



DEC 26 2013

Mr. Michael Gibbons  
Saint-Gobain Containers, Inc  
P.O. Box 4200  
Muncie, IN 47307

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)**  
**District Facility # C-801**  
**Project # C-1132203**

Dear Mr. Gibbons:

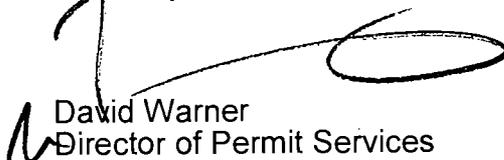
Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The applicant proposes to install a portable forehearth heater system consisting of two 0.4 MMBtu/hr propane-fired burners.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authority to Construct with a Certificate of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. 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: Mike Tollstrup, CARB (w/enclosure) via email  
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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

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### 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

The purpose of the portable propane-fired forehearth heater system would be to prevent damage to the forehearth by heating them if there was an interruption in the natural gas supply to the facility. The planned operation of the system is only in the event of loss of conventional heating utilizing natural gas. Although the unit is portable, the source plans to leave the unit onsite for use as needed.

### V. EQUIPMENT LISTING

#### Equipment Description

**C-801-48-0: PORTABLE 0.8 MMBTU/HR PROPANE-FIRED FOREHEARTH HEATING SYSTEM CONSISTING OF TWO 0.4 MMBTU/HR BURNERS**

### VI. EMISSION CONTROL EQUIPMENT EVALUATION

Low-NO<sub>x</sub> burners reduce NO<sub>x</sub> formation by producing lower flame temperatures (and longer flames) than conventional burners. Conventional burners thoroughly mix all the fuel and air in a single stage just prior to combustion, whereas low-NO<sub>x</sub> burners delay the mixing of fuel and air by introducing the fuel (or sometimes the air) in multiple stages. Generally, in the first combustion stage, the air-fuel mixture is fuel rich. In a fuel rich environment, all the oxygen will be consumed in reactions with the fuel, leaving no excess oxygen available to react with nitrogen to produce thermal NO<sub>x</sub>. In the secondary and tertiary stages, the combustion zone is maintained in a fuel-lean environment. The excess air in these stages helps to reduce the flame temperature so that the reaction between the excess oxygen with nitrogen is minimized.

### VII. CALCULATIONS

#### A. Assumptions

- The portable heater system unit is fired solely on propane
- The maximum operating schedule for the portable heater unit is 24 hours per day and 8,760 hours per year and will only be operational when the forehearth for which it is serving is not fired on natural gas. In addition to the operation when the forehearth is not fired, the portable heater system will be operated for an additional 168 hours per year for maintenance and testing purposes.
- Propane Heating Value: 91,500 Btu/gal (District Practice)
- F-Factor for Propane: 8,578 dscf/MMBtu corrected to 60°F (40 CFR 60, Appendix B)

- The forehearths at the facility for which the portable heater system will be serving are listed in permits C-801-22, '23, '24, '25, '27, '28, '29 and have heat input ratings ranging from 2.7 MMBtu/hr to 4.3 MMBtu/hr

## B. Emission Factors

The following emissions factors for the portable heater system will be used for this project.

Pollutant	Emission Factors	Source
NO <sub>x</sub>	0.15 lb/MMBtu	AP-42 (10/96) Table 1.5-1
SO <sub>x</sub>	0.0164 lb/MMBtu <sup>1</sup>	AP-42 (10/96) Table 1.5-1
PM <sub>10</sub>	0.0044 lb/MMBtu	AP-42 (10/96) Table 1.5-1
CO	0.021 lb/MMBtu	AP-42 (10/96) Table 1.5-1
VOC	0.0055 lb/MMBtu	AP-42 (10/96) Table 1.5-1

The following emissions factors for the forehearths will be used for this project.

Pollutant	Emission Factors	Source
NO <sub>x</sub>	0.10 lb/MMBtu	Current PTO
SO <sub>x</sub>	0.00285 lb/MMBtu	Current PTO
PM <sub>10</sub>	0.0076 lb/MMBtu	Current PTO
CO	0.084 lb/MMBtu	Current PTO
VOC	0.0055 lb/MMBtu	Current PTO

## C. Calculations

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

Since this is a new emissions unit, PE1 = 0 for all pollutants.

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

The PE2 for each pollutant is calculated with the following equation:

- $PE2 = EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times \text{Op. Sched. (hr/day or hr/year)}$

#### Portable Heater System

The following emissions from the portable heater system will be for maintenance and testing purposes.

<sup>1</sup> SO<sub>x</sub> = 0.1(S), where S = sulfur content in gr/100 scf = 0.1 (15) = 1.5 lb/1000 gal => (1.5 lb/1000 gal ÷ 0.0915 MMBtu/gal) = 0.0164 lb/MMBtu where, maximum sulfur content of LPG is 15 gr/100 scf (CRC Handbook of Tables for Applied Engineering Science, 2<sup>nd</sup> Edition, page 390).

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
<b>NO<sub>x</sub></b>	0.15	0.8	24	2.9
<b>SO<sub>x</sub></b>	0.0164	0.8	24	0.3
<b>PM<sub>10</sub></b>	0.0044	0.8	24	0.1
<b>CO</b>	0.021	0.8	24	0.4
<b>VOC</b>	0.0055	0.8	24	0.1

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
<b>NO<sub>x</sub></b>	0.15	0.8	168	20
<b>SO<sub>x</sub></b>	0.0164	0.8	168	2
<b>PM<sub>10</sub></b>	0.0044	0.8	168	1
<b>CO</b>	0.021	0.8	168	3
<b>VOC</b>	0.0055	0.8	168	1

The following emissions from the portable heater system will be representative of operation when the forehearth are not fired.

