STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0957-AOP-R8 AFIN: 46-00005

1. **PERMITTING AUTHORITY:**

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

2. APPLICANT:

The Cooper Tire Company 3500 East Washington Road Texarkana, Arkansas 71854

3. PERMIT WRITER:

Charles Hurt, P.E.

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description:Rubber Product Manufacturing for Mechanical UseNAICS Code:326291

5. SUBMITTALS:

2/23/09, 5/4/2009

6. **REVIEWER'S NOTES**:

The Cooper Tire Company (AFIN: 46-00005) operates a tire manufacturing facility located at 3500 East Washington Road, Texarkana, AR 71854. Cooper submitted two minor modification applications. The following changes were requested:

Modification #1

Cooper requested permission to install the equipment listed below.

Group Number	Source Number	Quantity	Description
04	124	1	Radial Green Tire Spray Booth
05	125-127	3	Tire Uniformity Optimizers
06	128, 129	2	White Sidewall Buffers
08	130	1 set	#2 Cold Feed Tread Markers

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-	68,106	3	Tire Inspection / Repair Machines
	100 10 Addition		Additional & Replacement Extrusion Lines in
-	109	10	Rubber Extruding
111 20		20	Additional & Replacement Curing Presses in
-	- 111 29		Tire Curing
	121	1	New White Sidewall Protective Primer
-	131	1	(Insignificant Activity)

The total emission increase associated with this project is 26.9 tpy VOC, 0.8 tpy PM/PM₁₀, and 0.005 tpy Lead (Pb). Cooper also requested a revision to the permitted PM/PM₁₀ emission limits to GR-03, GR-04, GR-05, and GR-06. The permit limits for those sources were based on an annual tire production rate of approximately 20 million tires whereas the facility as whole is limited to 17 million tires. Therefore, permitted PM/PM₁₀ emission limits were lowered by 3.6 tpy.

Modification #2

Cooper requested permission to install an additional truck radial green tire spray booth SN-132 at GR-04. The total emission increase associated with SN-132 is 3.5 tpy VOC and 1.2 tpy PM/PM_{10} . Cooper requested the permit be modified for solvent change that affected Tire Building Area (SN-67), Tire Inspection/Repair and Reclass Area (SN-68 and SN-106), and Miscellaneous Plant-wide Use of Volatile Materials (SN-121). The maximum VOC content increased to 6.26 lb/gal to reflect the switch to the replacement solvent. VOC emissions associated with the solvent increased by 0.3 tpy.

The total emission increases associated the new equipment and VOC content changes from both modifications are 30.7 tpy VOC, 2.0 tpy PM/PM_{10} , and 0.005 tpy Pb.

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 in October of 2008 and determined to be operating in accordance with Permit No. 0957-AOP-R7.

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 not PSD?

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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	

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 for CO and VOC. For PM_{10} there is an increase associated with the modification, but the increases are within the permitted limits. Below list the criteria pollutants which have been evaluated. The evaluation is based on modeling performed for a previous application.

Pollutant	Emission Rate (lb/hr)	NAAQS Standard (µg/m ³)	Averaging Time	Highest Concentration (µg/m ³)	% of NAAQS
PM.	21	50	Annual	37.3	74.6
1 10110	2.1	150	24-Hour	144	96.0
		80	Annual	6.58	8.3
SO_2	63.3	1300	3-Hour	172.3	13.3
		365	24-Hour	67.55	18.5
NO _x	99.9	100	Annual	2.89	2.89
Pb	0.00835	0.15	Rolling 3-month Period over 3 years (not to be exceeded in any 3 month period)	0.147	98%

Note: For PM_{10} the highest concentration reported includes Shreveport, LA 2008 PM_{10} background concentrations. For Lead compliance with the NAAQS is demonstrated by comparing the highest concentration which is on a 24-hour basis (a short term averaging period) to the 3-month rolling total limit (a long term averaging period). In this case it is statistically impossible to exceed either limit.

