

**NORTH CAROLINA  
DIVISION OF AIR QUALITY  
Air Permit Review**

**Region:** Raleigh Regional Office  
**County:** Vance  
**NC Facility ID:** 9100069  
**Inspector's Name:** Brian Bland  
**Date of Last Inspection:** 10/12/2005  
**Compliance Code:** C/In Compliance With Procedural Reqr

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>
<b>Applicant (Facility's Name):</b> Saint-Gobain Containers  <b>Facility Address:</b> Saint-Gobain Containers 620 Facet Road Henderson, NC 27536 CDS PLANT ID 3718100069  <b>SIC:</b> 3221 / Glass Containers <b>NAICS:</b> 327213 / Glass Container Manufacturing  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V			<b>SIP:</b> N/A <b>NSPS:</b> N/A <b>NESHAP:</b> N/A <b>PSD:</b> N/A <b>PSD Avoidance:</b> N/A <b>NC Toxics:</b> N/A <b>112(r):</b> N/A <b>Other:</b>
<b>Contact Data</b>			<b>Application Data</b>
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<b>Application Number:</b> 9100069.05A <b>Date Received:</b> 05/02/2005 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 02834/T15 <b>Existing Permit Issue Date:</b> 07/08/2005 <b>Existing Permit Expiration Date:</b> 01/31/2006
Spottswood Burwell Plant Engineer (252) 430-1131 620 Facet Road Henderson NC, 27537	Richard Buzalka Plant Manager (252) 492-1131 620 Facet Rd Henderson NC, 27537+0887	Spottswood Burwell Plant Engineer (252) 430-1131 620 Facet Road Henderson NC, 27537	
<b>Review Engineer:</b> Rahul Thaker  <b>Review Engineer's Signature:</b> _____		<b>Date:</b> October 17, 2006	<b>Comments / Recommendations:</b> Issue 02834/T16 <b>Permit Issue Date:</b> <b>Permit Expiration Date:</b>

**1. Purpose of Application**

This revision is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (02834T15) was issued on July 8, 2005 and is currently scheduled to expire on January 31, 2006. The renewal application was received on May 2, 2005 or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

The renewal application was deemed complete as of the above receipt date.

**2. Facility Description**

The facility manufactures glass containers at the Henderson facility since 1970. The permitted equipment include two natural gas/propane-fired with electric boost heating glass melting furnaces, raw material unloading, storage, and transfer operations, batching operations, furnace feed operations, and mold swabbing operations.

### 3. Statement of Compliance

Brian Bland of RRO inspected the facility on 4/19/2005. The facility was found to be in compliance of the applicable air quality regulations at that time.

Separately, the Permittee has certified on 9/20/06 through submittal of E5 form that the facility is in compliance with all applicable requirements.

### 4. Permit History

- The initial Title V permit 02834T12 was issued on February 2, 2001.
- Air permit 02834T13 was issued on September 3, 2002 as per 15A NCAC 2Q .0501(c)(2). This permit has allowed increasing the nominal capacity of furnace GF-1 from 200 tons/day to 320 tons/day.
- Air permit 02834T14 was issued on December 18, 2004 as per the procedures in 15A NCAC 2Q .0514. This permit revised emission rates for some of the NC air toxics as state-only requirement.
- Air permit 02834T15 was issued on July 8, 2005 as per 15A NCAC 2Q .0501(c)(1). This permit established PSD avoidance limit for sulfuric acid mist and included compliance schedule for furnace GF1 for its noncompliance with NSPS Subpart CC.

### 5. Regulatory Review

The permitted emission sources are subject to the following regulations:

2D .0515 "Particulates from Miscellaneous Industrial Processes"  
2D .0516 "Sulfur Dioxide Emissions from Combustion Sources"  
2D .0521 "Control of Visible Emissions"  
2D .0524 "New Source Performance Standards (NSPS Subpart CC)"  
2D .1100 "Control of Toxic Air Pollutants"  
2Q .0317 "Avoidance Conditions for PSD"

No regulatory review is required for the above existing applicable requirements, as no physical or operational changes to the permitted equipment have been requested.

Separately, the Permittee has requested to obtain permit shield for the following non-applicable requirements for the permitted emission sources; furnaces (ID Nos. GF-1 and GF-2), raw material unloading, storage, and transfer operations (ID No. ES-1), batching operations (ID No. ES-2), furnace feed operations (ID No. ES-03) and mold swabbing operation (ID No. MS-1):

- 15A NCAC 2D .0524 [specifically 40 CFR 60 Subpart D, Da, Db, and Dc)] do not apply because the combustion sources are not steam generating units.
- 15A NCAC 2D .0524 [specifically 40 CFR 60 Subpart K, Ka, and Kb) do not apply because none of these sources are storage vessels.
- 15A NCAC 2D .0524 [specifically 40 CFR 60 Subpart Y) does not apply because none of the combustion sources burn coal.
- 15A NCAC 2D .0524 [specifically 40 CFR 60 Subpart OOO) does not apply because none of these sources are crusher or grinder processing any nonmetallic mineral.
- 15A NCAC 2D .1110 [specifically 40 CFR 61 Subpart N) does not apply because none of these sources use commercial arsenic as a raw material.

