

STATEMENT OF BASIS

for the issuance of Draft Air Permit # : 2016-A

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913

2. APPLICANT:

Hall Tank Company
2001 East 5th Street
North Little Rock, AR 72119

3. PERMIT WRITER: Karen Cerney

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Metal Tank Manufacturing
NAICS Code: 332420

5. SUBMITTALS: 7/15/2005

6. REVIEWER'S NOTES:

The Hall Tank Company is located in North Little Rock at 2001 East 5th Street. The facility manufactures both above and underground steel storage tanks and coats them according to consumer specifications. This modification allows the facility to add the existing sandblasting operation as a permitted source and to become a synthetic minor source.

7. COMPLIANCE STATUS:

The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues: CAO LIS #04-163 was issued because the facility had numerous errors and deficiencies in their VOC and HAP emission records that indicated exceedances.

8. APPLICABLE REGULATIONS:

PSD Applicability

Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, et cetera)? N

Has this facility undergone PSD review in the past? N Permit#

Is this facility categorized as a major source for PSD? N

≥ 100 tpy and on the list of 28 (100 tpy)? N
 ≥ 250 tpy all other N

PSD Netting

Was netting performed to avoid PSD review in this permit? N

Source and Pollutant Specific Regulatory Applicability

Source	Pollutant	Regulation [NSPS, NESHAP (Part 61 & Part 63), or PSD <u>only</u>]
None		

9. EMISSION CHANGES:

The following table summarizes plant wide emission changes associated with this permitting action.

Plant Wide Permitted Emissions (ton/yr)			
Pollutant	Air Permit [2016-AOP-R0]	Air Permit [2016-A]	Change
PM	1.1	17.9	+16.8
PM ₁₀	1.1	9.2	+8.1
VOC	83.8	90.0	+6.2
Any Single HAP	-	9.50	+9.50
Combination of All HAPs	50.20	24.50	-25.70

10. 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.

Other Modeling

Odor

Odor modeling for sources emitting styrene.

Pollutant	Threshold value 1-hour average	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass ?
Styrene	1361 $\mu\text{g}/\text{m}^3$	*2583.55762	N

*Passed in previous permit, 2016-AOP-R0, at same lb/hr

11. **Non-Criteria Pollutants**

This permit contains a TLV table for non-criteria pollutants. Modeling was used to determine the permitted emission rates for ranges of non-criteria pollutants (grouped by TLVs) that pass the *PAER or PAIL*. Therefore, modeling of specific non-criteria pollutants was not performed.

The TLV table is based upon the highest VOC content of the paints used at the source. The approximate emission rate would be 25.7 lb/hr (5.14 lb/gallon at the maximum 5 gal/hr application rate with one gun). The source has two fan exhausts which are rated at 18,000 cfm each and booth doors are required to remain closed during source operation.

Paint Booth, SN-01, Parameters	
Maximum lb/gal of a single HAP	Minimum TLV (mg/m^3)
5.14	130.03
4.63	117.02
4.12	104.02
3.60	91.02
3.08	78.02
2.57	65.01

Paint Booth, SN-01, Parameters	
Maximum lb/gal of a single HAP	Minimum TLV (mg/m ³)
2.06	52.01
1.54	39.01
1.03	26.01
0.52	13.00
0.26	6.50
0.21	5.20
0.15	3.90
0.11	2.60
0.05	1.30
0.03	0.65

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 deemed 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?
Styrene	85.20	9.372	65.80	N

2nd Tier Screening (PAIL)

ISCST3 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 was deemed by the Department 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?
Styrene	852.0	766.60889	Y

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipment Efficiency	Comments (Emission factor controlled/uncontrolled, etc)
01	Mass Balance	-	None	-	-
02	Equations from Table 1 MACT WWWW	-	None	-	-
03	Dept. Guidance	PM: 27 lb/1000 lb of sand used PM ₁₀ : 13 lb/1000 lb of sand used	None	-	

13. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
None				

14. MONITORING OR CEMS

The permittee must monitor the following parameters with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and the need for records included in any annual, semiannual or other reports.

SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Report (Y/N)**
None				

* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)

** Indicates whether the parameter needs to be included in reports.

15. RECORD KEEPING REQUIREMENTS

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Recorded Item	Limit (as established in permit)	Frequency*	Report (Y/N)**
01	Minimum TLV	-	Annual	N
01	HAP content in Paints	5.14 lb/gal	Annual	N
01	Paint VOC content	5.14 lb/gal or can be above as long as less than 205.6 lb/day VOC emissions	As needed	N
02	Styrene content	Manual Appl. – 78.16% Mechanical Atom. – 49.11% Mech. Atom. Controlled Spray – 56.25% Mech. Non-Atom. – 100%	As needed	N
02	Application Method	-	As needed	N
02	Minimum TLV	-	Annual	N
02	HAP Content	1.65 lb/gal	As needed	N

SN	Recorded Item	Limit (as established in permit)	Frequency*	Report (Y/N)**
03	Sand usage	2080 tons/yr	Monthly	N
Facility Wide	VOC emissions	90.0 tpy	Monthly	N
Facility Wide	HAP Emissions	9.50 any single HAP 24.50 combination of all HAPs	Monthly and Daily for any Paint w/ VOC content >5.14 lb/gal	N

* Indicate frequency of recording required for the item (Continuously, hourly, daily, etc.)

** Indicates whether the item needs to be included in reports

16. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
01 & 02	0%	Dept. Guidance	Inspector's Observation
03	20%	Dept. Guidance	Inspector's Observation

17. DELETED CONDITIONS:

The previous permit contained the following deleted Specific Conditions.

Former SC	Justification for removal
11	Replaced with a styrene content limit.
12	Replaced with a HAP limit instead of VOC.

18. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

Permit #
2016-AOP-R0

19. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Phillip Murphy, P.E.