



JUL 05 2013

Michael Gibbons  
Saint-Gobain Containers, Inc.  
24441 Avenue 12  
Madera, CA 93637

**Re: Proposed Authority to Construct / Certificate of Conformity (Minor Mod)  
District Facility # C-801  
Project # C-1131354**

Dear Mr. Gibbons:

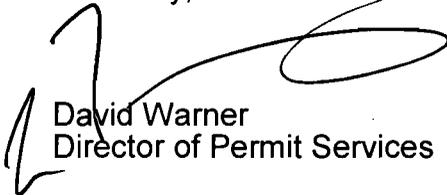
Enclosed for your review is the District's analysis of your application for Authority to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. Saint-Gobain Containers, Inc. has requested to increase the permitted daily and annual durations for soda ash storage silo truck loading from 24 deliveries per year and 1 hour per day of silo filling to 45 deliveries per year and 2 hours per day of silo filling.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,



David Warner  
Director of Permit Services

Enclosures  
cc: John Yoshimura, Permit Services

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

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JUL 05 2013

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

Re: **Proposed Authority to Construct / Certificate of Conformity (Minor Mod)**  
**District Facility # C-801**  
**Project # C-1131354**

Dear Mr. Rios:

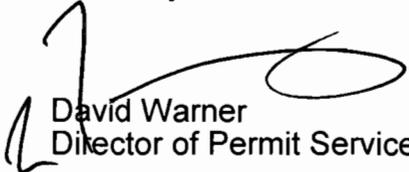
Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Saint-Gobain Containers, Inc., located at 24441 Avenue 12 and Road 24 1/2, Madera, CA, which has been issued a Title V permit. Saint-Gobain Containers, Inc. is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. Saint-Gobain Containers, Inc. has requested to increase the permitted daily and annual durations for soda ash storage silo truck loading from 24 deliveries per year and 1 hour per day of silo filling to 45 deliveries per year and 2 hours per day of silo filling.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authority to Construct # C-801-39-5 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

  
David Warner  
Director of Permit Services

Enclosures  
cc: John Yoshimura, Permit Services

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Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

### III. Project Location

This facility is located at 24441 Avenue 12, at Road 24 1/2, Madera, CA. The District has verified that the facility is not located within 1,000 feet of any K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

### IV. Process Description

Raw materials used in container glass production include silica, soda ash, limestone, and minor ingredients used to affect glass color. Cullet (recycled glass) is also stored for use in each batch. Materials are stored in bins and mixed in batches prior to furnace charging. Materials are released from the bottom side of each storage bin and weighed to ensure the proper batch composition before mixing. Transfer points are enclosed and vented to dust collectors to minimize emissions.

The soda ash storage silo is used to supply the semi-dry scrubber via enclosed screw conveyor which is being added to control SOx emissions from furnaces #1 and #2. The silo will be served by a dust collector.

The facility operates 24 hours per day, 365 days per year.

### V. Equipment Listing

#### Pre-Project Equipment Description:

C-801-39-4: 11,220 GALLON (1,500 CU FT) SODA ASH STORAGE SILO CONTROLLED WITH A MCGILL AIR CLEAN MODEL #72AVS25 PULSE JET CARTRIDGE BAGHOUSE AND ENCLOSED SCREW CONVEYOR SUPPLYING SEMI-DRY SCRUBBER (LISTED ON PERMIT C-801-1) FOR FURNACES #1 AND #2

#### Proposed Modification:

C-804-39-5: MODIFICATION OF 11,220 GALLON (1,500 CU FT) SODA ASH STORAGE SILO CONTROLLED WITH A MCGILL AIR CLEAN MODEL #72AVS25 PULSE JET CARTRIDGE BAGHOUSE AND ENCLOSED SCREW CONVEYOR SUPPLYING SEMI-DRY SCRUBBER (LISTED ON PERMIT C-801-1) FOR FURNACES #1 AND #2: INCREASE DAILY AND ANNUAL DURATIONS FOR SODA ASH SILO TRUCK LOADING FROM 24 DELIVERIES PER YEAR AND 1 HOUR OF SILO FILLING PER DAY TO 45 DELIVERIES PER YEAR AND 2 HOURS OF SILO FILLING PER DAY

#### Post Project Equipment Description:

C-804-39-5: 11,220 GALLON (1,500 CU FT) SODA ASH STORAGE SILO CONTROLLED WITH A MCGILL AIR CLEAN MODEL #72AVS25 PULSE JET CARTRIDGE

