



**MAY 23 2018**

Mr. Eddison Flores  
Owens-Brockway Glass Container  
14700 W Schulte Road  
Tracy, CA 95376-8628

**Re: Notice of Preliminary Decision – Title V Permit Renewal**  
**Facility Number: N-593**  
**Project Number: N-1170115**

Dear Mr. Flores:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Owens-Brockway Glass Container at 14700 W Schulte Road, Tracy, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Sincerely,



Arnaud Marjollet  
Director of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email  
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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

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

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585

**SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT**

**Proposed Title V Permit Renewal Evaluation  
Owens-Brockway Glass Container  
N-593**

**TABLE OF CONTENTS**

---

|       |                                              |    |
|-------|----------------------------------------------|----|
| I.    | PROPOSAL.....                                | 1  |
| II.   | FACILITY LOCATION.....                       | 1  |
| III.  | EQUIPMENT LISTING .....                      | 1  |
| IV.   | GENERAL PERMIT TEMPLATE USAGE.....           | 2  |
| V.    | SCOPE OF EPA AND PUBLIC REVIEW.....          | 2  |
| VI.   | FEDERALLY ENFORCEABLE REQUIREMENTS.....      | 2  |
| VII.  | REQUIREMENTS NOT FEDERALLY ENFORCEABLE ..... | 5  |
| VIII. | PERMIT REQUIREMENTS.....                     | 6  |
| IX.   | PERMIT SHIELD .....                          | 33 |
| X.    | CALIFORNIA ENVIRONMENTAL QUALITY ACT.....    | 33 |
| XI.   | PERMIT CONDITIONS.....                       | 34 |
| XII.  | ATTACHMENTS.....                             | 35 |

# **TITLE V PERMIT RENEWAL EVALUATION**

## **Container Glass Manufacturing Facility**

**Engineer:** Jagmeet Kahlon  
**Date:** May 15, 2018

**Facility Number:** N-593  
**Facility Name:** Owens-Brockway Glass Container  
**Mailing Address:** 14700 W Schulte Road  
Tracy, CA 95376-8628

**Contact Name:** Edison Flores  
**Title:** Plant Manager  
**Phone:** (567) 336-8200

**Responsible Official:** Eddison Flores  
**Title:** Plant Manager

**Project # :** N-1170115  
**Deemed Complete:** January 31, 2017

---

### **I. PROPOSAL**

Owens-Brockway Glass Container submitted a permit application to renew their Title V permit. During this renewal process, the existing permits will be reviewed and revised to include up to date requirements of all applicable District, State and Federal rules that were adopted or amended since the issuance of the previous Title V permit on August 19, 2013.

The purpose of this document is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. This document also identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

### **II. FACILITY LOCATION**

The facility is located at 14700 W Schulte Road, Tracy, California.

### **III. EQUIPMENT LISTING**

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

#### **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant has requested to use the following model general permit templates:

##### **A. Template SJV-UM-03 Facility-wide Umbrella**

The applicant has requested to utilize template SJV-UM-0-3, Facility Wide Umbrella. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

#### **V. SCOPE OF EPA AND PUBLIC REVIEW**

Certain segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

Conditions 1 through 40 in facility-wide permit requirement permit N-593-0-5 including their underlying applicable requirements originate from template SJV-UM-0-3 and are not subject to further EPA or public review.

#### **VI. FEDERALLY ENFORCEABLE REQUIREMENTS**

##### **A. Rules Updated**

The following rules are updated since the previous Title renewal on August 19, 2013.

- District Rule 2020, Exemptions  
(Amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule  
(Amended February 18, 2016)
- District Rule 4702, Internal Combustion Engines  
(Amended November 14, 2013)

- 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines  
(Amended February 27, 2014)
- 40 CFR Part 61, Subpart N, National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants  
(Amended February 27, 2014)
- 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines  
(Amended February 27, 2014)
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

**B. Rules Removed**

There are no applicable rules that were removed since the previous Title V renewal.

**C. Rules Added**

None

**D. Rules Not Updated**

- District Rule 1070, Inspections  
(Amended December 17, 1992)
- District Rule 1080, Stack Monitoring  
(Amended December 17, 1992)
- District Rule 1081, Source Sampling  
(Amended December 16, 1993)
- District Rule 2010, Permits Required  
(Amended December 17, 1992)
- District Rule 2031, Transfer of Permits  
(Amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications  
(Amended December 17, 1992)

- District Rule 2080, Conditional Approval  
(Amended December 17, 1992)
- District Rule 2410, Prevention of Significant Deterioration  
(Effective November 26, 2012)
- District Rule 2520, Federally Mandated Operating Permits  
(Amended June 21, 2001)
- District Rule 4101, Visible Emissions  
(Amended February 17, 2005)
- District Rule 4201, Particulate Matter Concentration  
(Amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate  
(Amended December 17, 1992)
- District Rule 4354, Glass Melting Furnaces  
(Amended May 19, 2011)
- District Rule 4601, Architectural Coatings  
(Amended December 17, 2009)
- District Rule 4701, Internal Combustion Engines – Phase 1  
(Amended August 21, 2003)
- District Rule 4801, Sulfur Compounds  
(Amended December 17, 1992)
- District Rule 8011, General Requirements  
(Amended August 19, 2004)
- District Rule 8021, Construction, Demolition, Excavation, Extraction and Other Earthmoving Activities  
(Amended August 19, 2004)
- District Rule 8031, Bulk Materials  
(Amended August 19, 2004)
- District Rule 8041, Carryout and Trackout  
(Amended August 19, 2004)

- District Rule 8051, Open Areas  
(Amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads  
(Amended August 19, 2004)
- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas  
(Amended August 19, 2004)
- 40 CFR Part 60 Subpart CC, Standards of Performance for Glass Manufacturing Plants  
(Amended October 17, 2000)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos  
(Amended July 20, 2004)
- 40 CFR Part 63, Subpart SSSSSS, National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources  
(Adopted December 26, 2007)
- 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners  
(Amended June 25, 2013)
- 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction  
(Amended June 25, 2013)

## VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

### A. Rules Added

None

## **B. Rules Not Updated**

- District Rule 1100, Equipment Breakdown  
(Amended December 17, 1992)
- District Rule 1160, Emission Statements  
(Adopted November 18, 1992)
- District Rule 2040, Applications  
(Amended December 17, 1992)
- District Rule 4102, Nuisance  
(Amended December 17, 1992)
- Title 17 California Code of Regulations (CCR) Section 93115, Airborne Toxic Control Measure for Stationary Compression Ignition Engines  
(Adopted February 26, 2004)

## **VIII. PERMIT REQUIREMENTS**

The purpose of this evaluation is to review changes to federally enforceable requirements and to ensure the renewed operating permit contains conditions enforcing the requirements of all applicable federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the previous Title V permit.

### **District Rule 2020, Exemptions**

District Rule 2020 lists equipment which is specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

### **District Rule 2201, New and Modified Stationary Source Review Rule**

District Rule 2201 has been amended since this facility's previous Title V permit was issued. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit.

## **District Rule 4702, Internal Combustion Engines**

### *Section 2.0 - Applicability*

This rule applies to any internal combustion engine rated at 25 brake horsepower (bhp) or greater.

As shown below, bhp of each engine is greater than 25 bhp; therefore, these engines are subject to the requirements of this rule.

- N-593-27: 240 bhp diesel-fueled emergency IC engine powering an electrical generator
- N-593-28: 380 bhp diesel-fueled emergency IC engine powering an electrical generator
- N-593-29: 534 bhp diesel-fueled emergency IC engine powering an electrical generator
- N-593-31: 136 bhp diesel-fueled emergency IC engine powering a fire pump
- N-593-32: 185 bhp diesel-fueled IC engine powering a fire pump assembly

### *Section 4.0 – Exemptions*

Pursuant to Section 4.2, except for the requirements of Sections 5.9 and 6.2.3, the requirements of this rule shall not apply to an “emergency standby engine” (section 3.15) or a “low-use engine” (section 3.26), provided that the engine is operated with an operating non-resettable elapsed time meter or other APCO approved alternative.

Section 5.9 requires complying with the following requirements:

- Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier.
- Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.
- Install and operate a non-resettable elapsed time meter or other APCO approved alternative device.

### N-593-27-6, '-28-6, '-29-6

The following requirements ensures on-going compliance with the above sections:

- This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]

- An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
- This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
- During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]

Pursuant to Section 4.3, except for the requirements of Section 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following conditions:

- The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood; and
- Except for operations (stated above), the engine is limited to operate no more than 100 hours per calendar year as determined by an operational non-resettable elapsed time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine; and
- The engine is operated with an operational non-resettable elapsed time meter or other APCO approved alternative method.

N-593-31-6 and '-32-6

These engines will be operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood. Furthermore, each engine is limited to operate less than 100 hours per calendar year for all maintenance, testing and required regulatory purpose. Each engine's operation is required to be recorded using a non-resettable elapsed time meter or other APCO approved alternative. Therefore, these engines are not subject to the requirements in this rule with an exception of requirements in 6.2.3.

The following requirements ensure on-going compliance with this section:

- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]
- This engine shall be operated only for maintenance and testing of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]

*Section 6.2 – Recordkeeping*

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following:

- Total hours of operation,
- The type of fuel used,
- The purpose for operating the engine,
- For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and
- Other support documentation necessary to demonstrate claim to the exemption.

The following requirements ensure on-going compliance with this section:

- The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]
- The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115]
- 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 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]

Compliance is expected with this Rule.

**40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

*§ 60.4200 Am I subject to this subpart?*

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
- (i) 2007 or later, for engines that are not fire pump engines;
  - (ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines (i.e., starting 2009 year model for  $175 \leq \text{HP} \leq 750$ ).
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

- (i) Manufactured after April 1, 2006, and are not fire pump engines, or
  - (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- (3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
- (4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

The engines under permits N-593-27, '-28 and '-29 were installed sometime in 1990<sup>1</sup>. Further, the engines under permits N-593-31 and '-32 were installed in 1963<sup>2</sup>. Therefore, all these engines are not subject to the requirements of this rule.

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

*§61.160 Applicability and designation of source.*

- (a) The source to which this subpart applies is each glass melting furnace that uses commercial arsenic as a raw material. This subpart does not apply to pot furnaces.
- (b) Rebricking is not considered construction or modification for the purposes of §61.05(a).

Use of commercial arsenic as a raw material is prohibited under glass melting furnace permits N-593-10-17 (condition #18), '-12-15 (condition #18), and '-13-13 (condition #18). Therefore, these units are not subject to the requirements of this rule.

---

<sup>1</sup> Taken from the application filed under project N-960472

<sup>2</sup> Taken from the application filed under project N-960643

**40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for  
Hazardous Air Pollutants for Stationary Reciprocating Internal  
Combustion Engines**

*§ 63.6585 Am I subject to this subpart?*

This subpart applies to owners and operators of stationary reciprocating internal combustion engines (RICE) operated at a major or area source of Hazardous Air Pollutant (HAP) emissions.

Section (b) states a major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

Section (c) states an area source of HAP emissions is a source that is not a major source.

Per project N-1120195, this facility is an area source of HAP emissions.

*§ 63.6590 What parts of my plant does this subpart cover?*

This subpart applies to each affected source.

- (a) An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

*(1) Existing stationary RICE*

- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE*

- (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

The engines under permit N-593-27 through '-29, '-31 and '-32 are existing engines under this subpart since they were installed before June 12, 2006.

Section (c) Stationary RICE subject to Regulations under 40 CFR Part 60: An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

- (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

The engines under permits N-593-27 through '-29, '-31 and '-32 are located at an area source and are not subject to requirements in 40 CFR Part 60 Subpart IIII (discussed previously). Therefore, further evaluation is required to determine the applicable requirements under this subpart.

*§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?*

Section (a) states if you own or operate existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

The following condition(s) in permits N-593-27-6 through '-29-6, '-31-6 and '-32-6 ensure on-going compliance with the requirements in Table 2d. Note that these engines are not subject to any operating limitations in Table 2b.

- The engine's oil and filter shall be changed every 500 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ]
- The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator

must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ]

- The engine's air filter shall be inspected every 1,000 hours of operation or annually, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ]
- The engine's hoses and belts shall be inspected every 500 hours of operation or annually, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ]

*§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?*

Section (b) states that beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

40 CFR 80.510(b) states that diesel fuel is subject to the following per-gallon standards:

(1) Sulfur content.

- (i) 15 ppm maximum for non-road diesel fuel.
- (ii) 500 ppm maximum for locomotive diesel fuel.

(2) Cetane index or aromatic content, as follows:

- (i) A minimum cetane index of 40; or
- (ii) A maximum aromatic content of 35 volume percent.

The engines under permits N-593-27 through '-29, '-31 and '-32 are compression ignition engines, and are required to use CARB certified diesel containing no more than 15 ppmv sulfur by weight. Furthermore, the CARB diesel fuel

specification requires no more than 10 v% of aromatic hydrocarbon content (<http://www.arb.ca.gov/enf/fuels/dieselspecs.pdf>). The following condition in permit N-593-27 through '-29, '-31 and '-32 ensures on-going compliance with this section:

- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]

*§63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?*

For the engines under permits N-593-27 through '-29, '-31 and '-32, there are no applicable emissions limitations to comply from this subpart. As such, no initial performance tests are required.

*§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?*

Section (e)(3) states that if you own or operate an existing emergency or black start stationary RICE located at an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The following condition(s) in permits N-593-27 through '-29, '-31 and '-32 ensure on-going compliance:

- The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ]

Section (f) states that if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

The engines under permits N-593-27 through '-29, '-31 and '-32 are already equipped with a non-resettable hour meter or other District approved alternative. The following condition(s) in permits N-593-27 through '-29, '-31 and '-32 ensure on-going compliance:

- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]

Section (h) states if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. The following condition(s) in permits N-593-27 through '-29, '-31 and '-32 ensure on-going compliance:

- The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ]

*§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?*

Section (a) states that you must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

Section (b) states during the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

Section (c) states that you must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

The engines under permits N-593-27 through '-29, '-31 and '-32 are not subject to the items in Tables 1b, 2b and 5 of this subpart. Therefore, no further discussion is required.

*§63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?*

- (a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

The engines under permits N-593-27 through '-29, '-31 and '-32 are not subject to emission limitation or operating limitation. They are subject to work or management practices (item 9, Table 6). The following requirement in section 63.6625 (discussed above) will ensure on-going compliance with this section:

- The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ]
- (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

The engines under permits N-593-27 through '-29, '-31 and '-32 are not subject to emission limitation in Table 2d or operating limitation in Table 2b. Therefore, no further discussion is required.

- (c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to requirements in (c)(1) through (c)(7).

The engines under permits N-593-27 through '-29, '-31 and '-32 are emergency RICE. Therefore, this section does not apply.

- (d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

The engines under permits N-593-27 through '-29, '-31 and '-32 are not subject to emission limitation in Table 2d or operating limitation in Table 2b. Therefore, no further discussion is required.