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
<b>NO<sub>x</sub></b>	0.15	0.8	24	2.9
<b>SO<sub>x</sub></b>	0.0164	0.8	24	0.3
<b>PM<sub>10</sub></b>	0.0044	0.8	24	0.1
<b>CO</b>	0.021	0.8	24	0.4
<b>VOC</b>	0.0055	0.8	24	0.1

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
<b>NO<sub>x</sub></b>	0.15	0.8	8,760	1,051
<b>SO<sub>x</sub></b>	0.0164	0.8	8,760	115
<b>PM<sub>10</sub></b>	0.0044	0.8	8,760	31
<b>CO</b>	0.021	0.8	8,760	147
<b>VOC</b>	0.0055	0.8	8,760	39

Forehearths

The following emissions are from the forehearth with the lowest heat input rating and from the forehearth with the highest heat input rating.

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO <sub>x</sub>	0.10	2.7	24	6.5
SO <sub>x</sub>	0.00285	2.7	24	0.2
PM <sub>10</sub>	0.0076	2.7	24	0.5
CO	0.084	2.7	24	5.4
VOC	0.0055	2.7	24	0.4

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
NO <sub>x</sub>	0.10	2.7	8,760	2,365
SO <sub>x</sub>	0.00285	2.7	8,760	67
PM <sub>10</sub>	0.0076	2.7	8,760	180
CO	0.084	2.7	8,760	1,987
VOC	0.0055	2.7	8,760	130

Pollutant	Daily PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/day)	Daily PE2 (lb/day)
NO <sub>x</sub>	0.10	4.3	24	10.3
SO <sub>x</sub>	0.00285	4.3	24	0.3
PM <sub>10</sub>	0.0076	4.3	24	0.8
CO	0.084	4.3	24	8.7
VOC	0.0055	4.3	24	0.6

Pollutant	Annual PE2			
	EF2 (lb/MMBtu)	Heat Input (MMBtu/hr)	Operating Schedule (hr/year)	Annual PE2 (lb/year)
NO <sub>x</sub>	0.10	4.3	8,760	3,767
SO <sub>x</sub>	0.00285	4.3	8,760	107
PM <sub>10</sub>	0.0076	4.3	8,760	286
CO	0.084	4.3	8,760	3,164
VOC	0.0055	4.3	8,760	207

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

Pursuant to District Rule 2201, the Pre-Project Stationary Source Potential to Emit (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 that have occurred at the source, and which have not been used on-site. The Pre-Project Stationary Source Potential to Emit (SSPE1) is summarized below (see project C-1084423).

<b>Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)</b>					
	<b>NO<sub>x</sub> (lb/year)</b>	<b>SO<sub>x</sub> (lb/year)</b>	<b>PM<sub>10</sub> (lb/year)</b>	<b>CO (lb/year)</b>	<b>VOC (lb/year)</b>
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 Post Project Stationary Source Potential to Emit (SSPE2) 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 that have occurred at the source, and which have not been used on-site. The Post Project Stationary Source Potential to Emit (SSPE2) is summarized below.

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

This source is an existing Major Source for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC and will remain a Major Source for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC.

**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>	
	CO <sub>2</sub> e
Estimated Facility PE before Project Increase	> 125,762
PSD Major Source Thresholds	100,000
PSD Major Source ? (Y/N)	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
Total		245.4 MMBtu/hr

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 x 10<sup>-3</sup> kg/MMBtu (0.0022 lb/MMBtu)  
 N<sub>2</sub>O 1.0 x 10<sup>-4</sup> 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

C-801-48-0

Since this is a new emissions unit, BE = PE1 = 0 for all pollutants.

### Forehearths

#### *Clean Emissions Unit, Located at a Major Source*

Pursuant to Rule 2201, a Clean Emissions Unit is defined as an emissions unit that is "equipped with an emissions control technology with a minimum control efficiency of at least 95% or is equipped with emission control technology that meets the requirements for achieved-in-practice BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

This emissions unit is fired on natural gas and propane as backup, which meets the requirements for achieved-in-practice BACT.

Therefore, BE = 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.*"

As discussed in Section VII.C.5 above, the facility is an existing Major Source for all pollutants; however, the project by itself would need to be a significant increase in order to trigger a SB 288 Major Modification. The emission units within this project do not have a total potential to emit which is greater than the SB 288 Major Modification thresholds (see table below). Therefore, the project cannot be a significant increase and the project does not constitute a SB 288 Major Modification.

The worst case PE from this project would be the highest emissions from the operation of either the highest rated forehearth plus the emissions from the portable heater system for maintenance and testing or the portable heater system normal operation.

Worst case PE = 4.3 MMBtu/hr Forehearth PE  
+ Portable Heater System Maintenance and Testing PE

Or

Worst case PE = Portable Heater System Normal Operation PE

<b>Major Modification Thresholds (Existing Major Source)</b>						
Pollutant	4.3 MMBtu/hr Forehearth PE (lb/year)	Portable Heater System Normal Operation PE (lb/year)	Portable Heater System Maintenance and Testing PE (lb/year)	Worst Case Project PE (lb/year)	Threshold (lb/year)	Major Modification?
NO <sub>x</sub>	3,767	1,051	20	3,787	50,000	No
SO <sub>x</sub>	107	115	2	117	80,000	No
PM <sub>10</sub>	286	31	1	287	30,000	No
VOC	207	39	1	208	50,000	No

### 8. Federal Major Modification

District Rule 2201 states that major modifications are also federal major modifications, unless they qualify for either a "Less-Than-Significant Emissions Increase" exclusion or a "Plantwide Applicability Limit" (PAL) exclusion.

A Less-Than-Significant Emissions Increase exclusion is for an emissions increase for the project, or a Net Emissions Increase for the project (as defined in 40 CFR 51.165 (a)(2)(ii)(B) through (D), and (F)), that is not significant for a given regulated NSR pollutant, and therefore is not a federal major modification for that pollutant.

