

Facility Name: **Anchor Glass Container Corporation**  
 City: Warner Robins  
 County: Houston  
 AIRS #: 04-13-153-00014

Application #: TV-16557  
 Date Application Received: 1/06/2006  
 Date Application Deemed  
 Administratively Complete: 3/06/2006  
 Date of Draft Permit:  
 Permit No: 3221-153-0014-V-03-0

<b>Program</b>	<b>Review Engineers</b>	<b>Review Managers</b>
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<b>Toxics</b>	N/A	N/A

## Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to Anchor Glass Container Corporation and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

**I. Facility Description****A. Facility Identification**

1. Facility Name: Anchor Glass Container Corporation.
2. Parent/Holding Company Name: Anchor Glass Container Corporation.
3. Previous and/or Other Name(s): None.
4. Facility Location  
  
1044 Booth Road  
Warner Robins, Georgia 31088 (Houston County)
5. Attainment or Non-attainment Area Location  
  
This facility is located in the Middle Georgia Region and is in an attainment area.
6. Class I Area Impacts  
  
This facility is not located within 100 km of a Class I area.

**B. Site Determination**

There are no other facilities which could possibly be contiguous or adjacent and under common control.

## C. Existing Permits

Table 1 below lists all current permits (including Part 71 permits), as amended, issued to the facility. Based on a comparative review of Section A6 of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office, comments are listed in Table 2 below.

**Table 1: List of Current Permits as Amended**

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
3221-153-0014-V-02-0	July 9, 2001	✓	
3221-153-0014-V-02-2	August 14, 2003	✓	

**Table 2: Comments on Specific Permits**

Permit Number	Comments
3221-153-0014-V-02-0	Initial Title V Operating Permit
3221-153-0014-V-02-2	Significant Modification Amendment for an increase in the production rate of Glass Melting Furnace No. 1, for the re-bricking and expansion of Glass Melting Furnace No. 2, and the use of oxygen systems in both furnaces.

## D. Process Description

## 1. SIC Codes(s):

3221

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

## 2. Description of Product(s)

Anchor Glass Container Corporation manufactures container glass primarily used for the packaging of food and beverages.

### 3. Overall Facility Process Description

This facility consists of a raw material batching operation, two glass melting furnaces, and eight glass container forming and finishing lines. During the raw material batching operation, raw materials (e.g., sand, limestone, soda ash, and minor quantities of other solid material products) are delivered to the facility by railcar and by truck. These raw materials are unloaded in bulk into a bucket elevator that transfers the different raw materials to separate storage silos. The raw materials are then weighed in precise amounts and blended for delivery to the glass melting furnaces. The raw material blends may contain ground cullet; cullet is plant-generated, waste glass. In the glass melting furnaces, the precisely mixed raw materials are melted into a viscous fluid; the glass melting furnaces are operated in a continuous fashion. The glass melting furnaces are primarily fueled by a combination of natural gas and electric heat. The molten glass is then cooled to forming temperatures in the refiner, alcoves, and forehearths. During the glass-forming stages of production, shearing mechanisms cut continuous streams of molten glass into precise increments of hot, viscous glass called “gobs”. The “gobs” are gravity-fed to the forming machines. The forming machines form containers from the gobs by shaping the glass using a combination of mechanical pressing and air blowing techniques; the containers are formed at a rate of several hundred per minute. The containers are then sent through the finishing processes—hot end container coating, glass annealing, cold end container coating, container identification, and packaging. After the containers are formed, the glass containers pass through a hot end vapor deposition hood, where a tin-based coating is applied as a surface preparation prior to the cold end coating. The containers are then delivered on a belt to annealing lehrs to remove residual stresses induced during container forming; this step also allows the containers time to cool before further processing. During the cold end container coating step, a spray coater applies a polyethylene coating after the application of a food-grade coating to the container’s exterior surface; the polyethylene coating is applied as a scratch preventative. Then, a VideoJet printing system puts identifying numbers on selected containers and cartons as required by various customers. In the final step, the containers are automatically put into cardboard boxes or onto pallets for bulk handling and shipping.

