



**JAN 19 2017**

Mr. Nathaniel Ruttersbush  
Guardian Industries Corp.  
11535 E Mountain View Ave  
Kingsburg, CA 93631-9211

**Re: Notice of Preliminary Decision – Title V Permit Renewal  
District Facility # C-598  
Project # C-1152340**

Dear Mr. Ruttersbush:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Guardian Industries Corp. at 11535 E Mountain View Ave in Kingsburg, 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. Errol Villegas, Permit Services Manager, at (559) 230-5900.

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

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**SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT**

**Proposed Title V Permit Renewal Evaluation  
Guardian Industries Corp.  
C-598**

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**TITLE V PERMIT RENEWAL EVALUATION**  
**Flat Glass Production Facility**

**Engineer:** Sajjad Ahmad  
**Date:** September 22, 2016

**Facility Number:** C-598  
**Facility Name:** Guardian Industries Corp.  
**Mailing Address:** 11535 E Mountain View Ave  
Kingsburg, CA 93631-9211

**Contact Name:** Nathaniel Ruttersbush, EHS Manager  
**Phone:** (559) 977-1527

**Responsible Official:** Richard Duncan  
**Title:** Continuous Improvement Manager

**Project # :** C-1152340  
**Deemed Complete:** August 13, 2015

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**I. PROPOSAL**

Guardian Industries Corporation (Guardian) was issued a Title V permit on January 14, 1999 and the last Title V permit renewal was done on December 22, 2011. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the last Title V permit renewal.

In addition, Guardian has proposed revisions to several current permit conditions to be incorporated into the Title V permit during this permit renewal. Guardian's proposed items and District's responses are included in the Attachment D and will be referenced throughout this document where necessary. Since several of the proposed revisions are related to the Prevention of Significant (PSD) permit number SJ-76-44-B that was previously issued to Guardian by EPA, a copy of the PSD permit has been included in Attachment E for reference.

The purpose of this evaluation 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. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

## II. FACILITY LOCATION

This Guardian Industries Corporation facility is located at 11535 E Mountain View Ave in Kingsburg, CA.

## III. EQUIPMENT LISTING

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

## IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is requesting to not use any model general permit templates. All applicable requirements are explicitly addressed in the permit outside of general permit templates.

## V. SCOPE OF EPA AND PUBLIC REVIEW

As mentioned in Section IV above, the applicant is requesting to not use any model general permit templates. All applicable requirements are explicitly addressed in the permit outside of general permit templates. Therefore, the renewed permit in its entirety is subject to EPA and public review.

## VI. FEDERALLY ENFORCEABLE REQUIREMENTS

### A. Rules Updated

- 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 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (amended on July 7, 2016, effective September 6, 2016)



- 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (amended March 6, 2013)
- 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners (amended June 25, 2013)
- 40 CFR 82, Subpart F, Recycling and Emissions Reduction (amended April 10, 2015)

#### **B. Rules Removed**

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

#### **C. Rules Added**

- District Rule 2410, Prevention of Significant Deterioration (adopted June 16, 2011, effective November 26, 2012 – SIP approved)

#### **D. Rules Not Updated**

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (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 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 4311, Flares (amended June 18, 2009)
- 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 September 16, 2004)
- 17 CCR 93115, California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 7.5, Measure 93115 (adopted December 8, 2004)
- 40 CFR 60, Subpart CC, Standard of Performance for Glass Manufacturing Plants (Amended October 17, 2000)
- 40 CFR 61, Subpart M, National Emission Standard for Asbestos

- 40 CFR 64, Compliance Assurance Monitoring (CAM)
- 40 CFR 68, Chemical Accident Prevention Provisions

## 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

There are no applicable rules that have been added since the previous Title V renewal.

### B. Rules Not Updated

- District Rule 4102, Nuisance (amended December 17, 1992)

Condition 41 of facility-wide permit C-598-0-5 is based on District Rule 4102 and will therefore not be discussed any further.

## VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the most recent renewal of the Title V permit.

### A. District Rule 2020 - Exemptions

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

**B. District Rule 2201 - New and Modified Stationary Source Review Rule**

District Rule 2201 has been amended since the last Title V permit renewal 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, except for the terms from Authority to Construct (ATC) No. C-598-4-13 which are being included as part of this Title V permit renewal (see Attachment F for a copy of the ATC C-598-4-13).

ATC C-598-4-13:

ATC C-598-4-13 was recently issued under project C-1152449 to install a NO<sub>x</sub> and O<sub>2</sub> Continuous Emissions Monitoring System (CEMS) analyzer on the inlet side of the emission control system. The project also involved incorporating the routine maintenance requirements of Rule 4354 of add-on control equipment into the Title V permit. No other modifications were proposed. The project did not constitute an NSR modification and was not subject to District Rule 2201. The only new condition included on ATC '4-13 is as follows:

- The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NO<sub>x</sub> and O<sub>2</sub> concentration at the inlet of the SCR system. Continuous emissions monitor(s) shall meet the requirements of 40 CFR part 51, 40 CFR parts 60.7 and 60.13, 40 CFR part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures), and applicable sections of Rule 1080 (Stack Monitoring) (as amended December 17, 1992) [District Rule 4102]

This condition will be included on the proposed PTO '4-12 to ensure continued compliance.

**C. District Rule 2410 - Prevention of Significant Deterioration**

District Rule 2410 was adopted on June 16, 2011 and became effective on November 26, 2012 after the Title V permit was last renewed. However the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any PSD permit actions have already been incorporated into the current Title V permit, except for some proposed revisions as requested by Guardian (see Attachment D for Guardian's proposed changes to the Title V permit and the District's responses). In addition, all references to Guardian's previous PSD Permit SJ-76-44-B are replaced by District Rule 2410 reference in the Title V permit.

**D. District Rule 4354 - Glass Melting Furnaces**

District Rule 4354 has not been amended since the last Title V renewal. However, since Guardian has requested several changes to the existing permit conditions to clarify some of the rule requirements, discussion of Rule 4354 is included below for reference (see Attachment D for Guardian's proposed changes to the Title V permit and the District's responses).

1.0 Purpose

The purpose of this rule is to limit emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), oxides of sulfur (SOx), and particulate matter (PM<sub>10</sub>) from glass melting furnaces.

2.0 Applicability

The provisions of this rule shall apply to any glass melting furnace. As such, permit unit '-4 (flat glass line) is subject to this rule.

5.0 Requirements

5.1 NOx Emission Limits

Section 5.1 states that except as specified in Section 4.4, the operator of any glass melting furnace shall not operate a furnace in such a manner that results in NOx emissions exceeding the limits in Table 1. The applicable NOx emission limits applicable to flat glass furnaces are as follows:

<b>Table 1 – NOx Emission Limits in pounds NOx per ton glass produced</b>			
Type of Glass Produced	Tier 2 NOx limit	Tier 3 NOx limit	Tier 4 NOx limit
Flat Glass Standard Option	9.2 <sup>A</sup> 7.0 <sup>B</sup>	5.5 <sup>A</sup> 5.0 <sup>B</sup>	3.7 <sup>A</sup> 3.2 <sup>B</sup>
Flat Glass Enhanced Option	9.2 <sup>A</sup> 7.0 <sup>B</sup>	5.5 <sup>A</sup> 5.0 <sup>B</sup>	3.4 <sup>A</sup> 2.9 <sup>B</sup>
Flat Glass Early Enhanced Option	9.2 <sup>A</sup> 7.0 <sup>B</sup>	not available	3.4 <sup>A</sup> 2.9 <sup>B</sup>

<sup>A</sup> Block 24-hour average

<sup>B</sup> Rolling 30-day average

Guardian's flat glass furnace is currently subject to Tier 4 NOx emission limit of 3.2 lb/ton glass produced (standard option) listed in the table above. Guardian has already demonstrated compliance with this limit via source tests. Therefore, condition #14 of current PTO '-4-10 can be revised as follows and will be included on the proposed PTO '-4-12 to ensure continued compliance:

- NOx emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 107.92 lb/hr or 3.70 lb/ton of glass pulled, based on a block 24-hour average; or 3.2 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201, 2410, and 4354]

## 5.2 CO and VOC Emission Limits

Section 5.2 states that except as specified in Section 4.4, the operator of any glass melting furnace shall not operate a furnace in such a manner that results in CO and VOC emissions exceeding the limits in Table 2. The applicable CO and VOC emission limits applicable to flat glass furnaces are as follows:

<b>Table 2 - CO and VOC Emission Limits - rolling three hour average (ppmv limits are referenced at 8% O<sub>2</sub> and dry stack conditions)</b>			
Type of Glass Produced	Firing Technology	CO Limit	VOC Limit
Flat Glass	100% air fired furnace	300 ppmv	20 ppmv

Section 3.1 defines that 100% air-fuel fired means operation of a glass melting furnace where the oxidant is exclusively ambient air. Guardian operates a natural gas fired glass furnace that uses exclusively ambient air and currently complies with the emission limits specified in Table 2 above.

The following conditions from the current PTO '-4-10 will be place on the proposed PTO '-4-12 to ensure continued compliance:

- CO emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 22.05 lb/hr or 101 ppmv @ 8% O<sub>2</sub> (equivalent to 0.104 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354]

- VOC emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 0.83 lb/hr or 6.6 ppmv VOC @ 8% O<sub>2</sub> (equivalent to 0.0039 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354]

### 5.3 SO<sub>x</sub> Emission Limits

Section 5.3 states that except as specified in Section 4.4, the operator of any glass melting furnace shall not operate a furnace in such a manner that results in SO<sub>x</sub> emissions exceeding the limits in Table 3. The applicable SO<sub>x</sub> emission limits applicable to flat glass furnaces are as follows:

<b>Table 3 - SO<sub>x</sub> Emission Limits in pounds SO<sub>x</sub> per ton glass produced</b>		
Type of Glass Produced	Firing Technology	SO <sub>x</sub> Limit
Flat Glass	All technologies	1.7 <sup>A</sup> 1.2 <sup>B</sup>

<sup>A</sup> Block 24-hour average

<sup>B</sup> Rolling 30-day average

<sup>E</sup> Rolling 24-hour average

Guardian operates a natural gas fired glass furnace and complies with the SO<sub>x</sub> emission limits specified in Table 3 above. The following condition will be included on the proposed PTO '4-12 to ensure continued compliance:

- SO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 49.58 lb/hr or 1.7 lb/ton of glass pulled, based on a block 24-hour average; or 1.2 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201, 2410, and 4354]

### 5.4 PM<sub>10</sub> Emission Limits

Section 5.4 states that except as specified in Section 4.4, the operator of any glass melting furnace shall not operate a furnace in such a manner that results in PM<sub>10</sub> emissions exceeding the limits in Table 4. The applicable PM<sub>10</sub> emission limits applicable to flat glass furnaces are as follows:

<b>Table 4 - PM<sub>10</sub> Emission Limits in pounds total PM<sub>10</sub> per ton glass produced Block 24-hour average</b>		
Type of Glass Produced	Firing Technology	PM <sub>10</sub> Limit
Flat Glass	All technologies	0.70

Guardian operates a natural gas fired glass furnace and complies with the PM<sub>10</sub> emission limit specified in the table above by the following condition #16 on current PTO '-4-10:

- PM<sub>10</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 20.42 lb/hr or 0.7 lb/ton of glass pulled. [District Rules 2201, 2410, 4202, and 4354]

Guardian has requested to revise this condition for clarity to include the time basis of Table 4 of block 24-hour average (see Guardian's requested item #12 and District's response in Attachment D). Therefore, this condition is revised as follows and will be included on the proposed PTO '-4-12 to ensure continued compliance:

- PM<sub>10</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, idling, shall not exceed either of the following limits: 20.42 lb/hr or 0.7 lb/ton of glass pulled, based on a block 24-hour average. [District Rules 2201, 2410, 4202, and 4354]

**5.5, 5.6, and 5.7 Start-up, Shutdown, and Idling Requirements**

Sections 5.5, 5.6 and 5.7 specify requirements for startup, shutdown and idling. The current permit for this glass furnace contains conditions for startup, shutdown and idling periods. Guardian is not proposing any changes to their existing startup, shutdown or idling requirements.