- 15A NCAC 2D .1111 [specifically 40 CFR 63 Subpart ZZZZ) does not apply to these sources because the facility is a minor source for HAP.
- 15A NCAC 2D .1111 [specifically 40 CFR 63 Subpart DDDDD) do not apply to these sources because the facility is a minor source for HAP and the combustion sources are not boilers or process heaters.

The renewed permit will include the permit shield for the above non-applicable requirements.

## **6. NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM**

### NSPS

The existing furnace GF-1 is subject to NSPS Subpart CC requirements. The current permit (02834T15) includes a statement of noncompliance with NSPS. It also includes compliance schedule and the NSPS requirements the Permittee is required to comply with. See Section 2.1 A.3. of this permit. The Permittee has satisfied and complied with each of these requirements. The following provides in brief each requirement under this permit condition and the status of compliance.

#### Section 2.1 A.3.b.

"For glass melting furnace (ID No. GF-1), the Permittee has certified noncompliance with the requirements of 15A NCAC 2D .0524 (40 CFR 60 Subpart CC)."

Status of compliance: See signed Form E5 dated 9/20/06, certifying compliance with all applicable requirements.

#### Section 2.1 A.3.b.i. (A)

"Select vendor(s) to supply and install continuous opacity monitoring system (COMS) on furnace GF-1 (melter only) by July 1, 2005."

Status of Compliance: Notified DAQ on July 1, 2005 about completion of this requirement.

#### Section 2.1 A.3.b.i. (B)

"Install, calibrate, maintain, and operate selected COMS on furnace GF-1 (melter only) by September 30, 2005."

Status of Compliance: Notified DAQ on August 25, 2005 about completion of this requirement.

#### Section 2.1 A.3.b.i. (C)

"Submit notification of COMS performance demonstration to DAQ by September 30, 2005."

Status of Compliance: Notified DAQ on August 25, 2005 about completion of this requirement.

#### Section 2.1 A.3.b.i. (D)

"Submit notification to DAQ that COMS data will be used to determine compliance with applicable opacity standard during performance testing in lieu of Method 9 observation data by September 30, 2005."

Status of Compliance: The RRO cannot find this notification but the company is submitting COM data for all time periods beginning October 13, 2005.

#### Section 2.1 A.3.b.i. (E)

"Submit PM performance testing notification to DAQ by September 30, 2005."

Status of Compliance: The RRO cannot find this notification, however, as per the region office, the company has completed this requirement by the deadline. Refer to 2005 annual compliance certification.

Section 2.1 A.3.b.i. (F)

"Complete PM performance testing on furnace GF-1 (melter only), including operating the COMS during PM performance testing runs, calculating 6-minute opacity average values from 24 continuous data points during PM performance testing runs, and determining opacity value corresponding to 99% upper confidence level of normal distribution of average opacity values by October 30, 2005."

Status of Compliance: The company had conducted initial performance test on October 12, 2005. DAQ has reviewed the results of the test. See 8/23/06 memo from Shannon Vogel. The PM emission rate was observed to be 0.34 g/kg from GF1 furnace melter, complying with the NSPS emission standard of 0.5 gm/kg PM. The opacity value has been established through the performance test at 7.2 percent corresponding to 99 percent upper confidence level.

Section 2.1 A.3.b.i. (G)

"Submit PM performance testing results to DAQ by December 1, 2005."

Status of Compliance: Test report was received on 12/2/05.

Section 2.1 A.3.e.

"The Permittee shall conduct an initial performance test on each glass melting furnace (melter only) for particulate matter as per 40 CFR 60.8 and 60.293, and using Method 5 of 40 CFR 60 Appendix A.

During the performance test, the permittee shall conduct continuous opacity monitoring during each test run.

The Permittee shall calculate 6-minute opacity averages from 24 or more data points equally spaced over each 6-minute period during the test runs.

The Permittee shall determine, based on the 6-minute opacity averages, the opacity value corresponding to the 99 percent upper confidence level of a normal distribution of average opacity values."

Status of Compliance: The company had conducted initial performance test on October 12, 2005. DAQ has reviewed the results of the test. See 8/23/06 memo from Shannon Vogel. The PM emission rate was observed to be 0.34 g/kg from GF1 furnace melter, complying with the NSPS emission standard of 0.5 gm/kg PM. The opacity value has been established through the performance test at 7.2 percent corresponding to 99 percent upper confidence level.

**NESHAPS/MACT**

The facility is a minor source for HAP. It is not subject to any Section 112 standards (Part 61 or Part 63 of 40 CFR).

**PSD**

The facility is a major source for SO<sub>2</sub> and NO<sub>x</sub>. The potential to emit for these pollutants exceed 250 tons.

The furnace GF-1 has avoided PSD review for a number of NSR regulated pollutants by taking federally enforceable limitations to limit emissions below 64.6 tons of particulate matter, 139.1 tons of sulfur dioxide, 510.9 tons of nitrogen oxide, 205.3 tons of carbon monoxide, and 42.1 tons of sulfuric acid mist per consecutive 12-month period.