## E. Regulatory Status

## 1. PSD/NSR

Anchor Glass was originally constructed prior to the implementation of the PSD regulations and is considered to be an existing major source.

In Amendment No. 3221-153-0014-V-02-2, Anchor Glass took permit limits to avoid PSD for a project conducted on both Glass Melting Furnaces No. 1 and No. 2. The project included several significant changes to the glass melting furnaces; the application proposed an increase in the production rate on Furnace No. 1, the installation of an oxy-boost system on Furnace No. 1, the re-bricking of Furnace No. 2 at a larger capacity, and the installation of an oxy-fuel system on Furnace No. 2. The emission increases associated with these changes were considered collectively for the purposes of establishing PSD avoidance limits. To avoid PSD on the collective project, Anchor took a limit for NO<sub>x</sub> on Glass Melting Furnace No. 1 and also took limits for PM, NO<sub>x</sub> and SO<sub>2</sub> on Glass Melting Furnace No. 2. In this renewal permit, the above-mention limits are included as Condition 3.2.1 (for Furnace No. 1), Condition 3.2.2 (for Furnace No. 2), and Condition 3.2.3 (for both furnaces).

## 2. Title V Major Source Status by Pollutant

**Table 3: Title V Major Source Status**

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes	✓		
PM <sub>10</sub>	Yes	✓		
SO <sub>2</sub>	Yes	✓		
VOC	Yes			✓
NO <sub>x</sub>	Yes	✓		
CO	Yes			✓
TRS	Yes			✓
H <sub>2</sub> S	Yes			✓
Individual HAP	Yes			✓
Total HAPs	Yes			✓

## 3. MACT Standards

Anchor Glass Container Corporation is not currently subject to any MACT standards.

## 4. Program Applicability

**Table 4: Program Applicability**

<b>Program Code</b>	<b>Applicable (y/n)</b>
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	Yes
Program Code M – Part 63 NESHAP	No
Program Code V – Title V	Yes

**Regulatory Analysis****II. Facility Wide Requirements****A. Emission and Operating Caps:**

There are no facility-wide emission or operating caps associated with this facility.

**B. Applicable Rules and Regulations**

There are no facility-wide rules or regulations that apply to this facility.

**C. Compliance Status**

The facility did not indicate that they were/are out of compliance with any facility-wide applicable rules and regulations in the application.

**D. Operational Flexibility**

The facility did not request any operational flexibility in the application.

**E. Permit Conditions**

Not Applicable.

### III. Regulated Equipment Requirements

#### A. Brief Process Description

Please refer to the “Overall Facility Process Description” provided on page 4 of this narrative.

#### B. Equipment List for the Process

**Table 5: Emission Units**

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
EU01	Glass Melting Furnace No. 1	40 CFR 60 Subpart A, 40 CFR 60 Subpart CC, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e), and 391-3-1-.02(2)(g).	3.2.1, 3.2.3, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 4.2.1, 4.2.3, 4.2.4, 4.2.5, 4.2.7, 5.2.1, 5.2.2, 6.1.7, 6.2.1, and 6.2.2.	None.	None.
EU02	Glass Melting Furnace No. 2	40 CFR 60 Subpart A, 40 CFR 60 Subpart CC, 391-3-1-.02(2)(b), 391-3-1-.02(2)(e), and 391-3-1-.02(2)(g).	3.2.2, 3.2.3, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 4.2.2, 4.2.3, 4.2.4, 4.2.6, 5.2.1, 6.1.7, 6.2.1, 6.2.3, and 6.2.4.	None.	None.

#### C. Equipment & Rule Applicability

The equipment listed in Table 5 of this narrative is subject to the following rules and regulations:

- 40 CFR 60 Subpart A—“General Provisions”
- 40 CFR 60 Subpart CC—“Standards of Performance for Glass Manufacturing Plants”
- Georgia Rule 391-3-1-.02(2)(b)—“Visible Emissions”
- Georgia Rule 391-3-1-.02(2)(e)—“Particulate Emission from Manufacturing Processes”
- Georgia Rule 391-3-1-.02(2)(g)—“Sulfur Dioxide”

#### Equipment Emission Caps and Operating Limits

This permit contains three equipment-specific emission caps or operating limits.