- To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.
- To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
- If the project is determined not to be a federal major modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).
- Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.

<b>Significant Threshold (lb/year)</b>	
Pollutant	Threshold (lb/year)
VOC	0
NO <sub>x</sub>	0
PM <sub>10</sub>	30,000
SO <sub>x</sub>	80,000

Since this project consists of both existing and new emissions units, the "hybrid test" specified in 40 CFR(a)(2)(ii)(F) is applicable and requires that the NEI determination be based on the sum of the individual NEI determinations for existing emissions units ( $NEI_E$ ) and new emissions units ( $NEI_N$ ) pursuant to 40 CFR(a)(2)(ii)(C) and (D) respectively. In addition, pursuant to 40 CFR (a)(1)(vi)(A)(2), creditable contemporaneous emissions increases ( $NEI_C$ ) must also be included in the determination of the NEI. Therefore,

$$NEI = NEI_E + NEI_N + NEI_C$$

#### Net Emission Increase for Existing Units ( $NEI_E$ )

##### Forehearths

The Net Emissions Increases (NEI) for purposes of determination of a "Less-Than-Significant Emissions Increase" exclusion will be calculated below to determine if this project qualifies for such an exclusion.

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.

$$\text{Net Emission Increase (NEI)} = \text{PAE} - \text{BAE} - \text{UBC}$$

Where: PAE = Projected Actual Emissions, and  
BAE = Baseline Actual Emissions  
UBC = Unused baseline capacity

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 (10 years for existing units with an increase in design capacity or potential to emit). 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 (5 years for electric utility steam generating units). 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.

UBC: Since this project does not result in an increase in design capacity or potential to emit, and it does not impact the ability of the emission unit to operate at a higher utilization rate, the UBC is the portion of PAE that the emission units could have accommodated during the baseline period.

$$\text{Net Emission Increase (NEI}_E\text{)} = \text{PAE} - \text{BAE} - \text{UBC} = 0$$

#### Net Emission Increase for New Unit (NEI<sub>N</sub>)

##### Portable Heater System

Per 40 CFR 51.165 (a)(2)(ii)(D) for new emissions units in this project,

$$\text{NEI}_N = \text{PE}_{2N} - \text{BAE}$$

BAE = 0 for the new units therefore  $\text{NEI}_N = \text{PE}_{2N}$

$$\text{NEI}_N (\text{NO}_x) = 1,051 \text{ lb/year}$$

$$\text{NEI}_N (\text{SO}_x) = 115 \text{ lb/year}$$

$$\text{NEI}_N (\text{PM}_{10}) = 31 \text{ lb/year}$$

$$\text{NEI}_N (\text{VOC}) = 39 \text{ lb/year}$$

#### Creditable Contemporaneous Net Emissions Increase (NEI<sub>C</sub>)

The portable heater system in this project will only operate when the forehearth which is it serving is not being fired. A creditable contemporaneous emission change will be associated with this project due to this operational scenario.

$$\text{NEI}_C = \text{PAE} - \text{BAE}$$

#### Projected Actual Emissions

The projected actual emissions from the worst case forehearth are assumed to be zero since the forehearth will not be fired when the portable heater system is being utilized.

#### Baseline Actual Emissions

The baseline period is the two years immediately prior to the submission of a complete application. The following historical fuel use for the worst case forehearth listed in permit C-801-28 taken from the facility emission inventory submittals.

<b>Baseline Actual Emissions (NOx Emissions)</b>				
Year	Process Rate (MMscf/year)	Permitted Emission Factor (lb/MMBtu)	Heating Value (Btu/scf)	NOx Emissions (lb/year)
2011	6.88	0.10	1,000	688
2012	6.09	0.10	1,000	609
Annual Average				649

<b>Baseline Actual Emissions (SOx Emissions)</b>				
Year	Process Rate (MMscf/year)	Permitted Emission Factor (lb/MMBtu)	Heating Value (Btu/scf)	SOx Emissions (lb/year)
2011	6.88	0.00285	1,000	20
2012	6.09	0.00285	1,000	17
Annual Average				19

<b>Baseline Actual Emissions (PM<sub>10</sub> Emissions)</b>				
Year	Process Rate (MMscf/year)	Permitted Emission Factor (lb/MMBtu)	Heating Value (Btu/scf)	PM <sub>10</sub> Emissions (lb/year)
2011	6.88	0.0076	1,000	52
2012	6.09	0.0076	1,000	46
Annual Average				49

<b>Baseline Actual Emissions (VOC Emissions)</b>				
Year	Process Rate (MMscf/year)	Permitted Emission Factor (lb/MMBtu)	Heating Value (Btu/scf)	VOC Emissions (lb/year)
2011	6.88	0.0055	1,000	38
2012	6.09	0.0055	1,000	33
Annual Average				36

Creditable Contemporaneous Net Emissions Increase (NEI<sub>C</sub>) is calculated as follows:

$$NEI_C = PAE - BAE$$

<b>Creditable Contemporaneous Net Emissions Increase (NEI<sub>C</sub>)</b>				
Permit Unit	Pollutant	PAE (lb/year)	BAE (lb/year)	NEI <sub>C</sub> (lb/year)
C-801-28-1	NOx	0	649	-649
	SOx	0	19	-19
	PM <sub>10</sub>	0	49	-49
	VOC	0	36	-36

Net Emission Increase

The NEI for this project is thus calculated as follows:

$$NEI = NEI_E + NEI_N + NEI_C$$

Net Emissions Increase (NEI)					
Pollutant	NEI <sub>E</sub> (lb/year)	NEI <sub>N</sub> (lb/year)	NEI <sub>C</sub> (lb/year)	NEI (lb/year)	Federal Major Modification?
NO <sub>x</sub>	0	1,051	-649	402	Yes
SO <sub>x</sub>	0	115	-19	96	No
PM <sub>10</sub>	0	31	-49	-18	No
VOC	0	39	-36	3 → 0*	No

\* Similar to projects C-1130749 and C-1120882, calculated emission increases from new or modified emission units that are less than or equal to 0.5 lb/day (equivalent to 183 lb/year) are rounded to zero (consistent with District Policy APR-1130 Increases Maximum Daily Permitted Emissions Less Than or Equal to 0.5 lb/day). This calculation is performed on an emissions unit by emissions unit basis. New or modified emission units with emission increases that round to zero shall not constitute a Federal Major Modification. This project results in an emission increase less than 183 lb/year for VOC and is rounded to zero. Therefore, this project does not constitute a Federal Major Modification for VOC.

