ADEQ

RENEWAL OPERATING

AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation #26:

Permit #: 1440-AOP-R2

RENEWAL #1

IS ISSUED TO:

Arkansas Glass Container Corporation

516 West Johnson, Jonesboro, AR 72403

Craighead County

AFIN: 16-00061

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

AND

IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith Michaels

Date

Table of Contents

Table of Tables

Table 1 - List of Acronyms

A.C.A.	Arkansas Code Annotated
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CSN	County Serial Number
HAP	Hazardous Air Pollutant
lb/hr	Pound per hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate matter
PM_{10}	Particulate matter smaller than ten microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Ton per year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Section I: FACILITY INFORMATION

PERMITTEE:	Arkansas Glass Container Corp.
AFIN:	16-00061
PERMIT NUMBER:	1440-AOP-R2
FACILITY ADDRESS:	516 West Johnson Jonesboro, AR 72403
MAILING ADDRESS	516 West Johnson Jonesboro, AR 72403
COUNTY:	Craighead
CONTACT NAME & POSITION:	Joel Sharp-Executive Vice President
TELEPHONE NUMBER:	870-932-4564
REVIEWING ENGINEER:	James G. Siganos, P. E.
UTM North - South (Y):	3969
UTM East - West (X):	707

Section II: INTRODUCTION

Summary of Permit Activity

Arkansas Glass Container Corporation owns and operates a glass container manufacturing facility in Jonesboro, Arkansas (Craighead County). The facility first began operation in 1949 as the McSwain Glass Company. Current ownership was established in January of 1986.

This permit is being issued as a renewal for a Title V operating permit # 1440-AOP-R1 which has an expiration date of June 24, 2003. No new construction or major modification is being proposed.

Also on January 2, 2003 the Division issued a letter of acceptance for a Title V Minor Modification allowing Arkansas Glass Container Corp to modify several miscellaneous pieces of natural gas fired equipment, designated as emission source SN-05, during a planned shutdown. These miscellaneous items of equipment are located and operated through the plant to facilitate the required heating of molten glass and other materials. Some equipment will be refurbished, some equipment will be removed, and two new pieces (mil ovens) of equipment will be added. This modification resulted in a decrease in the total firing rate, by 1,654,000 Btu/ hr, of the equipment designated as SN-05.

Process Description

The raw materials used for making glass are stored in silos. Particulate emissions from the feldspar/nephelene silo (SN-04A), the soda ash silo (SN-04B), and the cullet silo (SN-04C) are controlled with fabric socks on top of the silos. Particulate emissions from the sand silo (SN-04D) and the limestone silo (SN-04E) are controlled with baghouses. The discharges from the silos are controlled with a baghouse (SN-04F). The railcar unloading operation is also controlled with a baghouse (SN-08).

The raw materials are mixed and conveyed to one of two glass melting furnaces (SN-01 and SN-03), where molten glass is produced. Natural gas burners provide the energy needed to melt the raw materials. Electrical boost systems help equalize the temperature in the flow of liquid glass in order to improve the quality of the finished glass. The electrical boost system is essentially a series of heating coils placed in the flow of liquid glass. No emissions are associated with the electrical boost systems.

The molten glass is carried through distribution channels (alcoves) to the forehearths. Natural gas-fired burners inside the alcoves provide heat to keep the glass molten. The molten glass is then shaped into containers in the forming machines (SN-09). VOC emissions from the forming machines occur due to the flash vaporization of the lubricant used on the molds. The still hot formed containers proceed to the annealing lehrs for controlled cooling. The annealing lehrs are also heated with natural gas burners. All of the natural gas combustion sources associated with the alcoves, forehearths, and annealing lehrs, the heated caustic tanks, and the oil/water separator dehydrators are grouped together as SN-05.

The finished glass is then inspected, packaged, and shipped to customers. Defective glass containers are returned to the furnaces for remelting.

Regulations

Operations at this facility are subject to regulation under the *Clean Air Act* as amended, the *Arkansas Water and Air Pollution Control Act*, the *Arkansas Air Pollution Control Code* (Regulation 18), the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19), and the *Regulations of the Arkansas Operating Air Permit Program* (Regulation 26). The facility is also classified as a major stationary source as defined by 40 CFR Part 52.21, *Prevention of Significant Deterioration of Air Quality* (PSD).