When the Permittee made the changes to the glass melting furnaces associated with Amendment No. 3221-153-0014-V-02-2, the Permittee had to take limits on both the glass melting furnaces to avoid triggering PSD review. For the purposes of PSD review applicability, the changes that were made to the glass melting furnaces were considered part of a single project, and the emission increases associated with the changes were considered collectively.

As part of Amendment No. 3221-153-0014-V-02-2, Anchor Glass took a NO<sub>x</sub> emission limit, in terms of pounds pollutant per ton of glass pulled, on Glass Melting Furnace No. 1. This limit, in conjunction with a glass production limit in terms of tons of glass pulled per day, limits NO<sub>x</sub> from Glass Melting Furnace No. 1 so that the collective project does not trigger PSD review. The oxy-boost system that was installed on Furnace No. 1 reduces NO<sub>x</sub> emissions below the limit because less nitrogen will be introduced into the high-temperature furnace area. Compliance with this limit is demonstrated through initial and scheduled periodic stack testing. Continuous compliance with the NO<sub>x</sub> limit will be reasonably assured by continuous monitoring of the oxygen input rate into the combustion air for Furnace No. 1. The NO<sub>x</sub> limit for Glass Melting Furnace No. 1 is expressed in Condition 3.2.1, and the associated glass production limit is expressed in Condition 3.2.3.

As part of Amendment No. 3221-153-0014-V-02-2, Anchor Glass took PM, NO<sub>x</sub>, and SO<sub>2</sub> emission limits, in terms of pounds pollutant per ton of glass pulled, on Glass Melting Furnace No. 2. These limits, in conjunction with a glass production limit in terms of tons of glass pulled per day, limit PM, NO<sub>x</sub>, and SO<sub>2</sub> from Glass Melting Furnace No. 2 so that the collective project does not trigger PSD review. Compliance with these limits is demonstrated through initial and scheduled periodic stack testing. The oxy-fuel system that was installed on Furnace No. 2 will reasonably assure compliance with the NO<sub>x</sub> limit because the ambient combustion air is replaced with pure oxygen; no specific monitoring is required to demonstrate compliance with the NO<sub>x</sub> limit on Glass Melting Furnace No. 2. Continuous compliance with the PM limit will be reasonably assured using continuous opacity monitoring (COMS). Continuous compliance with the SO<sub>2</sub> limit will be reasonably assured by calculating the daily SO<sub>2</sub> emissions and by monitoring the use of sulfur-containing raw materials. The PM, NO<sub>x</sub>, and SO<sub>2</sub> limits for Glass Melting Furnace No. 2 are expressed in Condition 3.2.2, and the associated glass production limit is expressed in Condition 3.2.3.

#### Equipment Federal Rule Standards

This permit contains two equipment-specific limits based upon federal rule standards.

The project associated with Amendment No. 3221-153-0014-V-02-2 increased the emissions coming from the glass melting furnaces; as a result, the Division found that the furnaces had been modified under NSPS. These actions triggered applicability under 40 CFR 60 Subpart CC—“Standards of Performance for Glass Manufacturing Plants” for both glass melting furnaces.

40 CFR 60 Subpart CC establishes a particulate matter limit of 1.0 lb/ton of glass pulled from glass melting furnaces with a “modified process”. A “modified process” is defined as any technique designed to minimize emissions without the use of an add-on control device. Each furnace is equipped with electric boosting capabilities; the electric boost that each furnace uses meets the definition of “modified process” because it provides heat and helps prevent temperature spikes near the surface of the molten glass. Compliance with the 1.0 lb/ton of glass pulled limit on each furnace is demonstrated through initial and scheduled periodic stack testing. Continuous compliance with the PM limit will be reasonably assured using continuous opacity monitoring (COMS). A general provision specifying the applicability of Part 60 requirements is expressed in Condition 3.3.1, and the 1.0 lb/ton of glass pulled limit from 40 CFR 60 Subpart CC is expressed in Condition 3.3.2.