The NEI for this project will be greater than the Federal Major Modification threshold for NO<sub>x</sub>. Therefore, this project does not qualify for a “Less-Than-Significant Emissions Increase” exclusion and is thus determined to be a Federal Major Modification for NO<sub>x</sub>.

**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 further 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	0.5	0.06	0.07	0.02	0.02	477
PSD Significant Emission Increase Thresholds	40	40	100	25	15	75,000
PSD Significant Emission Increase?	N	N	N	N	N	N

**GHG Calculations**

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:

*Propane*

CO<sub>2</sub> 61.46 kg/MMBtu (135.496 lb/MMBtu)  
CH<sub>4</sub> 3.0 x 10<sup>-3</sup> kg/MMBtu (0.0066 lb/MMBtu)  
N<sub>2</sub>O 6.0 x 10<sup>-4</sup> kg/MMBtu (0.0013 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

CO<sub>2</sub> Emissions = 0.8 MMBtu/hr x 135.496 lb/MMBtu x 8,760 hr/year  
= 949,555.968 lb-CO<sub>2</sub>(eq)/year  
CH<sub>4</sub> Emissions = 0.8 MMBtu/hr x 0.0066 lb/MMBtu x 8,760 hr/year x  
21 lb-CO<sub>2</sub>(eq) per lb-CH<sub>4</sub>  
= 971.3088 lb-CO<sub>2</sub>(eq)/year  
N<sub>2</sub>O Emissions = 0.8 MMBtu/hr x 0.0013 lb/MMBtu x 8,760 hr/year x  
310 lb-CO<sub>2</sub>(eq) per lb-N<sub>2</sub>O  
= 2,824.224 lb-CO<sub>2</sub>(eq)/year  
  
Total = (949,555.968 + 971.3088 + 2,824.224) lb-CO<sub>2</sub>(eq)/year  
= 953,351.5 lb-CO<sub>2</sub>(eq)/year  
Total = 953,351.5 lb-CO<sub>2</sub>(eq)/year ÷ 2,000 lb/ton  
= **477 short tons-CO<sub>2</sub>(eq)/year**

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 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 = PE<sub>2</sub> - PE<sub>1</sub>, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.  
PE<sub>2</sub> = Post Project Potential to Emit for each emissions unit, lb/qtr.  
PE<sub>1</sub> = 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 PE<sub>2</sub> and quarterly PE<sub>1</sub> can be calculated as follows:

PE<sub>2</sub><sub>quarterly</sub> = PE<sub>2</sub><sub>annual</sub> ÷ 4 quarters/year  
PE<sub>1</sub><sub>quarterly</sub> = PE<sub>1</sub><sub>annual</sub> ÷ 4 quarters/year

<b>Quarterly NEC [QNEC]</b>			
	<b>PE2 (lb/qtr)</b>	<b>PE1 (lb/qtr)</b>	<b>QNEC (lb/qtr)</b>
NO <sub>x</sub>	263	0	263
SO <sub>x</sub>	29	0	29
PM <sub>10</sub>	8	0	8
CO	37	0	37
VOC	10	0	10

## VIII. COMPLIANCE

### Rule 2201 New and Modified Stationary Source Review

#### 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 for the following\*:

- 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 a Major Modification.

\*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 seen in Section VII.C.2 of this evaluation, the applicant is proposing to install a new portable forehearth heating system unit with a PE greater than 2 lb/day for NO<sub>x</sub>. Therefore, BACT is triggered for NO<sub>x</sub>.

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

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

As discussed in Section I above, there are no modified emissions units associated with this project; therefore BACT is not triggered.

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

As discussed in Section VII.C.7 and VII.C.8 previously, this project does constitute a Federal Major Modification for NOx; therefore BACT is triggered.

**2. BACT Guideline**

BACT Guideline 1.5.7, applies to the portable forehearth heating system unit. [Glass Furnace Forehearth] (See Attachment A)

**3. Top-Down BACT Analysis**

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Attachment A), BACT has been satisfied with the following:

NO<sub>x</sub>: Natural gas/propane-fired and good combustion practices

**B. Offsets**

**1. Offset Applicability**

Pursuant to Rule 2201, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

<b>Offset Determination</b>					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
Post Project SSPE (SSPE2)	> 20,000	> 140,000	> 140,000	> 200,000	> 20,000
Offset Threshold	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 facility is an existing Major Source for all pollutants and the SSPE2 is greater than the offset thresholds; therefore offset calculations will be required for this project.

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

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

Where,

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

BE = Baseline Emissions, (lb/year)

ICCE = Increase in Cargo Carrier Emissions, (lb/year)

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)

There are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

Offsets Required (lb/year) =  $(\Sigma[PE2 - BE]) \times DOR$

The portable heater unit will only be operational when the forehearth for which it is serving is not fired on natural gas. In addition to the operation when the forehearth is not fired, the portable heater system will be operated for an additional 168 hours per year for maintenance and testing purposes. The worst case forehearth (unit with the lowest heat input rating) has higher emissions for all pollutants than the portable heater. Therefore, the only increase in emissions that require offsetting in this project are from the portable heater maintenance and testing.