The *Standards of Performance for Glass Manufacturing Plants* (40 CFR Part 60, Subpart CC) are not applicable to the glass melting furnaces at this facility. 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)).

The following table contains the regulations applicable to this permit.

Table 2 - Regulations

Source No.	Regulation Citations
Facility	Arkansas Air Pollution Control Code (Regulation 18)
Facility	Regulations of the Arkansas Plan of implantation for Air Pollution Control (Regulation 19)
Facility	Regulations of the Arkansas Operating Air Permit Program (Regulation 26)

Emission Summary

The following table is a summary of emissions from the facility. The following table contains cross-references to the pages containing specific conditions and emissions for each source. This table, in itself, is not an enforceable condition of the permit.

Table 3 – Emission Summary

Emission Summary					
Source No.	**Description**	**Pollutant**	**Emission Rates**		**Cross Reference Page**
			Lb/hr	**Tpy**	
Total Allowable Emissions		PM	35.4	112	---
		PM_{10}	35.4	112	
		SO_2	17.5	63.3	
		VOC	27.1	94.0	
		CO	6.4	12.6	
		NO_x	177.8	655.5	
SN-01, (01A, 01B, 01C)	Glass Melting Furnace "A"	PM PM_{10} SO_2 VOC CO NO_x	14.6 14.6 8.7 5.9 1.2 86.5	106.9 106.9 63.3 42.8 8.6 634.0	18
SN-02	Source Removed				

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			Lb/hr	Tpy	
SN-03 (03A, 03B, 03C)	Glass Melting Furnace "C"	PM PM_{10} SO_2 VOC CO NO_x	14.6 14.6 8.7 5.9 1.2 86.5	Emission bubble – combined with SN-01	18
SN-4A	Feldspar/Nephaline Storage Silo with Fabric Sock	PM PM_{10}	1.8 1.8	0.2 0.2	13
SN-04B	Soda Ash Storage Silo with Fabric Sock	PM PM_{10}	1.8 1.8	0.9 0.9	13
SN-04C	Cullet Silo with Fabric Sock	PM PM_{10}	1.8 1.8	1.7 1.7	13
SN-04D	Sand Silo with Baghouse	PM PM_{10}	0.1 0.1	0.2 0.2	13
SN-04E	Limestone Silo with Baghouse	PM PM_{10}	0.1 0.1	0.1 0.1	13
SN-04F	Storage Silos Discharge with Baghouse	PM PM_{10}	0.1 0.1	0.2 0.2	13

Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	Tpy	
SN-05	Miscellaneous Natural Gas Combustion Sources	PM PM_{10} SO_2 VOC CO NO_x	0.4 0.4 0.1 0.3 4.2 4.9	1.7 1.7 0.2 1.2 18.1 21.5	22
SN-08	Railcar Unloading Baghouse	PM PM_{10}	0.1	0.1	16
SN-09	Forming Machines	VOC	15.0	50.0	25
SN-06A	Refractory Shaker Screen (fugitive)	Moved to Insignificant Activity List			
SN-06B	Cullet Hammer Mill	Removed from service			
SN-07A	Gasoline Storage Tank (fugitive)	Moved to Insignificant Activity List			
SN-07B	Diesel Storage Tank (fugitive)	Moved to Insignificant Activity List.			
SN-07C	Kerosene Storage Tank (fugitive)	Removed from service.			

Section III: PERMIT HISTORY

Air Permit 1440-A was issued to Arkansas Glass Container Corporation on February 26, 1993. This was the first air permit issued to the facility. Permitted sources included three glass melting furnaces (SN-01, SN-02, SN-03) and a fabric dust collection system (SN-04).

Due to permitted nitrogen oxides emissions of 615.8 tons per year, Air Permit 1440-A classified the facility as a major source under the regulations of 40 CFR Part 52.21 (Prevention of Significant Deterioration).

Air Permit 1440-AOP-R0 was issued on June 25, 1998. This permit was issued in order to fulfill the requirements of Arkansas Regulation 26 and Title V of the Clean Air Act. This permitting action identified and quantified pre-existing emission sources not covered by the previous permit, authorized an annual production increase of 5200 tons of glass per year, acknowledged the removal of the middle glass furnace (SN-02), and recognized the identification of a higher daily production capacity for the two remaining glass furnaces (SN-01 and SN-03).