Equipment SIP Rule Standards

This permit contains three equipment-specific limits based upon SIP rule standards.

Each glass melting furnace is subject to the requirements of Georgia Rules 391-3-1-.02(2)(b)—“Visible Emissions”, 391-3-1-.02(2)(e)—“Particulate Emission from Manufacturing Processes”, and 391-1-3-.02(2)(g)—“Sulfur Dioxide”.

Georgia Rules (b) and (e) apply to all processes that both emit particulate matter and are not covered by a more specific Georgia rule or regulation.

Georgia Rule (g) applies to all fuel burning sources capable of burning fossil fuels. However, part 1 of the rule is not applicable to Anchor Glass since there are no fuel burning sources at this facility with heat input capacities of greater than 250 million BTU’s per hour. Part 2 of the rule places sulfur-content restrictions on the fuel used in fuel-burning sources.

D. Compliance Status

The facility did not indicate that they were/are out of compliance with any equipment-specific applicable rules and regulations in the application.

E. Operational Flexibility

The facility did not request any operational flexibility in the application.

F. Permit Conditions

With the exception of Condition 3.4.2 and any renumbering, the conditions from Permit No. 3221-153-0014-V-02-0 and the associated amendment have not been altered.

Equipment Emission Caps and Operating Limits

Section 3.2 of the permit includes three conditions.

Condition 3.2.1 specifies that the Permittee shall not emit NO<sub>x</sub> from Glass Melting Furnace No. 1 in amounts greater than 90 lb/ton of glass pulled. This condition is a requirement for PSD avoidance of NO<sub>x</sub>.

Condition 3.2.2 specifies that the Permittee shall not emit PM, NO<sub>x</sub>, or SO<sub>2</sub> from Glass Melting Furnace No. 2 in amounts greater than 0.89, 2.00, or 2.90 lbs/ton of glass pulled, respectively. This condition is a requirement for PSD avoidance of PM, NO<sub>x</sub>, and SO<sub>2</sub>.

Condition 3.2.3 specifies that the Permittee shall limit the production of glass to 470 tons per day from Glass Melting Furnace No. 1 and to 455 tons per day from Glass Melting Furnace No. 2. This condition was originally in Section 3.4 of the permit, but has been moved to a more appropriate location in Section 3.2 of the renewal permit. This condition is a requirement for PSD avoidance.

Equipment Federal Rule Standards

Section 3.3 of the permit includes two conditions.

Condition 3.3.1 specifies that the Permittee shall abide by the applicable provisions of 40 CFR 60 Subpart A—"General Provisions" and 40 CFR 60 Subpart CC—"Standards of Performance for Glass Manufacturing."

Condition 3.3.2 specifies that the Permittee shall not emit PM from either Glass Melting Furnace No. 1 or No. 2 in amounts greater than 1.0 lb/ton of glass pulled. This condition is a requirement of 40 CFR 60.293(b)(1).

Equipment SIP Rule Standards

Section 3.4 of the permit includes three conditions.

Condition 3.4.1 specifies that the Permittee shall not allow emissions having an opacity equal to or greater than 40 percent. This condition is a requirement of 391-3-1-.02(2)(b)1.

Condition 3.4.2 specifies that the Permittee shall not burn fuel containing more than 3.0 percent sulfur. This condition was altered because the glass melting furnaces have a maximum hourly heat capacity input greater than 100 MMBtu/hr. In the application for Permit No. 3221-153-0014-V-02-0, the facility submitted a prorated maximum hourly heat capacity input value for each furnace based upon the furnace's associated production restrictions. However, though the daily glass throughput is limited in tons/day, the hourly heat capacity input is not limited by any of the existing permit conditions. The furnaces are fired with natural gas or propane, each of which contain sulfur at a much lower percent than specified by the Georgia Rule (g) restrictions, so this change should not result in any increase in emissions. This condition is a requirement of 391-3-1-.02(2)(g)2.