- (e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions' (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

The engines under permits N-593-27 through '-29, '-31 and '-32 are existing engines located at area source for HAPs; therefore, the above section does not apply.

- (f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an

emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Operation of each engine (N-593-27 through '-29, '-31 and '-32) for maintenance, testing, and required regulatory purposes is limited to 100 hours per calendar year, or less. Therefore, compliance is expected with the above sections.

*§63.6645 What notifications must I submit and when?*

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following:

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

- (2) An existing stationary RICE located at an area source of HAP emissions.
- (3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.
- (5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

§§63.7(b) and (c) covers notification of performance test and quality assurance program, 63.8(e) covers performance evaluation of continuous monitoring systems, (f)(4) covers the use of alternative monitoring procedures and (f)(6) covers alternative to the relative accuracy test, 63.9(b) through (e) covers initial notifications when a source becomes subject to a relevant standard (i.e., The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard or within 120 calendar days after the source becomes subject to the relevant standard), 63.9 (g) covers additional notification requirements for sources with continuous monitoring systems, and 63.9(h) covers notification of compliance status.

The engines under permits N-593-27 through '-29, '-31 and '-32 are not subject to emissions or operating limitations in this subpart. However, they are subject to the other management practices in this subpart, and are expected to comply with the requirements of this subpart.

*§63.6650 What reports must I submit and when?*

- (a) You must submit each report in Table 7 of this subpart that applies to you.
- (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.
- (c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.
- (d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

- (e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.
- (f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.
- (g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.
- (h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

Table 7 of this subpart does not have a category for the engines under permits N-593-27 through '-29, '-31 and '-32. Additionally, the units are not subject to emissions or operating limitations in this subpart.

*§63.6655 What records must I keep?*

Section (e) states that you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE:

- (1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
- (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

The following condition will be included in permits N-593-27 through '-29, '-31 and '-32:

- The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ]

*§63.6660 In what form and how long must I keep my records?*

- (a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

The following condition(s) in permits N-593-27 through '-29, '-31 and '-32 ensure on-going compliance.

- 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 Rules 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ]

Compliance is expected with this subpart.

**40 CFR Part 64, Compliance Assurance Monitoring (CAM)**

40 CFR Part 64 requires CAM for units that meet the following three criteria:

1. Unit must have an emission limit for the pollutant;
2. Unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), SCR system, baghouses, and thermal/catalytic oxidizers; and
3. Unit must have a pre-control potential to emit of greater than the major source thresholds given below:

|                    |               |
|--------------------|---------------|
| NO <sub>x</sub> :  | 20,000 lb/yr  |
| SO <sub>x</sub> :  | 140,000 lb/yr |
| PM <sub>10</sub> : | 140,000 lb/yr |
| CO:                | 200,000 lb/yr |
| VOC:               | 20,000 lb/yr  |

**N-593-2-10, '-11-10, '-37-4, '-38-4, '-39-4, '-40-4, and '-41-4: Hot End Surface Treatment Systems Served by a Shared Baghouse**

These units share a baghouse that controls PM<sub>10</sub> emissions. The maximum product throughput for the six systems is 8.91 lb of monobutyltin trichloride (MBTT) per hour and the controlled PM<sub>10</sub> emission factor is 0.01107 lb-PM<sub>10</sub>/lb-MBTT. A baghouse control efficiency of 99% is assumed. Using these values, the combined uncontrolled emission rate from the six hot end surface treatment systems is:

$$\begin{aligned}\text{PE (uncontrolled)} &= (8.91 \text{ lb-MBTT/hr})(0.01107 \text{ lb-PM}_{10}\text{/lb-MBTT})(8760 \text{ hr/yr})/(1-0.99) \\ &= 86,403 \text{ lb-PM}_{10}\text{/year}\end{aligned}$$

Since the uncontrolled emission rate is less than the major source threshold of 140,000 lb/year for PM<sub>10</sub>, CAM is not triggered for these units.

**N-593-3-5: Batch Constituents Handling System: Raw Material Unloading Hopper, Conveying, Weighing, and Mixing served by a Baghouse.**

This unit is not subject to CAM since the permit does not include an emission limit for PM<sub>10</sub>, which is the only pollutant emitted by this unit.

**N-593-4-5: Batch Constituents Handling System: New Minor Ingredients System Served by a Baghouse**

This unit is not subject to CAM since the permit does not include an emission limit for PM<sub>10</sub>, which is the only pollutant emitted by this unit.

N-593-5-5: Batch Constituents Handling System: Cullet Crushing, Elevating, and Blending

This unit is not subject to CAM since the permit does not include an emission limit for PM<sub>10</sub>, which is the only pollutant emitted by this unit.

N-593-6-5: Batch Constituents Handling System: Batch Distribution and Conveying to Furnace #22-C Served by a Baghouse

This unit is not subject to CAM since the permit does not include an emission limit for PM<sub>10</sub>, which is the only pollutant emitted by this unit.

N-593-7-5: Batch Constituents Handling System: Batch Distribution and Conveying to Furnace #22-A Served by a Baghouse

This unit is not subject to CAM since the permit does not include an emission limit for PM<sub>10</sub>, which is the only pollutant emitted by this unit.

N-593-8-5: Batch Constituents Handling System: Batch Distribution and Conveying to Furnace #22-B Served by a Baghouse

This unit is not subject to CAM since the permit does not include an emission limit for PM<sub>10</sub>, which is the only pollutant emitted by this unit.

N-593-10-17: 60 MMBtu/hr Glass Melting Furnace #22-C With A Custom GEA Bischoff Inc. Dry Sox Scrubber, A GEA Bischoff Model BS 780 10 / 5.0 / 2 X 11 / 0.4 Electrostatic Precipitator, A 10 MMBtu/hr Duct Burner System (Or Equivalent), A GEA Process Engineering Selective Catalytic Reduction System, And An Electrostatic Precipitator Dust Handling System Consisting Of A 153 Cubic Foot Storage Silo And A 190 Cubic Foot Storage Silo, Each With A Met-Pro Corp Flex-Kleen Bin Vent Filter

NO<sub>x</sub>, SO<sub>x</sub>, CO

The furnace exhaust stack is equipped with continuous emissions monitoring system (CEMS) to monitor NO<sub>x</sub>, SO<sub>x</sub> and CO emissions. Therefore, CAM is not required for these pollutants.

PM<sub>10</sub>

The glass furnace is equipped with an electrostatic precipitator (ESP) to control PM<sub>10</sub> emissions. Further, the current permit to operate (PTO) limits, PM<sub>10</sub> emissions from the glass furnace (except during periods of startup, shutdown and idling) to 6.59 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled. The glass pull rate is limited to 417 tons/day and 146,000 tons/yr.

Presuming 99% reduction in PM<sub>10</sub> due to the use of ESP, the uncontrolled emissions would be:

$$\begin{aligned}\text{PE (uncontrolled)} &= (6.59 \text{ lb-PM}_{10}/\text{hr} \times 8,760 \text{ hr/yr}) \div (1-0.99) \\ &= 5,772,840 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

$$\begin{aligned}\text{PE (uncontrolled)} &= (0.5 \text{ lb-PM}_{10}/\text{ton of glass pulled} \times 146,000 \text{ tons/yr}) \div (1-0.99) \\ &= 7,300,000 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

Since the furnace is equipped with an ESP, permit has PM<sub>10</sub> emission limit, and uncontrolled PM<sub>10</sub> are greater than major source threshold of 140,000 lb/yr for PM<sub>10</sub>, CAM is required for PM<sub>10</sub>.

Current PTO requires the permittee to install, operate and maintain a continuous monitoring and recording system to accurately measure and record the ESP secondary current and secondary voltage. The data will be used to calculate average daily total power input to the ESP, which is required to be compared with the average daily total power input to the ESP for which compliance with the permitted PM<sub>10</sub> has been demonstrated. Reference to 40 CFR Part 64 is being added to the existing requirements.

- The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354 and 40 CFR Part 64]
- The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64]
- The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM<sub>10</sub> limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM<sub>10</sub> limit has been demonstrated, the permittee shall conduct a certified PM<sub>10</sub> source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM<sub>10</sub> source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354 and 40 CFR Part 64]
- The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic

precipitator daily total power input established during the source test that showed compliance with the PM<sub>10</sub> emission limit of this permit. [District Rule 4354 and 40 CFR Part 64]

Note that post-control PM<sub>10</sub> potential emissions are below the Major Source threshold for PM<sub>10</sub> emissions; therefore, daily monitoring is sufficient.

Dust from ESP system is collected in two silos each equipped with its own bin vent filtration system. The current PTO limits PM<sub>10</sub> emissions from each silo to 0.00034 lb/ton of dust conveyed. Further, the dust process rate for each silo is limited to 1.81 tons/day. Presuming 99% control efficiency for the bin filtration system, the uncontrolled PM<sub>10</sub> emissions would be:

$$\begin{aligned}\text{PE (Uncontrolled, each silo)} &= 0.00034 \text{ lb/ton} \times 1.81 \text{ tons/day} \times 365 \text{ days/yr} \times \\ &\quad 1/(1-0.99) \\ &= 22 \text{ lb/yr}\end{aligned}$$

Since the uncontrolled PM<sub>10</sub> emissions from each silo are less than the major source threshold of 140,000 lb/yr for PM<sub>10</sub> emissions, these units are not subject CAM requirements.

VOC:

This furnace is not equipped with an add-on control device to reduce VOC emissions. Therefore, CAM is not required.

N-593-12-15: 36 MMBtu/Hr Glass Melting Furnace #22-A, With An Optional Oxygen-Enriched Air Staging System (Use Of This System Is Optional), A Custom Gea Bischoff Inc. Dry Sox Scrubber, A Gea Bischoff Model BS 780 10 / 5.0 / 2 X 7 / 0.4 Electrostatic Precipitator, A 10 MMBtu/Hr Duct Burner System (Or Equivalent), A Gea Process Engineering Selective Catalytic Reduction System, And An Electrostatic Precipitator Dust Handling System Consisting Of A 153 Cubic Foot Storage Silo And A 190 Cubic Foot Storage Silo, Each With A Met-Pro Corp Flex-Kleen Bin Vent Filter (Or Equivalent)

NO<sub>x</sub>, SO<sub>x</sub>, CO

The furnace exhaust stack is equipped with continuous emissions monitoring system (CEMS) to monitor NO<sub>x</sub>, SO<sub>x</sub> and CO emissions. Therefore, CAM is not required for these pollutants.

PM<sub>10</sub>

The glass furnace is equipped with an electrostatic precipitator (ESP) to control PM<sub>10</sub> emissions. Further, the current permit to operate (PTO) limits, PM<sub>10</sub> emissions from the glass furnace (except during periods of startup, shutdown and idling) to 3.78 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled. The glass pull rate is limited to 250 tons/day and 87,235 tons/yr.

Presuming 99% reduction in PM<sub>10</sub> due to the use of ESP, the uncontrolled emissions would be:

$$\begin{aligned}\text{PE (uncontrolled)} &= (3.78 \text{ lb-PM}_{10}/\text{hr} \times 8,760 \text{ hr/yr}) \div (1-0.99) \\ &= 3,311,280 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

$$\begin{aligned}\text{PE (uncontrolled)} &= (0.5 \text{ lb-PM}_{10}/\text{ton of glass pulled} \times 87,235 \text{ tons/yr}) \div (1-0.99) \\ &= 4,361,750 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

Since the furnace is equipped with an ESP, permit has PM<sub>10</sub> emission limit, and uncontrolled PM<sub>10</sub> are greater than major source threshold of 140,000 lb/yr for PM<sub>10</sub>, CAM is required for PM<sub>10</sub>.

Current PTO requires the permittee to install, operate and maintain a continuous monitoring and recording system to accurately measure and record the ESP secondary current and secondary voltage. The data will be used to calculate average daily total power input to the ESP, which is required to be compared with the average daily total power input into the ESP for which compliance with the permitted PM<sub>10</sub> has been demonstrated. Reference to 40 CFR Part 64 is being added to these requirements, as shown, under the CAM discussion for permit N-593-10.

Note that post-control PM<sub>10</sub> potential emissions are below the Major Source threshold for PM<sub>10</sub> emissions; therefore, daily monitoring is sufficient.

Dust from ESP system is collected in two silos each equipped with its own bin vent filtration system. The current PTO limits PM<sub>10</sub> emissions from each silo to 0.00034 lb/ton of dust conveyed. Further, the dust process rate for each silo is limited to 1.23 tons/day. Presuming 99% control efficiency for the bin filtration system, the uncontrolled PM<sub>10</sub> emissions would be:

$$\begin{aligned}\text{PE (Uncontrolled, each silo)} &= 0.00034 \text{ lb/ton} \times 1.23 \text{ tons/day} \times 365 \text{ days/yr} \times \\ &\quad 1/(1-0.99) \\ &= 15 \text{ lb/yr}\end{aligned}$$

Since the uncontrolled PM<sub>10</sub> emissions from each silo are less than the major source threshold of 140,000 lb/yr for PM<sub>10</sub> emissions, these units are not subject CAM requirements.

VOC:

This furnace is not equipped with an add-on control device to reduce VOC emissions. Therefore, CAM is not required.

N-593-13-13: 67 MMBtu/Hr Glass Melting Furnace #22-B With An Oxygen-Enriched Air Staging System (Use Of This System Is Optional), A Custom Gea Bischoff Inc. Dry Sox Scrubber, A Gea Bischoff Model BS 780 10 / 5.0 / 2 X 11 / 0.4 Electrostatic Precipitator, A 10 MMBtu/Hr Duct Burner System (Or Equivalent), A Gea Process Engineering Selective Catalytic Reduction System, And An Electrostatic Precipitator Dust Handling System Consisting Of A 153 Cubic Foot Storage Silo And A 190 Cubic Foot Storage Silo, Each With A Met-Pro Corp Flex-Kleen Bin Vent Filter (Or Equivalent)

NO<sub>x</sub>, SO<sub>x</sub>, CO

The furnace exhaust stack is equipped with continuous emissions monitoring system (CEMS) to monitor NO<sub>x</sub>, SO<sub>x</sub> and CO emissions. Therefore, CAM is not required for these pollutants.

PM<sub>10</sub>

The glass furnace is equipped with an electrostatic precipitator (ESP) to control PM<sub>10</sub> emissions. Further, the current permit to operate (PTO) limits, PM<sub>10</sub> emissions from the glass furnace (except during periods of startup, shutdown and idling) to 5.38 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled. The glass pull rate is limited to 340 tons/day and 124,100 tons/yr.

Presuming 99% reduction in PM<sub>10</sub> due to the use of ESP, the uncontrolled emissions would be:

$$\begin{aligned}\text{PE (uncontrolled)} &= (5.38 \text{ lb-PM}_{10}/\text{hr} \times 8,760 \text{ hr/yr}) \div (1-0.99) \\ &= 4,712,880 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

$$\begin{aligned}\text{PE (uncontrolled)} &= (0.5 \text{ lb-PM}_{10}/\text{ton of glass pulled} \times 124,100 \text{ tons/yr}) \div (1-0.99) \\ &= 6,205,000 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

Since the furnace is equipped with an ESP, permit has PM<sub>10</sub> emission limit, and uncontrolled PM<sub>10</sub> are greater than major source threshold of 140,000 lb/yr for PM<sub>10</sub>, CAM is required for PM<sub>10</sub>.