### NOx

PE2 = 20 lb/year

BE = 0 lb/year

Offsets Required (lb/year) =  $([20 - 0]) \times DOR$   
= 20 → 0\* lb NOx/year

\* Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day (equivalent to 183 lb/year) to be rounded to zero for the purposes of triggering NSR requirements.

SOx

$$PE2 = 2 \text{ lb/year}$$

$$BE = 0 \text{ lb/year}$$

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([2 - 0]) \times \text{DOR} \\ &= 2 \rightarrow 0^* \text{ lb SOx/year} \end{aligned}$$

\* Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day (equivalent to 183 lb/year) to be rounded to zero for the purposes of triggering NSR requirements.

PM<sub>10</sub>

$$PE2 = 1 \text{ lb/year}$$

$$BE = 0 \text{ lb/year}$$

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([1 - 0]) \times \text{DOR} \\ &= 1 \rightarrow 0^* \text{ lb PM}_{10}/\text{year} \end{aligned}$$

\* Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day (equivalent to 183 lb/year) to be rounded to zero for the purposes of triggering NSR requirements.

CO

$$PE2 = 3 \text{ lb/year}$$

$$BE = 0 \text{ lb/year}$$

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([3 - 0]) \times \text{DOR} \\ &= 3 \rightarrow 0^* \text{ lb CO/year} \end{aligned}$$

\* Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day (equivalent to 183 lb/year) to be rounded to zero for the purposes of triggering NSR requirements.

VOC

$$PE2 = 1 \text{ lb/year}$$

$$BE = 0 \text{ lb/year}$$

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([1 - 0]) \times \text{DOR} \\ &= 1 \rightarrow 0^* \text{ lb VOC/year} \end{aligned}$$

\* Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day (equivalent to 183 lb/year) to be rounded to zero for the purposes of triggering NSR requirements.

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 SSPE 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 Section VII.C.8, this project does constitute a Federal Major Modification for NO<sub>x</sub>; therefore, public noticing for Federal Major Modification purposes is required.

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

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

**c. Offset Threshold**

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Threshold				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO <sub>x</sub>	> 20,000	> 20,000	20,000 lb/year	No
SO <sub>x</sub>	> 54,750	> 54,750	54,750 lb/year	No
PM <sub>10</sub>	> 29,200	> 29,200	29,200 lb/year	No
CO	> 200,000	> 200,000	200,000 lb/year	No
VOC	> 20,000	> 20,000	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>Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice</b>					
Pollutant	Project PE2 (lb/year)	Project PE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO <sub>x</sub>	20	0	20	20,000 lb/year	No
SO <sub>x</sub>	2	0	2	20,000 lb/year	No
PM <sub>10</sub>	1	0	1	20,000 lb/year	No
CO	3	0	3	20,000 lb/year	No
VOC	1	0	1	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, public noticing is required for this project for Federal Major Modification for NO<sub>x</sub>. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB), US Environmental Protection Agency (US EPA), and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC permits for this equipment.

**D. Daily Emission Limits**

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

- Emissions from the propane-fired unit shall not exceed any of the following limits: 0.15 lb-NO<sub>x</sub>/MMBtu, 0.0164 lb-SO<sub>x</sub>/MMBtu, 0.0044 lb-PM<sub>10</sub>/MMBtu, 0.21 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201]

## **E. Compliance Assurance**

### **1. Source Testing**

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 permittee shall record the total time the unit operates, in hours per calendar year. [District Rule 2201]
- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070]

### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

## **F. Ambient Air Quality Analysis**

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to Attachment D of this document for the AAQA analysis.

The proposed location is in an attainment area for NO<sub>x</sub>, CO, and SO<sub>x</sub>. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO<sub>x</sub>, CO, or SO<sub>x</sub>.

The proposed location is in a non-attainment area for the state's PM<sub>10</sub> as well as federal and state PM<sub>2.5</sub> thresholds. As shown by the AAQA analysis the proposed equipment will not cause a violation of an air quality standard for PM<sub>10</sub> and PM<sub>2.5</sub>.

## **G. Compliance Certification**

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this facility is a

major source and this project does constitute a Title I modification, therefore this requirement is applicable. Included in Attachment B is the facility's compliance certification.

#### **H. Alternate Siting Analysis**

The current project occurs at an existing facility. The applicant proposes to install a portable forehearth heater system.

Since the project will provide heat to be used in the forehearths at the current facility location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

#### **Rule 2410 Prevention of Significant Deterioration**

The prevention of significant deterioration (PSD) program is a construction permitting program for new major stationary sources and major modifications to existing major stationary sources located in areas classified as attainment or in areas that are unclassifiable for any criteria air pollutant.

As demonstrated above, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

#### **Rule 2520 Federally Mandated Operating Permit**

This facility is subject to this Rule, and has received their Title V Operating Permit. Section 3.29 defines a significant permit modification as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

Section 3.20.5 states that a minor permit modification is a permit modification that does not meet the definition of modification as given in Section 111 or Section 112 of the Federal Clean Air Act. Since this project is a Title I modification (i.e. Federal Major Modification), the proposed project is considered to be a modification under the Federal Clean Air Act. As a result, the proposed project constitutes a Significant Modification to the Title V Permit pursuant to Section 3.29.

As discussed above, the facility has applied for a Certificate of Conformity (COC) (see Attachment C); 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 shall not implement the changes requested until the final permit is issued.

#### **Rule 4101 Visible Emissions**

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than

Ringelmann 1 (or 20% opacity). Based on past inspections of the facility continued compliance is expected.

**Rule 4102 Nuisance**

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. The emissions from the proposed operations are not expected to impose any comfort, repose, health, or safety problems to the public provided the equipment is properly maintained and operated.

