

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1319-AR-2 AFIN: 73-00089

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Eaton Hydraulics LLC
400 East Lincoln Avenue
Searcy, Arkansas 72143

3. PERMIT WRITER:

Ambrosia Brown

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Fluid Power Valve and Hose Fitting Manufacturing

NAICS Code: 332912

5. SUBMITTALS:

2/27/2012, 5/4/2012, 5/8/2012, 5/14/2012, 5/23/2012, 6/4/2012, 6/15/2012, 7/6/2012,
7/20/2012, 7/25/2012, 9/5/2012, 10/1/2012, 10/15/2012, 10/24/2012, 11/2/2012,
11/19/2012

6. REVIEWER'S NOTES:

Eaton Hydraulics operates a facility in Searcy, AR that manufactures hydraulic valves, valve components and steering boosters. The basic raw materials used in the processes include aluminum castings, bar stock, cast iron castings, stainless steel tubing and other component parts. The emission limits for the facility established by this permit is 11.0 tpy PM/ PM₁₀, 0.2 tpy SO₂, 60.6 tpy VOC, 0.7 tpy CO, 0.7 tpy NO_x, 14.72 tpy acetone, and 11.50 tpy total HAPs.

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7. COMPLIANCE STATUS:

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

There are no current enforcement issues for this facility.

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, or
- CO₂e potential to emit $\geq 100,000$ tpy and ≥ 100 tpy/ ≥ 250 tpy of combined GHGs?

If yes, explain why this permit modification is not PSD.

9. GHG MAJOR SOURCE (TITLE V):

Indicate one:

- Facility is classified as a major source for GHG and the permit includes this designation
- Facility does not have the physical potential to be a major GHG source
- Facility has restrictions on GHG or throughput rates that limit facility to a minor GHG source. Describe these restrictions: _____

10. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

This facility is not subject to 40 CFR Part 63 Subpart XXXXXX because it is not classified under one of the listed NAICS codes

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-08	NO _x & CO	40 CFR Part 63 Subpart ZZZZ 40 CFR 40 Part 60 Supart JJJJ
SN-03	HAPs	40 CFR Part 63, Subpart WWWWW

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. 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.

Non-Criteria Pollutants:

Estimated emissions from the facility were compared to the reportable levels based upon the relative toxicity of each pollutant. The Department has deemed permitable levels to be exceeded when the hourly rate multiplied by 4.38 exceeds the relative toxicity (RT) value.

Pollutant	Lb/hr	RT	lb/hr x 4.38	Permit?
<i>Acetone</i>	3.4	N/A	14.892	Y
<i>Ethylbenzene</i>	0.39	1.0	1.0782	Y
Chromium	0.0048	0.5	0.0211	N
Ethyl Acrylate	0.0001	0.1	0.0005	N
Hydrogen Chloride	0.0128	1	0.0561	N
Methanol	0.01	1	0.0438	N
<i>Nickel</i>	0.0038	N/A	0.0167	Y
Toluene	0.076	1	0.3829	N
<i>Xylene</i>	2.23	1	9.7674	Y

1st Tier Screening (PAER)

Estimated hourly emissions from the facility 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 (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Acetone	1187.12	130.58	3.39	Y
Nickel	1.5	0.165	0.02	Y
Ethylbenzene	86.84	9.552	0.39	Y
Xylene	434.19	47.760	2.23	Y

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13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
SN-A	MSCS	6.26 lb/gal VOC	none	N/A	0.30 gal/hr
SN-02	AP-42 Table 1.4-1& 1.4-2, MSDS	7.6 lb/MMft ³ PM, 5.5 lb/MMft ³ VOC, 0.6 lb/MMft ³ SO _x , 100 lb/MMft ³ NO _x , 84 lb/MMft ³ CO, 7.17 lb/gal VOC in AAA Oil, 6.45 lb/gal VOC in Oil 22, 0.0002 Toluene lb/gal in Oil 22	none	N/A	0.5 MMBtu/hr
SN-03	Characterizing Site Specific Source Emissions for EPA's Risk Assessment Tool for Metal Finishing Industry Table 4	41 grams/day Nickel	none	N/A	Nitec 8200A = 0.165 gal/hr
SN-04	MSDS	1.46 lb/gal VOC in Metex SCB B, 1.67 lb VOC in Oakite 33, 6.59 lb/gal VOC in Pen Dip Super	none	N/A	Metex SCB B = 0.015 gal/hr Oakite 33 = 0.0275 gal/hr Pen Dip Super = 0.275 gal/hr
SN-05	MSDS	6.59 lb/gal VOC in Pen Dip Super, 2.02 lb/gal VOC in Preso Prep P2	none	N/A	Pen Dip Super = 0.275 gal/hr Presto Prep P2 Surface Conditioner = 0.055 gal/hr
SN-06	Mass Balance/MSDS	lb/gal VOC: 5.13 PM: 2.90 Xylene 2.65	Water Curtain	50% Particulate	0.84 gal/hr
SN-07	MSDS	6.59 lb/gal Acetone 0.0003 lb/gal Benzene	none	N/A	0.51 gal/hr
SN-08	AP-42 Table 3.2-3	(lbs/mmbtu) PM/PM ₁₀ : 0.0095	None	N/A	0.3876 MMBtu/hr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		VOC: 0.0296 SO _x : 0.000588 NO _x : 2.27 CO: 3.72			