Current PTO requires the permittee to install, operate and maintain a continuous monitoring and recording system to accurately measure and record the ESP secondary current and secondary voltage. The data will be used to calculate average daily total power input to the ESP, which is required to be compared with the average daily total power input into the ESP for which compliance with the permitted PM<sub>10</sub> has been demonstrated. Reference to 40 CFR Part 64 is being added to these requirements, as shown, under the CAM discussion for permit N-593-10.

Note that post-control PM<sub>10</sub> potential emissions are below the Major Source threshold for PM<sub>10</sub> emissions; therefore, daily monitoring is sufficient.

Dust from ESP system is collected in two silos each equipped with its own bin vent filtration system. The current PTO limits PM<sub>10</sub> emissions from each silo to 0.00034 lb/ton of dust conveyed. Further, the dust process rate for each silo is limited to 1.64 tons/day. Presuming 99% control efficiency for the bin filtration system, the uncontrolled PM<sub>10</sub> emissions would be:

$$\begin{aligned}\text{PE (Uncontrolled, each silo)} &= 0.00034 \text{ lb/ton} \times 1.64 \text{ tons/day} \times 365 \text{ days/yr} \times \\ &\quad 1/(1-0.99) \\ &= 20 \text{ lb/yr}\end{aligned}$$

Since the uncontrolled PM<sub>10</sub> emissions from each silo are less than the major source threshold for PM<sub>10</sub> emissions, these units are not subject CAM requirements.

**VOC:**

This furnace is not equipped with an add-on control device to reduce VOC emissions. Therefore, CAM is not required.

N-593-20-5, '-21-5, and '-22-5: Storage Silos Served by a Baghouse

These units are not subject to CAM since the permits do not include an emission limit for PM<sub>10</sub>, which is the only pollutant emitted by these units.

N-593-27-6: 240 BHP Caterpillar Model #3306B Diesel-Fired Emergency Standby IC Engine Powering a 150 kW Electrical Generator

This permit only includes emission limits for NO<sub>x</sub> and SO<sub>x</sub>. The engine is not equipped with a NO<sub>x</sub> control device or SO<sub>x</sub> control device; therefore, CAM is not triggered for this unit.

N-593-28-6: 380 BHP Caterpillar Model #3406 DIT Diesel-Fired Emergency Standby IC Engine Powering a 260 kW Electrical Generator

This permit only includes emission limits for NO<sub>x</sub> and SO<sub>x</sub>. The engine is not equipped with a NO<sub>x</sub> control device or SO<sub>x</sub> control device; therefore, CAM is not triggered for this unit.

N-593-29-6: 534 BHP Caterpillar Model #3406 DITA Diesel-Fired Emergency Standby IC Engine Powering a 350 kW Electrical Generator

This permit only includes emission limits for NO<sub>x</sub> and SO<sub>x</sub>. The engine is not equipped with a NO<sub>x</sub> control device or SO<sub>x</sub> control device; therefore, CAM is not triggered for this unit.

N-593-31-6: 136 BHP Cummins Model #V-378-F2 Diesel-Fired Emergency IC Engine Powering a Firewater Pump

This permit only include emission limit for SOx. The engine is not equipped with a SOx control device; therefore, CAM is not triggered for this unit.

N-593-32-6: 185 BHP Caterpillar Model #3208 DINA Diesel-Fired Emergency IC Engine Powering a Firewater Pump

This permit only include emission limit for SOx. The engine is not equipped with a SOx control device; therefore, CAM is not triggered for this unit.

N-593-36-4: Iron Chromite Pre-Mix System for Furnace #22-A Including an Iron Chromite Bulk Bag Unloader Served by a Nol-Tec Model #350 Dust Collector, Hopper, Mixer, Staging Hopper, Flexible Screw Feeder, Transporter, Air Injectors, and Receiving Hopper Served by a Nol-Tec Model #84-NT-16 Baghouse, Scale and Supporting Valves

The iron chromite bulk bag unloader is served by a dust collector that controls PM10 emissions. The maximum iron chromite throughput for this system is 2.1 tons/day and the controlled PM10 emission factor is 0.00024 lb-PM10/ton. A baghouse control efficiency of 99% is assumed. Using these values, the uncontrolled emission rate for this system is:

$$\begin{aligned}\text{PE (uncontrolled)} &= (2.1 \text{ tons/day} \times 0.00024 \text{ lb-PM}_{10}/\text{ton} \times 365 \text{ days/year}) \div (1-0.99) \\ &= 18 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

The other emission units listed on this permit are served by a dust collector that controls PM10 emissions. The maximum iron chromite throughput for this system is 2.1 tons/day and the controlled PM10 emission factor is 0.0049 lb-PM10/ton. A baghouse control efficiency of 99% is assumed. Using these values, the uncontrolled emission rate for this system is:

$$\begin{aligned}\text{PE (uncontrolled)} &= (2.1 \text{ tons/day} \times 0.0049 \text{ lb-PM}_{10}/\text{ton} \times 365 \text{ days/year}) \div (1-0.99) \\ &= 376 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

Since the uncontrolled PM10 emission rate is less than the threshold of 140,000 lb/yr for both units, CAM is not triggered for these units.

Note that the existing permit N-593-36-3, Conditions 16 through 19 (shown below), were established during Title V renewal under project N-1070244 based on the erroneous pre-control calculation of emissions. Therefore, these requirements has been removed from the permit:

- ~~When operated visible emissions from the baghouse controlling the iron chromite pre-mix system shall be checked and the results recorded daily. If visible emissions are observed, corrective action is required prior to further~~

~~operation of the equipment. Corrective action means that visible emissions are eliminated before operation of the equipment is resumed. If visible emissions cannot be corrected within 24 hours, a visible emissions test shall be conducted by a trained observer using EPA method 9 within 72 hours. A record of the results of these observations shall be maintained. Such records shall include the observer's name and affiliation, the date, time, sky condition, and the observer's location relative to the source. [40 CFR Part 64]~~

- ~~• The permittee shall maintain daily records of the differential pressure across the baghouse filter. [40 CFR 64.9]~~
- ~~• The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9]~~
- ~~• If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64.8]~~

N-593-42-5: Trona/Dry Reagent Receiving and Storage Operation with a 2800 Cubic Foot Storage Silo Served by a Met-Pro Corp Flex-Kleen Vent Filter

The trona receiving and storage operation is served by a vent filter that controls PM<sub>10</sub> emissions. The maximum throughput for this system is 120 tons/day and the controlled PM<sub>10</sub> emission factor is 0.00034 lb-PM<sub>10</sub>/ton. A baghouse control efficiency of 99% is assumed. Using these values, the uncontrolled emission rate for this system is:

$$\begin{aligned} \text{PE (uncontrolled)} &= 120 \text{ tons/day} \times 0.00034 \text{ lb-PM}_{10}/\text{ton} \times 365 \text{ days/year} \div (1-0.99) \\ &= 1,489 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

Since the uncontrolled PM<sub>10</sub> emission rate is less than the threshold of 140,000 lb/year, CAM is not triggered for this unit.

N-593-43-3: Fully Enclosed Iron Chromite Material Handling System Consisting of one 65 CU FT Storage Bin Controlled by a Flex-Kleen Baghouse Dust Collector, One Weigh Screw Feeder, One Weigh Hopper with Load Cells, One Covered Metering Vibratory Feeder, and Air Conveyance Lines

This operation is served by a dust collector that controls PM<sub>10</sub> emissions. Pursuant to District Project N-1102902, the controlled PM<sub>10</sub> emission rate is 0.00007 lb-PM<sub>10</sub>/day and the dust collector efficiency is assumed to be 99%. Using this data, the uncontrolled PM<sub>10</sub> emission rate is:

$$\begin{aligned} \text{PE (uncontrolled)} &= 0.00007 \text{ lb-PM}_{10}/\text{day} \times 365 \text{ days/year} \div (1-0.99) \\ &= 3 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

Since the uncontrolled PM<sub>10</sub> emission rate is less than the threshold of 140,000 lb/year, CAM is not triggered for this unit.

## **IX. PERMIT SHIELD**

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

### **A. Requirements Addressed by Model General Permit Templates**

By using the model general permit template(s) listed in Section IV of this evaluation, the applicant has requested that a permit shield be issued for requirements addressed in the template(s). The basis for each permit shield is discussed in the Permit Shield section of each template.

### **B. Requirements not Addressed by Model General Permit Templates**

The applicant has not requested any new permit shields. Therefore, no further discussion is necessary.

## **X. CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements.

Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, a Title V permit renewal, is subject to a ministerial action that is exempt from CEQA.

## XI. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit. Note that during this project, the following changes were made to the equipment description of permits N-593-12 and '-13.

### N-593-12-15:

The equipment description of this permit has been revised. As part of project N-1121347 (ATC N-593-12-14), Owens Brockway was authorized to install a 10 MMBtu/hr duct burner system (or equivalent system). This system was to maintain proper temperature across the selective catalytic reduction (SCR) system. This duct burner was not listed in the equipment description. This appears to be a mistake on District's part, and is being corrected under this project. The equipment description will be stated in the following manner:

36 MMBTU/HR GLASS MELTING FURNACE #22-A, WITH AN OPTIONAL OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL), A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 7 / 0.4 ELECTROSTATIC PRECIPITATOR, **A 10 MMBTU/HR DUCT BURNER SYSTEM (OR EQUIVALENT)**, A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

### N-593-13-13:

The equipment description of this permit has been revised. Owens Brockway was authorized to install a 10 MMBtu/hr duct burner system (or equivalent). This system was to maintain proper temperature across the selective catalytic reduction (SCR) system. This duct burner was not listed in the equipment description. This appears to be a mistake on District's part, and is being corrected under this project. The equipment description will be stated in the following manner:

67 MMBTU/HR GLASS MELTING FURNACE #22-B WITH AN OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL), A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 11 / 0.4 ELECTROSTATIC PRECIPITATOR, **A 10 MMBTU/HR DUCT BURNER SYSTEM (OR EQUIVALENT)**, A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE

SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

## **XII. ATTACHMENTS**

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List

---

# ATTACHMENT A

Draft Renewed Title V Operating Permit

---

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-2-10

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD A1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-11, '-37, '-38, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-3-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: RAW MATERIAL UNLOADING HOPPER, CONVEYING, WEIGHING AND MIXING SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particle matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-4-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: NEW MINOR INGREDIENTS SYSTEM SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-5-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: CULLET CRUSHING, ELEVATING, AND BLENDING

## PERMIT UNIT REQUIREMENTS

---

1. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections.  
[District NSR Rule] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-6-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-C  
SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-7-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-A  
SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

13. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-8-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-B  
SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-10-17

**EXPIRATION DATE:** 07/31/2017

## **EQUIPMENT DESCRIPTION:**

60 MMBTU/HR GLASS MELTING FURNACE #22-C WITH A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 11 / 0.4 ELECTROSTATIC PRECIPITATOR, A 10 MMBTU/HR DUCT BURNER SYSTEM (OR EQUIVALENT), A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

## **PERMIT UNIT REQUIREMENTS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of the Federal Major Stationary Source permit shall at all times be maintained in good working order and be operated as efficiently as possible to minimize air pollutant emissions. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [San Joaquin County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
6. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The exhaust from the glass melting furnace shall be vented through an operational SOx scrubber and electrostatic precipitator, except during periods of furnace startup (when technologically infeasible), furnace idle (when technologically infeasible), and during add-on control system maintenance. Scheduled maintenance of add-on control system shall be accomplished during periods of furnace idling whenever possible. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
8. The emission limitations of District Rule 4354 shall not apply during periods of start-up, shutdown, and idling, as defined by District Rule 4354. The permittee shall notify the District at least 24 hours prior to initiating idling, shutdown, or start-up of the glass furnace and this notification shall include: The date and time of the start of the exempt operation, reason for performing the operation, and an estimated completion date. The permittee shall notify the District by telephone within 24 hours after completion of the operation and shall maintain operating records and/or support documentation necessary to claim exemption. [District Rule 4354] 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.

9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the amount as calculated using the following equation: NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, or PM<sub>10</sub> (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
16. The SO<sub>x</sub> and PM<sub>10</sub> emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
19. The glass pull rate shall not exceed 417 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
20. The glass pull rate shall not exceed 146,000 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The weight percent of cullet per batch shall not be less than 17.5%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
22. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 69.50 lb-NO<sub>x</sub>/hr and 4.0 lb-NO<sub>x</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
23. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 26.06 lb-NO<sub>x</sub>/hr and 1.5 lb-NO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
24. SO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 15.64 lb-SO<sub>x</sub>/hr and 0.9 lb-SO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O<sub>2</sub> or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O<sub>2</sub> or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
27. PM<sub>10</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 6.59 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
28. Particulate matter emissions shall not exceed 17.5 lb/hr. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
29. Ammonia emissions (NH<sub>3</sub>) shall not exceed 10 ppmvd @ 8% O<sub>2</sub>, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NO<sub>x</sub>/day, 300.0 lb-PM<sub>10</sub>/day, and 105.0 lb-filterable PM<sub>10</sub>/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
31. Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM<sub>10</sub>/year. [District NSR Rule] Federally Enforceable Through Title V Permit
32. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
33. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
34. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM<sub>10</sub> (lb/ton of glass pulled and lb/hr), SO<sub>x</sub> (lb/ton of glass pulled and lb/hr), and NO<sub>x</sub> (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
35. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
36. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

DRAFT  
PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

37. Performance testing shall be conducted using following test methods: (1) Oxides of Nitrogen: EPA Method 7E, EPA Method 19, or ARB Method 100; (2) Carbon Monoxide: EPA Method 10, or ARB Method 100; (3) VOC (ppmv): EPA Method 25A expressed in terms of carbon, or ARB Method 100, EPA Method 18 or ARB method 422 to determine emissions of exempt compounds; (4) Stack Gas Oxygen, Carbon Dioxide, Excess Air, and Dry Molecular Weight: EPA Method 3 or 3A, or ARB Method 100; (5) Oxides of Sulfur: EPA Method 6C, EPA Method 8, or ARB Method 100; (6) Filterable PM10: EPA Method 5, EPA Method 201, or EPA Method 201A. An operator choosing EPA Method 5 shall count all PM collected as PM10; (7) Condensible PM10: EPA Method 202 with the following procedures, (7a) Purge the impinger with dry nitrogen for one hour. The one hour purge with dry nitrogen shall be performed as soon as possible after the final leak check of the system, (7b) Neutralize the inorganic portion to a pH of 7.0. Use the procedure, "Determination of NH<sub>4</sub> Retained in Sample by Titration" described in Method 202 to neutralize sulfuric acid, (7c) Evaporate the last 1 ml of the inorganic fraction by air drying following evaporation of the bulk of the impinger water in a 105 degrees C oven as described in the first sentence of the Method 202 section titled "Inorganic Fraction Weight Determination". [District NSR Rule, Districts Rule 4354 and 2520, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
38. In lieu of performing a source test for PM10, the results of CARB Method 5 or EPA Methods 5 and 8 may be used for measuring PM10 emissions limit. If this option is used, then all of the particulate emissions will be considered to be PM10. [District NSR Rule] Federally Enforceable Through Title V Permit
39. Source testing to measure emissions when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. Once 100 hours of operation using LPG fuel is exceeded, a source test shall be performed within 90 days after the exceedance of 100 hours. [District Rule 1081] Federally Enforceable Through Title V Permit
40. For source testing purposes, arithmetic average of three 30-consecutive-minute test runs shall be used to determine compliance with NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> emission limits. [District Rules 2201, 4354, 6.4.4] Federally Enforceable Through Title V Permit
41. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM10 emission limits. [District Rule 4354, 6.4.5] Federally Enforceable Through Title V Permit
42. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the furnace, even if the averaged emissions of all three test runs is less than the applicable limit. [District Rule 4354] Federally Enforceable Through Title V Permit
43. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack NO<sub>x</sub>, SO<sub>x</sub>, CO, O<sub>2</sub> concentration (if required for compliance determination), and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2, 3, and 4, or shall meet equivalent specifications established by mutual agreement of the District, the California Air Resources Board, and EPA. The CEM systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4354] Federally Enforceable Through Title V Permit
44. The applicant shall install, maintain, and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, or shall meet equivalent specifications established by mutual consent of the District, the California Air Resources Board, and EPA. [District Rules 1080, 2201, and 4101] Federally Enforceable Through Title V Permit
45. The facility shall install and maintain equipment, facilities, and systems compatible with the Districts CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
46. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternate method. [District Rule 1080] Federally Enforceable Through Title V Permit
47. {2251} The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.

48. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
49. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
50. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
51. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
52. Any visible emission monitoring exceedance showing air contaminant 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 shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
53. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
54. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
55. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
56. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
57. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
58. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit

DRAFT  
PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

59. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
60. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
61. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
62. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
63. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
64. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
65. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
66. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
67. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
68. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
69. The throughput for each electrostatic precipitator dust silo shall not exceed 1.81 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
70. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
71. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. 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
72. The differential pressure gauge reading range for each bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
73. The differential operating pressure across each bin vent filter shall be monitored and recorded on each day that the unit 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.

74. Records of all maintenance of each bin vent filter, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
75. A log of daily process weight, wt% cullet per batch, electric boosting, fuel usage and other relevant operating parameters shall be kept on the premises and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2 and District NSR Rule] Federally Enforceable Through Title V Permit
76. During periods of electrostatic precipitator maintenance and furnace startup, the furnace visible emissions shall be recorded by CARB certified personnel during daylight hours using EPA Method 9 within 2 hours of electrostatic precipitator shutdown or bypass and at least three times a day. Each visible emissions evaluation shall be at least 4 hours apart. [District NSR Rule] Federally Enforceable Through Title V Permit
77. The applicant shall maintain accurate records of the time, date, cause (e.g. electrostatic precipitator maintenance, furnace startup, or furnace idle), and duration electrostatic precipitator is not in operation and result of any visible emissions testing during the period. Records shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
78. The permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, quantity of glass pulled, the NOx emission rate (in lb/ton of glass pulled), the CO emission rate (in lb/ton of glass pulled), and the SOx emission rate (in lb/ton of glass pulled). The permittee shall also maintain records of source tests, the acceptable range for each approved key system operating parameter as established by source testing, all instances of maintenance and repair, any malfunction, and records of all periods of idling, startup, or shutdown. All records shall be maintained on the premises for a period of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
79. Permittee shall keep a record of the rolling 12-month quantity of glass pulled. This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
80. Permittee shall keep a record of the combined daily NOx emissions (based on CEMs data), the combined daily PM10 emissions (based on annual source test results and daily production data), and the combined daily filterable PM10 emissions (based on annual source test results and daily production data), each in pounds, for furnaces N-593-10 (22-C), N-593-12 (22-A) and N-593-13 (22-B). [District Rule 2201] Federally Enforceable Through Title V Permit
81. Permittee shall keep a record of the combined rolling 12-month PM10 emissions for furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B). This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
82. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rules 4201 and 4202. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
83. The requirements of District Rule 4301 were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
84. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
85. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
86. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-11-10

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD C1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-37, '-38, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-12-15

**EXPIRATION DATE:** 07/31/2017

## **EQUIPMENT DESCRIPTION:**

36 MMBTU/HR GLASS MELTING FURNACE #22-A, WITH AN OPTIONAL OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL), A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 7 / 0.4 ELECTROSTATIC PRECIPITATOR, A 10 MMBTU/HR DUCT BURNER SYSTEM (OR EQUIVALENT), A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

## **PERMIT UNIT REQUIREMENTS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of the Federal Major Stationary Source permit shall at all times be maintained in good working order and be operated as efficiently as possible to minimize air pollutant emissions. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [San Joaquin County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
6. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The exhaust from the glass melting furnace shall be vented through an operational SOx scrubber and electrostatic precipitator, except during periods of furnace startup (when technologically infeasible), furnace idle (when technologically infeasible), and during add-on control system maintenance. Scheduled maintenance of add-on control system shall be accomplished during periods of furnace idling whenever possible. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
8. The emission limitations of District Rule 4354 shall not apply during periods of start-up, shutdown, and idling, as defined by District Rule 4354. The permittee shall notify the District at least 24 hours prior to initiating idling, shutdown, or start-up of the glass furnace and this notification shall include: The date and time of the start of the exempt operation, reason for performing the operation, and an estimated completion date. The permittee shall notify the District by telephone within 24 hours after completion of the operation and shall maintain operating records and/or support documentation necessary to claim exemption. [District Rule 4354] 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.

9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the amount as calculated using the following equation: NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, or PM<sub>10</sub> (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
16. The SO<sub>x</sub> and PM<sub>10</sub> emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
19. The glass pull rate shall not exceed 250 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
20. The glass pull rate shall not exceed 87,235 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The weight percent of cullet per batch shall not be less than 13.6%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
22. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 41.67 lb-NO<sub>x</sub>/hr and 4.0 lb-NO<sub>x</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
23. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 15.63 lb-NO<sub>x</sub>/hr and 1.5 lb-NO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
24. SO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 9.38 lb-SO<sub>x</sub>/hr and 0.9 lb-SO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O<sub>2</sub> or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O<sub>2</sub> or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
27. PM<sub>10</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 3.78 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
28. Ammonia emissions (NH<sub>3</sub>) shall not exceed 10 ppmvd @ 8% O<sub>2</sub>, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NO<sub>x</sub>/day, 300.0 lb-PM<sub>10</sub>/day, and 105.0 lb-filterable PM<sub>10</sub>/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
30. Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM<sub>10</sub>/year. [District NSR Rule] Federally Enforceable Through Title V Permit
31. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM<sub>10</sub> (lb/ton of glass pulled and lb/hr), SO<sub>x</sub> (lb/ton of glass pulled and lb/hr), and NO<sub>x</sub> (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
34. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
35. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. Performance testing shall be conducted using following test methods: (1) Oxides of Nitrogen: EPA Method 7E, EPA Method 19, or ARB Method 100; (2) Carbon Monoxide: EPA Method 10, or ARB Method 100; (3) VOC (ppmv): EPA Method 25A expressed in terms of carbon, or ARB Method 100, EPA Method 18 or ARB method 422 to determine emissions of exempt compounds; (4) Stack Gas Oxygen, Carbon Dioxide, Excess Air, and Dry Molecular Weight: EPA Method 3 or 3A, or ARB Method 100; (5) Oxides of Sulfur: EPA Method 6C, EPA Method 8, or ARB Method 100; (6) Filterable PM10: EPA Method 5, EPA Method 201, or EPA Method 201A. An operator choosing EPA Method 5 shall count all PM collected as PM10; (7) Condensible PM10: EPA Method 202 with the following procedures, (7a) Purge the impinger with dry nitrogen for one hour. The one hour purge with dry nitrogen shall be performed as soon as possible after the final leak check of the system, (7b) Neutralize the inorganic portion to a pH of 7.0. Use the procedure, "Determination of NH<sub>4</sub> Retained in Sample by Titration" described in Method 202 to neutralize sulfuric acid, (7c) Evaporate the last 1 ml of the inorganic fraction by air drying following evaporation of the bulk of the impinger water in a 105 degrees C oven as described in the first sentence of the Method 202 section titled "Inorganic Fraction Weight Determination". [District NSR Rule, Districts Rule 4354 and 2520, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
37. In lieu of performing a source test for PM10, the results of CARB Method 5 or EPA Methods 5 and 8 may be used for measuring PM10 emissions limit. If this option is used, then all of the particulate emissions will be considered to be PM10. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Source testing to measure emissions when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. Once 100 hours of operation using LPG fuel is exceeded, a source test shall be performed within 90 days after the exceedance of 100 hours. [District Rule 1081] Federally Enforceable Through Title V Permit
39. For source testing purposes, arithmetic average of three 30-consecutive-minute test runs shall be used to determine compliance with NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> emission limits. [District Rules 2201, 4354, 6.4.4] Federally Enforceable Through Title V Permit
40. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM10 emission limits. [District Rule 4354, 6.4.5] Federally Enforceable Through Title V Permit
41. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the furnace, even if the averaged emissions of all three test runs is less than the applicable limit. [District Rule 4354] Federally Enforceable Through Title V Permit
42. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack NO<sub>x</sub>, SO<sub>x</sub>, CO, O<sub>2</sub> concentration (if required for compliance determination), and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2, 3, and 4, or shall meet equivalent specifications established by mutual agreement of the District, the California Air Resources Board, and EPA. The CEM systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4354] Federally Enforceable Through Title V Permit
43. The applicant shall install, maintain, and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, or shall meet equivalent specifications established by mutual consent of the District, the California Air Resources Board, and EPA. [District Rules 1080, 2201, and 4101] Federally Enforceable Through Title V Permit
44. The facility shall install and maintain equipment, facilities, and systems compatible with the Districts CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
45. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternate method. [District Rule 1080] Federally Enforceable Through Title V Permit
46. {2251} The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.

47. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
48. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
49. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
50. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
51. Any visible emission monitoring exceedance showing air contaminant 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 shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
52. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
53. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
54. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
55. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
56. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
57. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit

DRAFT  
PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

58. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
59. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
60. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
61. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
62. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
63. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
64. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
65. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
66. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
67. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
68. The throughput for each electrostatic precipitator dust silo shall not exceed 1.23 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
69. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
70. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. 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
71. The differential pressure gauge reading range for each bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
72. The differential operating pressure across each bin vent filter shall be monitored and recorded on each day that the unit 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.

73. Records of all maintenance of the bin vent filters, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
74. A log of daily process weight, wt% cullet per batch, electric boosting, fuel usage and other relevant operating parameters shall be kept on the premises and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2 and District NSR Rule] Federally Enforceable Through Title V Permit
75. During periods of electrostatic precipitator maintenance and furnace startup, the furnace visible emissions shall be recorded by CARB certified personnel during daylight hours using EPA Method 9 within 2 hours of electrostatic precipitator shutdown or bypass and at least three times a day. Each visible emissions evaluation shall be at least 4 hours apart. [District NSR Rule] Federally Enforceable Through Title V Permit
76. The applicant shall maintain accurate records of the time, date, cause (e.g. electrostatic precipitator maintenance, furnace startup, or furnace idle), and duration electrostatic precipitator is not in operation and result of any visible emissions testing during the period. Records shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
77. The permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, quantity of glass pulled, the NOx emission rate (in lb/ton of glass pulled), the CO emission rate (in lb/ton of glass pulled), and the SOx emission rate (in lb/ton of glass pulled). The permittee shall also maintain records of source tests, the acceptable range for each approved key system operating parameter as established by source testing, all instances of maintenance and repair, any malfunction, and records of all periods of idling, startup, or shutdown. All records shall be maintained on the premises for a period of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
78. Permittee shall keep a record of the rolling 12-month quantity of glass pulled. This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
79. Permittee shall keep a record of the combined daily NOx emissions (based on CEMs data), the combined daily PM10 emissions (based on annual source test results and daily production data), and the combined daily filterable PM10 emissions (based on annual source test results and daily production data), each in pounds, for furnaces N-593-10 (22-C), N-593-12 (22-A) and N-593-13 (22-B). [District Rule 2201] Federally Enforceable Through Title V Permit
80. Permittee shall keep a record of the combined rolling 12-month PM10 emissions for furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B). This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
81. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rules 4201 and 4202. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
82. The requirements of District Rule 4301 were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
83. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
84. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
85. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-13-13

**EXPIRATION DATE:** 07/31/2017

## **EQUIPMENT DESCRIPTION:**

67 MMBTU/HR GLASS MELTING FURNACE #22-B WITH AN OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL), A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 11 / 0.4 ELECTROSTATIC PRECIPITATOR, A 10 MMBTU/HR DUCT BURNER SYSTEM (OR EQUIVALENT), A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

## **PERMIT UNIT REQUIREMENTS**

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of the Federal Major Stationary Source permit shall at all times be maintained in good working order and be operated as efficiently as possible to minimize air pollutant emissions. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [San Joaquin County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
6. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The exhaust from the glass melting furnace shall be vented through an operational SOx scrubber and electrostatic precipitator, except during periods of furnace startup (when technologically infeasible), furnace idle (when technologically infeasible), and during add-on control system maintenance. Scheduled maintenance of add-on control system shall be accomplished during periods of furnace idling whenever possible. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
8. The emission limitations of District Rule 4354 shall not apply during periods of start-up, shutdown, and idling, as defined by District Rule 4354. The permittee shall notify the District at least 24 hours prior to initiating idling, shutdown, or start-up of the glass furnace and this notification shall include: The date and time of the start of the exempt operation, reason for performing the operation, and an estimated completion date. The permittee shall notify the District by telephone within 24 hours after completion of the operation and shall maintain operating records and/or support documentation necessary to claim exemption. [District Rule 4354] 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.