BAGHOUSE AND ENCLOSED SCREW CONVEYOR SUPPLYING SEMI-DRY  
SCRUBBER (LISTED ON PERMIT C-801-1) FOR FURNACES #1 AND #2

**VI. Emission Control Technology Evaluation**

Soda Ash Storage Silo (permit C-801-39)

Design check calculations:

Air Flow Calculations for each dust collector:

*McGill Air Clean Model #72AVS25 pulse jet dust collector*

Airflow: 1,400 ft<sup>3</sup>/min (per Applicant)  
Air/Cloth Ratio: = Air Flow Rate ÷ Cloth Area  
= 1,400 cfm ÷ 227 ft<sup>2</sup> = 6.2 ft/min

The pulse jet cleaning mechanism uses a high pressure jet of air to remove the dust from the bags. The dust cake is removed from the bag by a blast of compressed air injected into the top of the bag tube. The air blast causes the bag to flex or expand as the shock wave travels down the bag tube. As the bag tube flexes, the dust cake fractures and deposited particulates are discharged from the bag. Pulse jet baghouses are generally designed with air-to-cloth ratio (filtering velocity) between 5 and 15 ft/min.

The calculated air/cloth ratio falls within the range of typical values; therefore proper control efficiencies are expected.

**VII. General Calculations**

**A. Assumptions**

- Maximum operating schedule = 24 hours/day, 365 days/year
- PM<sub>10</sub> = 50% PM (Rule 2201 Section 4.11.2)
- PM<sub>2.5</sub> = PM<sub>10</sub> (worst case assumption, unless otherwise stated)
- McGill AirClean baghouse = 0.01 gr/dscf (manufacturer guarantee)
- McGill AirClean baghouse Airflow = 1,400 cfm (per Applicant)
- Maximum annual soda ash throughput based on maximum pre- and post-project potential glass pull rates of 157,680 U.S. short tons per year for Furnace #1 and 212,700 U.S. short tons per year for Furnace #2 (based upon 600 tons/day and two weeks per year of furnace idling at 25% capacity), uncontrolled SO<sub>2</sub> emissions of 3.0 lb/ton glass, a stoichiometric ratio of soda ash to SO<sub>2</sub> of 1.25, and the relative molecular weights of soda ash and SO<sub>2</sub>
- Pre-Project: Maximum of 24 soda ash deliveries per year and a maximum of 1 hour per day of silo filling (per current PTO)
- Post-project: Maximum of 45 soda ash deliveries per year and 2 hours per day of silo filling (per applicant)
- Emissions from the storage silo are only expected to occur during silo filling operations (per applicant)
- Maximum soda ash throughput = 3.2 tons/day and 1,150 tons/year (per current PTO)

**B. Emission Factors**

Pre- and Post-Project Emission Factor (EF1 and EF2) Soda Ash Storage		
Pollutant	EF	Source
PM <sub>10</sub>	0.01 gr/dscf	Per Manufacturer
PM <sub>10</sub>	0.0625 lb/ton soda ash loaded	Per Applicant

**C. Calculations**

**1. Pre-Project Potential to Emit (PE1)**

C-801-39-4

$$\begin{aligned} \text{Daily PE1}_{\text{PM}_{10}} &= 0.01 \text{ gr-PM}_{10}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 1 \text{ hr}/\text{day} \times 1 \text{ lb}/7000 \text{ gr} \\ &= 0.1 \text{ lb-PM}_{10}/\text{day}^* \end{aligned}$$

$$\begin{aligned} \text{Annual PE1}_{\text{PM}_{10}} &= 0.01 \text{ gr-PM}_{10}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 24 \text{ hr}/\text{year} \times 1 \text{ lb}/7000 \text{ gr} \\ &= 3 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Daily PE1}_{\text{PM}_{2.5}} &= 0.01 \text{ gr-PM}_{2.5}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 1 \text{ hr}/\text{day} \times 1 \text{ lb}/7000 \text{ gr} \\ &= 0.1 \text{ lb-PM}_{2.5}/\text{day}^* \end{aligned}$$

$$\begin{aligned} \text{Annual PE1}_{\text{PM}_{2.5}} &= 0.01 \text{ gr-PM}_{2.5}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 24 \text{ hr}/\text{year} \times 1 \text{ lb}/7000 \text{ gr} \\ &= 3 \text{ lb-PM}_{2.5}/\text{year} \end{aligned}$$