**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 one. According to the Technical Services Memo for this project (Attachment D), the total facility prioritization score including this project was greater than one. Therefore, a health risk assessment was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
C-801-48-0	0.0 per million	No

**Discussion of T-BACT**

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District's thresholds for triggering T-BACT requirements; therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in Attachment D of this report, the emissions increases for this project was determined to be less than significant.

**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.

F-Factor for Propane:	8,578 dscf/MMBtu at 60 °F
PM10 Emission Factor:	0.0044 lb-PM10/MMBtu
Percentage of PM as PM10 in Exhaust:	100%
Exhaust Oxygen (O <sub>2</sub> ) Concentration:	3%
Excess Air Correction to F Factor =	$\frac{20.9}{(20.9 - 3)} = 1.17$

$$GL = \left( \frac{0.0044 \text{ lb-PM}}{\text{MMBtu}} \times \frac{7,000 \text{ grain}}{\text{lb-PM}} \right) / \left( \frac{8,578 \text{ ft}^3}{\text{MMBtu}} \times 1.17 \right)$$

$$GL = 0.0031 \text{ grain/dscf} < 0.1 \text{ grain/dscf}$$

Therefore, compliance with District Rule 4201 requirements is expected and a permit condition will be listed on the permit as follows:

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

**Rule 4301 Fuel Burning Equipment**

This rule specifies maximum emission rates in lb/hr for SO<sub>2</sub>, NO<sub>2</sub>, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to ≤ 0.1 gr/scf. According to AP 42 (Table 1.4-2, footnote c), all PM emissions from propane combustion are less than 1 μm in diameter.

District Rule 4301 Limits			
Pollutant	NO <sub>2</sub>	Total PM	SO <sub>2</sub>
ATC #C-801-48-0 (lb/hr)	0.12	0.0042	0.013
Rule Limit (lb/hr)	140	10	200

The above table indicates compliance with the maximum lb/hr emissions in this rule; therefore, continued compliance is expected.

**Rule 4308 Boilers, Steam Generators, And Process Heaters – 0.075 MMBtu/hr to less than 2.0 MMBtu/hr**

The purpose of this rule is to limit emissions of oxides of nitrogen (NO<sub>x</sub>) from boilers, steam generators, process heaters and water heaters.

Rule 4308 applies to any person who supplies, sells, offers for sale, installs, or solicits the installation of any boiler, steam generator, process heater or water heater with a rated heat input capacity greater than or equal to 75,000 British thermal units per hour and less than 2,000,000 British thermal units per hour.

Boiler, steam generator, or water heater is defined under Section 3.2 as "any external combustion equipment fired with any liquid or gaseous fuel to produce hot water or steam". Process heater is defined under Section 3.13 as "any combustion equipment fired on gaseous or liquid fuel, which transfers heat from combustion gases to water or process streams. Process heaters exclude kilns or ovens used for drying, baking, cooking, calcining, heat treating, or vitrifying".

The forehearth is not used to produce hot water or steam; therefore, the unit is not considered a boiler or steam generator. The definition of process heater states a unit that "transfers heat from combustion gases to water or process streams". Although the rule does not define "process stream", the heating of glass in a forehearth is a non-continuous processes and will not be considered a "process stream". Therefore, the requirements of this rule are not applicable to this project.

#### Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO<sub>2</sub>, on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the emission factors presented in Section VII, the sulfur compound emissions are calculated as follows:

$$\text{Volume SO}_2 = \frac{n RT}{P}$$

With:

N = moles SO<sub>2</sub>

T (Standard Temperature) = 60°F = 520°R

P (Standard Pressure) = 14.7 psi

R (Universal Gas Constant) =  $\frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}}$

$$\frac{0.0164 \text{ lb} - \text{SO}_x}{\text{MMBtu}} \times \frac{\text{MMBtu}}{8,578 \text{ dscf}} \times \frac{1 \text{ lb} \cdot \text{mol}}{64 \text{ lb}} \times \frac{10.73 \text{ psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot ^\circ\text{R}} \times \frac{520^\circ\text{R}}{14.7 \text{ psi}} \times \frac{1,000,000 \cdot \text{parts}}{\text{million}} = 11.3 \frac{\text{parts}}{\text{million}}$$

$$\text{Sulfur Concentration} = 11.3 \frac{\text{parts}}{\text{million}} < 2,000 \text{ ppmv (or 0.2\%)}$$

Therefore, compliance with District Rule 4801 requirements 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)**

The California Environmental Quality Act (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 San Joaquin Valley Unified Air Pollution Control District (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.
- 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.

### **Greenhouse Gas (GHG) Significance Determination**

It is determined that no other agency has prepared or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

On December 17, 2009, the District's Governing Board adopted a policy, APR 2005, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency, for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Consistent with District Policy 2005, projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

The California Air Resources Board (ARB) adopted a Cap-and-Trade regulation as part one of the strategies identified for AB 32. This Cap-and-Trade regulation is a statewide plan, supported by a CEQA compliant environmental review document, aimed at reducing or mitigating GHG emissions from targeted industries. Facilities subject to the Cap-and-Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a

corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions.

Under District policy APR 2025, CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, the District finds that the Cap-and-Trade is a regulation plan approved by ARB, consistent with AB32 emission reduction targets, and supported by a CEQA compliant environmental review document. As such, consistent with District Policy 2005, projects complying project complying with Cap-and-Trade requirements are determined to have a less than significant individual and cumulative impact for GHG emissions.

Facility C-801 is subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

**District CEQA Findings**

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment (see Section VII.C.9 for greenhouse gas emission calculations). The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

**X. RECOMMENDATION**

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct permit C-801-48-0 subject to the permit conditions on the attached draft Authority to Construct permit in Attachment E.