9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the amount as calculated using the following equation: NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, or PM<sub>10</sub> (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
16. The SO<sub>x</sub> and PM<sub>10</sub> emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
19. The glass pull rate shall not exceed 340 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
20. The glass pull rate shall not exceed 124,100 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The weight percent of cullet per batch shall not be less than 13.6%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
22. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 56.67 lb-NO<sub>x</sub>/hr and 4.0 lb-NO<sub>x</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
23. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 21.25 lb-NO<sub>x</sub>/hr and 1.5 lb-NO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
24. SO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 12.75 lb-SO<sub>x</sub>/hr and 0.9 lb-SO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

DRAFT  
PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O<sub>2</sub> or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O<sub>2</sub> or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
27. PM<sub>10</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 5.38 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
28. Ammonia emissions (NH<sub>3</sub>) shall not exceed 10 ppmvd @ 8% O<sub>2</sub>, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NO<sub>x</sub>/day, 300.0 lb-PM<sub>10</sub>/day, and 105.0 lb-filterable PM<sub>10</sub>/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
30. Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM<sub>10</sub>/year. [District NSR Rule] Federally Enforceable Through Title V Permit
31. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM<sub>10</sub> (lb/ton of glass pulled and lb/hr), SO<sub>x</sub> (lb/ton of glass pulled and lb/hr), and NO<sub>x</sub> (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
34. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
35. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. Performance testing shall be conducted using following test methods: (1) Oxides of Nitrogen: EPA Method 7E, EPA Method 19, or ARB Method 100; (2) Carbon Monoxide: EPA Method 10, or ARB Method 100; (3) VOC (ppmv): EPA Method 25A expressed in terms of carbon, or ARB Method 100, EPA Method 18 or ARB method 422 to determine emissions of exempt compounds; (4) Stack Gas Oxygen, Carbon Dioxide, Excess Air, and Dry Molecular Weight: EPA Method 3 or 3A, or ARB Method 100; (5) Oxides of Sulfur: EPA Method 6C, EPA Method 8, or ARB Method 100; (6) Filterable PM10: EPA Method 5, EPA Method 201, or EPA Method 201A. An operator choosing EPA Method 5 shall count all PM collected as PM10; (7) Condensible PM10: EPA Method 202 with the following procedures, (7a) Purge the impinger with dry nitrogen for one hour. The one hour purge with dry nitrogen shall be performed as soon as possible after the final leak check of the system, (7b) Neutralize the inorganic portion to a pH of 7.0. Use the procedure, "Determination of NH4 Retained in Sample by Titration" described in Method 202 to neutralize sulfuric acid, (7c) Evaporate the last 1 ml of the inorganic fraction by air drying following evaporation of the bulk of the impinger water in a 105 degrees C oven as described in the first sentence of the Method 202 section titled "Inorganic Fraction Weight Determination". [District NSR Rule, Districts Rule 4354 and 2520, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
37. In lieu of performing a source test for PM10, the results of CARB Method 5 or EPA Methods 5 and 8 may be used for measuring PM10 emissions limit. If this option is used, then all of the particulate emissions will be considered to be PM10. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Source testing to measure emissions when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. Once 100 hours of operation using LPG fuel is exceeded, a source test shall be performed within 90 days after the exceedance of 100 hours. [District Rule 1081] Federally Enforceable Through Title V Permit
39. For source testing purposes, arithmetic average of three 30-consecutive-minute test runs shall be used to determine compliance with NOx, CO, VOC, and SOx emission limits. [District Rules 2201, 4354, 6.4.4] Federally Enforceable Through Title V Permit
40. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM10 emission limits. [District Rule 4354, 6.4.5] Federally Enforceable Through Title V Permit
41. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the furnace, even if the averaged emissions of all three test runs is less than the applicable limit. [District Rule 4354] Federally Enforceable Through Title V Permit
42. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack NOx, SOx, CO, O2 concentration (if required for compliance determination), and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2, 3, and 4, or shall meet equivalent specifications established by mutual agreement of the District, the California Air Resources Board, and EPA. The CEM systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4354] Federally Enforceable Through Title V Permit
43. The applicant shall install, maintain, and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, or shall meet equivalent specifications established by mutual consent of the District, the California Air Resources Board, and EPA. [District Rules 1080, 2201, and 4101] Federally Enforceable Through Title V Permit
44. The facility shall install and maintain equipment, facilities, and systems compatible with the Districts CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
45. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternate method. [District Rule 1080] Federally Enforceable Through Title V Permit
46. {2251} The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.

47. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
48. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
49. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
50. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
51. Any visible emission monitoring exceedance showing air contaminant 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 shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
52. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
53. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
54. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
55. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
56. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
57. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit

DRAFT  
PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

58. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
59. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
60. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
61. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
62. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
63. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
64. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
65. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
66. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
67. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
68. The throughput for each electrostatic precipitator dust silo shall not exceed 1.64 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
69. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
70. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. 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
71. The differential pressure gauge reading range for each bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
72. The differential operating pressure across each bin vent filter shall be monitored and recorded on each day that the unit 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.

73. Records of all maintenance of each bin vent filter, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
74. A log of daily process weight, wt% cullet per batch, electric boosting, fuel usage and other relevant operating parameters shall be kept on the premises and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2 and District NSR Rule] Federally Enforceable Through Title V Permit
75. During periods of electrostatic precipitator maintenance and furnace startup, the furnace visible emissions shall be recorded by CARB certified personnel during daylight hours using EPA Method 9 within 2 hours of electrostatic precipitator shutdown or bypass and at least three times a day. Each visible emissions evaluation shall be at least 4 hours apart. [District NSR Rule] Federally Enforceable Through Title V Permit
76. The applicant shall maintain accurate records of the time, date, cause (e.g. electrostatic precipitator maintenance, furnace startup, or furnace idle), and duration electrostatic precipitator is not in operation and result of any visible emissions testing during the period. Records shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
77. The permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, quantity of glass pulled, the NOx emission rate (in lb/ton of glass pulled), the CO emission rate (in lb/ton of glass pulled), and the SOx emission rate (in lb/ton of glass pulled). The permittee shall also maintain records of source tests, the acceptable range for each approved key system operating parameter as established by source testing, all instances of maintenance and repair, any malfunction, and records of all periods of idling, startup, or shutdown. All records shall be maintained on the premises for a period of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
78. Permittee shall keep a record of the rolling 12-month quantity of glass pulled. This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
79. Permittee shall keep a record of the combined daily NOx emissions (based on CEMs data), the combined daily PM10 emissions (based on annual source test results and daily production data), and the combined daily filterable PM10 emissions (based on annual source test results and daily production data), each in pounds, for furnaces N-593-10 (22-C), N-593-12 (22-A) and N-593-13 (22-B). [District Rule 2201] Federally Enforceable Through Title V Permit
80. Permittee shall keep a record of the combined rolling 12-month PM10 emissions for furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B). This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
81. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rules 4201 and 4202. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
82. The requirements of District Rule 4301 were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
83. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
84. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
85. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-20-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

4,770 GAL CRUSHED CULLET STORAGE SILO #1 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #2 AND #3)

## PERMIT UNIT REQUIREMENTS

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

12. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-21-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

4,770 GAL CRUSHED CULLET STORAGE SILO #2 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #1 AND #3)

## PERMIT UNIT REQUIREMENTS

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

12. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-22-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

4,770 GAL CRUSHED CULLET STORAGE SILO #3 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #1 AND #2)

## PERMIT UNIT REQUIREMENTS

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

12. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-27-6

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

240 BHP CATERPILLAR MODEL #3306B DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 150 KW ELECTRICAL GENERATOR (A)

## PERMIT UNIT REQUIREMENTS

1. The NO<sub>x</sub> emission rate shall not exceed 10.0 grams/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 500 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's air filter shall be inspected every 1,000 hours of operation or annually, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's hoses and belts shall be inspected every 500 hours of operation or annually, whichever comes first, and replaced as necessary [40 CFR Part 63 Subpart ZZZZ] 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.

10. The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
15. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
17. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
18. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. 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 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-28-6

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

380 BHP CATERPILLAR MODEL #3406 DIT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 260 KW GENERATOR (B)

## PERMIT UNIT REQUIREMENTS

1. The NOx emission rate shall not exceed 10.0 grams/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 500 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's air filter shall be inspected every 1,000 hours of operation or annually, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's hoses and belts shall be inspected every 500 hours of operation or annually, whichever comes first, and replaced as necessary [40 CFR Part 63 Subpart ZZZZ] 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.

10. The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
15. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
17. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
18. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93155, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4703 and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. 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 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-29-6

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

534 BHP CATERPILLAR MODEL #3406 DITA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 350 KW ELECTRICAL GENERATOR (C)

## PERMIT UNIT REQUIREMENTS

1. The NOx emission rate shall not exceed 7.2 grams/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's oil and filter shall be changed every 500 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's air filter shall be inspected every 1,000 hours of operation or annually, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's hoses and belts shall be inspected every 500 hours of operation or annually, whichever comes first, and replaced as necessary [40 CFR Part 63 Subpart ZZZZ] 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.

10. The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
15. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
17. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
18. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. 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 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-31-6

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

136 BHP CUMMINS MODEL #V-378-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP  
(2)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. The engine's oil and filter shall be changed every 500 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's air filter shall be inspected every 1,000 hours of operation or annually, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's hoses and belts shall be inspected every 500 hours of operation or annually, whichever comes first, and replaced as necessary [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] 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.

10. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for maintenance and testing of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
15. 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 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-32-6

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

185 BHP CATERPILLAR MODEL #3208 DINA DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (3)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Part Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. The engine's oil and filter shall be changed every 500 hours of operation or annually, whichever comes first. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The engine's air filter shall be inspected every 1,000 hours of operation or annually, whichever comes first, and replaced as necessary. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's hoses and belts shall be inspected every 500 hours of operation or annually, whichever comes first, and replaced as necessary [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] 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.

10. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for maintenance and testing of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
15. 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 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

DRAFT

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-36-4

**EXPIRATION DATE:** 07/31/2017

## **EQUIPMENT DESCRIPTION:**

IRON CHROMITE PRE-MIX SYSTEM FOR FURNACE #22-A INCLUDING AN IRON CHROMITE BULK BAG UNLOADER SERVED BY NOL-TEC MODEL #350 DUST COLLECTOR, HOPPER, MIXER, STAGING HOPPER, FLEXIBLE SCREW FEEDER, TRANSPORTER, AIR INJECTORS, AND RECEIVING HOPPER SERVED BY A NOL-TEC MODEL #84-NT-16 BAGHOUSE, SCALE, AND SUPPORTING VALVES

## **PERMIT UNIT REQUIREMENTS**

1. There shall be no visible emissions from the baghouse. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Material removed from the dust collectors shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The baghouses cleaning frequency and duration shall be adjusted to optimize the control efficiency per manufacturer's recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOL-TEC Model 84-NT-16 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
5. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
8. Emissions from the NOL-TEC Model 350 baghouse shall not exceed 0.00024 lb-PM10 per ton of Iron Chromite throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from the NOL-TEC Model 84-NT-16 baghouse shall not exceed 0.0049 lb-PM10 per ton of Iron Chromite throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of Iron Chromite shall not exceed 2.10 ton per day (4,200 lb per day). [District Rule 2201] Federally Enforceable Through Title V Permit
11. The pre-mix amount of soda-ash and Iron Chromite shall not exceed 4.20 ton per day (8,400 lb/day). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily records of the Iron Chromite and soda ash throughput for the pre-mix shall be maintained, retained for at least five years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
13. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [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.

14. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2201] Federally Enforceable Through Title V Permit
16. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-37-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD A2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-38, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-38-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD B1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-39-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD B2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-38, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-40-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD C2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-38, '-39, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-593-41-4

EXPIRATION DATE: 07/31/2017

## EQUIPMENT DESCRIPTION:

HOT END SURFACE TREATMENT HOOD C3 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-38, '-39, AND '-40)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-42-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

TRONA/DRY REAGENT RECEIVING AND STORAGE OPERATION WITH A 2500 CUBIC FOOT STORAGE SILO SERVED BY A MET-PRO CORP FLEX-KLEEN VENT FILTER (OR EQUIVALENT)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Visible emissions from the exhaust of the bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All filters shall be properly maintained and must be in place during the receiving of trona/dry reagent. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The quantity of Trona/dry reagent delivered to the silo shall not exceed 120 tons in any one day. [District Rule 2201]
8. PM10 emissions from the Trona/dry reagent receiving operation shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall keep a record of the daily quantity of Trona/dry reagent delivered to the silo, in tons. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The bin vent filter 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
11. The differential pressure gauge reading range for the bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The differential operating pressure across the bin vent filter shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Records of all maintenance of the bin vent filter, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-43-3

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

FULLY ENCLOSED IRON CHROMITE MATERIAL HANDLING SYSTEM CONSISTING OF ONE 65 CU FT STORAGE BIN CONTROLLED BY A FLEX-KLEEN BAGHOUSE DUST COLLECTOR, ONE WEIGH SCREW FEEDER, ONE WEIGH HOPPER WITH LOAD CELLS, ONE COVERED METERING VIBRATORY FEEDER, AND AIR CONVEYANCE LINES

## PERMIT UNIT REQUIREMENTS

1. Visible emissions shall not exceed 5% opacity for a period of periods aggregating more than three minutes in any one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Material removed from the dust collector shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
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 4102]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
5. The dust collector shall be maintained and operated according to manufacturer's specifications. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The cleaning frequency and duration for the dust collector shall be adjusted to optimize the control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Replacement bags numbering at least 10% of the total number of bags in the dust collector shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The dust collector 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 differential pressure gauge reading range for the dust collector shall be established per manufacturer's recommendation at time of start up inspection. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The PM10 emissions from the dust collector shall not exceed 0.02 gr/dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Differential operating pressure for the dust collector shall be monitored and recorded on each day that the dust collector operates. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Records of all maintenance of the dust collector, including all change outs of filter media, shall be maintained. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Records of inspections and repair for the dust collector shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

---

# ATTACHMENT B

Previous Title V Operating Permit

---

# San Joaquin Valley Air Pollution Control District

FACILITY: N-593-0-4

EXPIRATION DATE: 07/31/2017

## FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (8/18/2011). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: OWENS-BROCKWAY GLASS CONTAINER  
Location: 14700 W SCHULTE ROAD, TRACY, CA 95376  
N-593-0-4 May 15 2018 7:34AM - KAHILONJ

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin July 15 every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
42. All correspondence as required by the Federal Major Stationary Source permit shall be forwarded to EPA at the following: Mailing address - Director, Air Division (Attn: Air-5), U. S. Environmental Protection Agency, Region IX, 75 Hawthorne Street San Francisco, CA 94105-3901; Email: R9.AEO@epa.gov; Facsimile: (415) 947-3579. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-2-9

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD A1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-11, '-37, '-38, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-3-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: RAW MATERIAL UNLOADING HOPPER, CONVEYING, WEIGHING AND MIXING SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

---

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particle matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-4-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: NEW MINOR INGREDIENTS SYSTEM SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

---

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-5-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: CULLET CRUSHING, ELEVATING, AND BLENDING

## PERMIT UNIT REQUIREMENTS

---

1. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections.  
[District NSR Rule] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-6-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-C  
SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

---

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-7-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-A  
SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

---

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
8. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

13. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-8-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

BATCH CONSTITUENTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-B  
SERVED BY A BAGHOUSE

## PERMIT UNIT REQUIREMENTS

---

1. There shall be no visible emissions from the baghouse. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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
3. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
6. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
8. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
9. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] 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.