Pre-Project Potential to Emit Soda Ash Storage		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)
PM <sub>10</sub>	0.1	3
PM <sub>2.5</sub>	0.1	3

\* Per District Policy APR 1130, District policy is to consider a PE of less than 0.5 lb/day to be rounded to zero for purpose of triggering NSR requirements and therefore the requirements are no triggered. However, to minimize rounding errors, DELs, SSPE, PE, and all other associated figures will be reflected in the engineering evaluation without setting a daily increase of emissions less than 0.5 lb/day to zero

**2. Post Project Potential to Emit (PE2)**

C-801-39-5

$$\begin{aligned} \text{Daily PE2}_{\text{PM}_{10}} &= 0.01 \text{ gr-PM}_{10}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 2 \text{ hr}/\text{day} \times 1 \text{ lb}/7000 \text{ gr} \\ &= 0.2 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2}_{\text{PM}_{10}} &= 0.01 \text{ gr-PM}_{10}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 2 \text{ hr}/\text{day} \times 45 \text{ day}/\text{yr} \\ &\quad \times 1 \text{ lb}/7000 \text{ gr} \\ &= 11 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2}_{\text{PM}_{2.5}} &= 0.01 \text{ gr-PM}_{2.5}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 2 \text{ hr}/\text{day} \times 1 \text{ lb}/7000 \text{ gr} \\ &= 0.2 \text{ lb-PM}_{2.5}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2}_{\text{PM}_{2.5}} &= 0.01 \text{ gr-PM}_{2.5}/\text{dscf} \times 1400 \text{ ft}^3/\text{min} \times 60 \text{ min}/\text{hr} \times 2 \text{ hr}/\text{day} \times 45 \text{ day}/\text{yr} \\ &\quad \times 1 \text{ lb}/7000 \text{ gr} \\ &= 11 \text{ lb-PM}_{2.5}/\text{year} \end{aligned}$$

<b>Post-Project Potential to Emit Soda Ash Storage</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)
PM <sub>10</sub>	0.2	11
PM <sub>2.5</sub>	0.2	11

### 3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

<b>Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)</b>					
	NO <sub>x</sub> (lb/year)	SO <sub>x</sub> (lb/year)	PM <sub>10</sub> (lb/year)	CO (lb/year)	VOC (lb/year)
Pre-project SSPE (SSPE1)	> 20,000	> 140,000	> 140,000	> 200,000	> 20,000

### 4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

<b>Post Project Stationary Source Potential to Emit [SSPE2] (lb/year)</b>					
	NO <sub>x</sub> (lb/year)	SO <sub>x</sub> (lb/year)	PM <sub>10</sub> (lb/year)	CO (lb/year)	VOC (lb/year)
Post Project SSPE (SSPE2)	> 20,000	> 140,000	> 140,000	> 200,000	> 20,000

### 5. Major Source Determination

#### Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

<b>Rule 2201 Major Source Determination</b>					
	NO <sub>x</sub> (lb/year)	SO <sub>x</sub> (lb/year)	PM <sub>10</sub> (lb/year)	CO (lb/year)	VOC (lb/year)
Post Project SSPE (SSPE2)	> 20,000	> 140,000	> 140,000	> 200,000	> 20,000
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	Yes	Yes	Yes	Yes

**Rule 2410 Major Source Determination:**

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

<b>PSD Major Source Determination (tons/year)</b>		
	NO <sub>2</sub>	CO <sub>2e</sub>
Estimated Facility PE before Project Increase	473.3	> 125,762
PSD Major Source Thresholds	250	100,000
PSD Major Source ? (Y/N)	Y	Y

**GHG Calculations**

The following table summarizes the external combustion equipment at the facility.

<b>Permit</b>	<b>Equipment</b>	<b>Rating</b>
C-801-1-13	Glass Furnace	75 MMBtu/hr
C-801-2-10	Glass Furnace	85 MMBtu/hr
C-801-19-3	Distributor	10 MMBtu/hr
C-801-20-3	Lehr	7.0 MMBtu/hr
C-801-21-3	Lehr	12.0 MMBtu/hr
C-801-22-2	Forehearth	3.0 MMBtu/hr
C-801-23-2	Forehearth	3.0 MMBtu/hr
C-801-24-2	Forehearth	4.0 MMBtu/hr
C-801-25-3	Forehearth	3.0 MMBtu/hr
C-801-26-1	Distributor	9.9 MMBtu/hr
C-801-27-1	Forehearth	4.3 MMBtu/hr
C-801-28-1	Forehearth	2.7 MMBtu/hr
C-801-29-1	Forehearth	4.3 MMBtu/hr
C-801-30-1	Lehr	5.0 MMBtu/hr
C-801-31-1	Lehr	5.0 MMBtu/hr
C-801-32-1	Lehr	5.0 MMBtu/hr
C-801-33-1	Fire Polishing Operation	3.6 MMBtu/hr
C-801-34-1	Fire Polishing Operation	3.6 MMBtu/hr
<b>Total</b>		<b>245.4 MMBtu/hr</b>

