STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0957-AOP-R17 AFIN: 46-00005

1. PERMITTING AUTHORITY:

Arkansas Department 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:

Joseph Hurt

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
1/30/2018	Minor Modification	Add an additional Tread Marker; and Increase marking ink limit
1/30/2018	Modification	Revise the silica mixing and milling emission factors; and Update the annual plantwide VOC bubble

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 applications to:

1. Add an additional Tread Marker (SN-131 in GR-08);
2. Increase the marking ink limit to 3,000 gallons on a rolling 12-month basis;
3. Revise the silica mixing and milling emission factors; and
4. Update the annual plantwide VOC bubble to 346 tpy.

The first two items were processed as a minor modification. After revising the facility's annual plantwide VOC bubble from 249 tpy to 346 tpy, the facility is crossing the major source threshold for the first time. Any future modifications will need to address PSD applicability. Section VIII of the permit has been updated with the latest General Provisions. The total permitted emission increases include 97.0 tpy of VOC, 0.01 tpy of Tetrachloroethene, and 0.01 tpy of Chargeable HAPs. The total permitted emission decreases include 6.8 tpy of PM/PM_{10}, 0.0319 tpy of Lead, 0.0008 tpy of Cadmium Compounds, 0.03 tpy of Methylene Chloride, 0.08 tpy of Xylenes, and 33.96 tpy of 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 July 19, 2016 and determined to be in compliance. A review of ECHO indicates that the facility had two (2) 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
If yes, were GHG emission increases significant? 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.

After revising the facility's annual plantwide VOC bubble from 249 tpy to 346 tpy, the facility is crossing the major source threshold for the first time. Any future modifications will need to address PSD applicability.

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

The facility is now subject to 40 C.F.R. § 52.21 - *Prevention of Significant Deterioration* (PSD). Any future modifications will need to address PSD applicability.

10. 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 Regulation 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? N/A
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		

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. 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 ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department 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 Department 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?
1,1,2,2-Tetrachloroethane	6.87	0.76	0.02	PASS
1,1-Dichloroethene	19.8	2.18	0.04	PASS
1,2-Dibromo-3-Chloropropane	9.66	1.06	0.03	PASS
1,3-Butadiene	4.42	0.49	0.05	PASS
2,2,4-Trimethyl pentane	1401.5	154.2	0.16	PASS
Acetophenone	49.1	5.41	0.27	PASS
Acrylonitrile	4.34	0.48	0.01	PASS
Aniline	7.54	0.83	0.72	PASS
Benzene	1.60	0.18	0.12	PASS
Benzyl Chloride	5.18	0.57	0.01	PASS
Bis(2-Ethylhexyl)phthalate	5.00	0.55	0.19	PASS
Carbonyl Sulfide	245.7	27.0	0.21	PASS
Ethyl Acrylate	20.5	2.25	0.01	PASS
Ethyl Benzene	434.2	47.8	1.37	PASS
Glycol Ethers	100.0	11.0	0.68	PASS
Hexane	176.2	19.4	1.09	PASS
Methanol	262.1	28.8	0.01	PASS
Methyl Isobutyl Ketone	81.9	9.01	4.05	PASS
Methylene Chloride	173.7	19.1	0.21	PASS
Phenol	19.2	2.12	0.11	PASS
Selenium	0.200	0.02	2.56E-03	PASS
Styrene	85.2	9.37	0.76	PASS
Tetrachloroethene	169.5	18.6	0.26	PASS
Toluene	75.4	8.29	2.46	PASS
Xylenes	434.2	47.8	4.03	PASS
Acrolein	0.229	0.03	5.19E-02	Model
Arsenic	0.010	0.0011	6.83E-04	PASS
Beryllium	0.00005	5.50E-06	5.13E-04	Model
Cadmium	0.002	2.20E-04	1.01E-03	Model

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Carbon Disulfide	3.11	0.34	1.96	Model
Formaldehyde	0.368	0.04	0.07	Model
Hexachlorobutadiene	0.021	0.0023	0.03	Model
Lead	0.050	0.0055	7.93E-03	Model
Mercury	0.010	0.0011	5.12E-04	PASS

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 ($\mu g/m^3$)	Pass?
Acrolein	2.29	0.52	PASS
Beryllium	5.00E-04	4.60E-04	PASS
Cadmium	0.02	2.65E-03	PASS
Carbon Disulfide	31.14	13.98	PASS
Formaldehyde	3.68	0.08	PASS
Hexachlorobutadiene	0.21	0.1996	PASS
Lead	0.50	0.08	PASS

The above modeling analysis was performed with a previous permitting action. There were no increases in short-term emission rates associated with the permitting action for Permit 0957-AOP-R17.

c) H_2S 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.