The following conditions will be included on the proposed PTO '-4-12 to ensure continued compliance:

- Permittee shall comply with all startup requirements of District Rule 4354 during startup. Startup exemption time shall not exceed 208 days, beginning from the time of primary combustion system activation. [District Rules 2410 and 4354]



- Start-up is defined as the period of time, after initial construction or 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 purpose 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 listed in this permit. [District Rules 2410 and 4354]
- During startup, the stoichiometric ratio of the primary furnace combustion system shall not exceed 5% oxygen as calculated from the actual fuel and oxidant flow measurements for combustion in the furnace. [District Rule 4354]
- The emission control systems (ECS), C/Us 1, 2, and 3 shall be in operation at all times during normal operations, and whenever technologically feasible including during startup, idling and shutdown conditions. [District Rules 2410 and 4354]
- The furnace shall be in compliance with all applicable requirements of District Rule 4354 by the end of startup. [District Rule 4354]
- Furnace shutdown shall not exceed 20 days, measured from the time furnace operations drop below the idling threshold of less than 25 percent of the permitted glass production capacity listed in this permit to when all emissions from the furnace cease. [District Rule 4354]

In addition, condition #7 on the current PTO '-4-10 is listed as follows:

- NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the emissions limits as calculated using the following equation: NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> (lb/day) = (Applicable Emission limit (in lbs/ton)) x (Furnace permitted production capacity (in tons/day)). CO and VOC emissions during idling shall not exceed the emissions limits as calculated using the following equation: CO and VOC (lb/day) = (Applicable Emission limit (in lb/MMBtu)) x (Furnace Maximum Heat Input (in MMBtu/hr) x (24 hrs/day)). [District Rule 4354, 5.7; PSD SJ 76-44, X.E.2]

Guardian has requested to revise this condition to be consistent with PSD requirements of NOx emissions limits during idling as listed on PSD permit SJ-76-44-B, condition X.E.2 (see Guardian's requested item #16 and District's response in Attachment D). Therefore, this condition is revised as follows and will be included on the proposed PTO '-4-12 to ensure continued compliance:

- NOx emissions during idling shall not exceed 6,440 lbs/day. SOx and PM<sub>10</sub> emissions during idling shall not exceed the emissions limits as calculated using the following equation: SOx and PM<sub>10</sub> (lb/day) = (Applicable Emission limit (in lbs/ton)) x (Furnace permitted production capacity (in tons/day)). CO and VOC emissions during idling shall not exceed the emissions limits as calculated using the following equation: CO and VOC (lb/day) = (Applicable Emission limit (in lb/MMBtu)) x (Furnace Maximum Heat Input (in MMBtu/hr) x (24 hrs/day)). [District Rules 2410 and 4354]

#### 5.9 Monitoring Requirements

Sections 5.9.1 thru 5.9.4 specify monitoring requirements for NO<sub>x</sub>, CO, VOC, and PM<sub>10</sub> emissions.

##### 5.9.1 NOx Emission Monitoring Requirements

Section 5.9.1 states that the operator of any glass melting furnace shall implement a NOx CEMS that is approved, in writing, by the APCO and EPA, and that meets the requirements of Section 6.6.

Guardian currently operates a glass furnace with CEMS to measure stack gas NO<sub>x</sub>, SO<sub>x</sub>, CO and O<sub>2</sub> concentrations, and stack gas volumetric flow rate. The following condition will ensure continued compliance with the NOx monitoring requirements of this section:

- Permittee shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NO<sub>x</sub>, SO<sub>x</sub>, CO and O<sub>2</sub> concentration and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2 and 3 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the 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, 2410, and 4354; 40 CFR Part 64]

### 5.9.2 CO and VOC Emission Monitoring Requirements

Section 5.9.2.1 requires each furnace subject to Table 2 CO limits to implement the use of a CO CEMS that meets the requirements of Section 6.6.1. Guardian currently operates a glass furnace with CO CEMS and the following condition will ensure continued compliance:

- Permittee shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NO<sub>x</sub>, SO<sub>x</sub>, CO and O<sub>2</sub> concentration and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2 and 3 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the 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, 2410, and 4354; 40 CFR Part 64]

Section 5.9.2.2 requires each furnace subject to Table 2 VOC limits to implement the use of a VOC CEMS that meets the requirements of Section 6.6.1. Section 5.9.2.3 states that in lieu of installing and operating a CEMS for VOC, the operator may propose key system operating parameter(s) and frequency of monitoring and recording for VOC's, provided it meets the requirements of Sections 5.9.2.3.1 through 5.9.2.3.4.

Guardian currently monitors the furnace temperature, as alternate monitoring in lieu of installing and operating a VOC CEMS, that has been previously approved. Conditions #55 thru 57 on current PTO '4-10 ensure compliance with these requirements. Per Guardian's request (see Guardian's requested item #8 and District's response in Attachment D), condition #55 on current permit will be revised to clarify that the approved parametric monitoring is in lieu of installing and operating a CEMS for VOC emissions.

Therefore, the following conditions will be included on the proposed PTO '4-12 to ensure continued compliance:

- Permittee shall install, operate, and maintain a monitoring and recording system to accurately measure and record the furnace temperature at least once per hour. This approved parametric monitoring is in lieu of installing and operating a CEMS for VOC emissions. [District Rule 4354]

- The furnace temperature shall be maintained at or above 1,800 °F. If the measured furnace temperature is less than 1,800 °F, 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]
- Permittee shall keep records of the date and time of the furnace temperature readings and the furnace melter crown temperature measured during the most recent source test that demonstrated ongoing compliance with the VOC emission limit. [District Rule 4354]

#### 5.9.3 SO<sub>x</sub> Emission Monitoring Requirements

Section 5.9.3.1 requires each furnace, subject to Section 5.3, to implement a SO<sub>x</sub> CEMS that meets the requirements of Section 6.6.1 and that is approved, in writing, by the APCO and EPA. Guardian currently operates a SO<sub>x</sub> CEMS that has been previously approved by the APCO and EPA and the following condition will ensure continued compliance:

- Permittee shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NO<sub>x</sub>, SO<sub>x</sub>, CO and O<sub>2</sub> concentration and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2 and 3 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the 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, 2410, and 4354; 40 CFR Part 64]

#### 5.9.4 PM<sub>10</sub> Emission Monitoring Requirements

Section 5.9.4.1 requires the operators to propose key system operating parameter(s) and frequency of monitoring and recording, as follows:

- 5.9.4.1.1: The parametric monitoring must meet the requirements of Section 6.6.2.

- 5.9.4.1.2: The operator shall obtain approval of the APCO and EPA for the specific key system operating parameter(s), monitoring frequency, and recording frequency used by the operator to monitor PM<sub>10</sub> emissions.
- 5.9.4.1.3: The operator shall monitor approved key system operating parameter(s), monitoring frequency, and recording frequency to ensure compliance with the emission limit(s) during periods of emission-producing activities.
- 5.9.4.1.4: Acceptable range(s) for the key system operating parameter(s) shall be demonstrated through a source test.

Section 5.9.4.2 states that in lieu of parametric monitoring, the operator may elect to implement a PM<sub>10</sub> CEMS that meets the requirements of Section 6.6.1, and that is approved by the APCO and EPA.

Guardian currently monitors the primary and secondary voltage and current across each field of the electrostatic precipitator in order to satisfy the PM<sub>10</sub> monitoring requirements of this rule. Conditions #58 and 59 on current PTO '-4-10 satisfy these requirements. These conditions will be included on the proposed PTO '-4-12 as follows with a clarification to condition #58 that the approved parametric monitoring is in lieu of installing and operating a CEMS for PM<sub>10</sub> emissions (see Guardian's requested item #9 and District's response in Attachment D):

- Permittee shall establish parameters for primary and secondary voltage and current, which provides a reasonable assurance of ongoing compliance with emission limitations stated in this permit. The initial parameters shall be established using at least 6 months of historical operating data and manufacturer/supplier recommendations. These parameters shall be reviewed annually and revised if necessary based on PM<sub>10</sub> source test result data, historical operating data and manufacturer/supplier recommendations. This approved parametric monitoring is in lieu of installing and operating a CEMS for PM<sub>10</sub> emissions. [District Rules 2410 and 4354; and 40 CFR Part 64]
- During each day of operation, the permittee shall record electrostatic precipitator voltage and current readings and compare the readings with the acceptable range of current and voltage levels established. Upon detecting any excursion from the acceptable range of current or voltage readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rules 2410 and 4354; and 40 CFR Part 64]

Section 5.10 states that during routine maintenance of add-on emission control system a glass furnace is exempt from the emission requirements listed in Sections 5.1 through 5.4 if:

- 5.10.1 Routine maintenance in each calendar year does not exceed 144 hours total for all add-on controls.
- 5.10.2 Routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions.

The current permit has the following condition to allow the routine maintenance requirements. This condition will be included on the proposed PTO to ensure continued compliance with the requirements of this section:

- NO<sub>x</sub>, CO, VOC, SO<sub>x</sub> and PM<sub>10</sub> emission limitations shall not apply during periods of routine maintenance of an add-on emission control system(s) as long as the routine maintenance does not exceed 144 hours total per calendar year for all add-on controls and the routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354]

## 6.0 Administrative Requirements

### 6.1 Permitted Glass Production Capacity

Section 6.1 states that each glass melting furnace permit shall include the furnace's permitted glass production capacity in tons of glass pulled per day as a permit condition. The current permit includes a daily glass production throughput limit. The following condition will ensure continued compliance:

- The glass pull rate shall not exceed 700 tons per day. [District Rules 2201, 2410, and 4354]

### 6.3 Operations Records

Section 6.3.1 states that the operators shall maintain daily records of the following items:

- 6.3.1.1 Total hours of operation;
- 6.3.1.2 The quantity of glass pulled from each furnace;
- 6.3.1.3 NO<sub>x</sub> emission rate in lb/ton glass pulled;

- 6.3.1.4 CO emission rate in units matching Table 2, if a CEMS is used;
- 6.3.1.5 VOC emission rate in units matching Table 2, if a CEMS is used;
- 6.3.1.6 SO<sub>x</sub> emission rate in lb/ton glass pulled, if a CEMS is used;
- 6.3.1.7 PM<sub>10</sub> emission rate in lb/ton glass pulled, if a CEMS is used;
- 6.3.1.8 For container glass furnaces that are oxy-fuel fired:
  - 6.3.1.8.1 The weight of mixed color mix cullet used;
  - 6.3.1.8.2 The total amount of cullet used by weight; and
  - 6.3.1.8.3 The ratio, expressed in percent, of mixed color mix weight to total cullet weight.

Compliance with these requirements is ensured by the following permit conditions:

- Permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, and the quantity of glass pulled. The permittee shall also maintain records of all source tests, operating parameters established during source testing, all maintenance and repair performed, any periods of malfunction, and all periods of startup, idling, and shutdown. The records shall include emission calculations in units of lbs/hr based on CEMS data. This information shall be made available on site during normal business hours from Monday through Friday, and submitted to the APCO upon request. [District Rules 1070, 2410, and 4354]
- Permittee shall maintain daily records of NO<sub>x</sub> and SO<sub>x</sub> emission rates in lb/ton of glass pulled to demonstrate compliance with the NO<sub>x</sub> and SO<sub>x</sub> emission limits. [District Rules 1070, 2201, 2410, and 4354]
- Permittee shall maintain records of NO<sub>x</sub> and SO<sub>x</sub> emission rates in lb/ton of glass pulled on a "30-day rolling average" to demonstrate compliance with the NO<sub>x</sub> and SO<sub>x</sub> emission limits. [District Rules 1070, 2201, and 4354]
- Permittee shall maintain records of the CO emission rates in ppmvd referenced at 8% O<sub>2</sub> on a "3-hour rolling average" to demonstrate compliance with the CO emission limits. [District Rules 1070 and 4354]

Section 6.3.2 states that for pollutants monitored using an approved parametric monitoring arrangement, operators shall record the operating values of the key system operating parameters at the approved recording frequency. In addition, section 6.3.1.7 requires the operators to maintain daily records of the PM<sub>10</sub> emission rate in lb/ton glass pulled, only if a CEMS is used. Since no PM<sub>10</sub> CEMS are used, the requirement of

Section 6.3.1.7 of maintaining daily records of the PM<sub>10</sub> emission rate in lb/ton glass pulled is not applicable.

Guardian currently monitors the primary and secondary voltage and current across each field of the electrostatic precipitator in order to satisfy the PM<sub>10</sub> monitoring requirements of this rule in lieu of PM<sub>10</sub> CEMS. This alternate monitoring has been previously approved by the District. Therefore, condition #64 on current PTO '4-10 can be revised to read as follows (see Guardian's requested item #10 and District's response in Attachment D):

- Permittee shall maintain records of the electrostatic precipitator primary and secondary voltage and current at least once per day. [District Rules 1070 and 4354]

Section 6.3.3 requires operators to keep the following records:

- 6.3.3.1 Source tests and source test results;
- 6.3.3.2 The acceptable range for each approved key system operating parameter, as established during source test;
- 6.3.3.3 Maintenance and repair; and
- 6.3.3.4 Malfunction.