### Basis and Assumptions

- Emission factors and global warming potentials (GWP) are taken from EPA 40 CFR Part 98, Subpart A, Tables C-1 and C-2:

#### *Natural Gas*

CO<sub>2</sub> 53.02 kg/MMBtu (116.89 lb/MMBtu)

CH<sub>4</sub>  $1.0 \times 10^{-3}$  kg/MMBtu (0.0022 lb/MMBtu)

N<sub>2</sub>O  $1.0 \times 10^{-4}$  kg/MMBtu (0.00022 lb/MMBtu)

GWP for CH<sub>4</sub> = 21 lb-CO<sub>2</sub>(eq) per lb-CH<sub>4</sub>

GWP for N<sub>2</sub>O = 310 lb-CO<sub>2</sub>(eq) per lb-N<sub>2</sub>O

### Calculations

#### *Annual Emissions (External Combustion)*

CO<sub>2</sub> Emissions = 245.4 MMBtu/hr x 116.89 lb/MMBtu x 8,760 hours/year  
= 251,278,901 lb-CO<sub>2</sub>(eq)/year

CH<sub>4</sub> Emissions = 245.4 MMBtu/hr x 0.0022 lb/MMBtu x 8,760 hours/year  
21 lb-CO<sub>2</sub>(eq) per lb-CH<sub>4</sub>  
= 99,316.3 lb-CO<sub>2</sub>(eq)/year

N<sub>2</sub>O Emissions = 245.4 MMBtu/hr x 0.00022 lb/MMBtu x 8,760 hours/year  
310 lb-CO<sub>2</sub>(eq) per lb-N<sub>2</sub>O  
= 146,609.8 lb-CO<sub>2</sub>(eq)/year

Total = 251,278,901 + 99,316.3 + 146,609.8 = 251,524,827 lb-CO<sub>2</sub>(eq)/year

Total = 251,524,827 lb-CO<sub>2</sub>(eq)/year ÷ 2,000 lb/ton = **125,762 short tons-CO<sub>2</sub>(eq)/year**

As shown above, the facility is an existing major source for PSD for at least one pollutant. Therefore, the facility is an existing major source for PSD.

## **6. Baseline Emissions (BE)**

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

Permit unit C-801-39-5 is served by a dust collector, which has a PM<sub>10</sub> control efficiency of 99% or greater (District practice). Therefore, Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

### 7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is a major source for all pollutants, the PE2 for the emission units within this project is compared to the SB 288 Major Modification Threshold in the following table in order to determine if the SB 288 Major Modification calculation is required.

<b>SB 288 Major Modification Threshold (Existing Major Source)</b>			
Pollutant	Project PE (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO <sub>x</sub>	0	50,000	No
SO <sub>x</sub>	0	80,000	No
PM <sub>10</sub>	11	30,000	No
VOC	0	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

### 8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

#### Step 1

For existing emissions units, the increase in emissions is calculated as follows.

$$\text{Emission Increase} = \text{PAE} - \text{BAE}$$

Where: PAE = Projected Actual Emissions, and  
BAE = Baseline Actual Emissions

If there is no increase in design capacity or potential to emit, the PAE is equal to the annual emission rate at which the unit is projected to emit in any one year, selected by the

operator, within 5 years after the unit resumes normal operation. If detailed PAE are not provided, the PAE is equal to the PE2 for each permit unit.

The BAE is calculated based on historical emissions and operating records for any 24 month period, selected by the operator, within the previous 10 year period. The BAE must be adjusted to exclude any non-compliant operation emissions and emissions that are no longer allowed due to lower applicable emission limits that were in effect when this application was deemed complete.

The project's combined total emission increases are calculated above and compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO <sub>x</sub> *	0	0	No
VOC*	0	0	No
PM <sub>10</sub>	8	30,000	No
PM <sub>2.5</sub>	8	20,000	No
SO <sub>x</sub>	0	80,000	No

\*If there is any emission increases in NO<sub>x</sub> or VOC, this project is a Federal Major Modification and no further analysis is required.