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 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	PAER (lb/hr) =	Proposed	Pass?
1 offutuitt	(mg/m³)	$0.11 \times TLV$	lb/hr	1 455.
1,1,2,2-Tetrachloroethane	6.87	0.7557	0.02	Yes
1,1-Dichloroethene	19.83	2.1813	0.04	Yes
1,2-Dibromo-3-Chloropropane	0.0097	0.001067	0.03	No
1,3-Butadiene	4.4	0.484	0.05	Yes
2,2,4-Trimethyl pentane	1401	154.16	0.16	Yes
2-Butanone (MEK)	589	64.79	0.1	Yes
Acetophenone	49	5.39	0.27	Yes
Acrolein	0.23	0.0253	0.06	No
Acrylonitrile	4.34	0.4774	0.01	Yes
Aniline	7.6	0.836	0.72	Yes
Arsenic Compounds	0.01	0.0011	0.01	No
Benzene	1.60	0.176	0.12	Yes
Benzyl Chloride	5.18	0.5698	0.01	Yes
Beryllium Compounds	0.002	0.00022	0.001	No
Bis(2-Ethylhexyl)phthalate	5	0.55	0.19	Yes
Cadmium Compounds	0.01	0.0011	0.04	No
Carbon Disulfide	31	3.41	1.96	Yes
Carbonyl Sulfide	4.2	0.462	0.21	Yes
Ethyl Acrylate	20.4	2.244	0.01	Yes
Ethylbenzene	434	47.74	1.37	Yes
Formaldehyde	1.5	0.165	0.07	Yes
Glycol Ethers	17	1.87	0.68	Yes
Hexachlorobutadiene	0.22	0.0242	0.03	No
Hexane	176	19.36	1.09	Yes
Lead Compounds	0.05	0.0055	0.00835	No
Mercury Compounds	0.0011	0.000121	0.01	No
Methanol	262	28.82	0.01	Yes
Methylene Chloride	174	19.14	1.49	Yes
MIBK (4-Methyl-2-Pentanone)	417	45.87	4.05	Yes
Phenol	19	2.09	0.11	Yes
Selenium Compounds	0.2	0.022	0.01	Yes
Styrene	213	23.43	0.76	Yes
Tetrachloroethene	169.5	18.645	0.42	Yes
Toluene	75.3	8.283	2.46	Yes

Pollutant	TLV (mg/m ³)	$PAER (lb/hr) = 0.11 \times TLV$	Proposed lb/hr	Pass?
Xylene (m, o, & p isomers)	434	47.74	3.35	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. The evaluation is based on modeling performed for a previous application.

Pollutant	(PAIL, µg/m ³) = 1/100 of TLV	Modeled lb/hr	Proposed lb/hr	Modeled Conc.(µg/m ³)	Pass?
Acrolein	2.3	0.19	0.05	1.58	YES
1,2 Dibromo- 3Chloropropane	0.097	0.03	0.025	0.094	YES
Benzene	5	0.06	0.06	0.53	YES
Beryllium	0.02	0.001	0.001	0.001	YES
Hexachlorobutadiene	2.2	0.025	0.025	0.308	YES
Lead Compounds	0.50	0.008	0.008	0.141	YES

Other Modeling:

Odor:

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

12. CALCULATIONS:

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
GR-01	RMA	4.00E-04 lb PM/lb rubber 3.86E-05 lb VOC/lb rubber	Baghouse	95%	RMA is the Rubber Manufacturers Association.
	RMA	4.00E-04 lb PM /lb rubber	Baghouse	95%	
GR-02	RMA	4.00E-04 lb PM /lb rubber	Wet Scrubber	95%	
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	

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SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
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-55	AP-42	Standard Natural Gas Standard Fuel Oil	None	None	
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-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 73.2 lb NO ₂ /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 ₂ /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 thurput 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	

13. TESTING REQUIREMENTS:

The permit does not require stack testing.

14. 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)
GR-02	Pressure Drop	Pressure Gauge and Sensors	continuously	N

15. 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-03, GR-04, GR-05, GR-06	Treads/Tires Processed	17,000,000 treads/yr	monthly	Y
GR_03	VOC Emissions per Tread	7.5 grams/tread/month	Monthly	Y
0103	VOC Content	Listed in Table	Annually	N
	VOC Emissions of Inside Paint	1.0 grams/tread/month	Monthly	Y
GR-04	VOC Emissions of Outside Paint	1.0 grams/tread/month	Monthly	Y
	Ink Throughput	800 gallons/yr	Monthly	Y
GR-08	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-55	Fuel Oil Throughput	2,766,950 gallons/yr	Monthly, as used	Y
	Sulfur Content	0.3 Weight %	As needed	N
SN-59	Carbon Black	80,000 Tons	Monthly	Y
	Cement	650 Gallons	Monthly	Y
SN 67	Solvent	2,000 Gallons	Monthly	Y
511-07	Solvent & Cement VOC Content	Listed in Table	Monthly	N
SN-68,	Solvent	650 Gallons	Monthly	Y