Air Permit 1440-AOP-R1 was modified and issued on August 22, 2001. The modification included the following:

- 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 by the Department in October 1999)
- Incorporate a slightly higher VOC limit for the glass furnaces, due to stack testing conducted in July 1999 (this increase was not due to any modification of the furnaces).

Section IV: EMISSION UNIT INFORMATION

(**SN-04**A, **SN-04**B, **SN-04**C, **SN-04**D, **SN-04**E, **SN-04**F)

Raw Material Storage

Source Description

High-silica sand, limestone, feldspar, and soda ash are the major raw materials used at the facility in the process of manufacturing glass. These materials are received in bulk by way of truck and railcar. They are off-loaded into storage silos, with one silo assigned to each material. Particulate emissions from the feldspar/nephelene silo (SN-04A), the soda ash silo (SN-04B), and the cullet silo (SN-04C) are controlled with fabric socks on top of the silos. Particulate emissions from the sand silo (SN-04D) and the limestone silo (SN-04E) are controlled with baghouses. The discharges from the silos are controlled with a baghouse (SN-04F).

Emission rates for raw material storage activities were calculated using an EPA AP-42 emission factor for cement unloading into a storage silo (no specific factor for glass raw material unloading was available). Pound per hour emissions were calculated based upon maximum equipment capacity. Ton per year emissions are limited by Specific Condition 4, except for sand and limestone generated emissions. Annual emissions from sand and limestone were calculated assuming year-round operation.

Specific Conditions

1. Pursuant to §19.501 et seq. of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table:

SN	Description	Pollutant	lb/hr	Tpy
SN-04A	Feldspar/Nephelene Storage Silo with Fabric Sock	PM_{10}	1.8	0.2
SN-04B	Soda Ash Storage Silo with Fabric Sock	PM_{10}	1.8	0.9
SN-04C	Cullet Silo with Fabric Sock	PM_{10}	1.8	1.7
SN-04D	Sand Silo with Baghouse	PM_{10}	0.1	0.2
SN-04E	Limestone Silo with Baghouse	PM_{10}	0.1	0.1
SN-04F	Storage Silos Discharge with Baghouse	PM_{10}	0.1	0.2

2. Pursuant to §18.801of the Arkansas Air Pollution Control Code (Regulation18) and A.C. A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

Table 3 – Maximum Non-Criteria Emission Rates

SN	Description	Pollutant	lb/hr	Tpy
SN-04A	Feldspar/Nepheline Storage Silo with Fabric Sock	PM	1.8	0.2
SN-04B	Soda Ash Storage Silo with Fabric Sock	PM	1.8	0.9
SN-04C	Cullet Silo with Fabric Sock	PM	1.8	1.7
SN-04D	Sand Silo with Baghouse	PM	0.1	0.2
SN-04E	Limestone Silo with Baghouse	PM	0.1	0.1
SN-04F	Storage Silos Discharge with Baghouse	PM	0.1	0.2

3. Pursuant to §18.501 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311, the following sources shall not exceed 5% opacity: SN-04D, SN-04E, and SN-04F. The following sources shall not exceed 10% opacity: SN-04A, SN-04B, SN-04C. Requirements for opacity compliance demonstration are outlined in Plantwide Condition 7.

4. Pursuant to §19.705 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and A.C.A. § 8-4-203 as referenced by § 8-4-304 and § 8-4-311,and 40 CFR Part 70.6, annual throughput for the bulk storage silos shall be limited to the following:

SN	Raw Material	Annual Limit (Tpy)
04A	Feldspar/Nepheline	5,400
04B	Soda Ash	24,000
04C	Cullet	46,000
04D	Sand Storage Silo	70,000
04E	Limestone Storage	16,000
04F	Storage Silos Discharge	Glass Product

Compliance with this condition shall be based upon a 12-month rolling total, and verified by monthly records of the raw materials. The permittee shall update the records by the fifteenth day of the month following the month to which it pertains. The records shall be kept on site, made available to Department personnel upon request, and shall be included in the semi-annual report as outlined in General Provision 7.

5. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation #19) and A.C.A. § 8-4-203 as referenced by § 8-4-304 and § 8-4-311, all fabric filter control equipment (baghouses and socks) shall be operated in accordance with manufacturer's specifications.