Compliance with these requirements is ensured by the following permit conditions:

- Permittee shall maintain records of the following items: 1) source tests and source test results; 2) the acceptable range of each approved key system operating parameter, as established during source test; 3) glass furnace maintenance and repair; 4) date, time and duration of any add-on control device routine maintenance; and 5) malfunctions. [District Rule 4534]
- Records shall be maintained and shall contain: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, or any periods during which the CEM is inoperative; and the CEM emission measurements. [District Rules 1080, 2410, and 4354; and 40 CFR Part 64]

Section 6.3.4 requires the operator shall retain records specified in Sections 6.3.1 through 6.3.3 for a period of five years; make the records available on site during normal business hours to the APCO, ARB, or EPA; and submit the records to the APCO, ARB, or EPA upon request. The following condition will ensure continued compliance:



- All records required by this permit shall be maintained, retained on-site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, 2410, and 4354]

#### 6.4 Compliance Source Testing

Section 6.4.1 requires each glass melting furnace or a furnace battery to be source tested at least once every calendar year, but not more than every 18 months and not sooner than every 6 months to demonstrate compliance with the applicable requirements of Section 5.0. The following conditions will ensure continued compliance with the source testing requirements:

- Source testing to measure the NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> emission rates (lb/hr and lb/ton of glass pulled) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2410, 2520, and 4354]
- Source testing to measure the CO emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O<sub>2</sub>) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2410, 2520, and 4354]
- Source testing to measure the VOC and Ammonia emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O<sub>2</sub>) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354]

Section 6.4.2 requires the source test conditions to be representative of normal operations, but not less than 60 percent of the permitted glass production capacity. The following condition will ensure continued compliance:

- Source tests shall be conducted at a minimum glass production pull rate equivalent to 90% of the maximum glass production pull rate achieved during the last year, unless otherwise approved by the District. In no case less than 420 tons glass pulled per day or 127.2 MMBtu/hr. [District Rules 2410 and 4354]

Section 6.4.3 requires operators using alternate monitoring systems to, during the source test, monitor and record, at a minimum, all operating data for each parameter, fresh feed rate, and flue gas flow rate and submit that data with the test report. Compliance with this requirement is expected. The conditions presented earlier in this evaluation incorporate the requirements of this section and continued compliance is expected.

Section 6.4.4 requires states that the arithmetic average of three 30-consecutive minute source test runs must be used to determine compliance with the NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> emission limits. The following condition ensures continued compliance:

- 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 Rule 4354]

Section 6.4.5 requires states that the arithmetic average of three 60-consecutive minute source test runs must be used to determine compliance with the PM<sub>10</sub> emission limits. The following condition ensures continued compliance:

- For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM<sub>10</sub> emission limits. [District Rule 4354]

Section 6.4.6 states that for a given pollutant, if two of the three runs individually demonstrate emission 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. The following condition ensures continued compliance:

- During source testing, for a given pollutant, 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]

## 6.5 Test Methods

Section 6.5 states that compliance with the requirements of 5.0 shall be determined in accordance with the following source test procedures or their equivalents approved by the EPA, ARB, and the APCO:

- 6.5.1 Oxides of nitrogen – EPA Method 7E, EPA Method 19, or ARB Method 100.
- 6.5.2 Carbon monoxide (ppmv) – EPA Method 10, or ARB Method 100.
- 6.5.3 Volatile Organic Compound (ppmv) – EPA Method 25A expressed in terms of carbon or ARB Method 100. EPA Method 18 or ARB Method 422 shall be used to determine emissions of exempt compounds.
- 6.5.4 Stack gas oxygen, carbon dioxide, excess air, and dry molecular weight – EPA Method 3 or 3A, or ARB Method 100.
- 6.5.5 Stack gas velocity and volumetric flow rate – EPA Method 2.
- 6.5.6 Oxides of sulfur – EPA Method 6C, EPA Method 8, or ARB Method 100.
- 6.5.7 The SO<sub>x</sub> emission control system efficiency shall be determined using the following:
  - 6.5.7.1 EPA Method 2 for measuring flow rates; and
  - 6.5.7.2 EPA Method 6C or EPA Method 8 for measuring total SO<sub>x</sub> (expressed as SO<sub>2</sub>) concentrations at the inlet and outlet of the control device.
  - 6.5.7.3 The SO<sub>x</sub> emission control system efficiency shall be calculated using the following equation:

$$\% \text{ Control Efficiency} = [ (C_{\text{SO}_2, \text{inlet}} - C_{\text{SO}_2, \text{outlet}}) / C_{\text{SO}_2, \text{inlet}} ] \times 100$$

Where:

$C_{\text{SO}_2, \text{inlet}}$  = concentration of SO<sub>x</sub> (expressed as SO<sub>2</sub>) at the inlet side of the SO<sub>x</sub> emission control system, in lb/dscf

$C_{\text{SO}_2, \text{outlet}}$  = concentration of SO<sub>x</sub> (expressed as SO<sub>2</sub>) at the outlet side of the SO<sub>x</sub> emission control system, in lb/dscf

6.5.8 Sulfur content of liquid fuel – American Society for Testing and Materials (ASTM) D 6428-99 or ASTM D 5453-99.

6.5.9 PM<sub>10</sub> Test Methods

6.5.9.1 Filterable PM<sub>10</sub> emissions - EPA Method 5; EPA Method 201; or EPA Method 201A. An operator choosing EPA Method 5 shall count all PM collected as PM<sub>10</sub>.

6.5.9.2 Condensable PM 10 emissions - EPA Method 202 with the following procedures:

6.5.9.2.1 Purge the impinger with dry nitrogen for one hour. The one-hour purge with dry nitrogen shall be performed as soon possible after the final leak check of the system.

6.5.9.2.2 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 the sulfuric acid. Neutralizing the inorganic portion to a pH of 7.0 determines the un-neutralized sulfuric acid content of the sample without over-correcting the amount of neutralized sulfate in the inorganic portion.

6.5.9.2.3 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."

The following conditions ensure continued compliance (see Guardian's requested items #19 thru 22 and District's response in Attachment D for requested changes to some of these conditions):

- Source testing to measure oxides of nitrogen (as NO<sub>2</sub>) shall be conducted in accordance with Rule 1081 using the following test methods: EPA Methods 1-4, 7E, or ARB Method 100 if NO<sub>x</sub> emissions are measured in ppmv; or EPA Methods 1-4, or 19 if NO<sub>x</sub> emissions are measured on heat input basis. [District Rules 1081, 2410, and 4354]

- Source testing to measure oxides of sulfur (as SO<sub>2</sub>) shall be conducted using EPA Methods 1-4, 6C, or 8, and in accordance with Rule 1081. [District Rules 1081, 2410, and 4354, and 4801]
- Source testing to measure PM<sub>10</sub> including condensables, shall be conducted using EPA Methods 1-5, EPA Method 201, or EPA Method 201A in combination with EPA Method 202 (Condensables), and in accordance with Rule 1081. An operator choosing EPA Method 5 for filterable PM shall count all PM collected as PM<sub>10</sub>. [District Rules 1081, 2410, and 4354]
- Source testing to measure CO (ppmv) shall be conducted using EPA Methods, 1-4, EPA Method 10, or ARB Method 100, and in accordance with Rule 1081. [District Rules 1081, 2410, and 4354]
- Source testing to measure VOCs (ppmv) shall be conducted using EPA Method 25A, expressed in terms of methane, or ARB Method 100, and in accordance with District Rule 1081. EPA Method 18 or ARB Method 422 shall be used to determine emissions of exempt compounds. [District Rules 1081 and 4354]
- Source testing to measure stack gas oxygen shall be conducted using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 2410, and 4354]

## 6.6 Emissions Monitoring Systems

Section 6.6.1 states that an approved CEMS shall comply with all of the following requirements:

- 6.6.1.1 Code of Federal Regulations Title 40 (40 CFR) Part 51;
- 6.6.1.2 40 CFR Part 60.7 (Notification and Record Keeping);
- 6.6.1.3 40 CFR Part 60.13 (Monitoring Requirements);
- 6.6.1.4 40 CFR Part 60 Appendix B (Performance Specifications);
- 6.6.1.5 40 CFR Part 60 Appendix F (Quality Assurance Procedures); and
- 6.6.1.6 Applicable sections of Rule 1080 (Stack Monitoring).

The NO<sub>x</sub>, CO, and SO<sub>x</sub> CEMS are expected to comply with the above requirements.

Section 6.6.2 states that an approved alternate emissions monitoring method shall be capable of determining the furnace emissions on an hourly basis and shall comply with the following requirements:

6.6.2.1 40 CFR 64 (Compliance Assurance Monitoring); and

6.6.2.2 40 CFR 60.13 (Monitoring Requirements).

The alternate monitoring schemes for VOC and PM<sub>10</sub> will comply with the above requirements.

Section 6.8 of this rule applies to exempt furnaces. The glass furnace in this project is not an exempt furnace. Therefore, the requirements of Section 6.8 are not applicable.

Conclusion:

Compliance with all of the requirements of District Rule 4354 is expected.

**E. District Rule 4702 - Internal Combustion Engines**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SO<sub>x</sub>) from internal combustion engines. This rule applies to any internal combustion engine rated at 25 brake horsepower or greater.

Permit Units C-598-1, '-2, '-3, '-8, '-9, and '-10 (diesel-fired emergency IC engines):

The engines under PTOs C-598-1, '-2, '-3, '-8, '-9, and '-10 are all emergency IC engines. Engines '-1, '-2, '-3, and '-9 power emergency electrical generators, engine '-8 powers a fire water pump for fire suppression, whereas engine '-10 powers a water pump to provide cooling water to cool off glass furnace in case main electrical driven water pumps fail.

Permit Units C-598-1, '-2, '-3 and '-9 (diesel-fired emergency standby IC engines powering electrical generators) and Permit Unit C-598-10 (diesel-fired emergency standby IC engine powering a water pump):

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 or a low-use engine, provided that the engine is operated with an operating nonresettable elapsed time meter.

- 4.2.1 In lieu of operating a nonresettable elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time, provided that the alternative is approved by the APCO and EPA and is allowed by the Permit-to-Operate or Permit-Exempt Equipment Registration. The operator must demonstrate that the alternative device, method, or technique is equivalent to using a nonresettable elapsed time meter.
- 4.2.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions.

Section 3.15 defines an "Emergency Standby Engine" an internal combustion engine which operates as a temporary replacement for primary mechanical or electrical power during an unscheduled outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the operator. An engine shall be considered to be an emergency standby engine if it is used only for the following purposes: (1) periodic maintenance, periodic readiness testing, or readiness testing during and after repair work; (2) unscheduled outages, or to supply power while maintenance is performed or repairs are made to the primary power supply; and (3) if it is limited to operate 100 hours or less per calendar year for non-emergency purposes. An engine shall not be considered to be an emergency standby engine if it is used: (1) to reduce the demand for electrical power when normal electrical power line service has not failed, or (2) to produce power for the utility electrical distribution system, or (3) in conjunction with a voluntary utility demand reduction program or interruptible power contract.

Therefore, the emergency standby IC engines only have to meet the requirements of Sections 5.9 and 6.2.3 of this Rule.

Section 5.9 of this rule requires that the owner of an emergency standby engine shall comply with the requirements specified in Section 5.9.2 through Section 5.9.5 below:

5.9.2 Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier.

5.9.3 Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.

5.9.4 Install and operate a nonresettable elapsed time meter.

5.9.4.1 In lieu of installing a nonresettable elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA and is allowed by a Permit-to-Operate or Permit-Exempt Equipment Registration condition.

5.9.4.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions.

Section 5.9.5 applies only to AO spark-ignited engines; therefore, not applicable to these engines.

Section 6.2.3 requires that an operator 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:

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

The requirements of this rule are satisfied with the following permit conditions on the proposed PTOs '-1-5, '-2-5, '-3-5, and '-9-2:

- 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 to produce power 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 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]
- 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 and 40 CFR 63 Subpart ZZZZ]
- 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]
- The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115]
- 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 Rules 2520 and 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 Rules 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ]

PTOs C-598-1-5, '-2-5, and '-3-5:

- This engine shall be operated only for maintenance, testing, and 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]

PTO C-598-9-2:

- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ]

Permit Unit C-598-10-3 (168 bhp diesel-fired emergency IC engine powering an emergency water pump for glass furnace cooling):

This engine does not drive an electrical generator and instead drives emergency water pumps to provide cooling water to the glass furnace in case the main electrical driven pumps fail. Therefore, the following condition from the current PTO '-10-2 is not applicable to this engine and will not be included on the proposed PTO '-10-3:

- This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

The requirements of this rule are satisfied with the following permit conditions on the proposed PTO '-10-3:

- 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 and 40 CFR 60 Subpart IIII]
- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702; 17 CCR 93115 and 40 CFR 60 Subpart IIII]

- 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 be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart III]
- 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]
- The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115]
- 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 Rules 2520 and 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 Rules 1070, 2520, and 4702; and 17 CCR 93115]

Permit Unit C-598-8 (diesel-fired emergency IC engine driving an emergency fire water pump):

Pursuant to Section 4.3.1, except for the requirements of Section 6.2.3, the requirements of this rule shall not apply an internal combustion engine that meets the following conditions:

- 4.3.1.1 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
- 4.3.1.2 Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine; and
- 4.3.1.3 The engine is operated with an operational nonresettable elapsed time meter. In lieu of installing a nonresettable elapsed time meter, the operator of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA. The operator of the engine shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions.

Section 3.15 defines an "Emergency Standby Engine" an internal combustion engine which operates as a temporary replacement for primary mechanical or electrical power during an unscheduled outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the operator. An engine shall be considered to be an emergency standby engine if it is used only for the following purposes: (1) periodic maintenance, periodic readiness testing, or readiness testing during and after repair work; (2) unscheduled outages, or to supply power while maintenance is performed or repairs are made to the primary power when normal electrical power line service has not failed, or (2) to produce power for the utility electrical distribution system, or (3) in conjunction with a voluntary utility demand reduction program or interruptible power contract.