**XI. BILLING INFORMATION**

<b>Annual Permit Fees</b>			
Permit Number	Fee Schedule	Fee Description	Fee Amount
C-801-48-0	3020-02-D	0.8 MMBtu/hr	\$314

**Attachments**

- A: BACT Guideline 1.5.7 and Top Down BACT Analysis
- B: Compliance Certification
- C: Certificate of Conformity
- D: Health Risk Assessment and Ambient Air Quality Analysis
- E: Draft Authority to Construct Permit

## **ATTACHMENT A**

### **BACT Guideline 1.5.7 and Top Down BACT Analysis**

San Joaquin Valley  
Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 1.5.7\***

Last Update 8/17/2006

**Glass Furnace Forehearth**

<b>Pollutant</b>	<b>Achieved in Practice or contained in the SIP</b>	<b>Technologically Feasible</b>	<b>Alternate Basic Equipment</b>
NOx	natural gas/propane-fired and good combustion practices		electric forehearth
SOx	natural gas/propane-fired and good combustion practices		electric forehearth
VOC	natural gas/propane-fired and good combustion practices		electric forehearth

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

**\*This is a Summary Page for this Class of Source**

## Top-Down BACT Analysis for Permit Unit C-801-48-0

### NOx Emissions

#### **Step 1 - Identify all control technologies**

The following control technologies have been found serving this class and category of operation that will control NOx emissions.

1. Electric Forehearth
2. Natural gas/Propane-fired and good combustion practices

#### **Step 2 - Eliminate Technologically Infeasible Options**

An electric portable heater would not be technologically feasible due to the portability requirements of the heater. The heater is required to serve various forehearths at different locations around the facility whenever a forehearth is not fired on natural gas. Therefore, an electric glass furnace forehearth is deemed technologically infeasible and will be removed from consideration as a control technology.

#### **Step 3 - Rank Remaining Control Technologies by Control Effectiveness**

Rank	Control Technology	Achieved in Practice
1	Natural gas/Propane-fired and good combustion practices	Y

There are no remaining control technologies for NOx.

#### **Step 4 - Cost Effectiveness Analysis**

The applicant is proposing the most effective control technology applicable for NOx therefore, a cost effectiveness analysis is not required.

#### **Step 5 - Select BACT**

NOx: Natural gas/Propane-fired and good combustion practices is selected as BACT.

**ATTACHMENT B**  
**Compliance Certification**

**Permit C-801-48-0**  
**Addition of Emergency Forehearth Burners**  
**Saint-Gobain Containers, Inc.**  
**Madera, CA**

## **Statewide Compliance Certification**

Pursuant to SJVAPCD Rule 2201 Section 4.15.2, Saint-Gobain Containers, Inc. (SGCI) submits this Statewide Compliance Certification regarding other owned, operated, or controlled major stationary sources in California.

SGCI is applying for an Authority to Construct (ATC) for new emergency forehearth burners. There are two major sources owned or operated by SGCI (or under common control with SGCI) in California: (1) SGCI in Madera, CA (the facility that is the subject of this application), and (2) CertainTeed in Chowchilla, CA (a facility under common control with the Madera plant since it shares a parent company – Saint-Gobain Group, but which is under separate site management)

As of the date designated with the signature below, SGCI asserts the following:

*All major Stationary Sources owned or operated by SGCI (or by any entity controlling, controlled by, or under common control with SGCI) in California, which are subject to emission limitations, are in compliance or on a schedule for compliance with all applicable emission limitations and standards.*

This certification is based upon a review by the employees of SGCI who have responsibility for compliance with environmental requirements in California. This certification is based on data available as of the date of its execution.

Thank you for your consideration. Please contact Jayne Browning at (765) 741-7112 or contact Steve Branoff of ENVIRON at (510) 420-2540 regarding this matter.

Sincerely,

  
\_\_\_\_\_  
Mirko Muller  
Plant Manager

11/04/13  
\_\_\_\_\_  
Date

**ATTACHMENT C**  
**Certificate of Conformity**

# San Joaquin Valley Unified Air Pollution Control District

## TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

**I. TYPE OF PERMIT ACTION (Check appropriate box)**

- SIGNIFICANT PERMIT MODIFICATION                       ADMINISTRATIVE  
 MINOR PERMIT MODIFICATION                                      AMENDMENT

COMPANY NAME: Saint-Gobain Containers, Inc.	FACILITY ID: C- 801
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Saint-Gobain Containers, Inc.	
3. Agent to the Owner: n/a	

**II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):**

Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).

Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Michael Gibbons  
Signature of Responsible Official

7/11/13  
Date

Michael Gibbons  
Name of Responsible Official (please print)

Plant Manager  
Title of Responsible Official (please print)

## **ATTACHMENT D**

### **Health Risk Assessment and Ambient Air Quality Analysis**

# San Joaquin Valley Air Pollution Control District Risk Management Review

To: Stanley Tom, AQE – Permit Services  
 From: Joe Aguayo, AQS – Technical Services  
 Date: September 30, 2013  
 Facility Name: Saint-Gobain Containers  
 Location: 24441 Avenue 12 & Road 24 ½  
 Madera, CA  
 Application #(s): C-801-48-0  
 Project #: C-1132203

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## A. RMR SUMMARY

RMR Summary			
Categories	Type of Unit (Unit 48-0)	Project Totals	Facility Totals
Prioritization Score	<1.0	>1.0	>1.0
Acute Hazard Index	0.00	0.00	0.00
Chronic Hazard Index	0.00	0.00	0.00
Maximum Individual Cancer Risk (10 <sup>-6</sup> )	0.0	0.0	2.3
T-BACT Required?	No		
Special Permit Conditions?	No		

### Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit # 48-0

No special conditions are required.