13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
14. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-10-16

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

60 MMBTU/HR GLASS MELTING FURNACE #22-C WITH A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 11 / 0.4 ELECTROSTATIC PRECIPITATOR, A 10 MMBTU/HR DUCT BURNER SYSTEM (OR EQUIVALENT), A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

## PERMIT UNIT REQUIREMENTS

---

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of the Federal Major Stationary Source permit shall at all times be maintained in good working order and be operated as efficiently as possible to minimize air pollutant emissions. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [San Joaquin County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The exhaust from the glass melting furnace shall be vented through an operational SOx scrubber and electrostatic precipitator, except during periods of furnace startup (when technologically infeasible), furnace idle (when technologically infeasible), and during add-on control system maintenance. Scheduled maintenance of add-on control system shall be accomplished during periods of furnace idling whenever possible. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
8. The emission limitations of District Rule 4354 shall not apply during periods of start-up, shutdown, and idling, as defined by District Rule 4354. The permittee shall notify the District at least 24 hours prior to initiating idling, shutdown, or start-up of the glass furnace and this notification shall include: The date and time of the start of the exempt operation, reason for performing the operation, and an estimated completion date. The permittee shall notify the District by telephone within 24 hours after completion of the operation and shall maintain operating records and/or support documentation necessary to claim exemption. [District Rule 4354] 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.

9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the amount as calculated using the following equation: NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, or PM<sub>10</sub> (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
16. The SO<sub>x</sub> and PM<sub>10</sub> emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
19. The glass pull rate shall not exceed 417 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
20. The glass pull rate shall not exceed 146,000 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The weight percent of cullet per batch shall not be less than 17.5%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
22. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 69.50 lb-NO<sub>x</sub>/hr and 4.0 lb-NO<sub>x</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
23. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 26.06 lb-NO<sub>x</sub>/hr and 1.5 lb-NO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
24. SO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 15.64 lb-SO<sub>x</sub>/hr and 0.9 lb-SO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] 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.

25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O<sub>2</sub> or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O<sub>2</sub> or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
27. PM<sub>10</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 6.59 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
28. Particulate matter emissions shall not exceed 17.5 lb/hr. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
29. Ammonia emissions (NH<sub>3</sub>) shall not exceed 10 ppmvd @ 8% O<sub>2</sub>, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NO<sub>x</sub>/day, 300.0 lb-PM<sub>10</sub>/day, and 105.0 lb-filterable PM<sub>10</sub>/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
31. Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM<sub>10</sub>/year. [District NSR Rule] Federally Enforceable Through Title V Permit
32. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
33. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
34. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM<sub>10</sub> (lb/ton of glass pulled and lb/hr), SO<sub>x</sub> (lb/ton of glass pulled and lb/hr), and NO<sub>x</sub> (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
35. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
36. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] 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.

37. Performance testing shall be conducted using following test methods: (1) Oxides of Nitrogen: EPA Method 7E, EPA Method 19, or ARB Method 100; (2) Carbon Monoxide: EPA Method 10, or ARB Method 100; (3) VOC (ppmv): EPA Method 25A expressed in terms of carbon, or ARB Method 100, EPA Method 18 or ARB method 422 to determine emissions of exempt compounds; (4) Stack Gas Oxygen, Carbon Dioxide, Excess Air, and Dry Molecular Weight: EPA Method 3 or 3A, or ARB Method 100; (5) Oxides of Sulfur: EPA Method 6C, EPA Method 8, or ARB Method 100; (6) Filterable PM10: EPA Method 5, EPA Method 201, or EPA Method 201A. An operator choosing EPA Method 5 shall count all PM collected as PM10; (7) Condensible PM10: EPA Method 202 with the following procedures, (7a) Purge the impinger with dry nitrogen for one hour. The one hour purge with dry nitrogen shall be performed as soon as possible after the final leak check of the system, (7b) Neutralize the inorganic portion to a pH of 7.0. Use the procedure, "Determination of NH4 Retained in Sample by Titration" described in Method 202 to neutralize sulfuric acid, (7c) Evaporate the last 1 ml of the inorganic fraction by air drying following evaporation of the bulk of the impinger water in a 105 degrees C oven as described in the first sentence of the Method 202 section titled "Inorganic Fraction Weight Determination". [District NSR Rule, Districts Rule 4354 and 2520, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
38. In lieu of performing a source test for PM10, the results of CARB Method 5 or EPA Methods 5 and 8 may be used for measuring PM10 emissions limit. If this option is used, then all of the particulate emissions will be considered to be PM10. [District NSR Rule] Federally Enforceable Through Title V Permit
39. Source testing to measure emissions when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. Once 100 hours of operation using LPG fuel is exceeded, a source test shall be performed within 90 days after the exceedance of 100 hours. [District Rule 1081] Federally Enforceable Through Title V Permit
40. For source testing purposes, arithmetic average of three 30-consecutive-minute test runs shall be used to determine compliance with NOx, CO, VOC, and SOx emission limits. [District Rules 2201, 4354, 6.4.4] Federally Enforceable Through Title V Permit
41. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM10 emission limits. [District Rule 4354, 6.4.5] Federally Enforceable Through Title V Permit
42. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the furnace, even if the averaged emissions of all three test runs is less than the applicable limit. [District Rule 4354] Federally Enforceable Through Title V Permit
43. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack NOx, SOx, CO, O2 concentration (if required for compliance determination), and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2, 3, and 4, or shall meet equivalent specifications established by mutual agreement of the District, the California Air Resources Board, and EPA. The CEM systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4354] Federally Enforceable Through Title V Permit
44. The applicant shall install, maintain, and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, or shall meet equivalent specifications established by mutual consent of the District, the California Air Resources Board, and EPA. [District Rules 1080, 2201, and 4101] Federally Enforceable Through Title V Permit
45. The facility shall install and maintain equipment, facilities, and systems compatible with the Districts CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
46. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternate method. [District Rule 1080] Federally Enforceable Through Title V Permit
47. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.

48. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
49. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
50. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
51. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
52. Any visible emission monitoring exceedance showing air contaminant 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 shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
53. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
54. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
55. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
56. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
57. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
58. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] 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.

59. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354] Federally Enforceable Through Title V Permit
60. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354] Federally Enforceable Through Title V Permit
61. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
62. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354] Federally Enforceable Through Title V Permit
63. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
64. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
65. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
66. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
67. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
68. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
69. The throughput for each electrostatic precipitator dust silo shall not exceed 1.81 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
70. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
71. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. 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
72. The differential pressure gauge reading range for each bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
73. The differential operating pressure across each bin vent filter shall be monitored and recorded on each day that the unit 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.

74. Records of all maintenance of each bin vent filter, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
75. A log of daily process weight, wt% cullet per batch, electric boosting, fuel usage and other relevant operating parameters shall be kept on the premises and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2 and District NSR Rule] Federally Enforceable Through Title V Permit
76. During periods of electrostatic precipitator maintenance and furnace startup, the furnace visible emissions shall be recorded by CARB certified personnel during daylight hours using EPA Method 9 within 2 hours of electrostatic precipitator shutdown or bypass and at least three times a day. Each visible emissions evaluation shall be at least 4 hours apart. [District NSR Rule] Federally Enforceable Through Title V Permit
77. The applicant shall maintain accurate records of the time, date, cause (e.g. electrostatic precipitator maintenance, furnace startup, or furnace idle), and duration electrostatic precipitator is not in operation and result of any visible emissions testing during the period. Records shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
78. The permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, quantity of glass pulled, the NOx emission rate (in lb/ton of glass pulled), the CO emission rate (in lb/ton of glass pulled), and the SOx emission rate (in lb/ton of glass pulled). The permittee shall also maintain records of source tests, the acceptable range for each approved key system operating parameter as established by source testing, all instances of maintenance and repair, any malfunction, and records of all periods of idling, startup, or shutdown. All records shall be maintained on the premises for a period of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
79. Permittee shall keep a record of the rolling 12-month quantity of glass pulled. This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
80. Permittee shall keep a record of the combined daily NOx emissions (based on CEMs data), the combined daily PM10 emissions (based on annual source test results and daily production data), and the combined daily filterable PM10 emissions (based on annual source test results and daily production data), each in pounds, for furnaces N-593-10 (22-C), N-593-12 (22-A) and N-593-13 (22-B). [District Rule 2201] Federally Enforceable Through Title V Permit
81. Permittee shall keep a record of the combined rolling 12-month PM10 emissions for furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B). This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
82. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rules 4201 and 4202. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
83. The requirements of District Rule 4301 were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
84. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
85. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
86. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-11-9

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD C1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-37, '-38, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-12-14

**EXPIRATION DATE:** 07/31/2017

## **EQUIPMENT DESCRIPTION:**

36 MMBTU/HR GLASS MELTING FURNACE #22-A, WITH AN OPTIONAL OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL), A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 7 / 0.4 ELECTROSTATIC PRECIPITATOR, A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

## **PERMIT UNIT REQUIREMENTS**

---

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of the Federal Major Stationary Source permit shall at all times be maintained in good working order and be operated as efficiently as possible to minimize air pollutant emissions. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [San Joaquin County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The exhaust from the glass melting furnace shall be vented through an operational SOx scrubber and electrostatic precipitator, except during periods of furnace startup (when technologically infeasible), furnace idle (when technologically infeasible), and during add-on control system maintenance. Scheduled maintenance of add-on control system shall be accomplished during periods of furnace idling whenever possible. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
8. The emission limitations of District Rule 4354 shall not apply during periods of start-up, shutdown, and idling, as defined by District Rule 4354. The permittee shall notify the District at least 24 hours prior to initiating idling, shutdown, or start-up of the glass furnace and this notification shall include: The date and time of the start of the exempt operation, reason for performing the operation, and an estimated completion date. The permittee shall notify the District by telephone within 24 hours after completion of the operation and shall maintain operating records and/or support documentation necessary to claim exemption. [District Rule 4354] 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.

9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the amount as calculated using the following equation: NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, or PM<sub>10</sub> (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
16. The SO<sub>x</sub> and PM<sub>10</sub> emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
19. The glass pull rate shall not exceed 250 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
20. The glass pull rate shall not exceed 87,235 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The weight percent of cullet per batch shall not be less than 13.6%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
22. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 41.67 lb-NO<sub>x</sub>/hr and 4.0 lb-NO<sub>x</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
23. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 15.63 lb-NO<sub>x</sub>/hr and 1.5 lb-NO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
24. SO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 9.38 lb-SO<sub>x</sub>/hr and 0.9 lb-SO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] 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.

25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O<sub>2</sub> or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O<sub>2</sub> or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
27. PM<sub>10</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 3.78 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
28. Ammonia emissions (NH<sub>3</sub>) shall not exceed 10 ppmvd @ 8% O<sub>2</sub>, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NO<sub>x</sub>/day, 300.0 lb-PM<sub>10</sub>/day, and 105.0 lb-filterable PM<sub>10</sub>/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
30. Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM<sub>10</sub>/year. [District NSR Rule] Federally Enforceable Through Title V Permit
31. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM<sub>10</sub> (lb/ton of glass pulled and lb/hr), SO<sub>x</sub> (lb/ton of glass pulled and lb/hr), and NO<sub>x</sub> (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
34. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
35. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] 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.

36. Performance testing shall be conducted using following test methods: (1) Oxides of Nitrogen: EPA Method 7E, EPA Method 19, or ARB Method 100; (2) Carbon Monoxide: EPA Method 10, or ARB Method 100; (3) VOC (ppmv): EPA Method 25A expressed in terms of carbon, or ARB Method 100, EPA Method 18 or ARB method 422 to determine emissions of exempt compounds; (4) Stack Gas Oxygen, Carbon Dioxide, Excess Air, and Dry Molecular Weight: EPA Method 3 or 3A, or ARB Method 100; (5) Oxides of Sulfur: EPA Method 6C, EPA Method 8, or ARB Method 100; (6) Filterable PM10: EPA Method 5, EPA Method 201, or EPA Method 201A. An operator choosing EPA Method 5 shall count all PM collected as PM10; (7) Condensible PM10: EPA Method 202 with the following procedures, (7a) Purge the impinger with dry nitrogen for one hour. The one hour purge with dry nitrogen shall be performed as soon as possible after the final leak check of the system, (7b) Neutralize the inorganic portion to a pH of 7.0. Use the procedure, "Determination of NH4 Retained in Sample by Titration" described in Method 202 to neutralize sulfuric acid, (7c) Evaporate the last 1 ml of the inorganic fraction by air drying following evaporation of the bulk of the impinger water in a 105 degrees C oven as described in the first sentence of the Method 202 section titled "Inorganic Fraction Weight Determination". [District NSR Rule, Districts Rule 4354 and 2520, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
37. In lieu of performing a source test for PM10, the results of CARB Method 5 or EPA Methods 5 and 8 may be used for measuring PM10 emissions limit. If this option is used, then all of the particulate emissions will be considered to be PM10. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Source testing to measure emissions when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. Once 100 hours of operation using LPG fuel is exceeded, a source test shall be performed within 90 days after the exceedance of 100 hours. [District Rule 1081] Federally Enforceable Through Title V Permit
39. For source testing purposes, arithmetic average of three 30-consecutive-minute test runs shall be used to determine compliance with NOx, CO, VOC, and SOx emission limits. [District Rules 2201, 4354, 6.4.4] Federally Enforceable Through Title V Permit
40. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM10 emission limits. [District Rule 4354, 6.4.5] Federally Enforceable Through Title V Permit
41. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the furnace, even if the averaged emissions of all three test runs is less than the applicable limit. [District Rule 4354] Federally Enforceable Through Title V Permit
42. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack NOx, SOx, CO, O2 concentration (if required for compliance determination), and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2, 3, and 4, or shall meet equivalent specifications established by mutual agreement of the District, the California Air Resources Board, and EPA. The CEM systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4354] Federally Enforceable Through Title V Permit
43. The applicant shall install, maintain, and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, or shall meet equivalent specifications established by mutual consent of the District, the California Air Resources Board, and EPA. [District Rules 1080, 2201, and 4101] Federally Enforceable Through Title V Permit
44. The facility shall install and maintain equipment, facilities, and systems compatible with the Districts CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
45. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternate method. [District Rule 1080] Federally Enforceable Through Title V Permit
46. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.

47. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
48. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
49. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
50. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
51. Any visible emission monitoring exceedance showing air contaminant 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 shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
52. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
53. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
54. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
55. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
56. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
57. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] 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.

58. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354] Federally Enforceable Through Title V Permit
59. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354] Federally Enforceable Through Title V Permit
60. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
61. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354] Federally Enforceable Through Title V Permit
62. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
63. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
64. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
65. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
66. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
67. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
68. The throughput for each electrostatic precipitator dust silo shall not exceed 1.23 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
69. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
70. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. 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
71. The differential pressure gauge reading range for each bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
72. The differential operating pressure across each bin vent filter shall be monitored and recorded on each day that the unit 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.