Therefore, the emergency standby IC engine only has to meet the requirements of Section 6.2.3 of this Rule.

Section 6.2.3 requires that an operator 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:

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

The requirements of this rule are satisfied with the following permit conditions on the proposed PTO '-8-4:

- 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]
- 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 and 40 CFR 63 Subpart ZZZZ]
- This engine shall be operated only for maintenance, testing, and 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]
- 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]

- The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115]
- 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 Rules 2520 and 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 Rules 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ]

**F. 40 CFR 60, Subpart IIII, New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines**

New Source Performance Standards (NSPS) from Part 60, Chapter 1, Title 40 of Code of Federal Regulations (CFR) apply to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart IIII is the only subpart that applies to compression-ignited internal combustion engines.

*Applicability of Subpart IIII*

Section 60.4200(a)(2)(i) states that the provisions of this subpart apply to owners and operators of stationary compression ignition (CI) internal combustion engines that commence construction after July 11, 2005, where the engines 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.

The engine permit units C-598-1, '-2, '-3, and '-9 are not fire pump engines and existed at the facility prior to these dates; therefore, Subpart IIII does not apply to these permit units. Similarly, permit unit '-8 is a fire pump engine and

existing at the facility prior to July 1, 2006; therefore, this Subpart IIII does not apply to this permit unit.

In addition, since the existing compression ignited IC engines C-598-1, '-2, '-3, '-8, and '-9 at this facility do not qualify for any of the exemptions listed in Sections 63.6590(c)(1) thru (c)(7) of 40 CFR Subpart ZZZZ, they are not subject to Subpart IIII and instead are subject to Subpart ZZZZ.

**Permit Unit C-598-10 (168 bhp diesel-fired emergency IC engine):**

This engine powers a water pump to supply water for the glass furnace cooling in the case the main electric motor driven pumps fail. This engine was installed at the facility after July 11, 2005 and was manufactured after April 1, 2006, so it is subject to NSPS Subpart IIII pursuant to §60.4200(a)(2)(i) as referenced above.

In addition, permit unit '-10 is also subject to 40 CFR Subpart ZZZZ. However, pursuant to Section 63.6590(c) of Subpart ZZZZ this engine needs only to comply with the requirements of Subpart IIII in order to achieve compliance with Subpart ZZZZ.

Therefore, below is a discussion of 40 CFR Subpart IIII applicable to permit unit '-10 only:

Sections 60.4201, 60.4202, and 60.4203 apply to manufacturers of engines; therefore, these sections are not applicable to engine under permit '-10.

**Emission Standards for Owners and Operators**

§60.4205(a) states that owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart.

Engine under PTO '-10 is a 2006 model engine and has a displacement of 6.6 liters; therefore, it must comply with the emission standards of Table 1 of Subpart IIII. The only emission standard that is applicable to this engine in Table 1 is 6.9 g-NOx/bhp-hr. Condition #6 of the current PTO '-10-2 lists a more stringent emission limit of 2.51 g-NOx/bhp-hr; therefore, the engine is currently in compliance with Subpart IIII applicable emissions limits. This condition will be included as follows on the proposed PTO '-10-3 with a reference of Subpart IIII to ensure continued compliance:

- Emissions from this IC engine shall not exceed any of the following limits: 2.51 g-NO<sub>x</sub>/bhp-hr, 1.34 g-CO/bhp-hr, or 0.18 g-VOC/bhp-hr. [District Rule 2201; 13 CCR 2423 and 17 CCR 93115; and 40 CFR 60 Subpart III]

§60.4206 states that owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4204 and 60.4205 over the entire life of the engine.

The following condition will be included on the proposed PTO '-10-3 to ensure compliance:

- The permittee shall operate and maintain this engine in a manner to achieve the applicable emission limits of 40 CFR Part 60 Subpart III over the entire life of the engine. [40 CFR 60 Subpart III]

Fuel Requirements for Owners and Operators

§60.4207(a) states that beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). This engine began was installed at facility in June 2008, so this section is not applicable.

§60.4207(b) states that beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

40 FR Part 80 – Regulation of Fuels and Fuel Additives, §80.510(b) states that beginning June 1, 2010, except as otherwise specifically provided in this subpart, all NR (nonroad) and LM (locomotive or marine) diesel fuel is subject to the following per-gallon standards:

- (1) Sulfur content.
  - (i) 15 ppm maximum for NR diesel fuel.
  - (ii) 500 ppm maximum for LM 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.



CARB certified diesel fuel meets these requirements; therefore, these requirements are ensured by condition #5 of current PTO '-10-2. This condition will be included on the proposed PTO '-10-3 as follows to ensure continued compliance:

- 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 60 Subpart III]

Other Requirements for Owners and Operators

§60.4208(a) thru (g) apply to engines installed after December 31, 2008 and beyond. The model year of the engine permitted under PTO '-10-2 is 2006 and Guardian installed this engine in June 2008; therefore, requirements of these sections are not applicable.

§60.4209(a) states that if you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

The engine is already equipped with a non-resettable hour meter and this requirement is currently incorporated into the Title V Permit through condition #15 of current PTO '-10-2. The reference of Subpart ZZZZ will be changed to Subpart III and the following condition will be included on the proposed PTO '-10-3 to ensure continued 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 60 Subpart III]

Compliance Requirements

§60.4211(a) states that if you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

The requirements of §60.4211(a)(1) are incorporated into the Title V Permit through condition #16 of current PTO '-10-2. No change is proposed to this condition and this condition will be included on the proposed PTO '-10-3 with Subpart IIII reference as follows:

- 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 and 40 CFR 60 Subpart IIII]

The requirements of §60.4211(a)(2) will be incorporated into the Title V Permit through the following condition included on the proposed PTO '-3:

- The permittee shall change only those emission-related settings that are permitted by the manufacturer. [40 CFR 60 Subpart IIII]

Since the engine under PTO '-10-2 is an EPA Tier III certified engine, it meets the requirements of §60.4211(a)(3).

§60.4211(b) states that if you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section as below:

- (1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
- (3) Keeping records of engine manufacturer data indicating compliance with the standards.
- (4) Keeping records of control device vendor data indicating compliance with the standards.
- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

The engine permitted under PTO C-598-10-2 is an EPA Tier III certified engine as indicated on the equipment description. Therefore, the engine is already in compliance and there is no need to demonstrate compliance on ongoing basis.

§60.4211(f) states that if you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE 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 (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) 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 ICE in emergency situations.
- (2) You may operate your emergency stationary ICE 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 paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
  - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
  - (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

- (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE 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 paragraph (f)(3)(i) of this section, the 50 hours per calendar 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.
  - (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
    - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
    - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
    - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
    - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
    - (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

The requirements of §60.4211(f) are currently incorporated into the Title V Permit through conditions #9 and #17 of the current PTO '-10-2. These permit conditions are more stringent than the requirements of §60.4211(f).

Therefore, the following condition will be included on the proposed PTO '-10-3 with a reference of Subpart IIII as follows for continued compliance:

- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702; 17 CCR 93115 and 40 CFR 60 Subpart IIII]

In addition, this engine does not drive an electrical generator and instead drives emergency water pumps to provide cooling water to the glass furnace in case the main electrical driven pumps fail. Therefore, the following condition from the current PTO '-10-2 is not applicable to this engine and will not be included on the proposed PTO '-10-3:

- This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

#### Testing Requirements for Owners and Operators

§60.4212 states the test methods and other procedures for owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder, who must conduct performance tests in order to demonstrate compliance with the application emission limits of Subpart IIII.

Since the engine permitted under PTO '-10-2 is an EPA Tier III certified engine, Guardian is not required to conduct performance tests in order to demonstrate compliance with the emissions limits of Subpart IIII. Therefore, §60.4212 does not apply to Guardian.

#### Notification, Reporting, and Recordkeeping for Owners and Operators

§60.4214(a) applies to non-emergency engines, thus this section is not applicable to this engine.

§60.4214(b) states that if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards

applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

Since the engine is 2006 model year and the starting model year for this engine is 2012, there are no applicable notification, reporting, or recordkeeping requirements of this section.

No other subsections of Section 60.4214 are applicable to this engine.

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

Permit Units C-598-1, '-2, '-3, '-8, '-9, and '-10 (diesel-fired emergency IC engines):

**§63.6580 What is the purpose of subpart ZZZZ?**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

**§63.6585 Am I subject to this subpart?**

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. As such, the emergency engines at this facility (permit units '-1, '-2, '-3, '-8, '-9, and '-10) are subject to this subpart.

The following condition will be placed on the proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance, except permit unit '-10 which is required to meet the applicable requirements of Subpart IIII pursuant to §63.6590(c) of Subpart ZZZZ:

- The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]

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

This subpart applies to each affected source.

§63.6590(a) states that 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.

This facility is an area source of HAP emissions; therefore, this subpart applies.

§ 63.6590(a)(1)(iii) states that for stationary RICE located at an area source of HAP emissions, stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

The following permit units are defined as “existing” since installation was prior to June 12, 2006: ‘-1, ‘-2, ‘-3, ‘-8, and ‘-9.

§63.6590(a)(2)(iii) states that 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.

Permit unit ‘-10 was installed after June 12, 2006 and is considered new unit for Subpart ZZZZ.

§ 63.6590(b)(3) states that the following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

- (i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

- (iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

The existing emergency engines at this facility do not qualify for any of the exemptions listed in (3)(i) thru (3)(v) above.

§ 63.6590(c) states that 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.

Permit unit '-10 is new and falls under paragraph (c)(1) shown above and must meet the requirements of Subpart ZZZZ by meeting the applicable requirements of Subpart IIII. Therefore, no further discussion for '-10 is needed under Subpart ZZZZ and this permit unit has been evaluated under 40 CFR Part 60, Subpart IIII.

The following discussion applies to the existing RICE at this facility under permit units C-598-1, '-2, '-3, '-8, and '-9.

**§63.6595 When do I have to comply with this subpart?**

§ 63.6595(a)(1) states that if you have an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

Permit units '-1, '-2, '-3, '-8, and '-9 are existing stationary CI RICE located at an area source of HAP emissions; therefore, the full compliance date for Subpart ZZZZ is May 3, 2013. The following condition will be listed on proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance:

- The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ]

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

§63.6603(a) states that if you own or operate an 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 1b and Table 2b to this subpart that apply to you. Note, there are no Table 1b or Table 2b operating limitations for emergency engines; whereas, Table 2d as the following requirements applicable to emergency CI RICE:

**Table 2d to Subpart ZZZZ of Part 63 - Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions.**

As stated in §§63.6603 and 63.6640, the following table applies to existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirements, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	N/A
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	N/A
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	N/A

<sup>1</sup> Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

<sup>2</sup> If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

Therefore, the following condition will be listed on proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance:

- The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ]
- The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]

- The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ]

As indicated in the footnote '1' of Table 2d, the sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart. Therefore, the following condition will be included on the proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 pursuant to §63.6625(i) to ensure compliance:

- The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ]

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

§ 63.6625(e) states that if you own or operate any of the following stationary RICE, 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:

- (1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;
- (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
- (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

§63.6625(h) states that 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 will be listed on proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance:

- The permittee 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 63 Subpart ZZZZ]

§63.6625(i) states that if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 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.

Therefore, the following condition will be included on the proposed PTOs '1-5, '2-5, '3-5, '8-4, and '9-2 to ensure compliance:

- The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ]

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

§63.6640(a) states that you must demonstrate continuous compliance with each emission limitation and operating limitation 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.

As indicated under §63.6603 discussion above, item #4 of Table 2d is applicable to emergency CI RICE located at area sources of HAP emissions. Similarly, item #9 of Table 6 is applicable to existing emergency stationary RICE located at an area source of HAP as below:

**Table 6 to Subpart ZZZZ of Part 63 - Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices**

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE located at an area source of HAP	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow 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.

Therefore, the following condition will be included on the proposed PTOs '1-5, '2-5, '3-5, '8-4, and '9-2 to ensure compliance:

- {modified 4261} 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 and 40 CFR 63 Subpart ZZZZ]

§63.6640(b) states that 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.

§63.6640(f) states that 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).
  - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
  - (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
  - (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

- (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.

Therefore, the following condition will be included on the proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance:

- {modified 3495} This engine shall be operated only for maintenance, testing, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100\* hours per year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]

\*Note hours allowed may be lower if state ATCM is the limiting factor, and each emergency engine permit has the appropriate hour limitation.

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

There are no notifications necessary for existing emergency engines.

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

There are no report submittals necessary for existing emergency engines.



**§63.6655 What records must I keep?**

§63.6655(a) states that if you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

Only paragraphs (a)(2) and (a)(5) are applicable as stated below:

- (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The following condition will be included on the proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance:

- The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ]

§63.6655(d) states that you must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

§63.6655(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:

- (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.

§63.6655(f) states that if you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

- (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

Therefore, the following condition will be included on the proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance:

- {modified 3404} 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]

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

§63.6660(a) states that your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

§63.6660(b) states that 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.

§63.6660(c) states that 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).