Since none of the Federal Major Modification Thresholds are being surpassed with this project, this project does not constitute a Federal Major Modification and no further analysis is required.

### 9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO<sub>2</sub> (as a primary pollutant)
- SO<sub>2</sub> (as a primary pollutant)
- CO
- PM
- PM<sub>10</sub>
- Greenhouse gases (GHG): CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, HFCs, PFCs, and SF<sub>6</sub>

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

In the case the facility is new source, the second step of the PSD evaluation is to determine if this new facility will become a new PSD major Source as a result of the project and if so, to determine which pollutant will result in a PSD significant increase.

**I. Project Location Relative to Class 1 Area**

As demonstrated in the “PSD Major Source Determination” Section above, the facility was determined to be a existing major source for PSD. Because the project is not located within 10 km of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

**II. Significance of Project Emission Increase Determination**

**a. Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds**

As a screening tool, the potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if total potential to emit from all new and modified units is below this threshold, no futher analysis will be needed.

<b>PSD Significant Emission Increase Determination: Potential to Emit (tons/year)</b>						
	NO2	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	0	0	0	0.006	0.006	0
PSD Significant Emission Increase Thresholds	40	40	100	25	15	75,000
PSD Significant Emission Increase?	N	N	N	N	N	N

As demonstrated above, because the project has a total potential to emit from all new and modified emission units below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

**10. Quarterly Net Emissions Change (QNEC)**

The QNEC is calculated solely to establish emissions that are used to complete the District’s PAS emissions profile screen. Detailed QNEC calculations are included in Appendix C.

## VIII. Compliance

### Rule 2201 New and Modified Stationary Source Review Rule

#### A. Best Available Control Technology (BACT)

##### 1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions\*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

\*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

##### a. New emissions units – PE > 2 lb/day

As discussed in Section I above, there are no new emissions units associated with this project. Therefore BACT for new units with PE > 2 lb/day purposes is not triggered.

##### b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

##### c. Modification of emissions units – AIPE > 2 lb/day

$$\text{AIPE} = \text{PE2} - \text{HAPE}$$

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)

PE2 = Post-Project Potential to Emit, (lb/day)

HAPE = Historically Adjusted Potential to Emit, (lb/day)

$$\text{HAPE} = \text{PE1} \times (\text{EF2}/\text{EF1})$$

Where,

PE1 = The emissions unit's PE prior to modification or relocation, (lb/day)

EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1

EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

$$AIPE = PE2 - (PE1 * (EF2 / EF1))$$

C-801-39-5:

$$\begin{aligned} AIPE &= 0.2 - (0.1 * (0.01/0.01)) \\ &= 0.2 - 0.1 * 1 \\ &= 0.1 \text{ lb/day} \end{aligned}$$

As demonstrated above, the AIPE is not greater than 2.0 lb/day for PM<sub>10</sub> emissions for any baghouse. Therefore BACT is not triggered.

**d. SB 288/Federal Major Modification**

As discussed in Section VII.C.7 above, this project does not constitute an SB 288 and/or Federal Major Modification. Therefore BACT is not triggered for any pollutant.

**B. Offsets**

**1. Offset Applicability**

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

<b>Offset Determination (lb/year)</b>					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
SSPE2	606,271	267,662	213,813	129,365	81,136
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	Yes	Yes	Yes	Yes

**2. Quantity of Offsets Required**

As seen above, the SSPE2 is greater than the offset thresholds for all pollutants, however, PM<sub>10</sub> is the only pollutant of concern for this project. Therefore, calculations are only required for PM<sub>10</sub> for this project.

Per Section 4.7.1 and 4.7.3 of Rule 2201, the quantity of offsets in pounds per year for each pollutant is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

$$\text{Offsets Required (lb/year)} = (\sum[PE2 - BE] + ICCE) \times DOR, \text{ for all new or modified emissions units in the project,}$$

Where,

PE2 = Post Project Stationary Source Potential to Emit

BE = Baseline Emissions, as defined in Section 3.7 of Rule 2201 (lb/year)

ICCE = Increase in Cargo Carrier Emissions  
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE)

As discussed in Section VII.C.6 above, the Baseline Emissions (BE) for the soda ash storage silo are equal to PE1 since this permit unit is considered to be a Clean Emissions Unit for PM10.

Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day to be rounded to zero for the purposes of triggering NSR requirements. The daily increase in potential to emit for this permit unit is less than 0.5 lb-PM10/day; therefore, offsets are not required for this project.