Condition 3.4.3 specifies that the Permittee shall not emit PM from either Glass Melting Furnace No. 1 or No. 2 in amounts equal to or exceeding the amount calculated using the following equation  $E=4.1P^{0.67}$ , where E equals the allowable emission rate in pounds per hour and P equals the process input rate in tons per hour. This condition is a requirement of 391-3-1-.02(2)(e).

#### IV. Testing Requirements (with Associated Record Keeping and Reporting)

##### A. General Testing Requirements

The general, standard testing conditions are included in this permit.

Since the date that Anchor Glass received their initial TV permit, the Division has relaxed the test result submittal requirements by allowing a facility 60 days, instead of 30 days, to submit test results after a testing event. Any testing condition included in Section 4.1 or 4.2 of this permit that requires the submittal of information has been changed to allow 60 days for the submission, in accordance with the change in the general testing requirements.

##### B. Specific Testing Requirements

Section 4.2 of the permit includes six conditions; the existing conditions have been renumbered or modified in some minor way for the renewal permit.

Condition 4.2.1 specifies that the Permittee shall conduct both initial and reoccurring performance tests for PM and NO<sub>x</sub> on Glass Melting Furnace No. 1 while operating at the maximum anticipated production rate. A requirement for visible emissions testing has been removed from this condition because the facility has been required to install a COMS on Furnace No. 1. The reworded condition is a requirement of 40 CFR 60.8.

Condition 4.2.2 specifies that the Permittee shall conduct both initial and reoccurring performance tests for PM, SO<sub>2</sub>, and NO<sub>x</sub> on Glass Melting Furnace No. 2 while operating at the maximum anticipated production rate. A requirement for visible emissions testing has been removed from this condition because the facility has been required to install a COMS on Furnace No. 2. The reworded condition is a requirement of 40 CFR 60.8.

Condition 4.2.3 specifies how the PM emission rate will be calculated for the testing conducted in accordance with Conditions 4.2.1 and 4.2.2. This condition has undergone a few minor wording changes. The reworded condition is a requirement of 40 CFR 60.296(d)(3).

Condition 4.2.4 specifies the procedure that the Permittee must use to establish the opacity deviations associated with the PM emission limits of Conditions 3.2.2 and 3.3.2. A portion of the original condition has been struck to remove a reference to USEPA-approved monitoring alternatives; the Permittee must now apply for a permit modification to abide by a USEPA-approved monitoring alternative. The reworded condition is a requirement of 40 CFR 60.293(d)(2).

Condition 4.2.5 specifies the procedure that the Permittee must use to establish the oxygen input rate deviation associated with the NO<sub>x</sub> emission limit of Condition 3.2.1. This condition is a requirement of PSD Avoidance for NO<sub>x</sub> and of general testing requirements.

Condition 4.2.6 specifies the procedure that the Permittee must use to establish the sulfur retention factor R; this factor is needed to calculate SO<sub>2</sub> daily emissions for direct comparison with the SO<sub>2</sub> emission limit of Condition 3.2.2. This condition is a requirement of PSD Avoidance for SO<sub>2</sub> and of general testing requirements.

New Condition 4.2.7 specifies that the Permittee may conduct a performance test for NO<sub>x</sub> on Glass Melting Furnace No. 1 for the purpose of setting a production level at or below which the oxygen input rate from the oxy-boost system could be set at zero. This condition requires that the Permittee conduct the test without the use of the oxy-boost system, and under typical conditions at the given production rate. Anchor Glass has requested the inclusion of this testing condition because the facility believes that it can demonstrate compliance with the 9.0 lb/ton NO<sub>x</sub> limit for Glass Melting Furnace No. 1 at low production levels without the use of the oxy-boost system. The facility has stated that as production levels go down, the amount of combustion air and natural gas (the sources of the nitrogen) are reduced, as well as the furnace temperature—the main driving factor for NO<sub>x</sub> formation. The facility submitted an industry report that shows that for average furnaces, as production is decreased, the multiple factors contributing to NO<sub>x</sub> are decreased as well, and NO<sub>x</sub> formation is increasingly reduced at lower production levels on a lb/ton basis. The new condition is a requirement of PSD Avoidance for NO<sub>x</sub> and of general testing requirements.