Unless prompted by visible emission monitoring events, routine inspections of all control equipment shall be performed no less than once per month. Records of inspection and maintenance of equipment components shall be maintained in a log, and updated as performed. A copy of the specification sheet and maintenance log for each filter shall be kept on site and made available to Department personnel upon request.

SN-08

Railcar Unloading Baghouse

Raw materials for the glass manufacturing processes are received and unloaded by railcar. The particulate emissions from railcar unloading activities are controlled by a baghouse (SN-08). Annual emissions were calculated assuming year-round operation. Pound per hour emissions were calculated for this baghouse based upon maximum equipment capacity.

Specific Conditions

6. Pursuant to §19.501 et seq. of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	Tpy
SN-08	Railcar Unloading Baghouse	PM_{10}	0.1	0.1

7. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation #18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	Tpy
SN-08	Railcar Unloading Baghouse	PM	0.1	0.1

8. Pursuant to §18.5 of the Arkansas Air Pollution Control Code (Regulation 18) and 40 CFR Part 52, Subpart E, the following source shall not exceed 5% opacity: SN-08. Requirements for opacity compliance demonstration are outlined in Plantwide Condition 7.

9. Pursuant to §19.705 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, the permittee shall not exceed 29,400 tpy annual throughput at Railcar Unloading (SN-08). This limit shall be based upon a rolling 12-month total.

10. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall maintain records which document compliance with the railcar unloading throughput limit set forth in the preceding condition. The permittee shall update the records by the fifteenth day of the month following the month to which it pertains. The records, shall be kept on site and made available to Department personnel upon request, and shall be included in the semi-annual report as outlined in General Provision 7.

11. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, all fabric filter control equipment (baghouses and socks) shall be operated in accordance with manufacturer's specifications.

Unless prompted by visible emission monitoring events, routine inspections of all control equipment shall be performed no less than once per month. Records of inspection and maintenance of equipment components shall be maintained in a log, and updated as performed. A copy of the specification sheet and maintenance log for each filter shall be kept on site and made available to Department personnel upon request.

SN-01 and SN-03

Glass Melting Furnaces

Source Description

The pre-mixed raw materials are loaded into the glass melting furnaces by means of a ram feeder system. Once inside the furnaces, the material heats up quickly in a 2730^{o}F environment. The glass melting furnaces use a twin bed regenerative burner system. In this scenario, while one burner is in operation, its twin on the opposite side provides an outlet for the exhaust gases. The exhaust gases pass through a bed of refractory rock, which cools the gases and then preheats the incoming combustion air as it passes through the rock bed. This cycle is systematically reversed every few seconds by the automatic burner control system. The hot combustion air is mixed with natural gas and combusted in the burner zone above the bed of molten glass. Electrical boost systems help equalize the temperature in the flow of liquid glass in order to improve the quality of the finished glass. The electrical boost system is essentially a series of heating coils placed in the flow of liquid glass. No emissions are associated with the electrical boost systems.

Exhaust gases pass through the beds and are then vented to the atmosphere. Automatic temperature controllers regulate the percentage of exhaust gases passing through the regenerative beds.

Each of the two glass melting furnaces has three vents, designated as SN-01A, SN-01B, and SN-01C for SN-01, and SN-03A, SN-03B, and SN-03C for SN-03. The larger diameter stacks (48") are designated "B" and "C," and handle 40% of the exhaust volume each. The smaller stacks (16") are labeled "A," and carry 20% of the exhaust volume at each furnace.

The rated capacity of each furnace is 140 tons per day. Typical emissions from the glass furnaces include oxides of nitrogen (NO_X), carbon monoxide (CO), and small amounts of particulate matter (PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOCs). These emissions are the by products resulting from the combustion of natural gas and the volatilization of impurities in the raw materials.

Permitted emission rates for the glass furnaces have been calculated using stack test data and emission factors from the EPA AP-42 and the Handbook of Glass Manufacture. Pound per hour emissions were calculated based upon maximum equipment capacity. Ton per year emissions are limited by Specific Condition 15.