Therefore, the following condition will be included on the proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 to ensure compliance:

- {modified 3873} 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 Rules 1070, 4702, 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ]

Summary of Subpart ZZZZ Permit Conditions:

Following is the summary of the permit conditions for the applicable requirements of Subpart ZZZZ that will be included on the proposed PTOs for permit units '-1, '-2, '-3, '-8, and '-9:

- The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] - §63.6585/63.6595(a)
- The permittee 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 63 Subpart ZZZZ] - §63.6625(h)
- The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] - §63.6603/63.6640 Table 2d, Row 4.a
- The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ]

- The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] - §63.6603/63.6640 Table 2d, Row 4.b
- The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] - §63.6603/63.6640 Table 2d, Row 4.c
- {modified 3404} 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] - §63.6655(f)
- {modified 4261} 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 and 40 CFR 63 Subpart ZZZZ] - Table 6
- The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rules 1070 and 2520; and 40 CFR 63 Subpart ZZZZ] - §63.6655(a)(2) and (a)(5)
- {modified 3873} 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 Rules 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] - §63.6660

PTOs C-598-1-5, '-2-5, and '-3-5:

- This engine shall be operated only for maintenance, testing, and 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] - §63.6640(f)(2)

PTO C-598-8-4:

- This engine shall be operated only for maintenance, testing, and 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] - §63.6640(f)(2)

PTO C-598-9-2:

- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] - §63.6640(f)(2)

**H. 40 CFR Part 64 – Compliance Assurance Monitoring (CAM)**

**§64.2 - Applicability**

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet all of the following three criteria:

- (1) The unit must have an emission limit for the pollutant;
- (2) The unit must have add-on controls for the pollutant (e.g. flue gas recirculation, baghouse, or catalytic oxidizer); and
- (3) The unit must have a pre-control potential to emit of greater than the major source thresholds for that pollutant.

Pollutant	Major Source Threshold (lb/year)
VOC	20,000
NO <sub>x</sub>	20,000
CO	200,000
PM <sub>10</sub>	140,000
SO <sub>x</sub>	140,000

Permit Units C-598-1, '-2, '-3, '-8, '-9, and '-10 (Emergency IC engines)

These units are not equipped with add on control devices for any pollutants; therefore, these units are not subject to CAM.

Permit Unit C-598-4 (Float Glass Manufacturing Line)

Permit Unit C-598-4 represents the float glass manufacturing line. The current permit '-4-10 lists emissions limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions.

CO and VOC:

There are no add-on control devices installed on this permit unit to control CO and VOC emissions; therefore, CAM is not required for CO and VOC emissions for this unit.

NO<sub>x</sub> and SO<sub>x</sub>:

The exemption under 40 CFR 64.2(b)(1)(vi) stipulates that an emission limitation is not applicable for CAM purposes if the Title V permit specifies that a continuous compliance determination method is used. The use of a CEMS meets the definition of a continuous compliance determination method under 40 CFR 64.1. Therefore, the unit is exempt from CAM requirements for NO<sub>x</sub> and SO<sub>x</sub> emissions.

PM<sub>10</sub>

The three CAM applicability criteria are analyzed below for PM<sub>10</sub> emissions:

- (1) Current PTO '-4-10 lists PM<sub>10</sub> emissions limits not to exceed 20.42 lb/hr or 0.7 lb/ton of glass pulled.
- (2) The unit is equipped with an electrostatic precipitator (ESP) that is an add-on control device for PM<sub>10</sub> emission.

- (3) Assuming 95% control efficiency, the uncontrolled PM<sub>10</sub> emissions can be calculated as follows:

$$\begin{aligned}\text{Uncontrolled Emissions} &= 20.42 \text{ lb-PM}_{10}/\text{hr} \times 8,760 \text{ hrs/year} \div (1-0.95) \\ &= 3,577,584 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

As shown above, the uncontrolled PE for PM<sub>10</sub> is greater than the major source threshold of 140,000 lb-PM<sub>10</sub>/year; therefore, CAM is triggered for PM<sub>10</sub> emissions for this unit.

Conditions # 43 thru 45, 51 thru 54, 58, 59, and 67 on the current PTO '4-10 ensure compliance CAM provisions. These conditions are included as #43 thru 45, 58 thru 61, 65, 66, and 73 on the proposed PTO '4-12 to ensure continued compliance.

Permit Unit C-598-5, '6, and '7 (Raw Material receiving and handling)

- (4) PM<sub>10</sub> emissions are limited to 5 lb/day for each permit.
- (5) The units are equipped with fabric filter dust collectors, the add-on control devices for PM<sub>10</sub> emissions.
- (6) Assuming 95% control efficiency, the uncontrolled PM<sub>10</sub> emissions can be calculated as follows:

$$\begin{aligned}\text{Uncontrolled Emissions} &= 5.0 \text{ lb-PM}_{10}/\text{day} \times 365 \text{ days/year} \div (1-0.95) \\ &= 36,500 \text{ lb-PM}_{10}/\text{year}\end{aligned}$$

As shown above, the uncontrolled PE for PM<sub>10</sub> is less than the major source threshold of 140,000 lb-PM<sub>10</sub>/year; therefore, CAM is not triggered for any of these units.

Permit Unit C-598-11 (2.5 MMBtu/hr Test Flare)

The current PTO '11-2 list the emission limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO and VOC emissions; however, no add-on control device is installed for any pollutant. Therefore, CAM is not applicable for this permit unit.

Permit Unit C-598-12 (Glass Cutting Operation)

No emission limits are listed on the current PTO '-12-0; therefore, CAM is not applicable for this permit unit.

**I. 40 CFR Part 82, Subparts B and F, Protection of Stratospheric Ozone**

These regulations apply to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC). However, the latest amendments do not affect requirements applicable to this facility. Conditions 20 and 21 of the facility-wide requirements '-0-5 ensure compliance with the requirements.

**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**

The applicant does not propose to use any model general permit templates.

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

Section 13.1.2 of District Rule 2520 states as follows regarding the application shields:

“Stationary Sources for which timely and complete renewal applications have been submitted may continue to operate until the renewal is either issued or denied. Under the renewal application shield, the existing permit shall not expire and the conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.”

Guardian has requested to grant an “Application Permit Shield” to allow operation under the existing permit condition, when a timely and complete Title V Permit renewal application has been submitted, until such time as renewal permit has been issued or denied.



Therefore, based on Section 13.1.2 of Rule 2520, the following condition will be included on the facility-wide permit C-598-0-5:

- If a timely and complete Title V Permit renewal application has been submitted to the District, the permittee may continue to operate until the renewal is either issued or denied. Under the renewal application shield, the existing permit shall not expire and the conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. [District Rule 2520]

## **X. PERMIT CONDITIONS**

See Attachment A - Draft Renewed Title V Operating Permit.

## **XI. ATTACHMENTS**

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List
- D. Guardian's Proposed Changes to Title V Permit and District's Responses
- E. PSD Permit Number: SJ 76-44-B Previously Issued to Guardian by EPA
- F. Recently Issued Authority to Construct No. C-598-4-13

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# ATTACHMENT A

Draft Renewed Title V Operating Permit

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# San Joaquin Valley Air Pollution Control District

FACILITY: C-598-0-5

EXPIRATION DATE: 01/31/2016

## FACILITY-WIDE REQUIREMENTS

1. {4364} 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
2. {4365} 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 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
3. {4366} 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, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
4. {4367} 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
5. {4368} 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
6. {4369} 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
7. {4370} 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
8. {4371} 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
9. {4372} 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

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.

10. {4374} 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
11. {4375} 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
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 Rules 2410 and 2520] Federally Enforceable Through Title V Permit
13. {4376} 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
14. {4377} 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
15. {4378} 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
16. {4384} 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
17. {4385} 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
18. {4386} 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
19. {4387} 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
20. {4388} 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
21. {4389} 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
22. {4390} 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 8021 and 8011] Federally Enforceable Through Title V Permit
23. {4391} 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 8031 and 8011] Federally Enforceable Through Title V Permit

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. {4392} 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 8041 and 8011] Federally Enforceable Through Title V Permit
25. {4393} 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 8051 and 8011] Federally Enforceable Through Title V Permit
26. {4394} 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 8061 and 8011] Federally Enforceable Through Title V Permit
27. {4395} 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 8071 and 8011] Federally Enforceable Through Title V Permit
28. {4396} 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
29. {4397} 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
30. {4398} 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
31. {4399} 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
32. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 202 (Fresno). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
33. {4401} 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
34. If a timely and complete Title V Permit renewal application has been submitted to the District, the permittee may continue to operate until the renewal is either issued or denied. Under the renewal application shield, the existing permit shall not expire and the conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. [District Rule 2520] 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.

35. 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] Federally Enforceable Through Title V Permit
36. 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] Federally Enforceable Through Title V Permit
37. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative 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 Rules 2410 and 2520] Federally Enforceable Through Title V Permit
38. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rules 2410 and 2520] Federally Enforceable Through Title V Permit
39. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rules 2410 and 2520] Federally Enforceable Through Title V Permit
40. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rules 2410 and 2520] Federally Enforceable Through Title V Permit
41. 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 (11/15/01). 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] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
43. Should the facility, as defined in 40 CFR section 68.3 become subject to part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR section 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR part 70. [40 CFR 68] Federally Enforceable Through Title V Permit
44. At all times, including periods of startup, shutdown and malfunction, permittee shall, to the extent practicable, maintain and operate the equipment including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the District which may include, but is not limited to, monitoring results, opacity observations, review of operating maintenance procedures and inspection of the source. [District Rule 2410] Federally Enforceable Through Title V Permit
45. In the event of any changes in control or ownership of the equipment to be constructed, the PSD requirements of this permit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of the PSD requirements of this permit by letter, a copy of which shall be forwarded to the State Air Resources Board and the District. [District Rule 2410] Federally Enforceable Through Title V Permit
46. Permittee shall construct and operate this project in compliance with the PSD requirements of this permit and all other applicable federal, state, and local air quality regulations. The PSD requirements of this permit do not release the permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act. [District Rule 2410] 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.

47. All correspondence as required by the PSD requirements of this permit shall be forwarded to the District at the following address: Air Pollution Control Officer, San Joaquin Valley Air Pollution Control District, 1990 E Gettysburg Ave, Fresno, CA 93726-0244; Email: sjvapcd@valleyair.org; Facsimile: (559) 230-6061. [District Rule 2410] Federally Enforceable Through Title V Permit
48. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 14 of each 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

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-598-1-5

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. 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
4. This engine shall not be used to produce power 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
5. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced 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.



10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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
12. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated only for maintenance, testing, and 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
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. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
16. 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 Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
17. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rules 1070 and 2520; and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. 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 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] 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:** C-598-2-5

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

## 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 Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. 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
4. This engine shall not be used to produce power 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
5. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced 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.

10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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
12. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated only for maintenance, testing, and 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
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. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
16. 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 Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
17. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rules 1070 and 2520; and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. 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 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] 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:** C-598-3-5

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

## 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 Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. 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
4. This engine shall not be used to produce power 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
5. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced 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.

10. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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
12. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated only for maintenance, testing, and 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
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. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
16. 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 Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
17. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rules 1070 and 2520; and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. 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 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] 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:** C-598-4-12

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (C/U1), AN ELECTROSTATIC PRECIPITATOR (C/U2), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION (C/U3), TIN FLOAT BATH, ANNEALING LEHR, TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