Existing Condition 4.2.3 of Amendment 3221-153-0014-V-02-2 has been removed from the renewal permit because EPA denied the facility's initial request for alternative monitoring and the facility was required to install and operate COMS on each furnace.

**V. Monitoring Requirements (with Associated Record Keeping and Reporting)****A. General Monitoring Requirements**

The general, standard monitoring conditions are included in this permit.

**B. Specific Monitoring Requirements**

Section 5.2 of the permit includes two conditions; the existing conditions have been renumbered or modified in some minor way for the renewal permit.

Condition 5.2.1 specifies that the Permittee shall install equipment to continuously monitor and record opacity emissions on both Glass Melting Furnaces No. 1 and No. 2 for the purposes of demonstrating compliance with Conditions 3.2.2 and 3.3.2; This condition is a requirement of 40 CFR 60.293(c) and 40 CFR 60.293(d), and of general monitoring provisions.

Condition 5.2.2 specifies that the Permittee shall install equipment to continuously monitor and record the oxygen input rate from the oxy-boost system on Glass Melting Furnace No. 1 for the purpose of demonstrating compliance with Condition 3.2.1. This condition is a requirement of PSD Avoidance for NO<sub>x</sub> and of general monitoring requirements.

Existing Conditions 5.2.1 (requiring bridgwall temperature monitoring) and 5.2.3b (requiring natural gas usage monitoring) of Amendment 3221-153-0014-V-02-2 have been removed from the renewal permit because EPA denied the facility's initial request for alternative monitoring and the facility was required to install and operate COMS on each furnace.

## VI. Other Record Keeping and Reporting Requirements

### A. General Record Keeping and Reporting Requirements

The general standard record keeping and reporting conditions are included in this permit.

Condition 6.1.7 specifies the excess emissions, exceedances, and excursions that should be reported in accordance with Condition 6.1.4; the existing deviations listed in Condition 6.1.7 have been renumbered or modified in some minor way for the renewal permit.

Condition 6.1.7a.i defines any 6-minute period where the average opacity of emissions from Glass Melting Furnace No. 1 is greater than the opacity established in accordance with Condition 4.2.4 as an excess emission. A portion of the original condition has been struck to remove a reference to USEPA-approved monitoring alternatives; the Permittee must now apply for a permit modification to abide by a USEPA-approved monitoring alternative. The reworded condition is a requirement of 40 CFR 60.293(c)(5) and of general reporting provisions.

Condition 6.1.7a.ii defines any 6-minute period where the average opacity of emissions from Glass Melting Furnace No. 2 is greater than the opacity established in accordance with Condition 4.2.4 as an excess emission. A portion of the original condition has been struck to remove a reference to USEPA-approved monitoring alternatives; the Permittee must now apply for a permit modification to abide by a USEPA-approved monitoring alternative. The reworded condition is a requirement of 40 CFR 60.293(c)(5) and of general reporting provisions.

Condition 6.1.7b.i defines any day that the production of glass from Glass Melting Furnace No. 1 is greater than 470 tons as an exceedance. This condition is a requirement of PSD Avoidance and of general reporting requirements.

Condition 6.1.7b.ii defines any day that the production of glass from Glass Melting Furnace No. 2 is greater than 455 tons as an exceedance. This condition is a requirement of PSD Avoidance and of general reporting requirements.

Condition 6.1.7.b.iii defines any day that the average emissions of SO<sub>2</sub> from Glass Melting Furnace No. 2 are greater than 2.90 lb/ton as an exceedance. This condition is a requirement of PSD Avoidance for SO<sub>2</sub> and of general reporting requirements.