Specific Conditions

12. Pursuant to §19.501 et seq. of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table:

SN	Description	Pollutant	lb/hr	Tpy
01	"A" Glass Melting Furnace	PM10	14.6	106.9
		SO2	8.7	63.3
		VOC	5.9	42.8
		CO	1.2	8.6
		NOx	86.5	634.0
03	"C" Glass Melting Furnace	PM10	14.6	Emission bubble – combined with SN-01
		SO2	8.7	
		VOC	5.9	
		CO	1.2	
		NOX	86.5	

13. Pursuant to §18.801of the Arkansas Air Pollution Control Code (Regulation18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	Lb/hr	Tpy
01	"A" Glass Melting Furnace	PM	14.6	106.9
03	"C" Glass Melting Furnace	PM	14.6	Emission bubble combined with SN-01

14. Pursuant to §19.503 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and 40 CFR Part 52, Subpart E, the following sources shall not exceed 20% opacity: SN-01, SN-03. Requirements for opacity compliance demonstration are outlined in Plantwide Condition 7.

15. Pursuant to §19.705 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, combined finished glass production from furnaces (SN-01, SN-03) shall not exceed 280 tons per day or 85,500 tons per year (both furnaces combined). The annual throughput limit shall be based upon a 12-month rolling total.

16. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall keep a production log of combined finished glass production for the furnaces. The log shall be updated daily, totaled monthly, kept on site, and made available to Department personnel upon request. Monthly summaries of the glass production log shall be included in the semi-annual report as outlined in General Provision 7.

17. Pursuant to §19.705 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, pipeline quality natural gas shall be the only fuel used for combustion at SN-01 and SN-03.

18. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall conduct stack testing on SN-01 (Furnace "A") and SN-03 (Furnace "C") in accordance with the following parameters:

Item	**Description**	
Test Schedule	With issuance of this permit (1440-AOP-R2), each furnace shall be tested once during the five (5) year permit term. Furnace "A" is not in operation and the permittee anticipates that it will not be operated for an extended period of time. Should Furnace "A" be placed in operation during the five (5) year permit term. stack testing shall be conducted.	
Pollutants	Total Particulate, SO_2, VOC, CO, NO_X	
Throughput	Within 10% of maximum capacity.	
EPA Reference Method	Total Particulate	5
	SO_2	6C
	VOC	25A
	CO	10
	NO_X	7E

Furnace sampling for each pollutant specified shall be conducted sequentially at all three vents for each furnace unless an alternative technique is approved by the Department prior to testing. Each test shall be coordinated in advance with the Compliance Inspector Supervisor, in accordance with Plantwide Condition 3.

SN-05

Miscellaneous Natural Gas Combustion Sources

Source Description

Arkansas Glass operates various natural gas combustion sources throughout the plant to facilitate the required heating of molten glass and other raw materials. The sources are summarized as follows:

Equipment	Total Rating (Btu/hr)
Caustic Cleaning Tanks (3 burners @ 150,000 Btu/hr each. 2 at East Tank, 1 at West Tank)	450,000
Forehearth 1 (118 burners @ 15,000 Btu/hr each) - Modified	1,770,000
Forehearth 2 (96 burners @ 16,000 Btu/hr each) - Discontinued	---
Forehearth 3 (96 burners @ 16,000 Btu/hr each)	1,536,000
Forehearth 4 (96 burners @ 16,000 Btu/hr each)	1,536,000
Forehearth 5 (104 burners @ 16,000 Btu/hr each)	1,664,000
Forehearth 6 (96 burners @ 16,000 Btu/hr each)	1,536,000
Forehearth 7 (108burners @ 16,000 Btu/hr each) - Discontinued	---
Forehearth 8 (94 burners @ 15,000 Btu/hr each)	1,410,000
Alcove Drain (64 burners @ 16,000 Btu/hr each)	1,024,000
Annealing Lehr 1 (6 burners@ 400,000 Btu/hr each) - Modified	2,400,000
Annealing Lehr 3 (8 burners @ 305,000 Btu/hr each)	2,440,000
Annealing Lehr 4 (8 burners @ 305,000 Btu/hr each)	2,440,000
Annealing Lehr 5 (8 burners @ 305,000 Btu/hr each)	2,440,000

Annealing Lehr 6 (8 burners @ 305,000 Btu/hr each)	2,440,000
Annealing Lehr 7 (24 burners @ 35,000 Btu/hr each, 8 burners @ 50,000 each), Discontinued	---
Annealing Lehr 8 (6 burners @ 400,000 Btu/hr each), Modified	2400,000
Alcoves (26 burners @ 500,000 Btu/hr each, 1 @ 1,000,000 Btu/hr each, 72 @ 16,000 Btu/hr and 120 @ 25,000 Btu/hr each), Refurbished	15,152,000
Dehydrators (1 burner @ 80,000 Btu/hr, 1 burner @ 85,000 Btu/hr)	165,000
Mold Oven (1 burner @ 500,000 Btu/hr) - Added	500,000
Mold Oven (1 burner @ 500,000 Btu/hr) - Added	500,000
TOTAL Btu/hr	*41,803,000

*Refer to Specific Conditions 23, 24 & 25.