## C. Public Notification

### 1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

#### **a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications**

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in VII.C.7, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

#### **b. PE > 100 lb/day**

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There

are no new emissions units associated with this project. Therefore public noticing is not required for this project for PE > 100 lb/day.

**c. Offset Threshold**

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

<b>Offset Thresholds</b>				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO <sub>x</sub>	606,271	606,271	20,000 lb/year	No
SO <sub>x</sub>	267,662	267,662	54,750 lb/year	No
PM <sub>10</sub>	213,805	213,813	29,200 lb/year	No
CO	129,365	129,365	200,000 lb/year	No
VOC	81,136	81,136	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

**d. SSIPE > 20,000 lb/year**

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

<b>SSIPE Public Notice Thresholds</b>					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO <sub>x</sub>	606,271	606,271	0	20,000 lb/year	No
SO <sub>x</sub>	267,662	267,662	0	20,000 lb/year	No
PM <sub>10</sub>	213,813	213,805	8	20,000 lb/year	No
CO	129,365	129,365	0	20,000 lb/year	No
VOC	81,136	81,136	0	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

**2. Public Notice Action**

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

## **D. Daily Emission Limits (DELs)**

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

### **Proposed Rule 2201 (DEL) Conditions:**

- PM10 emissions from the baghouse shall not exceed 0.0625 lb/ton soda ash loaded. [District Rule 2201]
- Soda ash loaded shall not exceed 3.2 tons/day, on an annual average basis. [District Rule 2201]
- The duration of the silo truck loading shall not exceed 2 hour in any one day. [District Rule 2201]
- The duration of the silo truck loading shall not exceed 90 hours in any one year. [District Rule 2201]
- Baghouse air flow rate shall not exceed 1400 scfm. [District Rule 2201]

## **E. Compliance Assurance**

### **1. Source Testing**

As stated in District Policy APR 1705, non-combustion equipment served by a baghouse with expected PM10 emissions of 30 pounds per day or greater must be tested upon initial start-up. Units with PM10 emissions in excess of 70 pounds per day should also be tested on annual basis.

As shown in the calculation section above, all equipment have PM10 emissions below the above levels. Therefore, pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

### **2. Monitoring**

No monitoring is required to demonstrate compliance with Rule 2201.

### **3. Recordkeeping**

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions will appear on the permit to operate:

- Differential operating pressure and air flow rate shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]
- Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201]
- The permittee shall maintain records of the soda ash throughput and hours of silo truck loading. [District Rule 2201]

#### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

#### **Rule 2520 Federally Mandated Operating Permits**

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment/minor modification application.

#### **Rule 4001 New Source Performance Standards (NSPS)**

##### **40 CFR Part 60 Subpart CC – Standards of Performance for Glass Manufacturing Plants**

Per Section 60.290, a glass manufacturing facility is subject to 40 CFR 60 Subpart CC if the affected facility commences construction (reconstruction) or modification after June 15, 1979. Section 60.2 defines a "modification" as "any physical change in, or change in the method of operation of an existing facility which increases the amount of any pollutant (to which the standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted."

The only pollutant to which Subpart CC applies is particulate matter emissions. The soda ash silos are not subject to this Subpart CC.

## **Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

### **40 CFR Part 61 Subpart N – National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants**

This subpart applies to furnaces that use commercial arsenic as a raw material. Saint-Gobain Container, Inc. is prohibited by the Title V permit from using commercial arsenic as a raw material; therefore, this rule will not apply to the furnace.

### **40 CFR Part 63 Subpart SSSSSS – National Emission Standard for Hazardous Air Pollutants for Glass Manufacturing Area Sources**

#### Section 63.11448

You are subject to this subpart if you own or operate a glass manufacturing facility that is an area source of hazardous air pollutant (HAP) emissions and meets all of the criteria specified in paragraphs (a) through (c) of this section.

- (a) A glass manufacturing facility is a plant site that manufactures flat glass, glass containers, or pressed and blown glass by melting a mixture of raw materials, as defined in §63.11459, to produce molten glass and form the molten glass into sheets, containers, or other shapes.
- (b) An area source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.
- (c) Your glass manufacturing facility uses one or more continuous furnaces to produce glass that contains compounds of one or more glass manufacturing metal HAP, as defined in §63.11459, as raw materials in a glass manufacturing batch formulation.