## 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. Permittee shall comply with all startup requirements of District Rule 4354 during startup. Startup exemption time shall not exceed 208 days, beginning from the time of primary combustion system activation. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit
3. Start-up is defined as the period of time, after initial construction or 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 purpose 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 listed in this permit. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit
4. During startup, the stoichiometric ratio of the primary furnace combustion system shall not exceed 5% oxygen as calculated from the actual fuel and oxidant flow measurements for combustion in the furnace. [District Rule 4354] Federally Enforceable Through Title V Permit
5. The emission control systems (ECS), C/Us 1, 2, and 3 shall be in operation at all times during normal operations, and whenever technologically feasible including during startup, idling and shutdown conditions. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit
6. The furnace shall be in compliance with all applicable requirements of District Rule 4354 by the end of startup. [District Rule 4354] Federally Enforceable Through Title V Permit
7. Furnace shutdown shall not exceed 20 days, measured from the time furnace operations drop below the idling threshold of less than 25 percent of the permitted glass production capacity listed in this permit to when all emissions from the furnace cease. [District Rule 4354] Federally Enforceable Through Title V Permit
8. NOx emissions during idling shall not exceed 6,440 lbs/day. SOx and PM10 emissions during idling shall not exceed the emissions limits as calculated using the following equation:  $SO_x \text{ and } PM_{10} \text{ (lb/day)} = (\text{Applicable Emission limit (in lbs/ton)}) \times (\text{Furnace permitted production capacity (in tons/day)})$ . CO and VOC emissions during idling shall not exceed the emissions limits as calculated using the following equation:  $CO \text{ and } VOC \text{ (lb/day)} = (\text{Applicable Emission limit (in lb/MMBtu)}) \times (\text{Furnace Maximum Heat Input (in MMBtu/hr)}) \times (24 \text{ hrs/day})$ . [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit
9. Except as specified elsewhere in this permit, all emissions from the furnace shall be ducted to the high temperature (dry) scrubber (C/U1), the electrostatic precipitator (C/U2), and the selective catalytic reduction (SCR) system (C/U3), prior to exhausting into the atmosphere. [District Rules 2201 and 2410] 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. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub> and PM<sub>10</sub> emission limitations shall not apply during periods of routine maintenance of an add-on emission control system(s) as long as the routine maintenance does not exceed 144 hours total per calendar year for all add-on controls and the routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
11. Permittee shall not use commercial arsenic as a raw material in the production process. [40 CFR 61, Subpart N] Federally Enforceable Through Title V Permit
12. The furnace shall be fired exclusively on PUC quality natural gas or LPG as a backup fuel. [District Rules 2201 and 2410] Federally Enforceable Through Title V Permit
13. The glass pull rate shall not exceed 700 tons per day. [District Rules 2201, 2410, and 4354] Federally Enforceable Through Title V Permit
14. NO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 107.92 lb/hr or 3.70 lb/ton of glass pulled, based on a block 24-hour average; or 3.2 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201, 2410, and 4354] Federally Enforceable Through Title V Permit
15. SO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 49.58 lb/hr or 1.7 lb/ton of glass pulled, based on a block 24-hour average; or 1.2 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201, 2410, and 4354] Federally Enforceable Through Title V Permit
16. PM<sub>10</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 20.42 lb/hr or 0.7 lb/ton of glass pulled, based on a block 24-hour average. [District Rules 2201, 2410, 4202, and 4354] Federally Enforceable Through Title V Permit
17. CO emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 22.05 lb/hr or 101 ppmv @ 8% O<sub>2</sub> (equivalent to 0.104 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
18. VOC emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 0.83 lb/hr or 6.6 ppmv VOC @ 8% O<sub>2</sub> (equivalent to 0.0039 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
19. CO emissions from the glass melting furnace exhaust shall not exceed 100 tons per year, based on a 12-month rolling average. [District Rules 2201 and 2410] Federally Enforceable Through Title V Permit
20. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 1.27 lb/hr or 10 ppmvd @ 8% O<sub>2</sub>, based on a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
21. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation: (ppmvd @ 8% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia solution injection rate (lb/hr) / (17 lb/lb mol) x ammonia concentration (%), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 8% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
22. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with 40 CFR 60.8(e) and EPA test methods and shall be equipped with safe permanent provisions to sample stack gases. 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 Rules 1081 and 2410] Federally Enforceable Through Title V Permit
23. Source testing to measure the NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> emission rates (lb/hr and lb/ton of glass pulled) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2410, 2520, and 4354] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

24. Source testing to measure the CO emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O<sub>2</sub>) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2410, 2520, and 4354] Federally Enforceable Through Title V Permit
25. Source testing to measure the VOC and Ammonia emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O<sub>2</sub>) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354] Federally Enforceable Through Title V Permit
26. 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. A compliance source test may be a performance test on the source and/or a CEMS unit. [District Rules 1081 and 2410] Federally Enforceable Through Title V Permit
27. 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 Rule 4354] Federally Enforceable Through Title V Permit
28. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM<sub>10</sub> emission limits. [District Rule 4354] Federally Enforceable Through Title V Permit
29. During source testing, for a given pollutant, 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
30. Source tests shall be conducted at a minimum glass production pull rate equivalent to 90% of the maximum glass production pull rate achieved during the last year, unless otherwise approved by the District. In no case less than 420 tons glass pulled per day or 127.2 MMBtu/hr. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit
31. Upon written request from the permittee, and adequate justification, the District may waive a specific annual test and/or allow for testing to be done at less than 90% of maximum glass production pull rate achieved during the last year. [District Rule 2410] Federally Enforceable Through Title V Permit
32. 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 test methods and procedures specified in this permit, or other equivalent methods with written approval by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2410] Federally Enforceable Through Title V Permit
33. Source testing to measure oxides of nitrogen (as NO<sub>2</sub>) shall be conducted in accordance with Rule 1081 using the following test methods: EPA Methods 1-4, 7E, or ARB Method 100 if NO<sub>x</sub> emissions are measured in ppmv; or EPA Methods 1-4, or 19 if NO<sub>x</sub> emissions are measured on heat input basis. [District Rules 1081, 2410, and 4354] Federally Enforceable Through Title V Permit
34. The initial performance test conducted after furnace startup shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, to measure NO<sub>2</sub> emissions. The source shall be classified as either a 'low' or 'high' NO<sub>2</sub> emission site based on these test results. If the emission source is classified as a: a) 'high NO<sub>2</sub> emission site,' then each subsequent performance test shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100. b) 'low NO<sub>2</sub> emission site,' then the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, shall be performed once every five years to verify the source's classification as a 'low NO<sub>2</sub> emission site.' [District Rule 2410] Federally Enforceable Through Title V Permit
35. Source testing to measure oxides of sulfur (as SO<sub>2</sub>) shall be conducted using EPA Methods 1-4, 6C, or 8, and in accordance with Rule 1081. [District Rules 1081, 2410, and 4354, and 4801] Federally Enforceable Through Title V Permit

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36. Source testing to measure PM10 including condensables, shall be conducted using EPA Methods 1-5, EPA Method 201, or EPA Method 201A in combination with EPA Method 202 (Condensables), and in accordance with Rule 1081. An operator choosing EPA Method 5 for filterable PM shall count all PM collected as PM10. [District Rules 1081, 2410, and 4354] Federally Enforceable Through Title V Permit
37. Source testing to measure CO (ppmv) shall be conducted using EPA Methods, 1-4, EPA Method 10, or ARB Method 100, and in accordance with Rule 1081. [District Rules 1081, 2410, and 4354] Federally Enforceable Through Title V Permit
38. Source testing to measure VOCs (ppmv) shall be conducted using EPA Method 25A, expressed in terms of methane, or ARB Method 100, and in accordance with District Rule 1081. EPA Method 18 or ARB Method 422 shall be used to determine emissions of exempt compounds. [District Rules 1081 and 4354] Federally Enforceable Through Title V Permit
39. Source testing to measure stack gas oxygen shall be conducted using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 2410, and 4354] Federally Enforceable Through Title V Permit
40. Source testing to measure ammonia shall be conducted using BAAQMD ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
41. 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
42. Permittee shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NOx and O2 concentration at the inlet of the SCR system. Continuous emissions monitor(s) shall meet the requirements of 40 CFR part 51, 40 CFR parts 60.7 and 60.13, 40 CFR part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures), and applicable sections of Rule 1080 (Stack Monitoring) (as amended December 17, 1992). [District Rule 4102]
43. Permittee shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NOx, SOx, CO and O2 concentration and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2 and 3 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the 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, 2410, and 4354; and 40 CFR Part 64] Federally Enforceable Through Title V Permit
44. Permittee 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 agreement of the District, the ARB, and the EPA. [District Rules 1080 and 2201; and 40 CFR Part 64] Federally Enforceable Through Title V Permit
45. 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, Procedure 1. [District Rules 1080, 2410, and 4354; and 40 CFR Part 64] Federally Enforceable Through Title V Permit
46. The CEMS used to monitor emissions of NOx and SOx shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed consistent with procedures under 40 CFR 60.13. Each 1-hour period in a block 24-hour average shall commence on the hour. The block 24-hour average is the arithmetic average of the hourly emissions rates as measured over 24 one-hour periods, daily, starting from 12:00 AM to 11:59 PM, excluding periods of system calibration. [District Rules 2201 and 4354; and 40 CFR 60.13] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

47. The CEMS used to monitor emissions of CO shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed consistent with procedures under 40 CFR 60.13. Each 1 hour period shall commence on the hour. The rolling three hour average is the arithmetic average of three contiguous 1-hour periods, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District and the ARB. [District Rule 1080 and 2410; and 40 CFR 60.13] Federally Enforceable Through Title V Permit
48. The rolling 30-day average is the arithmetic average of the valid daily emission rates over a contiguous 30-day period. [District Rule 4354] Federally Enforceable Through Title V Permit
49. The performance evaluation of the CEMS may be conducted as part of any performance test. [District Rule 2410] Federally Enforceable Through Title V Permit
50. CEMS shall be in operation during each idling period. [District Rule 2410] Federally Enforceable Through Title V Permit
51. Performance tests shall be conducted in accordance with 40 CFR 60.8(f). In lieu of the test methods specified in this permit, equivalent methods may be used with prior written approval from the District. [District Rule 2410] Federally Enforceable Through Title V Permit
52. Excess emissions shall be defined as any instance in which the block 24-hour average NOx or SOx emissions, as measured by CEMS, exceeds the maximum hourly NOx or SOx emission limits listed in this permit. [District Rule 2410] Federally Enforceable Through Title V Permit
53. A period of monitor down time shall be any unit operating hour in which sufficient data are not obtained to validate the hour for NOx, SOx or O2 emission rates. [District Rule 2410] Federally Enforceable Through Title V Permit
54. Cylinder Gas Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are 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 Rules 1080 and 2410; and 40 CFR 60 Appendix F] Federally Enforceable Through Title V Permit
55. 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] Federally Enforceable Through Title V Permit
56. Any violation of an emission standard, as shown by the stack-monitoring system, shall be reported to the APCO within 96 hours of detection. [District Rules 1080 and 2410] Federally Enforceable Through Title V Permit
57. Any breakdown in the continuous emission monitors shall be reported as soon as reasonably possible, but no later than eight hours after detection, unless the owner or operator demonstrates to the APCO's satisfaction that a longer reporting period was necessary, and shall initiate repairs. The Owner/operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
58. Permittee shall install and maintain equipment, facilities, and systems compatible with the District's 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 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
59. Upon notice by the District that the facility's CEM system is not providing polling data, the permittee may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
60. Permittee shall maintain CEMS records that contain the following: the occurrence and duration of any or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [District Rules 1080 and 2410; and 40 CFR Part 64] 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.

61. 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 (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventive measures adopted; applicable time and date of 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 Rules 1080 and 2410; and 40 CFR Part 64] Federally Enforceable Through Title V Permit
62. Permittee shall install, operate, and maintain a monitoring and recording system to accurately measure and record the furnace temperature at least once per hour. This approved parametric monitoring is in lieu of installing and operating a CEMS for VOC emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
63. The furnace temperature shall be maintained at or above 1,800 °F. If the measured furnace temperature is less than 1,800 °F, 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
64. Permittee shall keep records of the date and time of the furnace temperature readings and the furnace melter crown temperature measured during the most recent source test that demonstrated ongoing compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit
65. Permittee shall establish parameters for primary and secondary voltage and current, which provides a reasonable assurance of ongoing compliance with emission limitations stated in this permit. The initial parameters shall be established using at least 6 months of historical operating data and manufacturer/supplier recommendations. These parameters shall be reviewed annually and revised if necessary based on PM10 source test result data, historical operating data and manufacturer/supplier recommendations. This approved parametric monitoring is in lieu of installing and operating a CEMS for PM10 emissions. [District Rules 2410 and 4354; and 40 CFR Part 64] Federally Enforceable Through Title V Permit
66. During each day of operation, the permittee shall record electrostatic precipitator voltage and current readings and compare the readings with the acceptable range of current and voltage levels established. Upon detecting any excursion from the acceptable range of current or voltage readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rules 2410 and 4354; and 40 CFR Part 64] Federally Enforceable Through Title V Permit
67. Permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, and the quantity of glass pulled. The permittee shall also maintain records of all source tests, operating parameters established during source testing, all maintenance and repair performed, any periods of malfunction, and all periods of startup, idling, and shutdown. The records shall include emission calculations in units of lbs/hr based on CEMS data. This information shall be made available on site during normal business hours from Monday through Friday, and submitted to the APCO upon request. [District Rules 1070, 2410, and 4354] Federally Enforceable Through Title V Permit
68. Permittee shall maintain daily records of NO<sub>x</sub> and SO<sub>x</sub> emission rates in lb/ton of glass pulled to demonstrate compliance with the NO<sub>x</sub> and SO<sub>x</sub> emission limits. [District Rules 1070, 2201, 2410, and 4354] Federally Enforceable Through Title V Permit
69. Permittee shall maintain records of NO<sub>x</sub> and SO<sub>x</sub> emission rates in lb/ton of glass pulled on a "30-day rolling average" to demonstrate compliance with the NO<sub>x</sub> and SO<sub>x</sub> emission limits. [District Rules 1070, 2201, and 4354] Federally Enforceable Through Title V Permit
70. Permittee shall maintain records of the CO emission rates in ppmvd referenced at 8% O<sub>2</sub> on a "3-hour rolling average" to demonstrate compliance with the CO emission limits. [District Rules 1070 and 4354] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