**ATTAINMENT STATUS**

This facility is located in Vance, which is in attainment for all criteria pollutants.

**112(r)**

This facility is not subject to Section 112(r) of the Clean Air Act requirements.

**CAM**

In order to be subject to the Part 64 requirement, the following all three criteria must be satisfied:

- (i) pollutant specific emission unit (PSEU) (e.g. glass melting furnace) shall be subject to an emission limitation or a standard other than the exempt limitations or standards (exempt standards: post-1990 federal standards such as MACT, NSPS etc.),
- (ii) the pollutant specific emission unit uses an active control device to achieve compliance with the applicable requirement, and
- (iii) potential precontrol device emission rate for the pollutant specific emission unit for any regulated pollutant shall be greater than major source threshold.

The following Table provides a summary, which indicates that none of the PSEUs, which are equipped with active control devices, are subject to CAM.

PSEU	Pollutant	Applicable Requirement	Control Device (Active)	Pre-controlled Emission Rate tons/yr	Major Source Threshold tons/yr	Subject to CAM?
Raw Material Railcar Unloading (ES-1)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-11)	11.77	100	No
Silo No. 3 Storage Vent #1 (ES-1)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-14)	0.78	100	No
Silo No. 3 Storage Vent #2 (ES-1)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-15)	0.78	100	No
Silo No. 3 Storage Vent #3 (ES-1)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-16)	0.78	100	No
Silo No. 3 Storage Vent #4 (ES-1)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-17)	0.78	100	No
Silo No. 3 Storage Vent #5 (ES-1)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-18)	0.78	100	No
Weighing operations (ES-2)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-12)	11.77	100	No
Mixing operations (ES-2)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-13)	15.69	100	No
GF-1/Batch Feed Operations (ES-3)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-1)	3.86	100	No
GF-2/Batch Feed Operations (ES-3)	PM and PM10	15A NCAC 2D .0515	bag filter (CD92-3)	5.97	100	No

**7. Facility Wide Air Toxics**

The Permittee has in the past (See 02834T15 permit review) provided a facility wide modeling for arsenic, cadmium, sulfuric acid, and fluoride. There are no modifications occurred since the approval of previous facility wide air toxic compliance demonstration. This renewal application does not change the approved emission rates for these pollutants.

It should also be noted here that the facility is not subject to any promulgated MACT standard. Hence, the requirements of submittal of NC air toxics demonstration at the same time the compliance is required with any last MACT standard, in 2Q .0705 "Existing Facilities and SIC Calls", do not apply to this facility.

## 8. Facility Emissions Review

There is no change in facility wide emissions for this renewal application.

## 9. Stipulation Review

The following changes were made to the Saint-Gobain Containers, Inc. Air Permit No. 02834T15:

Old Page No. [Air Permit No. 02834T15]	New Page No. [Air Permit No. 02834T16]	Condition No.	Changes
6	6	Part I Section 2.1 A.3.b.	Remove this entire provision. The company has certified compliance with NSPS Subpart CC by submitting a revised Form E5. All of the requirements of the compliance schedule have been completed.
6	6	Section 2.1 A.3.c.	Renumber it to Section 2.1 A.3.b.
6	6	Section 2.1 A.3.d.	Renumber it to Section 2.1 A.3.c. Also include a specific opacity value of 7.2 percent as derived from the initial stack test.
6	6	Section 2.1 A.3.e.	Renumber it to Section 2.1 A.3.d. Modify the condition to state that initial performance test has been completed, compliance has been achieved, etc.
6	6	Section 2.1 A.3.f.	Renumber it to Section 2.1 A.3.e. Remove any reference to compliance schedule.
7	6	Section 2.1 A.3.g.	Renumber it to Section 2.1 A.3.f.
-	11	Section 2.3	New condition for providing permit shield for some non-applicable requirements.
12 through 20	11 through 20	Section 3 including Attachment	Replace with the latest TV shell General Condition and Attachment for acronyms.

## 10. Public Notice / EPA and Affected States Review

Pursuant to 2Q .0521, a notice of the proposed Title V Permit will be placed in the newspapers of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period with an opportunity for a public hearing. Copies of the public notice were also sent to persons on the Title V mailing list.

Based upon the EPA's current policy, the proposed permit for this facility will be sent to EPA for their 45-day review, simultaneously with noticing it in the newspaper for 30-day public review. The final permit will also be provided to EPA after issuance.

Also pursuant to 2Q .0522, a notice of the proposed Title V Permit will be sent to each affected State at or before the time notice provided to the public under 2Q .0521 above. Affected states as specified by 15A NCAC 2Q .0503(1) and 40 CFR 70.8(b) are Virginia and North Carolina local air pollution control program for Forsyth County.

## **11. Conclusions, Comments, and Recommendations**

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

The draft Title V permit was sent to RRO for their review on 10/10/06. Charles McEachern responded on 10/13/06 indicating to proceed on approving the renewal.

The draft Title V permit was sent to the company for their review on 10/10/06. The company (Bob Metzger) e-mailed on 10/16/06 stating that he did not have any comments at this time.

DAQ will issue the renewed permit after the completion of public comment and EPA review periods.