The facility is a glass manufacturing facility, is an area source of HAP emissions, and uses raw materials containing chromium; the furnaces are subject to Subpart SSSSSS. However, the soda ash silo are not subject to this subpart. As shown in Project C-1121028, continued compliance is expected.

### **Rule 4101 Visible Emissions**

Rule 4101 states that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity.

For operation served by a baghouse, visible emissions shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. The following condition ensures continued compliance:

- Visible emissions from each baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]

### **Rule 4102 Nuisance**

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result

of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

### **California Health & Safety Code 41700 (Health Risk Assessment)**

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (**Appendix C**), a prioritization was not performed after determining no Hazardous Air Pollutants (HAPs) are associated with this project. No further analysis was required.

### **Rule 4201 Particulate Matter Concentration**

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

Particulate matter (PM) emissions are not expected to exceed 0.1 grains/dscf. Therefore, compliance with District Rule 4201 requirements is expected and a permit condition will be listed on the permits as follows:

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

### **Rule 4202 Particulate Matter – Emission Rate**

This rule limits the allowable PM emission rate based on the equipment process weight rate. Section 3.1 defines the process weight as “the total weight of all materials introduced into any specific process, which process may cause any discharge into the atmosphere.”

Per section 4.1, particulate matter (PM) emissions from any source operation shall not exceed the allowable hourly emission rate (E) as calculated using the following applicable formulas:

$$E = 3.59 P^{0.62} \text{ (when, } P = \text{ process weight rate } \leq 30 \text{ tons/hr)}$$
$$E = 17.31 P^{0.16} \text{ (when, } P = \text{ process weight rate } > 30 \text{ tons/hr)}$$

The post-project process weight rate of the soda ash storage operation is 0.13 tons per hour (equivalent to 3.2 tons per day).

$$\begin{aligned} \text{Rule 4202 emission limit} &= 3.59 * P^{0.62} \text{ (where } P \text{ less than or equal to } 30 \text{ tons/hr)} \\ &= 3.59 * (0.13)^{0.62} \\ &= 1.03 \text{ lb/hr} \end{aligned}$$

The operation has a maximum Post Project Potential to Emit (PE2) of 0.008 lb-PM<sub>10</sub>/hr (0.2 lb-PM<sub>10</sub>/day ÷ 24 hr/day). Assuming PM<sub>10</sub> = 50% PM, the operation has a maximum Post Project Potential to Emit of 0.008 lb-PM/hr.

Therefore, the PM emissions are within allowable limits and compliance with the rule is expected.

**California Health & Safety Code 42301.6 (School Notice)**

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

**California Environmental Quality Act (CEQA)**

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District has determined that potential emission increases would have a less than significant health impact on sensitive receptors.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

**IX. Recommendation**

Compliance with all applicable rules and regulations is expected. Issue ATC C-801-39-5 subject to the permit conditions on the attached draft ATC in **Appendix A**.

**X. Billing Information**

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
C-801-39-5	3020-05-B	11,200 gallons	\$93.00

## **Appendixes**

- A: Draft ATC
- B: Current PTO
- C: HRA Summary
- D: Quarterly Net Emissions Change
- E: Emission Profile

**APPENDIX A**  
**Draft ATC**

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: C-801-39-5

LEGAL OWNER OR OPERATOR: SAINT-GOBAIN CONTAINERS, INC  
MAILING ADDRESS: ATTN: ENVIRONMENTAL MANAGER/V. KRULIC  
PO BOX 4200  
MUNCIE, IN 47307-4200

LOCATION: 24441 AVENUE 12 & ROAD 24 1/2  
MADERA, CA 93637

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 11,220 GALLON (1,500 CU FT) SODA ASH STORAGE SILO CONTROLLED WITH A MCGILL AIR CLEAN MODEL #72AVS25 PULSE JET CARTRIDGE BAGHOUSE AND ENCLOSED SCREW CONVEYOR SUPPLYING SEMI-DRY SCRUBBER (LISTED ON PERMIT C-801-1) FOR FURNACES #1 AND #2: INCREASE DAILY AND ANNUAL DURATIONS FOR SODA ASH SILO TRUCK LOADING FROM 24 DELIVERIES PER YEAR AND 1 HOUR OF SILO FILLING PER DAY TO 45 DELIVERIES PER YEAR AND 2 HOURS OF SILO FILLING PER DAY

## CONDITIONS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services  
C-801-39-5 - Jun 18 2013 10:02AM - YOSHIMUJ : Joint Inspection NOT Required

7. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The baghouse shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 6 inches water column. [District Rule 2201] Federally Enforceable Through Title V Permit
10. PM10 emissions from the baghouse shall not exceed 0.0625 lb/ton soda ash loaded. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Soda ash loaded shall not exceed 3.2 tons/day, on an annual average basis. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The duration of the silo truck loading shall not exceed 2 hour in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The duration of the silo truck loading shall not exceed 90 hours in any one year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Baghouse air flow rate shall not exceed 1400 scfm. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Differential operating pressure and air flow rate shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of the soda ash throughput and hours of silo truck loading. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

**APPENDIX B**  
**Current PTO**

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-801-39-3

**EXPIRATION DATE:** 01/31/2015

**EQUIPMENT DESCRIPTION:**

11,220 GALLON (1,500 CU FT) SODA ASH STORAGE SILO CONTROLLED WITH A MCGILL AIR CLEAN MODEL #72AVS25 PULSE JET CARTRIDGE BAGHOUSE AND ENCLOSED SCREW CONVEYOR SUPPLYING SEMI-DRY SCRUBBER (LISTED ON PERMIT C-801-1) FOR FURNACES #1 AND #2

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The baghouse shall be maintained and operated according to manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule] Federally Enforceable Through Title V Permit
9. The baghouse shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 6 inches water column. [District Rule 2201] Federally Enforceable Through Title V Permit
10. PM10 emissions from the baghouse shall not exceed 0.03125 lb/ton soda ash loaded. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Soda ash loaded shall not exceed 3.2 tons/day, on an annual average basis. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The duration of the silo truck loading shall not exceed 1 hour in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The duration of the silo truck loading shall not exceed 24 hours in any one year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Baghouse air flow rate shall not exceed 1400 scfm. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Differential operating pressure and air flow rate shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

16. Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The permittee shall maintain records of the soda ash throughput and hours of silo truck loading. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

**APPENDIX C**  
**HRA Summary**

# San Joaquin Valley Air Pollution Control District Risk Management Review

To: John Yoshimura – Permit Services  
 From: Cheryl Lawler – Technical Services  
 Date: June 7, 2013  
 Facility Name: Saint-Gobain Containers, Inc.  
 Location: 24441 Avenue 12, Madera  
 Application #(s): C-801-39-5  
 Project #: C-1131354

## A. RMR SUMMARY

RMR Summary			
Categories	Soda Ash Storage Silo Truck Loading (Unit 39-5)	Project Totals	Facility Totals
Prioritization Score	0.00*	0.00*	>1
Acute Hazard Index	N/A	N/A	0.00
Chronic Hazard Index	N/A	N/A	0.00
Maximum Individual Cancer Risk	N/A	N/A	2.25E-06
T-BACT Required?	No		
Special Permit Conditions?	No		

\*A prioritization was not performed after determining no Hazardous Air Pollutants (HAPs) are associated with this project. No further analysis was required.

### I. Project Description

Technical Services received a request on June 4, 2013, to perform a Risk Management Review for soda ash storage silo truck loading.

### II. Analysis

After reviewing the information provided in the Risk Management Review request, Technical Services determined that there are no HAPs associated with soda ash and, therefore, this project. No further analysis or prioritization was required for this project.

### III. Conclusion

The proposed project will not contribute to the facility's risk. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

**Attachments**

RMR Request Form  
Facility Summary

**APPENDIX D**  
**Quarterly Net Emissions Change (QNEC)**

## Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

$QNEC = PE2 - PE1$ , where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$\begin{aligned} PE2_{\text{quarterly}} &= PE2_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 11 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 2.75 \text{ lb PM}_{10}/\text{qtr} \end{aligned}$$

$$\begin{aligned} PE1_{\text{quarterly}} &= PE1_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 3 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 0.75 \text{ lb PM}_{10}/\text{qtr} \end{aligned}$$

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO <sub>x</sub>	0	0	0
SO <sub>x</sub>	0	0	0
PM <sub>10</sub>	2.75	0.75	2.0
CO	0	0	0
VOC	0	0	0

**APPENDIX E**  
**Emission Profile**

Permit #: C-801-39-5	<b>Last Updated</b>
Facility: SAINT-GOBAIN CONTAINERS, INC	06/10/2013 YOSHIMUJ

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	11.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.2	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	2.0	0.0	0.0
Q2:	0.0	0.0	2.0	0.0	0.0
Q3:	0.0	0.0	2.0	0.0	0.0
Q4:	0.0	0.0	2.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					