13. CALCULATIONS:

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
GR-01	RMA Testing	lb/lb rubber: 4.00E-04 PM 3.86E-05 VOC lb/lb silica: 1.69E-02 VOC (mixing) 2.57E-02 VOC (milling)	Baghouse	95%	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 Standard Fuel Oil	None	None	
SN-55a	AP-42	Standard Natural Gas	None	None	
SN-59	AP-42 Table 6.1.4	0.20 PM/ton Carbon Black	Dust Collector	95%	
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) 0.055 lb/gal (paint)	None	None	

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
SN-89	AP-42 & Testing	Standard Natural Gas Standard Fuel Oil 99.7 MMBTU/hr 8760 hrs/yr (NG) 6304 hrs/yr (FO) 95.4 MCF/hr (NG) Nat. Gas Factors 10 lb PM/MMCF 1.2 lb SO_2/MMCF 10 lb VOC/MMCF 84 lb CO/MMCF 73.2 lb NO_X/MMCF Fuel Oil Factors: 6 lb PM/kgal 142(.03) lb SO_2/kgal 0.75 lb VOC/kgal 25 lb CO/kgal 22.4 lb NO_X/kgal	None	None	
SN-108	RMA	30 ton/hr throughput 70% of rubber, milled 50% cmpd #6a mixed 1.1E-4 lbcmpd#2/lbrubber 0.00371 lbcmpd#6a/lbrubber	None	None	
SN-109	RMA	VOC: 4.2E-5 lb/lb rubber	None	None	
SN-110	RMA	30 ton/hr 40% of rubber, calendered 5.59E-5 lbcmpd#2/lbrubber	None	None	
SN-111	RMA	VOC: 3.37E-4 lb/lb rubber	None	None	
SN-121	MSDS	Various	None	None	
SN-140 and SN-141	AP-42	See Section 3.3 Tables 3.3-1 and 3.3-2	None	None	

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A*				

* In lieu of restricting fuel usage to 1,220 gallons of fuel oil per hour, the permittee may elect to demonstrate compliance with Specific Condition 39 by conducting a one-time fuel analysis using a test method with a minimum Beryllium detection limit of 10 parts per billion or less.

15. 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				

16. 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)
GR-01, SN-109, SN-111	Final Rubber Processed (Mixed & Imported)	220,000 tons/yr	Monthly	Y
GR-01, SN-109, SN-111	Silica Usage	7,000 tons/yr	Monthly	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
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	3,000 gallons/yr	Monthly	Y
	Solvent Throughput	100 gallons/yr	Monthly	Y
	Ink/Thinner VOC Content	Listed in Table	Annually	N
SN-53	Fuel Oil Throughput	1,388,475 gallons/yr	Monthly, as used	Y
	Sulfur Content	0.3 Weight %	As needed	N
SN-53 & SN-89	Simultaneous operation and firing of fuel oil[1.]	1,220 gallons of fuel oil per hour (max)	Monthly	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

Source	Recorded Item	Limit (as established in permit)	Frequency	Report (Y/N)
	Solvent	2,000 Gallons	Monthly	Y
	Solvent & Cement VOC Content	Listed in Table	Monthly	N
SN-68, SN-106	Solvent	650 Gallons	Monthly	Y
	Paint	2,500 gallons	Monthly	Y
	Solvent & Paint VOC Content	Listed in Table	Annually	N
SN-89	Fuel Oil Throughput	1,695,103 gallons/yr	Monthly, as used	Y
	Sulfur Content	0.3 Weight %	As Needed	N
SN-121	All HAP containing material usage	1.17 tpy Glycol ethers 0.06 tpy Toluene 0.09 tpy Xylene	Monthly	Y
Plant	All VOC containing material usage	346 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

1. In lieu of restricting fuel usage to 1,220 gallons of fuel oil per hour, the permittee may elect to demonstrate compliance with this condition by conducting a one-time fuel analysis using a test method with a minimum Beryllium detection limit of 10 parts per billion or less.