Emissions for the combined natural gas combustion sources have been calculated at maximum heat input capacity and year-round operation.

Specific Conditions

19. Pursuant to §19.501 et seq. of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	Tpy
05	Miscellaneous Natural Gas Combustion Sources	PM_{10}	0.40	1.70
		SO2	0.10	0.20
		VOC	0.30	1.20
		CO	4.20	18.1
		NOx	4.9	21.5

20. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation #18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	Tpy
05	Miscellaneous Natural Gas Combustion Sources	PM	0.40	1.70

21. Pursuant to §18.501 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311, the combustion units designated as SN-05 shall not exceed 5% opacity.

22. Pursuant to §19.705 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, pipeline quality natural gas shall be the only fuel used for combustion at the units designated as SN-05.

23. The permittee shall limit the total heat input for all miscellaneous natural gas combustion sources designated as SN-05, at the facility, to 50 MM Btu/hr. Compliance with this condition shall be demonstrated through compliance with Specific Conditions 24 & 25. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

24. The permittee shall maintain a monthly count of all miscellaneous natural gas combustion sources designated as SN-05. The equipment listed, in the table of natural gas combustion sources, was in use when this permit modification was issued. Changes to the miscellaneous natural gas fired equipment list are allowed, with the condition that the total firing rate of all miscellaneous equipment in the group does not exceed 50 MM Btu/hr. The permittee shall maintain a record of all miscellaneous equipment and associated firing rates, shall keep records onsite, and make the records available to Department personnel upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E

25. The permittee shall not construct, reconstruct, install, or modify any combination of miscellaneous natural gas combustion equipment that may have a total heat input capacity greater than 10 MMBTU/hr without submitting the appropriate application and obtaining the Department's prior approval. [§19.304 of Regulation 19]

SN- 09

Forming Machine

Molten glass gob is cut from the forehearth channels and fed into the forming machine, where the container is pressed in blank molds. The majority of emissions from the forming process are generated from the glass gob coming into contact with the machine lubricant. These emissions are vented to the atmosphere through openings in the production building, and have been calculated using an assumption of total evaporation and historical usage data.

Specific Conditions

26. Pursuant to §19.501 et seq. of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	Tpy
09	Forming Machine	VOC	15.0	50.0

27. Pursuant to §19.705 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, the permittee shall not exceed 100,000 lb/yr of lubricant usage at the Forming Machine (SN-09). This limit shall be based upon a rolling 12-month total.

28. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall maintain records which document compliance with the lubricant throughput limit set forth in the preceding condition. These records shall be updated and totaled monthly, kept on site, and made available to Department personnel upon request. Monthly summaries of the lubricant usage shall be included in the semi-annual report as outlined in General Provision 7.

Section V: COMPLIANCE PLAN AND SCHEDULE

Arkansas Glass Container Corp. does not currently have an enforcement action, and is in compliance with the applicable regulations cited in the permit application. Arkansas Glass Container Corp. will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee will notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation No. 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [§19.410(B) of Regulation 19 and , 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) New Equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start-up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee will submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A.§8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. The permittee must provide: [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
   a. Sampling ports adequate for applicable test methods
   b. Safe sampling platforms
   c. Safe access to sampling platforms
   d. Utilities for sampling and testing equipment.

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee will maintain the equipment in good condition at all times. [Regulation 19 §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

7. Pursuant to §19.705 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and 40 CFR 52, Subpart E, the permittee shall conduct observations of visible emissions for the sources listed below. The visible emissions (VE) observations shall be conducted in accordance with the following timeframes:

Source Number (SN)	VE Observation Frequency
01, 03	Daily (VE Observations are only required for the glass furnace in operation)
04A, 04B, 04C, 04D, 04E	During each silo loading event.
04F	Weekly
08	Weekly

The visible emissions observations shall be used as a method of compliance verification for the opacity limits assigned. The observations shall be conducted by personnel familiar with the facility's visible emissions. If during the observations visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

a. Take immediate action to identify the cause of the visible emissions.
b. Implement all necessary corrective action.
c. Reassess the visible emissions after corrective action is taken.
d. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9. This reading shall be conducted by personnel trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.