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Source	Recorded Item	Limit (as established in permit)	Frequency	Report (Y/N)
SN-106	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	249 tpy VOC	Monthly	Y
	MSDS (VOC & HAP Contents)		As needed	N

16. OPACITY:

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism
GR-01 through GR-06	20	Dept Guidance	EPA Method 9
GR-02 (SN-61 only)	5	Dept Guidance – Wet Scrubber Control	CPMS
07	20	Dept Guidance	EPA Method 9
53	5	Dept Guidance-NG	EPA Method 9 Burn only Nat. Gas
53	20	Dept Guidance Fuel Oil	E[Regulation No. 19 §19.705, A.C.A. §8-4- 203 as referenced by §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]PA Method 9
55	5	Dept Guidance –NG	EPA Method 9 Burn only Nat. Gas
55	20	Dept Guidance Fuel Oil	EPA Method 9
89	5	Dept Guidance - NG	EPA Method 9
89	20	NSPS Dc – Fuel Oil	Continuous - CEMS

17. DELETED CONDITIONS:

Former SC	Justification for removal
PC 37	Boiler MACT has been vacated.

18. GROUP A INSIGNIFICANT ACTIVITIES

	Group A Category	Emissions (tpy)			
Source Name		VOC	HAPs		
		VUC	Single	Total	
White Sidewall Protective Painter	A-9	0.1758	0.038	0.043	

1

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #	
0957-AOP-R7	

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

'**л** Philip Murphy, P.E.

Engineering Supervisors, Air Division

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

1

Fee Calculation for Major Source

Facility Name: The Cooper Tire Company 'ermit Number: 0957-AOP-R8 AFIN: 46-00005

\$/ton factor Permit Type	22.07 Minor Mod	Annual Chargeable Emissions (tpy) Permit Fee \$	<u>539.52</u> 500
Minor Modification Fee \$	500		
Renewal with Minor Modification \$	500		
Check if Facility Holds an Active Minor Source Permit 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)	-4.96		

HAPs not included in VOC or PM:

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

Revised 06-17-09

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		53.7	49.7	-4	-4	49.7
PM ₁₀	Г	53.7	49.7	-4		
SO ₂		125.5	125.5	0	0	125.5
voc	₽	249	249	0	0	249
со	r	84.6	84.6	0		
NO _X	☑	108.2	108.2	0	0	108.2
1,1,2,2-Tetrachloroethane	Г	0.06	0.05	-0.01		
1,1-Dichloroethene	r	0.16	0.13	-0.03		
1,2-Dibromo-3-Chloropropane	Г	0.11	0.1	-0.01		
1,3-Butadiene	r	0.16	0.18	0.02		
2,2,4- Trimethyl pentane	Γ	0.47	0.47	0		
Acetophenone	Г	1	0.89	-0.11		
Acrolein	r	0.2	0.17	-0.03		
Acrylonitrile	r	0.03	0.03	0		
Aniline	Г	2.61	2.3	-0.31		
Arsenic Compounds	ľ	0.01	0.01	0		
Benzene	Г	0.26	0.26	0		
Benzyl Chloride	Г	0.02	0.02	0		
Beryllium Compounds	ľ	0.001	0.001	0		

	Check if Chargeable	Old	New	Change in	Permit Fee Chargeable	Annual
Pollutant (tpy)	Emission	Permit	Permit	Emissions	Emissions	Emissions
Bis(2-Ethylhexyl)phthalate	r	0.62	0.59	-0.03		
Cadmium Compounds	Г	0.01	0.04	0.03		
Carbon Disulfide (included in VOC)	Γ	8.46	7.37	-1.09		
Carbonyl Sulfide (included in VOC)	Γ	0.86	0.82	-0.04		
Ethyl Acrylate	r		0.03	0.03		
Ethylbenzene	ľ	5.74	5.77	0.03		
Formaldehyde	Ĩ	0.14	0.14	0		
Glycol Ethers	Γ	2.67	2.27	-0.4		
Hexachlorobutadiene	Г	0.11	0.1	-0.01		
Hexane	Г	4.53	4.19	-0.34		
Lead Compounds	r	0.02	0.01729	-0.00271		
Mercury Compounds	Г	0.01	0.01	0		
Methanol	ľ		0.01	0.01		
Methylene Chloride	₹	6.35	5.48	-0.87	-0.87	5.48
MIBK (4-Methyl-2-Pentanone)	r	16.88	16.57	-0.31		
Phenol	r	0.26	0.28	0.02		
Selenium Compounds	r	0.01	0.01	0		
Styrene	r	2.83	2.68	-0.15		
Tetrachloroethene	N	1.73	1.64	-0.09	-0.09	1.64
Toluene	ľ	10.5	9.01	-1.49		
Xylene (m, o, & p isomers)	Г	17.52	12.28	-5.24		