17. OPACITY:

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism
GR-01, GR-03 through GR-06, and GR-09	20	Dept. Guidance	Weekly observation
07	20	Dept. Guidance	Weekly observation
53	5	Dept. Guidance-NG	Burn only Nat. Gas
53	20	Dept. Guidance Fuel Oil	Daily EPA Method 9
55a	5	Dept. Guidance for natural gas	EPA Method 9 Burn only Nat. Gas
89	5	Dept. Guidance - NG	Burn only Nat. Gas
89	20	NSPS Dc – Fuel Oil	Continuous – CEMS

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism
140 and 141	20%	Dept. Guidance	Annual Observation

18. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

19. 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) 6,000 gallon Naphthenic Petroleum Oil Storage Tanks #1 and #4	A-3	0.074			
1,000 gallon No. 2 Fuel Oil Day Tank	A-3	<0.01			
10,000 gallon Naphthalic Petroleum Oil Storage Tank #6	A-3	0.069			
Three (3) 10,000 gallon Aromatic Petroleum Hydrocarbon Storage Tanks #8, #9, and #10	A-3	<0.01			
10,000 gallon Naphthenic Process Oil Blend Tank #29	A-3	<0.01			
Dust Ring Lube Oil Tank #12	A-3	0.02			
500 gallon Fire Pump Tank #1	A-3	<0.01			
500 gallon Fire Pump Tank #2	A-3	<0.01			
Phenyldiamine Tank #7 (10,000 gallons)	A-3	<0.01			
Steric Acid Tank #30 (10, 000 gallons)	A-3	<0.01			
Hydrocarbon Resin Tank (10,000 gallons)	A-3	<0.01			
Group A-3 Total		0.172			
Quality Control and Materials testing Lab	A-5	0.02			<0.01
Group A-15 Total		0.02			<0.01
White Side Wall Protective Painters	A-9	0.25	0.27		0.061
Mold and Bladder Lube Application	A-9	<0.01			<0.01
Group A-19 Total		0.26	0.27		<0.01
Two (2) 30,000 gallon Fuel Oil Storage Tanks	A-13	<0.01			
Air Compressor #1			0.04		
Air Compressor #2			0.04		
Process Water #1			0.113		

Source Name	Group A Category	Emissions (tpy)			
		VOC	PM_{10}	HAPs	
				Single	Total
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		

20. 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-R16

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-R17
AFIN: 46-00005

$/ton factor	23.93	Annual Chargeable Emissions (tpy)	539.9
Permit Type	Modification	Permit Fee $	2160.6397

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	☐
If Hold Active Permit, Amt of Last Annual Air Permit Invoice $	0
Total Permit Fee Chargeable Emissions (tpy)	90.29
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		41.9	35.1	-6.8		
PM_{10}		41.9	35.1	-6.8	-6.8	35.1
$PM_{2.5}$		0	0	0		
SO_2		66.9	67	0.1	0.1	67
VOC		249	346	97	97	346
CO		76.8	76.8	0		
NO_X		85	85	0	0	85
Lead	☐	4.40E-02	1.21E-02	-0.0319		
4-Methyl-2-Pentanone (MIBK)	☐	14.77	14.77	0		
Acrolein	☐	0.17	0.17	0		
Arsenic Compounds	☐	0.00174	1.74E-03	0		
Beryllium Compounds	☐	0.00124	1.24E-03	0		
Cadmium Compounds	☐	2.97E-03	2.17E-03	-0.0008		
Hexachlorobutadiene	☐	0.1	0.1	0		
Mercury Compounds	☐	0.00136	1.36E-03	0		
Methylene Chloride	☑	5.35	5.32	-0.03	-0.03	5.32
Selenium Compounds	☐	0.00617	6.17E-03	0		
Tetrachloroethene	☑	1.46	1.47	0.01	0.01	1.47
Xylene	☐	14.77	14.69	-0.08		
HAPs	☐	74.33	40.37	-33.96		
Chargeable HAPs	☑	0	0.01	0.01	0.01	0.01