burn only Nat. Gas
89	5	Division of Environmental Quality Guidance - NG	Burn only Nat. Gas
140 and 141	20%	Division of Environmental Quality Guidance	Annual Observation

19. DELETED CONDITIONS:

Former SC	Justification for removal
74-77	SN-55a - Subpart 5D conditions moved to 5D Plant Wide conditions

20. GROUP A INSIGNIFICANT ACTIVITIES:

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

Source Name	Group A Category	Emissions (tpy)			
		VOC	PM ₁₀	HAPs	
				Single	Total
Two (2) 10,000 gallon Naphthenic Petroleum Oil Storage Tanks #1 and #4	A-3	0.092			
10,000 gallon Naphthalic Petroleum Oil Storage Tank #6	A-3	0.038			
Three (3) 10,000 gallon Aromatic Petroleum Hydrocarbon Storage Tanks #8, #9, and #10	A-3	.0009			
10,000 gallon Naphthenic Process Oil Blend Tank #29	A-3	0.005			
Dust Ring Lube Oil Tank #12	A-3	0.02			
500 gallon Fire Pump Tank #1	A-3	0.0001			
500 gallon Fire Pump Tank #2	A-3	0.0001			
Phenyldiamine Tank #7 (10,000 gallons)	A-3	0.038			
Steric Acid Tank #30 (10,000 gallons)	A-3	0.010			
Hydrocarbon Resin Tank #31(10,000 gallons)	A-3	0.012			
Group A-3 Total		0.21			
Quality Control and Materials testing Lab	A-5	0.02			0.00002
Group A-15 Total		0.02			0.00002
White Side Wall Protective Painters	A-9	0.25	0.28		0.062

Source Name	Group A Category	Emissions (tpy)			
		VOC	PM ₁₀	HAPs	
				Single	Total
Mold and Bladder Lube Application	A-9	0.0013			0.003
Group A-19 Total		0.26	0.28		0.065
Two (2) 30,000 gallon Fuel Oil Storage Tanks – Empty – Not in service	A-13	<0.01			
Air Compressor #1			0.04		
Air Compressor #2			0.04		
Process Water #1			0.113		
Process Water #2			0.113		
Process Water #3			0.113		
#1 HVAC Tower			0.082		
#2 HVAC Tower			0.082		
#3 HVAC Tower			0.265		
#4 HVAC Tower			0.265		
Group A-13 Total		<0.01	1.11		

21. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
0957-AOP-R18

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Cooper Tire & Rubber Company
 Permit Number: 957-AOP-R19
 AFIN: 46-00005

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	567.99
Permit Type	Modification	Permit Fee \$	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	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	-92.04
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		35.1	30.6	-4.5		
PM ₁₀		35.1	30.6	-4.5	-4.5	30.6
PM _{2.5}		0	0	0		
SO ₂		67.1	1.3	-65.8	-65.8	1.3
VOC		464	464	0	0	464
CO		77.6	86	8.4		
NO _x		86	64.3	-21.7	-21.7	64.3
Lead	<input type="checkbox"/>	1.22E-02	8.51E-03	-0.00369		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
4-Methyl-2-Pentanone (MIBK)	<input type="checkbox"/>	16.55	16.55	0		
Acrolein	<input type="checkbox"/>	0.19	0	-0.19		
Arsenic Compounds	<input type="checkbox"/>	1.74E-03	0	-0.00174		
Beryllium Compounds	<input type="checkbox"/>	1.24E-03	0	-0.00124		
Cadmium Compounds	<input type="checkbox"/>	2.19E-03	0.00E+00	-0.00219		
Hexachlorobutadiene	<input type="checkbox"/>	0.1	0	-0.1		
Mercury Compounds	<input type="checkbox"/>	1.36E-03	0	-0.00136		
Methylene Chloride	<input checked="" type="checkbox"/>	6.36	6.34	-0.02	-0.02	6.34
Selenium Compounds	<input type="checkbox"/>	6.17E-03	0	-0.00617		
Tetrachloroethene	<input checked="" type="checkbox"/>	1.47	1.45	-0.02	-0.02	1.45
Xylene	<input type="checkbox"/>	14.81	14.84	0.03		
Total HAPs	<input type="checkbox"/>	42.42	80.17	37.75		