

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 2016-AOP-R2 AFIN: 60-00058

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Hall Tank Company, LLC  
2001 East 5th Street  
North Little Rock, Arkansas 72114

3. PERMIT WRITER:

Adam McDaniel

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Metal Tank (Heavy Gauge) Manufacturing  
NAICS Code: 332420

5. SUBMITTALS:

4/30/2014

6. REVIEWER'S NOTES:

The Hall Tank Company is located in North Little Rock at 2001 East 5<sup>th</sup> Street. The facility manufactures both above and underground steel storage tanks and coats them according to consumer specifications. This modification to the permit includes permitting three additional paint booths (SN-01), increase the annual throughput limit of paint & primer to 7,065,300 gallons, increase acetone usage for clean-up (SN-04), and remove manufacturer from material listing in SC-5 and SC-6. The facility also wants to permit 2 insignificant activities which are a 150 gallon gasoline tank and a 150 gallon diesel tank. The total annual permitted emission rate limit changes include: +1.6 tpy PM/PM<sub>10</sub>, -10.7 tpy VOC, +2.9 tpy Xylene, +2.5 tpy Acetone, and +3.4 tpy Methyl Ethyl Ketone.

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 August 21, 2013 which revealed these compliance issues:

- Specific Condition #7 of permit #2016-A: A review of the records provided by the facility indicated that the spreadsheet contained incorrect threshold limit values for the following EPA listed HAPs: Styrene, Ethyl benzene, Toluene, Hexamethylene Diisocyanate, and Methyl Isobutyl Ketone.
- Specific Condition #19 of Permit #2016-A: A review of the records provided by the facility indicated that from March 2012 through December 2012 the facility

exceeded their 12-month rolling total limit of 1,500 gallons/consecutive 12 month period. The facility failed to provide monthly and 12-month total records of acetone usage for January 2013 through April 2013; under their permit 2016-A. Therefore, compliance during the months of January 2013 through April 2013 cannot be determined.

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  $\geq 100$  tpy and on the list of 28 or single pollutant  $\geq 250$  tpy and not on list, or*
  - *CO<sub>2</sub>e potential to emit  $\geq 100,000$  tpy and  $\geq 100$  tpy/ $\geq 250$  tpy of combined GHGs?*

9. GHG STATUS:

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:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
01 & 02	HAP's	NESHAP 40 CFR Part 63 Subpart WWWW
01 & 02	HAP's	NESHAP 40 CFR Part 63 Subpart MMMM

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. NAAQS EVALUATIONS AND NON-CRITERIA POLLUTANTS:

a) NAAQS:

Pursuant to Act 1302 of the Regular Session of the 89th General Assembly of the State of Arkansas, no dispersion modeling was performed by ADEQ because it was not voluntarily proposed and agreed to by the facility. No other information was submitted by the applicant. Criteria pollutants were not evaluated for impacts on the NAAQS.

b) Non-Criteria Pollutants:

1<sup>st</sup> 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 ( $\text{mg}/\text{m}^3$ ), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV ( $\text{mg}/\text{m}^3$ )	PAER (lb/hr) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
Styrene	85.20	9.372	32.3	N
Xylene	434.19	47.6709	2.96	Y
Cobalt Compound	0.05	0.0022	0.34	N

2<sup>nd</sup> 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. Styrene was not re-modeled due to a decrease in hourly emissions.

Pollutant	PAIL ( $\mu\text{g}/\text{m}^3$ ) = 1/100 of Threshold Limit Value	Modeled Concentration ( $\mu\text{g}/\text{m}^3$ )	Pass?
Styrene	852.0	40.05	Y
Cobalt Compound	0.5	0.4216	Y

13. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	MSDS	<p><b>Paint</b>= 1.0 Gallons Paint Used per 1,000 Gallons of Tank Painted                      Xylene= 1.174 lb/hr &amp; 5.15 tpy                      75% of Mixture                      VOC= 2.95 lb VOC/gal                      PM= (0.81 gal of coating/hr)(10 lb of solid/gal of coating)(0.80 overspray)= 6.48 lb/ of solid/hr uncontrolled*(100-90/100)= 0.65 lb/hr</p> <p><b>Catalyst Reducer</b> Xylene= 15.15%</p> <p><b>Primer</b>= consists of primer &amp; catalyst                      0.25 Gallons Primer Used per 1,000 Gallons of Tank Painted                      Xylene= 8.3%                      VOC= 2.93 lb/gal</p>	Six (6)- 3C412B (30") 3hp Dayton Tubeaxial Fans		<p>2 Run Simultaneously</p> <p>Paint= 4:1 ratio with catalyst reducer</p> <p>Throughput= 0.81 gallons of paint/hr</p>
02	MSDS	<p><b>Resin</b>= 7.5 Gallons Resin Used per 1,000 Gallons of Tank Painted  <b>Catalyst</b> = 1/50<sup>th</sup> of Resin =0.15 Gallons of Catalyst Used per 1,000 Gallons of Tank Painted</p>	Four (4)- 3C411B (24") 1hp Dayton Tubeaxial Fans		1, 2, or 3 Run Simultaneously
03	Dept. Guidance	PM: 27 lb/ 1000 lb of sand used PM <sub>10</sub> : 13 lb/1000 lb of sand used	None		2,080 tons of sand per year
04	MSDS				3,744 gallons per year of acetone

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
None				

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)
01, 02, 04	MSDS	-	Annual	Y
01, 02	Paint & Primer	7,065,300 Gallons of Tank Painted	Annual	Y
	Polyester Resin Solution & Catalyst #1 & #2	3,489,000 Gallons of Tank Painted		
03	Sand	2,080 tons	Annual	N
04	Acetone Xylene	3,744 Gallons 3,120 Gallons	Annual	Y
Facility	Certificate of Styrene Content	47%	Annual	Y

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 02, & 04	0%	Dept. Guidance	Inspector's Observation
03	20%	Dept. Guidance	Inspector's Observation

18. DELETED CONDITIONS:

Former SC	Justification for removal
None	

19. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
150 Gallon Diesel Tank	A-2			<0.01			0.03	
150 Gallon Gasoline Tank	A-2			0.05			0.00	0.00
Welding	A-7						0.00001	
Filling Touch-Up Paint Cans	A-13			0.01			0.0003	0.00035

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20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
2016-AOP-R1

## APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

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## Fee Calculation for Major Source

Revised 11-06-13

Facility Name: Hall Tank Company, LLC  
 Permit Number: 2016-AOP-R2  
 AFIN: 60-00058

\$/ton factor	23.42	Annual Chargeable Emissions (tpy)	106.2
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)	-6.6
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 condensable 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		18.4	20	1.6	1.6	20
PM <sub>10</sub>		9.7	11.3	1.6		
SO <sub>2</sub>		0	0	0	0	0
VOC		84.2	73.5	-10.7	-10.7	73.5
CO		0	0	0		
NO <sub>x</sub>		0	0	0	0	0
Xylene	<input type="checkbox"/>	13.45	16.35	2.9		
Styrene	<input type="checkbox"/>	56.4	56.4	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Cobalt Compound	<input type="checkbox"/>	0.66	0.66	0		
Acetone	<input checked="" type="checkbox"/>	10.2	12.7	2.5	2.5	12.7
Methyl Ethyl Ketone	<input type="checkbox"/>	0	3.4	3.4		