

STATEMENT OF BASIS

for issuance of Air Permit No. 1440-AOP-RI.

1. PERMITTING AUTHORITY:

Arkansas Department of Pollution Control and Ecology
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913.

2. APPLICANT:

Arkansas Glass Container Corporation
516 West Johnson Street
Jonesboro, Arkansas 72403.

3. PERMIT WRITER:

Lyndon Poole.

4. PROCESS DESCRIPTION AND SIC CODE:

Glass Manufacturing
SIC Code 3221.

5. SUBMITTALS: December 6, 1999 November 22, 2000

6. REVIEWER'S NOTES:

Arkansas Glass Container Corporation owns and operates a glass container manufacturing facility in Jonesboro, Arkansas (Craighead County).

The purpose of this modification is to:

- Identify existing emission points previously omitted from the air permit.
- Update emission calculation methods for baghouse-controlled sources and the forming machines.
- Update the insignificant activities list.
- Acknowledge the addition of electric boost systems in the glass melting furnaces (previously approved for installation by the Department via letter on October 19, 1999).
- Incorporate a slightly higher VOC limit for the glass furnaces, due to test results from July of 1999.

NOTE: The previous VOC limit was also based upon stack test data, from sampling conducted in 1996. No modifications were made to the furnaces between the two testing events. The hourly VOC limit for each furnace is increasing by 1.5 lb/hr, a combined increase of 3.0 lb/hr for both furnaces. Without the annual glass throughput limit, this would only result in a potential increase of 13.2 tons of VOC per year at the furnaces.

The VOC increase is therefore not subject to PSD review.

7. COMPLIANCE STATUS

Arkansas Glass is currently operating under a Consent Administrative Order (CAO, LIS # 99-217). The application for this modification was submitted to fulfill one of the requirements of this CAO.

8. APPLICABLE REGULATIONS

A. Applicability

Did the facility undergo PSD review in this permit? No
 Has this facility undergone PSD review in the past? No
 Is this facility categorized as a major source for PSD? Yes
 \$ 100 tpy and on the list of 28 (100 tpy)? (Y/N) No
 \$ 250 tpy all other (Y/N) Yes

B. PSD Netting N/A

C. Source and Pollutant Specific Regulatory Applicability

Source	Pollutant	Regulation [NSPS, NESHAP (Part 61 & Part 63), or PSD <u>only</u>]
Combined Sources	NO _x	PSD (---major source status, <i>not</i> subject to PSD review for this modification)

NOTE: The glass melting furnaces at this facility are not subject to NSPS Subpart CC. The work performed on these sources since the applicability date of the standards (June 15, 1979) is exempt from the requirements, because rebricking of furnace structures is expressly excluded from the regulation's definition of reconstruction (60.292(c)).

7. EMISSION CHANGES:

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

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1440-AOP-R0	Air Permit 1440-AOP-R1	Change
PM/PM ₁₀	120.2	126.2	+6.0
SO ₂	63.3	63.3	0.0
VOC	405.8	94.0	-311.8
CO	12.8	12.6	-0.2
NO _x	654.2	653.1	-1.1

NOTE: Substantial VOC decrease primarily due to newer and more accurate calculation method for forming machine lubricant at SN-09.

8. MODELING:

A. Criteria Pollutants

The following criteria pollutants were modeled using ISCST3 dispersion software in order to predict their impact on the National Ambient Air Quality Standards (NAAQS). SO₂, VOC, and CO were not included in the modeling, because the magnitude of their estimated emissions do not indicate a potential threat (the estimated emissions are below Title V thresholds).

SN(s)	Pollutant	Proposed lb/hr	Guideline Concentration	Modeled Concentration	Pass?
Plantwide	PM ₁₀ ¹	35.7	(0.50)*(50) annual = 25 ug/m ³ (0.50)*(150) 24-hour = 75 ug/m ³	4.8 ug/m ³ 64.0 ug/m ³	Yes. Yes.
Plantwide	NO _x	177.4	(0.50)*(100) annual = 50 ug/m ³	23.9 ug/m ³	Yes.