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
See Specific Condition #27				

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)
None				

16. 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)
SN-A	Mineral Spirits used	219.0 gal/month 2628 gal/yr	Monthly	N
SN-A	VOC Content	6.26 lb/gal	Annual update of MSDS	N
SN-03, SN-04, SN-05	VOC emissions	See Specific Condition #1 & #2	Monthly	N
SN-03	Inspections & Maintenance	N/A	Continuous	N
SN-03	Compliance Certification	Subpart WWWW	Annual	N
SN-06	Paint used	613.2 gal/month 7358.4 gal/yr	Monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
SN-06	Coating Content	PM (Metals): 2.9 lb/gal VOC: 5.13 lb/gal Ethyl Benzene: 0.47 lb/gal Toluene: 0.03 lb/gal Xylene: 2.65 lb/gal	Annual update of MSDS	N
SN-07	Acetone Used	371 gal/month 4467.6 gal/yr	Monthly	N
SN-08	Hours of operation and type of use	Total:500 hr/yr maintenance checks/testing: 100 hr/yr non-emergency: 50 hr/yr	Monthly	N
SN-08	Maintenance Record and Manufacturer's instructions	See Manufacturer's instructions	Monthly	N
SN-08	Engine certification or Testing Results	See SC #28 & #29	continuous	N
SN-08	Notifications for Subpart JJJJ	N/A	Continuous	N

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
02, 03, & 06	5%	§18.501 of Regulation #18	Inspections
08	5%	§18.501 of Regulation #18	Daily Observations when in operation

18. DELETED CONDITIONS:

Former SC	Justification for removal
	None

19. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Coolant Makeup Tank (2000 gallons)	A-3			0.001			0.001	0.001
Coolant Concentrate Tank (4000 gallons)	A-3			0.001			0.001	0.001
Coolant Reclaim System Tank (1000 gallons)	A-3			0.001			0.001	0.001
AW 46 Hydraulic Oil Tank (4000 gallons)	A-3			0.001			0.001	0.001
AW 32 Hydraulic Oil Tank (4000 gallons)	A-3			0.001			0.001	0.001
Used Oil Storage Tank	A-3			0.001			0.001	0.001
Cutting Oil Reclaim #3	A-3			0.001			0.001	0.001
<i>Total for A-3 Category</i>				<i>0.007</i>			<i>0.007</i>	<i>0.007</i>
Paint Storage in Small Containers (max 5 gallons in capacity)	A-8			0.152			0.075	0.084
<i>Total for A-8 Category</i>				<i>0.152</i>			<i>0.075</i>	<i>0.084</i>
Enclosed Sand Blasting Cabinet	A-13	0.45						
Used Solvent Still	A-13			0.31				
Low Vapor-pressure cleaners	A-13			0.9				
Assembly & Test Area	A-13			0.67			0.011	0.011
Thermal Deburring Unit	A-13	0.008	0.001	0.006	0.088	0.105		
PRC Laser Welder	A-13	1.10						

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Empty Drum Label Painting	A-13			0.03			0.012	0.016
Methanol ASTs (2)	A-13			0.011			0.01	0.01
Paint Pre-wash	A-13			1.45				
Oil Reclaim System	A-13			0.31				
4 Grinders (3 connected to collector)	A-13	0.07						
Machining Operations	A-13	0.62						
Storage/Transfer from 55 gallon Paint Drums	A-13			0.38			.180	0.212
Storage/Transfer of Metal Shavings	A-13	0.1						
Water Treating Process	A-13	0.61					0.002	0.002
Two 500 Gallon Methanol Storage Tanks	A-13			0.01			0.01	0.01
Labeling Machine	A-13			0.4			0.294	0.514
<i>Total of A-13 Category</i>		<i>2.958</i>		<i>4.047</i>			<i>0.519</i>	<i>0.775</i>

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1319-A-REG315

21. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

 Paula Parker, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 08-20-12

Facility Name: Eaton Hydraulics LLC

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			Old Permit	New Permit
\$/ton factor	22.97	Permit Predominant Air Contaminant	0	60.6
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	0	
Minimum Initial Fee \$	500			
		Permit Fee \$	1391.982	
Check if Administrative Amendment	<input type="checkbox"/>	Annual Chargeable Emissions (tpy)	60.6	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	0	11	11
PM ₁₀	0	11	11
SO ₂	0	0.2	0.2
VOC	0	60.6	60.6
CO	0	0.7	0.7
NO _x	0	0.7	0.7
Acetone	0	14.72	14.72
Total HAP	0	11.5	11.5