71. Permittee shall maintain records of the electrostatic precipitator primary and secondary voltage and current at least once per day. [District Rules 1070 and 4354] Federally Enforceable Through Title V Permit
72. Permittee shall maintain records of the following items: 1) source tests and source test results; 2) the acceptable range of each approved key system operating parameter, as established during source test; 3) glass furnace maintenance and repair; 4) date, time and duration of any add-on control device routine maintenance; and 5) malfunctions. [District Rule 4534] Federally Enforceable Through Title V Permit
73. Records shall be maintained and shall contain: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, or any periods during which the CEM is inoperative; and the CEM emission measurements. [District Rules 1080, 2410, and 4354; and 40 CFR Part 64] Federally Enforceable Through Title V Permit
74. All records required by this permit shall be maintained, retained on-site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, 2410, and 4354] Federally Enforceable Through Title V Permit
75. The District shall be notified by facsimile or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in this permit. In addition, the District shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in this permit, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in this permit. [District Rule 2410] 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:** C-598-5-5

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

RAW MATERIAL UNLOADING AND STORAGE OPERATION CONSISTING OF TRUCK HOPPERS, RAW MATERIAL CONVEYORS; BUCKET ELEVATORS; AND BINS FOR SAND, SODA ASH, CULLET, DOLOMITE, SALTCAKE, AND LIMESTONE; SERVED BY VARIOUS FLEX-KLEEN BV SERIES FABRIC FILTER DUST COLLECTORS

## PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Material removed from dust collectors shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. PM concentration shall not exceed 0.05 grains/scf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
4. PM10 emissions shall not exceed 5.0 lbs/day. [District Rules 2201 and 4202] Federally Enforceable Through Title V Permit
5. Filters of each dust collector shall be inspected at least once every two weeks while not in operation for any tears, holes, abrasions, and scuffs which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520] Federally Enforceable Through Title V Permit
6. Each dust collector shall be inspected weekly while in operation for visible emissions. If excessive visible emissions are observed, appropriate action shall be taken, such as dust collector maintenance, cleaning, or replacement of filters, as needed. [District Rule 2520] Federally Enforceable Through Title V Permit
7. The permittee shall conduct weekly visual inspections to determine whether visible emissions are present. If visible emissions are present, the facility will conduct a USEPA Method 9 test within 72 hours to determine if visible emissions are in excess of Ringelmann #1 or 20% opacity. If visible emissions can not be eliminated, the facility will conduct a EPA Method 5 test within 30 days of detection of visible emissions to demonstrate compliance with the particulate matter emission limit. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
8. In the case that a source test is required, the results of each source test shall be submitted to District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
9. In the case that a source test is required, compliance with the PM10 daily emission limit (DEL) for this permit unit shall be determined using the arithmetic mean of three 1-hour test runs for PM10 emissions, pursuant to District Rule 1081. This shall be multiplied by the appropriate factor to determine compliance. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
10. Records of each dust collector inspection, maintenance, and repair shall be maintained. These records shall include identification of the dust collector, date of inspection, any corrective action taken as a result of inspection, and initials of the personnel performing the inspection. [District Rule 2520] Federally Enforceable Through Title V Permit
11. Records of the daily process throughput shall be maintained. [District Rule 2520] 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:** C-598-6-5

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

RAW MATERIAL WEIGHTING, MIXING, AND DELIVERY OPERATION CONSISTING OF ROUGE AND CHARCOAL HOPPERS, SCALES, CONVEYORS, AND CRUSHER SURGE HOPPER SERVED BY AIR VENT DUST BAGS AND VARIOUS FLEX-KLEEN BV SERIES FABRIC FILTER DUST COLLECTORS

## PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Material removed from dust collectors shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. PM concentration shall not exceed 0.05 grains/scf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
4. PM10 emissions shall not exceed 5.0 lbs/day. [District Rules 2201 and 4202] Federally Enforceable Through Title V Permit
5. Filters of each dust collector shall be inspected at least once every two weeks while not in operation for any tears, holes, abrasions, and scuffs which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520] Federally Enforceable Through Title V Permit
6. Each dust collector shall be inspected weekly while in operation for visible emissions. If excessive visible emissions are observed, appropriate action shall be taken, such as dust collector maintenance, cleaning, or replacement of filters, as needed. [District Rule 2520] Federally Enforceable Through Title V Permit
7. The permittee shall conduct weekly visual inspections to determine whether visible emissions are present. If visible emissions are present, the facility will conduct a USEPA Method 9 test within 72 hours to determine if visible emissions are in excess of Ringelmann #1 or 20% opacity. If visible emissions can not be eliminated, the facility will conduct a EPA Method 5 test within 30 days of detection of visible emissions to demonstrate compliance with the particulate matter emission limit. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
8. In the case that a source test is required, the results of each source test shall be submitted to District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
9. In the case that a source test is required, compliance with the PM10 daily emission limit (DEL) for this permit unit shall be determined using the arithmetic mean of three 1-hour test runs for PM10 emissions, pursuant to District Rule 1081. This shall be multiplied by the appropriate factor to determine compliance. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
10. Records of each dust collector inspection, maintenance, and repair shall be maintained. These records shall include identification of the dust collector, date of inspection, any corrective action taken as a result of inspection, and initials of the personnel performing the inspection. [District Rule 2520] Federally Enforceable Through Title V Permit
11. Records of the daily process throughput shall be maintained. [District Rule 2520] 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:** C-598-7-4

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

SHEET GLASS SEAMER OPERATION SERVED BY AN INDUSTRIAL CLEAN AIR PULSE CLEAN 500 SERIES MODULAR IV FABRIC FILTER DUST COLLECTOR

## PERMIT UNIT REQUIREMENTS

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1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Material removed from dust collector shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
3. PM concentration shall not exceed 0.05 grains/scf. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
4. PM10 emissions shall not exceed 5.0 lbs/day. [District Rules 2201 and 4202] Federally Enforceable Through Title V Permit
5. Filters of the dust collector shall be inspected at least once every two weeks while not in operation for any tears, holes, abrasions, and scuffs which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520] Federally Enforceable Through Title V Permit
6. The dust collector shall be inspected weekly while in operation for visible emissions. If excessive visible emissions are observed, appropriate action shall be taken, such as dust collector maintenance, cleaning, or replacement of filters, as needed. [District Rule 2520] Federally Enforceable Through Title V Permit
7. The permittee shall conduct weekly visual inspections to determine whether visible emissions are present. If visible emissions are present, the facility will conduct a USEPA Method 9 test within 72 hours to determine if visible emissions are in excess of Ringelmann #1 or 20% opacity. If visible emissions can not be eliminated, the facility will conduct a EPA Method 5 test within 30 days of detection of visible emissions to demonstrate compliance with the particulate matter emission limit. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
8. In the case that a source test is required, the results of each source test shall be submitted to District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
9. In the case that a source test is required, compliance with the PM10 daily emission limit (DEL) for this permit unit shall be determined using the arithmetic mean of three 1-hour test runs for PM10 emissions, pursuant to District Rule 1081. This shall be multiplied by the appropriate factor to determine compliance. [District Rules 1081 and 2520] Federally Enforceable Through Title V Permit
10. Records of the dust collector inspection, maintenance, and repair shall be maintained. These records shall include identification of the dust collector, date of inspection, any corrective action taken as a result of inspection, and initials of the personnel performing the inspection. [District Rule 2520] Federally Enforceable Through Title V Permit
11. Records of the daily process throughput shall be maintained. [District Rule 2520] 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:** C-598-8-4

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

## 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 Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
4. The permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



10. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for maintenance, testing, and 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
12. 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
13. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. 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 Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
15. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rules 1070 and 2520; and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. 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 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] 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: C-598-9-2

EXPIRATION DATE: 01/31/2016

**EQUIPMENT DESCRIPTION:**

474.5 BHP CATERPILLAR MODEL XQ350-3406 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## 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. {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]
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] 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. Emissions from this engine shall not exceed any of the following limits 6.12 g-NOx/hp-hr, 0.76 g-CO/hp-hr, or 0.05 g-VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The PM10 emissions rate shall not exceed 0.08 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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
8. This engine shall not be used to produce power 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
9. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. The permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [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.

12. The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. 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
16. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. 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
19. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. 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 Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
21. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rules 1070 and 2520; and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. 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 1070, 2520, and 4702; 17 CCR 93115; and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-598-10-3

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

168 BHP CATERPILLAR MODEL C6.6 ACERT TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE  
POWERING WATER PUMPS FOR GLASS FURNACE COOLING

## PERMIT UNIT REQUIREMENTS

1. 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 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
2. The permittee shall operate and maintain this engine in a manner to achieve the applicable emission limits of 40 CFR Part 60 Subpart IIII over the entire life of the engine. [40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
3. The permittee shall change only those emission-related settings that are permitted by the manufacturer. [40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
5. {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]
6. 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 60 Subpart IIII] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed any of the following limits: 2.51 g-NOx/bhp-hr, 1.34 g-CO/bhp-hr, or 0.18 g-VOC/bhp-hr. [District Rule 2201; 13 CCR 2423 and 17 CCR 93115; and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
8. Emissions from this IC engine shall not exceed 0.112 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102; 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201 and 4702; 17 CCR 93115 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
10. 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
11. 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 60 Subpart IIII] 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. 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
13. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. 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 Rules 2520 and 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 Rules 1070, 2520, and 4702; and 17 CCR 93115] 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:** C-598-11-3

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4)

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The flare shall only be fired on commercial LPG. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Emissions rates from the combustion of LPG in the flare shall not exceed any of the following limits: 0.068 lb-NO<sub>x</sub>/MMBtu, 0.0164 lb-SO<sub>x</sub>/MMBtu, 0.026 lb-PM<sub>10</sub>/MMBtu, 0.370 lb-CO/MMBtu, or 0.063 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Sulfur content of gas flared shall not exceed 15 grain-S/100 scf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
5. A flame shall be present at all times when combustible gases are vented through this flare. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
6. A flame sensing or heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present, shall be operational. [District Rule 4311] Federally Enforceable Through Title V Permit
7. Operation of the flare shall not exceed either of the following limits: 12 hours per day or 200 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall maintain records of the daily and annual duration of flare operation, amount of gas burned, the nature of the emergency situation, and copies of LPG bills. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
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 Rules 2201 and 4311] 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:** C-598-12-1

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

FACILITY GLASS CUTTING OPERATIONS INCLUDING MAIN LINE, TEMPERING LINE, COATER AND OFFLINE CUTTING TABLES USING MINERAL SPIRITS

## PERMIT UNIT REQUIREMENTS

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1. The permittee shall maintain records of annual consumption of mineral spirits based on facility purchasing records.  
[District Rule 1160] Federally Enforceable Through Title V Permit

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



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# ATTACHMENT B

Previous Title V Operating Permit

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# San Joaquin Valley Air Pollution Control District

FACILITY: C-598-0-4

EXPIRATION DATE: 01/31/2016

## FACILITY-WIDE REQUIREMENTS

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1. 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
2. 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 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
3. 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, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. 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

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: GUARDIAN INDUSTRIES CORP  
Location: 11535 E MOUNTAIN VIEW AVE, KINGSBURG, CA 93631  
C-598-0-4 Sep 22 2016 1:36PM - AHMADS

10. 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
11. 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
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; PSD SJ 76-44, VII] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. 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
16. 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
17. 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
18. 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
19. 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
20. 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
21. 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
22. 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 8021 and 8011] Federally Enforceable Through Title V Permit
23. 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 8031 and 8011] 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.

24. 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 8041 and 8011] Federally Enforceable Through Title V Permit
25. 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 8051 and 8011] Federally Enforceable Through Title V Permit
26. 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 8061 and 8011] Federally Enforceable Through Title V Permit
27. 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 8071 and 8011] Federally Enforceable Through Title V Permit
28. 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
29. 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
30. 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
31. 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
32. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 202 (Fresno). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
33. 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
34. 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] 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.

35. 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] Federally Enforceable Through Title V Permit
36. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative 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; PSD SJ 76-44, V.A] Federally Enforceable Through Title V Permit
37. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative 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; PSD SJ 76-44, V.B] Federally Enforceable Through Title V Permit
38. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3; PSD SJ 76-44, V.C] Federally Enforceable Through Title V Permit
39. Upon presentation of appropriate credentials, a permittee shall allow the EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the District, and/or their authorized representative 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; PSD SJ 76-44, V.D] Federally Enforceable Through Title V Permit
40. 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 (11/15/01). 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] Federally Enforceable Through Title V Permit
41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. Should the facility, as defined in 40 CFR section 68.3 become subject to part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR section 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR part 70. [40 CFR 68] Federally Enforceable Through Title V Permit
43. At all times, including periods of startup, shutdown and malfunction, Permittee shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA which may include, but is not limited to, monitoring results, opacity observations, review of operating maintenance procedures and inspection of the source. [PSD SJ 76-44, III] Federally Enforceable Through Title V Permit
44. In the event of any changes in control or ownership of the facilities to be constructed, the PSD Permit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of the PSD Permit and its conditions by letter, a copy of which shall be forwarded to EPA Region IX, the State Air Resources Board, and District. [PSD SJ 76-44, VI] Federally Enforceable Through Title V Permit
45. Permittee shall construct and operate this project in compliance with the PSD permit and all other applicable federal, state, and local air quality regulations. The PSD permit does not release the Permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act. [PSD SJ 76-44, VIII] 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.