B. Non-Criteria Pollutants

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

9. CALCULATIONS:

At source locations for which no comments appear below, the emission calculations received the reviewer's concurrence as submitted by the facility in the permit application.

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
01 03	PM-Glass Mfg Handbook NO _x -Stack Test Data CO-AP-42 VOC-Stack Test Data SO ₂ -Stack Test Data	2.5 lb PM/ton 14.829 lb NO _x /ton 0.2 lb CO/ton 1 lb VOC/ton 1.475 SO ₂ /ton	-	-
04A	AP-42	0.27 lb PM/ton	Fabric Sock	90%
04B	AP-42	0.27 lb PM/ton	Fabric Sock	90%
04C	AP-42	0.27 lb PM/ton	Fabric Sock	90%
04D	Conservative Loading Factor Estimate	0.02 grains/ft ³	Baghouse	Not Used
04E	Conservative Loading Factor Estimate	0.02 grains/ft ³	Baghouse	Not Used
04F	Conservative Loading Factor Estimate	0.02 grains/ft ³	Baghouse	Not Used
05	AP-42	Natural Gas Factors	-	-
08	Conservative Loading Factor Estimate	0.02 grains/ft ³	Baghouse	Not Used
09	Conservative Estimate	100% evaporation of volatiles	-	-

10. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

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SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
01	PM/PM ₁₀ SO ₂ VOC CO NO _x	5 6C 25A 10 7E	Annually	To help ensure ongoing compliance with criteria emission limits.

11. MONITORING OR CEMS

This permit requires the following operational parameters:

SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Report (Y/N)**
04A 04B 04C 04D 04E 04F 08	Manufacturer's recommended specifications for fabric filters.	Procedure and inspection.	Routine inspection once per month.	No.

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SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Repo (Y/N)
04A 04B 04C 04D 04E 04F	Visible Emissions	Visual observation and Method 9 as needed.	At each loading event.	No.
08	Visible Emissions	Visual observation and Method 9 as needed.	Weekly	No.

14. RECORD KEEPING, REPORTING:

The following specific conditions were included in Air Permit 1440-AOP-R0 to require record keeping and reporting of throughput, emissions, or operational parameters:

SN	Recorded Item	Limit (as established in permit)	Frequency	Report (Y/N)
01, 03	Combined Raw Materials	280 ton/day 85,500 ton/yr	Daily	Yes
04A, 04B, 04C, 04D, 04E, 04F	Feldspar/Nepheline Soda Ash Cullet	5,400 ton/yr 24,000 ton/yr 46,000 ton/yr	Monthly	Yes
04A, 04B, 04C, 04D, 04E, 04F, 08	Control Equipment Quality Inspections	Manufacturer's Specifications	As Performed (no less than once per month)	No
09	Forming Machine Lubricant	100,000 lb/yr	Daily	Yes
01, 03, 04A, 04B, 04C, 04D, 04E, 04F, 08	VE Observation Results	Opacity Limits As Assigned	See PW Condition 7	No

15. OPACITY:

The following opacity limits are required by this permit.

SN	% Opacity	Justification	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.

16. DELETED CONDITIONS

The following Specific Conditions were included in the previous permit, but were removed for the current permitting action.

Former SC	Justification for removal
3	VE observations covered in new Plantwide Condition 7.
8	VE observations covered in new Plantwide Condition 7.
12	VE observations covered in new Plantwide Condition 7.
19	Former SNs 06A now on insignificant activity list, 06B removed from service.
20	Former SNs 06A now on insignificant activity list, 06B removed from service.
22	Former SN-06B removed from service.
23	Former SNs 06A now on insignificant activity list, 06B removed from service.
24	Former Sns 07A, 07B now on insignificant activity list, 07C removed from service.

17. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

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18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Thomas Rheume, P.E.

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