73. Records of all maintenance of the bin vent filters, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
74. A log of daily process weight, wt% cullet per batch, electric boosting, fuel usage and other relevant operating parameters shall be kept on the premises and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2 and District NSR Rule] Federally Enforceable Through Title V Permit
75. During periods of electrostatic precipitator maintenance and furnace startup, the furnace visible emissions shall be recorded by CARB certified personnel during daylight hours using EPA Method 9 within 2 hours of electrostatic precipitator shutdown or bypass and at least three times a day. Each visible emissions evaluation shall be at least 4 hours apart. [District NSR Rule] Federally Enforceable Through Title V Permit
76. The applicant shall maintain accurate records of the time, date, cause (e.g. electrostatic precipitator maintenance, furnace startup, or furnace idle), and duration electrostatic precipitator is not in operation and result of any visible emissions testing during the period. Records shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
77. The permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, quantity of glass pulled, the NOx emission rate (in lb/ton of glass pulled), the CO emission rate (in lb/ton of glass pulled), and the SOx emission rate (in lb/ton of glass pulled). The permittee shall also maintain records of source tests, the acceptable range for each approved key system operating parameter as established by source testing, all instances of maintenance and repair, any malfunction, and records of all periods of idling, startup, or shutdown. All records shall be maintained on the premises for a period of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
78. Permittee shall keep a record of the rolling 12-month quantity of glass pulled. This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
79. Permittee shall keep a record of the combined daily NOx emissions (based on CEMs data), the combined daily PM10 emissions (based on annual source test results and daily production data), and the combined daily filterable PM10 emissions (based on annual source test results and daily production data), each in pounds, for furnaces N-593-10 (22-C), N-593-12 (22-A) and N-593-13 (22-B). [District Rule 2201] Federally Enforceable Through Title V Permit
80. Permittee shall keep a record of the combined rolling 12-month PM10 emissions for furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B). This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
81. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rules 4201 and 4202. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
82. The requirements of District Rule 4301 were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
83. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
84. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
85. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-13-12

**EXPIRATION DATE:** 07/31/2017

## **EQUIPMENT DESCRIPTION:**

67 MMBTU/HR GLASS MELTING FURNACE #22-B WITH AN OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL), A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 11 / 0.4 ELECTROSTATIC PRECIPITATOR, A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)

## **PERMIT UNIT REQUIREMENTS**

---

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. All equipment, facilities, or systems installed or used to achieve compliance with the terms and conditions of the Federal Major Stationary Source permit shall at all times be maintained in good working order and be operated as efficiently as possible to minimize air pollutant emissions. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E=3.59P^{0.62}$  ( $P < 30$  tph) or  $E=17.31P^{0.16}$  ( $P > 30$  tph). [District Rule 4202 and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
5. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [San Joaquin County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. The exhaust from the glass melting furnace shall be vented through an operational SOx scrubber and electrostatic precipitator, except during periods of furnace startup (when technologically infeasible), furnace idle (when technologically infeasible), and during add-on control system maintenance. Scheduled maintenance of add-on control system shall be accomplished during periods of furnace idling whenever possible. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
8. The emission limitations of District Rule 4354 shall not apply during periods of start-up, shutdown, and idling, as defined by District Rule 4354. The permittee shall notify the District at least 24 hours prior to initiating idling, shutdown, or start-up of the glass furnace and this notification shall include: The date and time of the start of the exempt operation, reason for performing the operation, and an estimated completion date. The permittee shall notify the District by telephone within 24 hours after completion of the operation and shall maintain operating records and/or support documentation necessary to claim exemption. [District Rule 4354] 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.

9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the amount as calculated using the following equation: NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, or PM<sub>10</sub> (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
16. The SO<sub>x</sub> and PM<sub>10</sub> emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
19. The glass pull rate shall not exceed 340 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
20. The glass pull rate shall not exceed 124,100 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The weight percent of cullet per batch shall not be less than 13.6%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
22. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 56.67 lb-NO<sub>x</sub>/hr and 4.0 lb-NO<sub>x</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
23. NO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 21.25 lb-NO<sub>x</sub>/hr and 1.5 lb-NO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
24. SO<sub>x</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 12.75 lb-SO<sub>x</sub>/hr and 0.9 lb-SO<sub>x</sub>/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] 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.

25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O<sub>2</sub> or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O<sub>2</sub> or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
27. PM<sub>10</sub> emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 5.38 lb-PM<sub>10</sub>/hr and 0.5 lb-PM<sub>10</sub>/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
28. Ammonia emissions (NH<sub>3</sub>) shall not exceed 10 ppmvd @ 8% O<sub>2</sub>, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NO<sub>x</sub>/day, 300.0 lb-PM<sub>10</sub>/day, and 105.0 lb-filterable PM<sub>10</sub>/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
30. Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM<sub>10</sub>/year. [District NSR Rule] Federally Enforceable Through Title V Permit
31. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM<sub>10</sub> (lb/ton of glass pulled and lb/hr), SO<sub>x</sub> (lb/ton of glass pulled and lb/hr), and NO<sub>x</sub> (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
34. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
35. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] 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.

36. Performance testing shall be conducted using following test methods: (1) Oxides of Nitrogen: EPA Method 7E, EPA Method 19, or ARB Method 100; (2) Carbon Monoxide: EPA Method 10, or ARB Method 100; (3) VOC (ppmv): EPA Method 25A expressed in terms of carbon, or ARB Method 100, EPA Method 18 or ARB method 422 to determine emissions of exempt compounds; (4) Stack Gas Oxygen, Carbon Dioxide, Excess Air, and Dry Molecular Weight: EPA Method 3 or 3A, or ARB Method 100; (5) Oxides of Sulfur: EPA Method 6C, EPA Method 8, or ARB Method 100; (6) Filterable PM10: EPA Method 5, EPA Method 201, or EPA Method 201A. An operator choosing EPA Method 5 shall count all PM collected as PM10; (7) Condensable PM10: EPA Method 202 with the following procedures, (7a) Purge the impinger with dry nitrogen for one hour. The one hour purge with dry nitrogen shall be performed as soon as possible after the final leak check of the system, (7b) Neutralize the inorganic portion to a pH of 7.0. Use the procedure, "Determination of NH<sub>4</sub> Retained in Sample by Titration" described in Method 202 to neutralize sulfuric acid, (7c) Evaporate the last 1 ml of the inorganic fraction by air drying following evaporation of the bulk of the impinger water in a 105 degrees C oven as described in the first sentence of the Method 202 section titled "Inorganic Fraction Weight Determination". [District NSR Rule, Districts Rule 4354 and 2520, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
37. In lieu of performing a source test for PM10, the results of CARB Method 5 or EPA Methods 5 and 8 may be used for measuring PM10 emissions limit. If this option is used, then all of the particulate emissions will be considered to be PM10. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Source testing to measure emissions when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. Once 100 hours of operation using LPG fuel is exceeded, a source test shall be performed within 90 days after the exceedance of 100 hours. [District Rule 1081] Federally Enforceable Through Title V Permit
39. For source testing purposes, arithmetic average of three 30-consecutive-minute test runs shall be used to determine compliance with NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> emission limits. [District Rules 2201, 4354, 6.4.4] Federally Enforceable Through Title V Permit
40. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM10 emission limits. [District Rule 4354, 6.4.5] Federally Enforceable Through Title V Permit
41. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the furnace, even if the averaged emissions of all three test runs is less than the applicable limit. [District Rule 4354] Federally Enforceable Through Title V Permit
42. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack NO<sub>x</sub>, SO<sub>x</sub>, CO, O<sub>2</sub> concentration (if required for compliance determination), and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2, 3, and 4, or shall meet equivalent specifications established by mutual agreement of the District, the California Air Resources Board, and EPA. The CEM systems shall also be operated, maintained, and calibrated pursuant to the requirements of 40 CFR 60.7(c) and 40 CFR 60.13. [District Rules 1080, 2201, and 4354] Federally Enforceable Through Title V Permit
43. The applicant shall install, maintain, and operate a continuous opacity monitor (COM) and shall meet the performance specification requirements in 40 CFR Part 60, Appendix B, or shall meet equivalent specifications established by mutual consent of the District, the California Air Resources Board, and EPA. [District Rules 1080, 2201, and 4101] Federally Enforceable Through Title V Permit
44. The facility shall install and maintain equipment, facilities, and systems compatible with the Districts CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
45. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternate method. [District Rule 1080] Federally Enforceable Through Title V Permit
46. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.

47. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
48. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
49. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
50. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within a 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
51. Any visible emission monitoring exceedance showing air contaminant 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 shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
52. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
53. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
54. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
55. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
56. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
57. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] 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.

58. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354] Federally Enforceable Through Title V Permit
59. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354] Federally Enforceable Through Title V Permit
60. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
61. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354] Federally Enforceable Through Title V Permit
62. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
63. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
64. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
65. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
66. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
67. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
68. The throughput for each electrostatic precipitator dust silo shall not exceed 1.64 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
69. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
70. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. 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
71. The differential pressure gauge reading range for each bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
72. The differential operating pressure across each bin vent filter shall be monitored and recorded on each day that the unit 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.

73. Records of all maintenance of each bin vent filter, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
74. A log of daily process weight, wt% cullet per batch, electric boosting, fuel usage and other relevant operating parameters shall be kept on the premises and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2 and District NSR Rule] Federally Enforceable Through Title V Permit
75. During periods of electrostatic precipitator maintenance and furnace startup, the furnace visible emissions shall be recorded by CARB certified personnel during daylight hours using EPA Method 9 within 2 hours of electrostatic precipitator shutdown or bypass and at least three times a day. Each visible emissions evaluation shall be at least 4 hours apart. [District NSR Rule] Federally Enforceable Through Title V Permit
76. The applicant shall maintain accurate records of the time, date, cause (e.g. electrostatic precipitator maintenance, furnace startup, or furnace idle), and duration electrostatic precipitator is not in operation and result of any visible emissions testing during the period. Records shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
77. The permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, quantity of glass pulled, the NOx emission rate (in lb/ton of glass pulled), the CO emission rate (in lb/ton of glass pulled), and the SOx emission rate (in lb/ton of glass pulled). The permittee shall also maintain records of source tests, the acceptable range for each approved key system operating parameter as established by source testing, all instances of maintenance and repair, any malfunction, and records of all periods of idling, startup, or shutdown. All records shall be maintained on the premises for a period of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
78. Permittee shall keep a record of the rolling 12-month quantity of glass pulled. This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
79. Permittee shall keep a record of the combined daily NOx emissions (based on CEMs data), the combined daily PM10 emissions (based on annual source test results and daily production data), and the combined daily filterable PM10 emissions (based on annual source test results and daily production data), each in pounds, for furnaces N-593-10 (22-C), N-593-12 (22-A) and N-593-13 (22-B). [District Rule 2201] Federally Enforceable Through Title V Permit
80. Permittee shall keep a record of the combined rolling 12-month PM10 emissions for furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B). This record shall be updated on a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
81. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rules 4201 and 4202. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
82. The requirements of District Rule 4301 were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
83. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
84. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
85. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-20-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

4,770 GAL CRUSHED CULLET STORAGE SILO #1 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #2 AND #3)

## PERMIT UNIT REQUIREMENTS

---

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

12. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-21-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

4,770 GAL CRUSHED CULLET STORAGE SILO #2 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #1 AND #3)

## PERMIT UNIT REQUIREMENTS

---

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

12. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-22-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

4,770 GAL CRUSHED CULLET STORAGE SILO #3 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #1 AND #2)

## PERMIT UNIT REQUIREMENTS

---

1. 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
2. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201 and San Joaquin County Rule 404. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
7. Dust collector shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] 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.

12. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2]  
Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-27-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

240 BHP CATERPILLAR MODEL #3306B DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 150 KW ELECTRICAL GENERATOR (A)

## PERMIT UNIT REQUIREMENTS

---

1. The NO<sub>x</sub> emission rate shall not exceed 10.0 grams/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. The operator shall: (1) Change the oil and filter every 500 hours of operation, or annually, whichever comes first; (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] 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.

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit
13. 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 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-28-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

380 BHP CATERPILLAR MODEL #3406 DIT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 260 KW GENERATOR (B)

## PERMIT UNIT REQUIREMENTS

---

1. The NOx emission rate shall not exceed 10.0 grams/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. The operator shall: (1) Change the oil and filter every 500 hours of operation, or annually, whichever comes first; (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] 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.

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit
13. 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 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-29-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

534 BHP CATERPILLAR MODEL #3406 DITA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 350 KW ELECTRICAL GENERATOR (C)

## PERMIT UNIT REQUIREMENTS

---

1. The NOx emission rate shall not exceed 7.2 grams/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. The operator shall: (1) Change the oil and filter every 500 hours of operation, or annually, whichever comes first; (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] 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.

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit
13. 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 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-31-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

136 BHP CUMMINS MODEL #V-378-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP  
(2)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for maintenance and testing of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. The operator shall: (1) Change the oil and filter every 500 hours of operation, or annually, whichever comes first; (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ] 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.

9. 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 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-32-5

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

185 BHP CATERPILLAR MODEL #3208 DINA DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (3)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for maintenance and testing of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
6. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 2520, 9.4.2 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. The operator shall: (1) Change the oil and filter every 500 hours of operation, or annually, whichever comes first; (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ] 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.

9. 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 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
10. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-36-3

**EXPIRATION DATE:** 07/31/2017

## **EQUIPMENT DESCRIPTION:**

IRON CHROMITE PRE-MIX SYSTEM FOR FURNACE #22-A INCLUDING AN IRON CHROMITE BULK BAG UNLOADER SERVED BY NOL-TEC MODEL #350 DUST COLLECTOR, HOPPER, MIXER, STAGING HOPPER, FLEXIBLE SCREW FEEDER, TRANSPORTER, AIR INJECTORS, AND RECEIVING HOPPER SERVED BY A NOL-TEC MODEL #84-NT-16 BAGHOUSE, SCALE, AND SUPPORTING VALVES

## **PERMIT UNIT REQUIREMENTS**

1. There shall be no visible emissions from the baghouse. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Material removed from the dust collectors shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The baghouses cleaning frequency and duration shall be adjusted to optimize the control efficiency per manufacturer's recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The NOL-TEC Model 84-NT-16 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
5. The differential pressure across each compartment of the baghouse shall be maintained between 1" and 8" water column. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
8. Emissions from the NOL-TEC Model 350 baghouse shall not exceed 0.00024 lb-PM10 per ton of Iron Chromite throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from the NOL-TEC Model 84-NT-16 baghouse shall not exceed 0.0049 lb-PM10 per ton of Iron Chromite throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of Iron Chromite shall not exceed 2.10 ton per day (4,200 lb per day). [District Rule 2201] Federally Enforceable Through Title V Permit
11. The pre-mix amount of soda-ash and Iron Chromite shall not exceed 4.20 ton per day (8,400 lb/day). [District Rule 2201] Federally Enforceable Through Title V Permit
12. Daily records of the Iron Chromite and soda ash throughput for the pre-mix shall be maintained, retained for at least five years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
13. There shall be no fugitive emissions from conveying and elevating systems. Compliance with this requirement shall be demonstrated by conducting weekly inspections of the equipment and maintaining records of the inspections. [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.

14. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2201] Federally Enforceable Through Title V Permit
16. When operated visible emissions from the baghouse controlling the iron chromite pre-mix system shall be checked and the results recorded daily. If visible emissions are observed, corrective action is required prior to further operation of the equipment. Corrective action means that visible emissions are eliminated before operation of the equipment is resumed. If visible emissions cannot be corrected within 24 hours, a visible emissions test shall be conducted by a trained observer using EPA method 9 within 72 hours. A record of the results of these observations shall be maintained. Such records shall include the observer's name and affiliation, the date, time, sky condition, and the observer's location relative to the source. [40 CFR Part 64] Federally Enforceable Through Title V Permit
17. The permittee shall maintain daily records of the differential pressure across the baghouse filter. [40 CFR 64.9] Federally Enforceable Through Title V Permit
18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64.9] Federally Enforceable Through Title V Permit
19. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64.8] Federally Enforceable Through Title V Permit
20. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
21. The differential pressure across each compartment of the baghouse shall be checked and the results recorded weekly. If the differential pressure across each compartment of the baghouse is not between 1" and 8" water column, corrective action is required prior to further operation of the equipment. Corrective action means that the cause of the improper pressure differential is corrected before operation of the equipment is resumed. [District Rule 2520, 9.3.2 and 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-37-3

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD A2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-38, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-38-3

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD B1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-39, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM<sub>10</sub>/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH<sub>3</sub>) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-39-3

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD B2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-38, '-40, AND '-41)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-40-3

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD C2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-38, '-39, AND '-41)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-41-3

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

HOT END SURFACE TREATMENT HOOD C3 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11, '-37, '-38, '-39, AND '-40)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation  $E = 3.59 \times P^{0.62}$  if P is less than or equal to 30 tons per hour, or  $E = 17.31 \times P^{0.16}$  if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
4. 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
5. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] 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.

13. The permittee shall monitor and record the stack concentration (in ppmv) of NH<sub>3</sub> at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Records of the weekly NH<sub>3</sub> concentration from the glass treatment operations shall be maintained. [District Rule 4102]
27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. 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
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-42-4

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

TRONA/DRY REAGENT RECEIVING AND STORAGE OPERATION WITH A 2500 CUBIC FOOT STORAGE SILO  
SERVED BY A MET-PRO CORP FLEX-KLEEN VENT FILTER (OR EQUIVALENT)

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Visible emissions from the exhaust of the bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
3. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
4. All filters shall be properly maintained and must be in place during the receiving of trona/dry reagent. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The quantity of Trona/dry reagent delivered to the silo shall not exceed 120 tons in any one day. [District Rule 2201]
8. PM10 emissions from the Trona/dry reagent receiving operation shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall keep a record of the daily quantity of Trona/dry reagent delivered to the silo, in tons. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The bin vent filter 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
11. The differential pressure gauge reading range for the bin vent filter shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The differential operating pressure across the bin vent filter shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Records of all maintenance of the bin vent filter, including all change outs of filter media, shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-593-43-2

**EXPIRATION DATE:** 07/31/2017

**EQUIPMENT DESCRIPTION:**

FULLY ENCLOSED IRON CHROMITE MATERIAL HANDLING SYSTEM CONSISTING OF ONE 65 CU FT STORAGE BIN CONTROLLED BY A FLEX-KLEEN BAGHOUSE DUST COLLECTOR, ONE WEIGH SCREW FEEDER, ONE WEIGH HOPPER WITH LOAD CELLS, ONE COVERED METERING VIBRATORY FEEDER, AND AIR CONVEYANCE LINES

## PERMIT UNIT REQUIREMENTS

---

1. Visible emissions shall not exceed 5% opacity for a period of periods aggregating more than three minutes in any one hour. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Material removed from the dust collector shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 4102]
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 4102]
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
5. The dust collector shall be maintained and operated according to manufacturer's specifications. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The cleaning frequency and duration for the dust collector shall be adjusted to optimize the control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Replacement bags numbering at least 10% of the total number of bags in the dust collector shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The dust collector 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 differential pressure gauge reading range for the dust collector shall be established per manufacturer's recommendation at time of start up inspection. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The PM10 emissions from the dust collector shall not exceed 0.02 gr/dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Differential operating pressure for the dust collector shall be monitored and recorded on each day that the dust collector operates. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Records of all maintenance of the dust collector, including all change outs of filter media, shall be maintained. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Records of inspections and repair for the dust collector shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 1070] Federally Enforceable Through Title V Permit
14. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

---

# ATTACHMENT C

## Detailed Facility List

---

**OWENS-BROCKWAY GLASS CONTAINER**  
14700 W SCHULTE ROAD  
TRACY, CA 95376

FAC # N 593  
STATUS: A  
TELEPHONE: 2098355701

TYPE: Titlev  
TOXIC ID: 20921  
EXP. DATE: 07/31/2017  
AREA: 4/  
INSP. DATE: 05/18

| PERMIT NUMBER | FEE DESCRIPTION          | FEE RULE  | QTY | FEE AMOUNT | FEE TOTAL | PERMIT STATUS | EQUIPMENT DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------|--------------------------|-----------|-----|------------|-----------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N-593-2-9     | 5.5 HP                   | 3020-01 A | 1   | 97.00      | 97.00     | A             | HOT END SURFACE TREATMENT HOOD A1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-11, '37, '38, '39, '40, AND '41)                                                                                                                                                                                                                                                                                                                                     |
| N-593-3-4     | 194.5 hp electric motors | 3020-01 D | 1   | 345.00     | 345.00    | A             | BATCH CONSTITUTEANTS HANDLING SYSTEM: RAW MATERIAL UNLOADING HOPPER, CONVEYING, WEIGHING AND MIXING SERVED BY A BAGHOUSE                                                                                                                                                                                                                                                                                                                                                                                                             |
| N-593-4-4     | 4.5 hp electric motors   | 3020-01 A | 1   | 97.00      | 97.00     | A             | BATCH CONSTITUTEANTS HANDLING SYSTEM: NEW MINOR INGREDIENTS SYSTEM SERVED BY A BAGHOUSE                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| N-593-5-4     | 52 hp electric motors    | 3020-01 C | 1   | 217.00     | 217.00    | A             | BATCH CONSTITUTEANTS HANDLING SYSTEM: CULLET CRUSHING, ELEVATING, AND BLENDING                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| N-593-6-4     | 40.75 hp electric motors | 3020-01 B | 1   | 129.00     | 129.00    | A             | BATCH CONSTITUTEANTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-C SERVED BY A BAGHOUSE                                                                                                                                                                                                                                                                                                                                                                                                                         |
| N-593-7-4     | 21.5 hp electric motors  | 3020-01 A | 1   | 97.00      | 97.00     | A             | BATCH CONSTITUTEANTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-A SERVED BY A BAGHOUSE                                                                                                                                                                                                                                                                                                                                                                                                                         |
| N-593-8-4     | 3.75 hp electric motors  | 3020-01 A | 1   | 97.00      | 97.00     | A             | BATCH CONSTITUTEANTS HANDLING SYSTEM: BATCH DISTRIBUTION AND CONVEYING TO FURNACE #22-B SERVED BY A BAGHOUSE                                                                                                                                                                                                                                                                                                                                                                                                                         |
| N-593-10-16   | 60 MMBtu/hr              | 3020-02 H | 1   | 1,128.00   | 1,128.00  | A             | 60 MMBTU/HR GLASS MELTING FURNACE #22-C WITH A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 11 / 0.4 ELECTROSTATIC PRECIPITATOR, A 10 MMBTU/HR DUCT BURNER SYSTEM (OR EQUIVALENT), A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT)                                |
| N-593-11-9    | 4 HP                     | 3020-01 A | 1   | 97.00      | 97.00     | A             | HOT END SURFACE TREATMENT HOOD C1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '37, '38, '39, '40, AND '41)                                                                                                                                                                                                                                                                                                                                      |
| N-593-12-14   | 36 MMBtu/hr              | 3020-02 H | 1   | 1,128.00   | 1,128.00  | A             | 36 MMBTU/HR GLASS MELTING FURNACE #22-A, WITH AN OPTIONAL OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL), A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 7 / 0.4 ELECTROSTATIC PRECIPITATOR, A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT) |

**Detailed Facility Report**  
For Facility=593 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

5/15/18  
8:14 am

| PERMIT NUMBER | FEE DESCRIPTION         | FEE RULE  | QTY | AMOUNT<br>FEE | TOTAL<br>FEE | PERMIT<br>STATUS | EQUIPMENT DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------|-------------------------|-----------|-----|---------------|--------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N-593-13-12   | 67 MMBtu/hr             | 3020-02 H | 1   | 1,128.00      | 1,128.00     | A                | 67 MMBTU/HR GLASS MELTING FURNACE #22-B WITH AN OXYGEN-ENRICHED AIR STAGING SYSTEM (USE OF THIS SYSTEM IS OPTIONAL). A CUSTOM GEA BISCHOFF INC. DRY SOX SCRUBBER, A GEA BISCHOFF MODEL BS 780 10 / 5.0 / 2 X 11 / 0.4 ELECTROSTATIC PRECIPITATOR, A GEA PROCESS ENGINEERING SELECTIVE CATALYTIC REDUCTION SYSTEM, AND AN ELECTROSTATIC PRECIPITATOR DUST HANDLING SYSTEM CONSISTING OF A 153 CUBIC FOOT STORAGE SILO AND A 190 CUBIC FOOT STORAGE SILO, EACH WITH A MET-PRO CORP FLEX-KLEEN BIN VENT FILTER (OR EQUIVALENT) |
| N-593-20-4    | 4,770 gal storage       | 3020-05 A | 1   | 83.00         | 83.00        | A                | 4,770 GAL CRUSHED CULLET STORAGE SILO #1 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #2 AND #3)                                                                                                                                                                                                                                                                                                                                                                                                               |
| N-593-21-4    | 4,770 gal storage       | 3020-05 A | 1   | 83.00         | 83.00        | A                | 4,770 GAL CRUSHED CULLET STORAGE SILO #2 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #1 AND #3)                                                                                                                                                                                                                                                                                                                                                                                                               |
| N-593-22-4    | 4,770 gal storage       | 3020-05 A | 1   | 83.00         | 83.00        | A                | 4,770 GAL CRUSHED CULLET STORAGE SILO #3 SERVED BY A FLEX-KLEEN BAGHOUSE (SHARED WITH CULLET SILOS #1 AND #2)                                                                                                                                                                                                                                                                                                                                                                                                               |
| N-593-27-5    | 240 bhp IC engine       | 3020-10 C | 1   | 264.00        | 264.00       | A                | 240 BHP CATERPILLAR MODEL #33068 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 150 KW ELECTRICAL GENERATOR (A)                                                                                                                                                                                                                                                                                                                                                                                                        |
| N-593-28-5    | 380 bhp IC engine       | 3020-10 C | 1   | 264.00        | 264.00       | A                | 380 BHP CATERPILLAR MODEL #3406 DIT DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 260 KW GENERATOR (B)                                                                                                                                                                                                                                                                                                                                                                                                                |
| N-593-29-5    | 534 bhp IC engine       | 3020-10 D | 1   | 525.00        | 525.00       | A                | 534 BHP CATERPILLAR MODEL #3406 DITA DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 350 KW ELECTRICAL GENERATOR (C)                                                                                                                                                                                                                                                                                                                                                                                                    |
| N-593-31-5    | 136 bhp IC engine       | 3020-10 B | 1   | 129.00        | 129.00       | A                | 136 BHP CUMMINS MODEL #V-378-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (2)                                                                                                                                                                                                                                                                                                                                                                                                                              |
| N-593-32-5    | 185 bhp IC engine       | 3020-10 B | 1   | 129.00        | 129.00       | A                | 185 BHP CATERPILLAR MODEL #3208 DINA DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP (3)                                                                                                                                                                                                                                                                                                                                                                                                                         |
| N-593-36-3    | 11.5 hp electric motors | 3020-01 A | 1   | 97.00         | 97.00        | A                | IRON CHROMITE PRE-MIX SYSTEM FOR FURNACE #22-A INCLUDING AN IRON CHROMITE BULK BAG UNLOADER SERVED BY NOL-TEC MODEL #350 DUST COLLECTOR, HOPPER, MIXER, STAGING HOPPER, FLEXIBLE SCREW FEEDER, TRANSPORTER, AIR INJECTORS, AND RECEIVING HOPPER SERVED BY A NOL-TEC MODEL #84-NI-16 BAGHOUSE, SCALE, AND SUPPORTING VALVES                                                                                                                                                                                                  |
| N-593-37-3    | 5.5 HP                  | 3020-01 A | 1   | 97.00         | 97.00        | A                | HOT END SURFACE TREATMENT HOOD A2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, -11, -38, -39, -40, AND -41)                                                                                                                                                                                                                                                                                                                             |
| N-593-38-3    | 5.5 HP                  | 3020-01 A | 1   | 97.00         | 97.00        | A                | HOT END SURFACE TREATMENT HOOD B1 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, -11, -37, -39, -40, AND -41)                                                                                                                                                                                                                                                                                                                             |

**Detailed Facility Report**  
For Facility=593 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

| PERMIT NUMBER | FEE DESCRIPTION | FEE RULE  | QTY | FEE<br>AMOUNT | FEE<br>TOTAL | PERMIT<br>STATUS | EQUIPMENT DESCRIPTION                                                                                                                                                                                                                                                      |
|---------------|-----------------|-----------|-----|---------------|--------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N-593-39-3    | 5.5 HP          | 3020-01 A | 1   | 97.00         | 97.00        | A                | HOT END SURFACE TREATMENT HOOD B2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11', '-37', '-38, '-40, AND '-41)                                                                     |
| N-593-40-3    | 4 HP            | 3020-01 A | 1   | 97.00         | 97.00        | A                | HOT END SURFACE TREATMENT HOOD C2 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11', '-37', '-38, '-39, AND '-41)                                                                     |
| N-593-41-3    | 4 HP            | 3020-01 A | 1   | 97.00         | 97.00        | A                | HOT END SURFACE TREATMENT HOOD C3 WITH ONE APPLICATION HOOD SERVED BY AN AEROPULSE INCORPORATED MODEL (2)PR-144 (120)-10-H-N DUPLEX BAGHOUSE (SHARED WITH N-593-2, '-11', '-37', '-38, '-39, AND '-40)                                                                     |
| N-593-42-4    | < 25 Hp         | 3020-01 A | 1   | 97.00         | 97.00        | A                | TRONADRY REAGENT RECEIVING AND STORAGE OPERATION WITH A 2500 CUBIC FOOT STORAGE SILO SERVED BY A MET-PRO CORP FLEX-KLEEN VENT FILTER (OR EQUIVALENT)                                                                                                                       |
| N-593-43-2    | 2.5 HP          | 3020-01 A | 1   | 97.00         | 97.00        | A                | FULLY ENCLOSED IRON CHROMITE MATERIAL HANDLING SYSTEM CONSISTING OF ONE 65 CU FT STORAGE BIN CONTROLLED BY A FLEX-KLEEN BAGHOUSE DUST COLLECTOR, ONE WEIGH SCREW FEEDER, ONE WEIGH HOPPER WITH LOAD CELLS, ONE COVERED METERING VIBRATORY FEEDER, AND AIR CONVEYANCE LINES |

Number of Facilities Reported: 1