## B. RMR REPORT

### I. Project Description

Technical Services received a request on September 24, 2013, to perform an Ambient Air Quality Analysis and a Risk Management Review for a proposed installation of a 0.8 MMBtu/hr propane-fired portable hearth heating system consisting of two 0.4 MMBtu/hr burners.

### II. Analysis

Technical Services performed a health risk assessment using the External Combustion of NG Emissions spreadsheet. The cumulative prioritization scores were greater than 1.0, thus

modeling was conducted using the AERMOD model, with the parameters outlined below and meteorological data for 2003-2007 from Madera to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid.

<b>Analysis Parameters Unit 48-0</b>			
<b>Source Type</b>	Area	<b>Location Type</b>	Rural
<b>X-Length (m)</b>	51.8	<b>Closest Receptor (m)</b>	609
<b>Y-Length (m)</b>	48.8	<b>Type of Receptor</b>	Residential
<b>Release Height (m)</b>	12.2		

Technical Services performed modeling for criteria pollutants CO, NO<sub>x</sub>, SO<sub>x</sub> and PM<sub>10</sub>; as well as a RMR. The emission rates used for criteria pollutant modeling were 0.60 lb/hr CO, 0.82 lb/hr NO<sub>x</sub>, 0.03 lb/hr SO<sub>x</sub>, and 0.06 lb/hr PM<sub>10</sub>. The engineer supplied the maximum fuel rate for the IC engine used during the analysis.

The results from the Criteria Pollutant Modeling are as follows:

#### Criteria Pollutant Modeling Results\*

Diesel ICE	1 Hour	3 Hours	8 Hours.	24 Hours	Annual
CO	Pass	X	Pass	X	X
NO <sub>x</sub>	Pass <sup>1</sup>	X	X	X	Pass
SO <sub>x</sub>	Pass	Pass	X	Pass	Pass
PM <sub>10</sub>	X	X	X	Pass <sup>2</sup>	Pass <sup>2</sup>
PM <sub>2.5</sub>	X	X	X	Pass <sup>2</sup>	Pass <sup>2</sup>

\*Results were taken from the attached PSD spreadsheet.

<sup>1</sup>The project was compared to the 1-hour NO<sub>2</sub> National Ambient Air Quality Standard that became effective on April 12, 2010 using the District's approved procedures

<sup>2</sup>The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

### III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the project is less than 1.0 in a million. **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.

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

**IV. Attachments**

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Toxic emissions summary
- D. Prioritization score
- E. Facility Summary

**AAQA for 1132203 (C0801)**  
**All Values are in Micrograms per Cubic Meter**

	NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
AREA1	40.0	2.2	29.4	10.3	1.6	0.7	0.3	0.1	4.45E-01	1.54E-01
Background	93.7	21.0	2,679.5	1,747.5	159.8	133.2	71.9	26.6	8.10E+01	4.00E+01
<b>Facility Totals</b>	133.7	23.3	2,708.9	1,757.8	161.5	133.9	72.2	26.7	8.14E+01	4.02E+01
<b>AAQS</b>	188.7	56.0	23,000.0	10,000.0	195.0	1,300.0	105.0	80.0	50.0	30.0
	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	<del>Fail</del>	<del>Fail</del>

**EPA's Significance Level (ug/m<sup>3</sup>)**

NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	SOx Annual	PM 24 Hour	PM Annual
0.0	1.0	2000.0	500.0	0.0	25.0	5.0	1.0	5.0	1.0

Pass      Pass  
  
 PM<sub>2.5</sub>  
 24 h      PM<sub>2.5</sub>  
 Ann  
 SIL      1.2      0.3  
 Pass      Pass

\*Since 5-years of meteorological data were used, an adjustment factor of 1.5 for Madera was applied to the annual average concentrations for the devices modeled.

## AAQA Emission (g/sec)

<i>Device</i>	<b>NOx 1 Hour</b>	<b>NOx Annual</b>	<b>CO 1 Hour</b>	<b>CO 8 Hour</b>	<b>SOx 1 Hour</b>	<b>SOx 3 Hour</b>	<b>SOx 24 Hour</b>	<b>SOx Annual</b>	<b>PM 24 Hour</b>	<b>PM Annual</b>
AREA1	1.03E-01	1.03E-01	7.61E-02	7.61E-02	4.20E-03	4.20E-03	4.20E-03	4.16E-03	7.35E-03	7.15E-03

\*Since 5-years of meteorological data were used, an adjustment factor of 1.5 for Madera was applied to the annual average concentrations for the devices modeled.

# **ATTACHMENT E**

**Draft Authority to Construct Permit**

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** C-801-48-0

**LEGAL OWNER OR OPERATOR:** SAINT-GOBAIN CONTAINERS, INC  
**MAILING ADDRESS:** 24441 AVENUE 12  
ATTN: ENVIRO MANAGER/S. ARUNAGIRI  
MADERA, CA 93637

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

**EQUIPMENT DESCRIPTION:**  
PORTABLE 0.8 MMBTU/HR PROPANE-FIRED FOREHEARTH HEATING SYSTEM CONSISTING OF TWO 0.4 MMBTU/HR BURNERS

**CONDITIONS**

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. 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
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. 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. [District Rule 4101] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. The unit shall only be fired on propane. [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

**DRAFT**

DAVID WARNER, Director of Permit Services  
C-801-48-0, Nov 29 2013 5:50PM - TOMS Joint Inspection NOT Required

8. Except for 168 hours per year for maintenance and testing purposes, the heater system shall only operate when the hearth for which it is serving is not fired on any fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from the propane-fired unit shall not exceed any of the following limits: 0.15 lb-NO<sub>x</sub>/MMBtu, 0.0164 lb-SO<sub>x</sub>/MMBtu, 0.0044 lb-PM<sub>10</sub>/MMBtu, 0.21 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The permittee shall record the total time the unit operates, in hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

DRAFT