

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1440-AOP-R4 AFIN: 16-00061

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Arkansas Glass Container Corporation
516 West Johnson
Jonesboro, Arkansas 72403

3. PERMIT WRITER:

Andrea Sandage

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Glass Container Manufacturing
NAICS Code: 327213

5. SUBMITTALS:

10/5/2009, 10/12/2009

6. REVIEWER'S NOTES:

Arkansas Glass Container Corporation owns and operates a glass container manufacturing facility in Jonesboro, Arkansas (Craighead County). This Title 5 minor modification to Permit #1440-AOP-R3 is being issued to allow the facility to install a new small surface coating operation, (SN-10), and a new drying oven, 1 MMBTU/hr (to be added under SN-05). The total permitted emission increase is 8.7 tons per year (tpy) of VOC as a result of the booth itself. Emissions from the drying oven are 0.1 tpy PM/PM₁₀, 0.1 tpy SO₂, 0.1 tpy VOC, 0.4 tpy CO, and 0.5 tpy NO_x. There will be no permitted emission increase from the oven because of bubbled combustion sources under SN-05.

7. COMPLIANCE STATUS:

There are no known active/pending enforcement actions or compliance activities related to 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? Y
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?
 This is a permit renewal with no changes in the method of operation

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
Combined Sources	NOx	PSD (---major source status, not subject to PSD review for this renewal)

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu\text{g}/\text{m}^3$)	Averaging Time	Highest Concentration ($\mu\text{g}/\text{m}^3$) (model + background)	% of NAAQS
PM ₁₀	30.6	50	Annual	9.6 + 12.3 = 21.9	43.8
		150	24-Hour	39.8 + 33 = 72.8	48.5
NO _x	104.9	100	Annual	38.2 + 7.2 = 45.4	45.4

Non-Criteria Pollutants:

N/A: No non-criteria pollutants are expected to be emitted from this facility in significant quantities.

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01&03	PM-Glass Mfg Handbook	2.5 lb PM/ton glass	---	---	Uncontrolled Factors
	NOx-Stack Test Data	8.57 lb NOx/ton glass			
	CO. AP-42 Table 11.15-2	0.5 lb CO/ton glass			
	VOC- Stack Test Data	1lb VOC/ton glass			
	SO2-Stack Test Data	1.48 lb/ton glass			
O4A	Surrogate AP-42, 11.12-2	0.0072 lb PM/ton	Fabric Sock	90%	Uncontrolled Factors
O4B	Surrogate AP-42, 11.12-2	0.0072 lb PM/ton	Fabric Sock	90%	Uncontrolled Factors
O4C	Surrogate AP-42, 11.12-2	0.0072 lb PM/ton	Fabric Sock	90%	Uncontrolled Factors
04D	Surrogate AP-42, 11.12-2	0.0036 lb PM/ton	Baghouse	99.5%	Uncontrolled Factors
04E	Surrogate AP-42, 11.12-2	0.0036 lb PM/ton	Baghouse	99.5%	Uncontrolled Factors
04F	Surrogate AP-42, 11.6-4	0.0031 lb PM/ton	Baghouse	Not used	Controlled
05	PM/PM ₁₀ AP-42 Table 1.4-2, filterable + condensable NOx AP-42 Table 1.4-1 small industrial boiler CO AP-42 Table 1.4-1, small industrial boiler VOC AP-42 Table 1.4-2 SO ₂ AP-42 Table 1.4-2	7.6 lb/MMscf nat gas 100 lb/MMscf nat gas 84 lb/MMscf nat gas 5.5 lb/MMscf nat gas 0.6 lb/MMscf nat gas	---	---	Uncontrolled Factors
08	Surrogate AP-42, 11.6-4	0.00016 lb PM/ton	Baghouse	99.5%	Uncontrolled Factors
09	Conservative Estimate	100% Evaporation of volatiles	---	---	---
10	MSDS, conservative estimate	20% VOC – 3.96 lb/hr	---	---	HAP free paint

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01 & 03	PM/PM ₁₀	5	Five (5) year intervals (each furnace shall be tested every five (5) years).	To help ensure ongoing compliance with criteria emission limits
	SO ₂	6C		
	VOC	25A		
	CO	10		
	NOx	7E		

Note: Emissions testing was performed on Furnace A (SN-01) on January 9-10, 2008, and on Furnace “C” (SN-03) on October 8, 2008. Both sources were found to be in compliance.

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)
04A,04B04C, 04D, 04E, 04F, 08	Manufacturer’s recommended specifications for fabric filters.	Procedure and Inspection	Routine inspection once per month.	N
04A,04B04C, 04D, 04E, 04F, 08	Visible Emissions	Visual observation and Method 9 as needed.	At each loading event	N
08	Visible Emissions	Visual observation and Method 9 as needed.	Weekly	N

15. 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, 03	Combined Raw Materials	280 ton/day 85,500 ton/yr	Daily	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
04A, 04B, 04C, 04F	Feldspar/Nephelene	5,400 tons/yr	Monthly	Y
	Soda Ash	24,400 tons/yr		
	Cullet	46,400 tons/yr		
04D	Sand Storage	7,000 tons/yr	Monthly	Y
04E	Limestone Storage	16,000 tons/yr	Monthly	Y
04A, 04B, 04C, 04D, 04E, 04F	Control Equipment Quality Inspections	Manufacturer's Specifications	As Performed (no less than once per month)	N
09	Forming Machine Lubricant	100,000 lb/yr	Daily	Y
01, 03, 04A, 04B, 04C, 04D, 04E, 04F	VE Observation Results	Opacity Limit As Assigned	See PW Condition 8	N
SN-10	Paint VOC content	2.0 lb/gal	Monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 03	20	Previous Limit	Daily VE observations
04A, 04B, 04C	10	Previous Limit	VE observations-each loading event
04D, 04E	5	Department Guidance	VE observations-each loading event
04F	5	Department Guidance	Weekly VE observations
05	5	Department Guidance	Inspector's observation
08	5	Department Guidance	Weekly observation

17. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

18. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
320 gal Diesel Storage Tank	3	0	0	0.002	0	0	0	0
Cooling Towers	13	3.550	0	0	0	0	0	0
Cuttlet Jaw Crusherq	13	0.001	0	0	0	0	0	0
Bottle Breaker	13	0	0	0	0	0	0	0


19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1440-AOP-R3

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.



 Paula Parker, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 07-27-09

Facility Name: Arkansas Glass Container Corp
 Permit Number: 1440-AOP-R4
 AFIN: 16-00061

\$/ton factor	22.07	Annual Chargeable Emissions (tpy)	663.5
Permit Type	Minor Mod	Permit Fee \$	500

Minor Modification Fee \$	500
Minimum Modification Fee \$	1000
Renewal with Minor Modification \$	500
Check if Facility Holds an Active Minor Source Permit	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	8.7
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	<input checked="" type="checkbox"/>	109.6	109.6	0	0	109.6
PM ₁₀	<input type="checkbox"/>	109.6	109.6	0		
SO ₂	<input checked="" type="checkbox"/>	63.3	63.3	0	0	63.3
VOC	<input checked="" type="checkbox"/>	94	102.7	8.7	8.7	102.7
CO	<input type="checkbox"/>	39.5	39.5	0		
NO _x	<input checked="" type="checkbox"/>	387.9	387.9	0	0	387.9