New Conditions 6.1.7c.i and 6.1.7c.ii are very similar, and both apply to the oxy-boost system that injects oxygen into the combustion air of Glass Melting Furnace No. 1. Condition 6.1.7c.i applies prior to the performance of the testing allowed by Condition 4.2.7; this condition defines an excursion in the oxy-boost oxygen input rate as any three-hour period when the average oxygen input rate is below 95 percent of the value established in Condition 4.2.5 (under normal operating conditions). Condition 6.1.7c.ii applies after the performance of the testing allowed by Condition 4.2.7; this condition defines an excursion in exactly the same way as Condition 6.1.7c.i, with the exception that the excursion only occurs when the production level is higher than the production level tested in accordance with Condition 4.2.7. For Condition 6.1.7c.ii, when the production level is at or lower than the production level tested in accordance with

Condition 4.2.7, no excursion in the oxy-boost oxygen input rate can occur. These conditions are both requirements of PSD Avoidance for NO<sub>x</sub> and of general reporting requirements.

Existing Conditions 6.1.7c.i (defining a bridgwall temperature excursion) and 6.1.7c.iii (defining a natural gas usage excursion) of Amendment 3221-153-0014-V-02-2 have been removed from the renewal permit because EPA denied the facility's initial request for alternative monitoring and the facility was required to install and operate COMS on each furnace.

#### B. Specific Record Keeping and Reporting Requirements

Section 6.2 of the Permit includes four conditions; with the exception of Condition 6.2.1, the existing conditions have been renumbered or modified in some minor way for the renewal permit.

Condition 6.2.1 specifies that the Permittee shall record hourly production rates for Glass Melting Furnaces No. 1 and No. 2. This condition is a requirement of PSD avoidance and of general record keeping requirements.

New Condition 6.2.2 applies after the performance of the testing allowed by Condition 4.2.7; this condition specifies that the Permittee must record a 3-hour averaged oxygen input rate for the oxy-boost system that is at least 95 percent of the value established in accordance with Condition 4.2.5 on the first clock hour after a change in production level affecting the value of the excursion in Condition 6.1.7c.ii. This condition is a requirement of PSD Avoidance for NO<sub>x</sub> and of general record keeping requirements.

Condition 6.2.3 specifies that the Permittee must collect yearly sample of all sulfur-containing raw materials used in the production of glass and must analyze these raw materials for percent sulfur. The results of these analyses are used to define the sulfur retention factor R, which is in turn used to define the daily SO<sub>2</sub> emissions from Glass Melting Furnace No. 2. The frequency of the sampling has been changed from quarterly to yearly at the request of the facility; Anchor Glass indicated that they believed quarterly sampling to be unnecessary because glass making materials do not change that frequently, and also expressed that they believed quarterly sampling to be overly burdensome. The reworded condition is a requirement of PSD Avoidance for SO<sub>2</sub> and of general record keeping requirements.

Condition 6.2.4 specifies the procedure that the Permittee must use to establish the daily SO<sub>2</sub> emissions for direct comparison with the SO<sub>2</sub> emission limit of Condition 3.2.2. This condition is a requirement of PSD Avoidance for SO<sub>2</sub> and of general record keeping requirements.

Existing Condition 6.2.2 of Amendment 3221-153-0014-V-02-2 has been removed from the renewal permit because the facility has met all the specified notification requirements.

**VII. Specific Requirements**

- A. Operational Flexibility—Not Applicable.
- B. Alternative Requirements—Not Applicable.
- C. Insignificant Activities

Refer to <http://airpermit.dnr.state.ga.us/GATV/default.asp> for the Online Title V Application.

Refer to the following forms in the Title V permit application:

- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

- D. Temporary Sources—Not Applicable.
- E. Short-Term Activities

Refer to form D5—“Short Term Activities” of the Title V Permit Application.

- F. Compliance Schedule/Progress Reports—Not Applicable.
- G. Emissions Trading—Not Applicable.
- H. Acid Rain Requirements—Not Applicable.
- I. Prevention of Accidental Releases—Not Applicable.
- J. Stratospheric Ozone Protection Requirements

The facility has indicated that they are subject to Title VI requirements.

- K. Pollution Prevention—Not Applicable.
- L. Specific Conditions—Not Applicable.

**VIII. General Provisions**

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

**Addendum to Narrative**

The 30-day public review started on July 27, 2007 and ended on August 26, 2006. Comments were received by the Division from John Elloitt of Anchor Glass. No comments were received by the public or USEPA.