PDS DATA ENTRY FORM AIR PERMITS

Date Issued (yy/mm/dd):	10/1/2009
AFIN:	46-00005
Facility Name:	Cooper Tire Co
City:	Texarkana
Permit #:	0957-AOP-R8
Media Code:	А
Permit Type (MS, T5, R3):	T5 MM
T5 Permit Expiration Date:	1/31/2011

Volume (TPY):

Engineer:

PDS Invoice Number Entered if Applicable

Invoice #

Previous Permit # Voided

Charles Hurt

539.52

Yes_____No_X____

0957-AOP-R7

Cynthia CBA 10/14/09 Tom

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September 25, 2009

Mr. Charles Hurt Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, Arkansas 72118-5317

Subject: Comments on Cooper Tire Draft Operating Air Permit #957-AOP-R8

Dear Mr. Hurt:

As you know, the Cooper Tire Company (Cooper) operates a tire manufacturing facility in Texarkana, Arkansas under Title V operating permit #957-AOP-R7. The ADEQ issued a draft permit #957-AOP-R8 for public comment on July 21, 2009. Public notice was printed in the Texarkana Gazette on August 25, 2009. Cooper has reviewed the draft permit and offers the comments provided below.

- 1. The Emission Summary Table, page 13, SN-67 indicates VOC to be 0.1 lb/hr. The VOC should be changed to 3.8 lb/hr to be consistent with the source table on page 42.
- 2. Specific Condition 2, page 23, the emission table indicates a "*" footnote reference to Tetrachloroethene and Toluene. There is no footnote to the table. Please clarify the footnote or remove the "*" reference.
- 3. Specific Conditions 9-11, page 24, requires opacity to be demonstrated by maintaining pressure drop and performing a monthly inspection on the sensors. The wet scrubber is equipped to maintain proper operating range and set up in the facility preventative maintenance system for routine inspection. Cooper request to change SC-9 to be consistent with other opacity monitoring requirements (SC-3, 8, 14, 21, 28, 31, 40, and 59) to reduce complexity and reduce record keeping associated with the wet scrubber. In addition Cooper request to remove specific conditions 10 and 11 and other conditions be numbered sequintially as needed.
- 4. Source Description for GR-04, page 28, paragraph 1, line 1, should include the newly added equipment. "This group includes Radial Green Tire Spray Booths #1 through #9 (SN-14 through SN-19, SN-122, SN-124, and SN-132 respectively."
- 5. Source Description for GR-05, page 30, paragraph 1, line 1, should include the newly added equipment. "This group includes LTX and Passenger Tire Uniformity Optimizers (TUO) (SN-20 through SN-28, SN-43 through SN-46, SN-78, SN-79, SN-82 through SN-86, SN-119 through SN-120, and SN-125 through SN-127) and the Grind Cleaning Area (SN-105)."
- 6. Source Description for GR-06, page 32, paragraph 1, line 1, should include the newly added equipment. "This group includes White Sidewall Buffers #2 through #21 (SN-29

through SN-32, SN-47 through SN-48, SN-69 through SN-71, SN-80, SN-96 through SN-104, and SN-128 through SN-129)...."

- 7. Source Description for GR-08, page 34, paragraph 1, line 1, should include the newly added equipment. "This group includes tread markers (SN-65, SN-66, SN-116, and SN-130)."
- 8. Specific Condition 34, page 34, should change the word "solvent" to "thinner" to be consistent with other conditions in the group.
- 9. Source Description for SN-68 and SN-106, page 44, paragraph 1, line 1, indicates HAPfree solvent and repair paints are used to make cosmetic repairs. As indicated in the permit application, repair paints with minimal amounts of HAPs should be allowed.
- 10. Specific Condition 68 indicates compliance shall be demonstrated by Specific Condition #60, should be changed to read "demonstrated by Specific Conditons #69 and #71."

Cooper appreciates this opportunity to submit comments on the Draft Title V operating permit 957-AOP-R8. If you need any additional information, please contact me at 870-779-4260 or Tom Wood at our Corporate Office at 419-424-4345.

Respectfully,

THE COOPER TIRE COMPANY

Charles D Alla

Charles Allen Plant Environmental Coordinator

cc: Tom Wood