If no excessive visible emissions are detected, the incident shall be noted in the records as described below:

a. The permittee shall maintain records related to all visible emission observations and Method 9 readings. The records shall be updated on an as-performed basis. The records shall be kept on site and made available to Department personnel upon request. The records shall contain the following items:
b. the date and time of each observation/reading.
c. any observance of visible emissions appearing to be above permitted limits, or any Method 9 reading which indicates the limits have been exceeded.
d. the cause of any observed exceeded opacity limits, corrective action taken, and results of the reassessment.
e. The name of the person conducting the observation/reading.

Title VI Provisions

8. The permittee must comply with the standards for labeling of products using ozone depleting substances. [40 CFR Part 82, Subpart E]
    a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
    c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
9. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
    c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
    d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)
    e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
    f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
10. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

11. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

    The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

12. The permittee can switch from any ozone-depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program."

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement is a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated, December 19, 2002.

Table 4 - Insignificant Activities

Description	Category
Refractory Shaker Screen (formerly SN-06A)	Group A #13
120 Gallon Gasoline Storage Tank (formerly SN-07A)	Group A #2
320 Gallon Diesel Storage Tank (formerly SN-7B)	Group A #3
Cullet Jaw Crusher	Group A #13
Spray Booth in Mold Shop	The sprayed mold release material contains no VOCs
Job Change Shop Internal Dust Collector	Discharges Air inside the Building
Mold Shop Internal Dust Collector	Discharges Air inside the Building

Pursuant to §26.304 of Regulation 26, the Department determined the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

Section VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.[Pursuant to 40 CFR 70.6(b)(2)]

2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation #26 §26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.*. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation #26 §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation #26 §26.701(C)(2)]
   a. The date, place as defined in this permit, and time of sampling or measurements;
   b. The date(s) analyses performed;
   c. The company or entity performing the analyses;
   d. The analytical techniques or methods used;
   e. The results of such analyses; and
   f. The operating conditions existing at the time of sampling or measurement.

6. The permittee must retain the records of all required monitoring data and support information for at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation #26 §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every 6 months. If the permit establishes no other reporting period, the reporting period will end on the last day of the anniversary month of this permit. The report is due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation #26 §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 CFR 70.6(a)(3)(ii)(B) and §26.701(C)(2)(b)]

   Arkansas Department of Environmental Quality
   Air Division
   ATTN: Compliance Inspector Supervisor
   Post Office Box 8913
   Little Rock, AR 72219

8. The permittee will report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit. The permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

   a. The facility name and location
   b. The process unit or emission source deviating from the permit limit,
   c. The permit limit, including the identification of pollutants, from which deviation occurs,
   d. The date and time the deviation started,
   e. The duration of the deviation,
   f. The average emissions during the deviation,
   g. The probable cause of such deviations,
   h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
   i. The name of the person submitting the report.

   The permittee will make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report. [40 CFR 70.6(a)(3)(iii)(B), Regulation #26 §26.701(C)(3)(b), Regulation #19 §19.601 and §19.602]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5) and §26.701(E) of Regulation #26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation #26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, *et seq.*. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation No. §26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation #26 §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation #26 §26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation #26 §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation #19. [40 CFR 70.6(a)(7) and Regulation #26 §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation #26 §26.701(H)]

17. If the permit allows different operating scenarios, the permittee will, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation #26 §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation #26 §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation #26 §26.2. [40 CFR 70.6(c)(1) and Regulation #26 §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation #26 §26.703(B)]

    a. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
    b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
    d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee will submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee will submit the compliance certification annually. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation #26 §26.703(E)(3)]

    a. The identification of each term or condition of the permit that is the basis of the certification;
    b. The compliance status;
    c. Whether compliance was continuous or intermittent;
    d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
    e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation #26 §26.704(C)]

    a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
    b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
    c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act or,
    d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant-emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]