Each comment is printed below, followed by a discussion of the comment and any changes made to the permit as a result.

**Review of Applicant's Comments**

1. Applicant requested that the condition No. 4.2.7 be deleted.

**Response:** Condition No. 4.2.7 in the draft permit reads as follows:

The Permittee may conduct a performance test for nitrogen oxides on Glass Melting Furnace No. 1 (source code: EU01) for the purpose of establishing a production level at or below which the oxygen input rate from the oxy-boost system may be lowered to zero. This test shall be conducted without the use of the oxy-boost system and at typical operating conditions for the given production level.  
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21 Avoidance for NO<sub>x</sub>]

Anchor has performed the test on June 23, 2006 at 350 tons per day with and without oxy-boost and the results demonstrate that the Nitrogen Oxide emissions without oxy-boost were 56.4 % of the allowable emissions. Based on the stack results EPD feels comfortable that the facility can demonstrate compliance with Nitrogen Oxide emission limitation contained in the permit without oxy-boost at or below 350 tons per day. Agency agrees with the applicant to delete this permit condition, since the required test is performed.

2. Applicant requested to add the following language at the end of permit condition 5.2.2a.

When glass melting furnace No. 1 is operating above 350 tons of glass pulled per day, the daily production rate shall also be recorded.

**Response:** Condition No. 5.2.2a in the draft permit reads as follows:

The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.  
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Oxygen input rate in standard cubic feet per hour (SCFH) from the oxy-boost system into the combustion air for Glass Melting Furnace No. 1 (source code: EU01).  
[40 CFR 52.21 Avoidance for NO<sub>x</sub>]

The agency does not agree that the additional language is required since the daily production recording and reporting requirement is covered in Permit Condition No. 6.2.1 which reads as follows:

The Permittee shall measure, record, and maintain records of hourly production rates for each Glass Melting Furnace No. 1 (source code: EU01) and Glass Melting Furnace No. 2 (source code: EU02). From these records, the total production for each day shall be calculated and recorded for each furnace.

[391-3-1-.02(6)(b)1(i), CFR 70.6(a)(3)(ii)(B), and 40 CFR 52.21 Avoidance]

3. Applicant requested to modify the permit condition no. 6.1.7.c.i as follows

When the Glass Melting Furnace No. 1 is operating above 350 tons of glass pulled per day, an excursion shall be defined as any 3-hour period where the average oxygen input rate (SCFH) from the oxy-boost system into the combustion air into Glass Melting Furnace No. 1 is below 95 percent of the value established in accordance with Condition 4.2.5; for the purposes of this condition, each clock hour shall establish a new three-hour period

**Response:** Condition No. 6.1.7.c (i) will be modified as requested

4. Applicant requested to delete the permit condition no. 6.1.7.c.(ii)

**Response:** Condition No. 6.1.7.c (ii) is no longer applicable and captured in permit condition 6.17.c (i)

5. Applicant requested to delete the permit condition no. 6.2.2 without providing any explanation.

**Response:** Condition No. 6.2.2 is now modified to better explain the monitoring requirements when the Furnace No. 1 exceeds 350 tons per day of glass pulled per day. Condition No. 6.2.2 re reads as follows:

6.2.2 When the production level on Glass Melting Furnace No. 1 (source code: EU01) exceeds 350 tons of glass pulled per day the Permittee must start recording the oxygen input rate in accordance with Condition No. 5.2.2. For the first clock hour (after production rate exceeds 350 tons of glass pulled per day), the permittee shall report the average for the three hour period based only on the first clock hour of monitoring data, the average for the three hour period at the end of the second clock hour (after exceeding 350 tons per day of glass pulled per day) shall be based on two hours of monitoring data and the average for the third hour and every hour thereafter shall be based on previous three hour period. The Permittee must maintain records of production and average oxygen input rate that verify compliance with the terms of this condition.

[391-3-1-.02(6)(b)1(i), CFR 70.6(a)(3)(ii)(B), and 40 CFR 52.21 Avoidance for NO<sub>x</sub>]