46. All correspondence as required by the PSD 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. [PSD SJ 76-44, XI] Federally Enforceable Through Title V Permit
47. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 14 of each 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

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-598-1-4

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

1,115 HP CUMMINS MODEL 7421 DIESEL-FUELED I.C. ENGINE #1, POWERING A 750 KW EMERGENCY GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. 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
5. This engine shall not be used to produce power 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
6. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. On and after May 3, 2013, the permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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

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

12. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated only for maintenance, testing, and 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
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. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 4702 and 2520, 9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
16. 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 Rules 4702 and 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. 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 1070, 4702, 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] 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:** C-598-2-4

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

1,115 HP CUMMINS MODEL 7421 DIESEL-FUELED I.C. ENGINE #2, POWERING A 750 KW EMERGENCY GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. 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
5. This engine shall not be used to produce power 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
6. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. On and after May 3, 2013, the permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated only for maintenance, testing, and 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
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. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 4702 and 2520, 9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
16. 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 Rules 4702 and 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. 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 1070, 4702, 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] 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:** C-598-3-4

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

1,115 HP CUMMINS MODEL 7421 DIESEL-FUELED I.C. ENGINE #3, POWERING A 750 KW EMERGENCY GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. 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
5. This engine shall not be used to produce power 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
6. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. On and after May 3, 2013, the permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
10. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
13. This engine shall be operated only for maintenance, testing, and 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
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. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 4702 and 2520, 9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
16. 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 Rules 4702 and 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
19. 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 1070, 4702, 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] 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:** C-598-4-10

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

212.0 MMBTU/HR FLOAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (C/U1), AN ELECTROSTATIC PRECIPITATOR (C/U2), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION (C/U3), TIN FLOAT BATH, ANNEALING LEHR, TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITOR (CEMS)

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Permittee shall comply with all requirements of Section 5.5 of District Rule 4354 (5/19/11) during startup. Startup exemption time shall not exceed 208 days, beginning from the time of primary combustion system activation. [District Rule 4354, 5.5; PSD SJ 76-44, X.E.4] Federally Enforceable Through Title V Permit
3. During startup, the stoichiometric ratio of the primary furnace combustion system shall not exceed 5% oxygen as calculated from the actual fuel and oxidant flow measurements for combustion in the furnace. [District Rule 4354, 5.5] Federally Enforceable Through Title V Permit
4. The emission control systems (ECS), C/Us 1, 2, and 3 shall be in operation at all times during normal operations, and whenever technologically feasible including during startup, idling and shutdown conditions. [District Rule 4354, 5.5, 5.6, 5.7; PSD SJ 76-44, X.E.7] Federally Enforceable Through Title V Permit
5. The furnace shall be in compliance with all applicable requirements of District Rule 4354 (5/19/11) by the end of startup. [District Rule 4354, 7.0] Federally Enforceable Through Title V Permit
6. Furnace shutdown shall not exceed 20 days, measured from the time furnace operations drop below the idle threshold specified in Section 3.9 of District Rule 4354 (2/21/02) to when all emissions from the furnace cease. [District Rule 4354, 5.6] Federally Enforceable Through Title V Permit
7. NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the emissions limits as calculated using the following equation: NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> (lb/day) = (Applicable Emission limit (in lbs/ton)) x (Furnace permitted production capacity (in tons/day)). CO and VOC emissions during idling shall not exceed the emissions limits as calculated using the following equation: CO and VOC (lb/day) = (Applicable Emission limit (in lb/MMBtu)) x (Furnace Maximum Heat Input (in MMBtu/hr) x (24 hrs/day)). [District Rule 4354, 5.7; PSD SJ 76-44, X.E.2] Federally Enforceable Through Title V Permit
8. Except as specified elsewhere in this permit, all emissions from the furnace shall be ducted to the high temperature (dry) scrubber (C/U1), the electrostatic precipitator (C/U2), and the selective catalytic reduction (SCR) system (C/U3), prior to exhausting into the atmosphere. [District Rule 2201; PSD SJ 76-44, X.B.2] Federally Enforceable Through Title V Permit
9. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub> and PM<sub>10</sub> emission limitations shall not apply during periods of routine maintenance of an add-on emission control system(s) as long as the routine maintenance does not exceed 144 hours total per calendar year for all add-on controls and the routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354, 5.10] 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 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
11. The furnace shall be fired exclusively on PUC quality natural gas or LPG as a backup fuel. [District Rule 2201; PSD SJ 76-44, X.I.1] Federally Enforceable Through Title V Permit
12. The glass pull rate shall not exceed 700 tons per day. [District Rules 2201 and 4354, 6.1; PSD SJ 76-44, X.D.1] Federally Enforceable Through Title V Permit
13. Start-up is defined as the period of time, after initial construction or 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 purpose 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, 3.0; PSD SJ 76-44, X.E.4, X.E.5, and X.E.6] Federally Enforceable Through Title V Permit
14. NO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 107.92 lb/hr or 3.70 lb/ton of glass pulled, based on a block 24-hour average; or 3.25 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201 and 4354, 5.1; PSD SJ 76-44, X.D.2] Federally Enforceable Through Title V Permit
15. SO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 49.58 lb/hr or 1.7 lb/ton of glass pulled, based on a block 24-hour average; or 1.2 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201 and 4354, 5.3; PSD SJ 76-44, X.D.3] Federally Enforceable Through Title V Permit
16. PM<sub>10</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 20.42 lb/hr or 0.7 lb/ton of glass pulled. [District Rules 2201, 4202, and 4354, 5.4; PSD SJ 76-44, X.D.4] Federally Enforceable Through Title V Permit
17. CO emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 22.05 lb/hr or 101 ppmv @ 8% O<sub>2</sub> (equivalent to 0.104 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354, 5.2] Federally Enforceable Through Title V Permit
18. VOC emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 0.83 lb/hr or 6.6 ppmv VOC @ 8% O<sub>2</sub> (equivalent to 0.0039 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354, 5.2] Federally Enforceable Through Title V Permit
19. CO emissions from the glass melting furnace exhaust shall not exceed 100 tons per year, based on a 12-month rolling average [District Rule 2201 and PSD SJ 76-44 X.D.5] Federally Enforceable Through Title V Permit
20. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 1.27 lb/hr or 10 ppmvd @ 8% O<sub>2</sub>, based on a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
21. Each one hour period will commence on the hour. The three hour average will be compiled from the three most recent one-hour periods. The block 24-four hour average will be compiled of 24 one-hour periods, daily, starting from 12:00 AM to 11:59 PM, excluding periods of system calibration. [District Rules 2201 and 4354, 3.3] 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.

22. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 8\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 8% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 8% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
23. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with 40 CFR 60.8(e) and EPA test methods and shall be equipped with safe permanent provisions to sample stack gases. 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; PSD SJ 76-44, X.F.4] Federally Enforceable Through Title V Permit
24. Source testing to measure the NOx, SOx, and PM10 emission rates (lb/hr and lb/ton of glass pulled) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354, 6.4; PSD SJ 76-44, X.F.1] Federally Enforceable Through Title V Permit
25. Source testing to measure the CO emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O2) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354, 6.4; PSD SJ 76-44, X.F.1] Federally Enforceable Through Title V Permit
26. Source testing to measure the VOC and Ammonia emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O2) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354, 6.4] Federally Enforceable Through Title V Permit
27. 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
28. 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 Rule 4354, 6.4] Federally Enforceable Through Title V Permit
29. 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] Federally Enforceable Through Title V Permit
30. During source testing, for a given pollutant, 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, 6.4] Federally Enforceable Through Title V Permit
31. Source tests shall be conducted at a minimum glass production pull rate equivalent to 90% of the maximum glass production pull rate achieved during the last year, unless otherwise approved by EPA. In no case less than 420 tons glass pulled per day or 127.2 MMBtu/hr. [District Rule 4354, 6.4, 6.5; PSD SJ 76-44, X.F.6] Federally Enforceable Through Title V Permit
32. Upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than 90% of maximum glass production pull rate achieved during the last year. [PSD SJ 76-44, X.F.7] 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.

33. 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 test methods and procedures specified in this permit. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081; PSD SJ 76-44, X.F.2 and X.F.5] Federally Enforceable Through Title V Permit
34. Source testing to measure oxides of nitrogen (as NO<sub>2</sub>) (ppmv) shall be conducted using EPA Method 7E, or ARB Method 100, or oxides of nitrogen (as NO<sub>2</sub>) (heat input basis) shall be conducted using EPA Method 19 and in accordance with Rule 1081, section 6.0 (12/16/93). [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3.a and X.F.3.b] Federally Enforceable Through Title V Permit
35. The initial performance test conducted after furnace startup shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, to measure NO<sub>2</sub> emissions. The source shall be classified as either a 'low' or 'high' NO<sub>2</sub> emission site based on these test results. If the emission source is classified as a: a) 'high NO<sub>2</sub> emission site,' then each subsequent performance test shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100. b) 'low NO<sub>2</sub> emission site,' then the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, shall be performed once every five years to verify the source's classification as a 'low NO<sub>2</sub> emission site.' [PSD SJ 76-44, X.F.3.a and X.F.3.b] Federally Enforceable Through Title V Permit
36. Source testing to measure oxides of sulfur (as SO<sub>2</sub>) shall be conducted using EPA Method 8 or EPA Method 6C, and in accordance with Rule 1081, section 6.0 (12/16/93). [District Rules 1081, 4801, and 4354, 6.5; PSD SJ 76-44, X.F.3.c] Federally Enforceable Through Title V Permit
37. Source testing to measure PM<sub>10</sub> including condensables, shall be conducted using EPA Method 5, EPA Method 201, or EPA Method 201A in combination with EPA Method 202 (Condensables), and in accordance with Rule 1081, section 6.0 (12/16/93). An operator choosing EPA Method 5 for filterable PM shall count all PM collected as PM<sub>10</sub>. [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3.d] Federally Enforceable Through Title V Permit
38. Source testing to measure CO (ppmv) shall be conducted using EPA Method 10 or ARB Method 100, and in accordance with Rule 1081, section 6.0 (12/16/93). [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3.e] Federally Enforceable Through Title V Permit
39. Source testing to measure VOCs (ppmv) shall be conducted using EPA Method 25A, expressed in terms of carbon or other SIP approved Rule 4354 test methods, and in accordance with District Rule 1081, Section 6.0 (12/16/93). [District Rules 1081 and 4354, 6.5] Federally Enforceable Through Title V Permit
40. Source testing to measure stack gas oxygen shall be conducted using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3] Federally Enforceable Through Title V Permit
41. Source testing to measure ammonia shall be conducted using BAAQMD ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
42. 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
43. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NO<sub>x</sub>, SO<sub>x</sub>, CO and O<sub>2</sub> concentration and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2 and 3 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the 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, 6.5 and 6.6, 2201, and 4354, 5.9 and 6.6; 40 CFR Part 64; PSD SJ 76-44, X.C.1 and X.C.2] 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 agreement of the District, the ARB, and the EPA. [District Rules 1080, 6.7 and 2201 and 40 CFR Part 64] 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.



45. 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, Procedure 1. [District Rules 1080 and 4354, 6.6; 40 CFR Part 64; PSD SJ 76-44, X.C.2 and X.C.5] Federally Enforceable Through Title V Permit
46. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2 and 40 CFR 60.13; PSD SJ 76-44, X.C.4] Federally Enforceable Through Title V Permit
47. Cylinder Gas Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are 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 and 40 CFR 60 Appendix F; PSD SJ 76-44, X.F.8] Federally Enforceable Through Title V Permit
48. 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
49. Any violation of an emission standard, as shown by the stack-monitoring system, shall be reported to the APCO within 96 hours of detection. [District Rule 1080, 9.0; PSD SJ 76-44, X.G.5] Federally Enforceable Through Title V Permit
50. Any breakdown in the continuous emission monitors shall be reported as soon as reasonably possible, but no later than eight hours after detection, unless the owner or operator demonstrates to the APCO's satisfaction that a longer reporting period was necessary, and shall initiate repairs. The Owner/operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
51. The facility shall install and maintain equipment, facilities, and systems compatible with the District's 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 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
52. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
53. Permittee shall maintain CEMS records that contain the following: the occurrence and duration of any or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [District Rule 1080, 8.0; 40 CFR Part 64; PSD SJ 76-44, X.G.1] 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 (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventive measures adopted; applicable time and date of 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, 8.0; 40 CFR Part 64; PSD SJ 76-44, X.G.2] Federally Enforceable Through Title V Permit
55. The permittee shall install, operate, and maintain a monitoring and recording system to accurately measure and record the furnace temperature at least once per hour. [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.

56. The furnace temperature shall be maintained at or above 1,800 °F. If the measured furnace temperature is less than 1,800 °F, 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 melter crown temperature measured during the most recent source test that demonstrated ongoing compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit
58. Permittee shall establish parameters for primary and secondary voltage and current, which provides a reasonable assurance of ongoing compliance with emission limitations stated in this permit. The initial parameters shall be established using at least 6 months of historical operating data and manufacturer/supplier recommendations. These parameters shall be reviewed annually and revised if necessary based on PM10 source test result data, historical operating data and manufacturer/supplier recommendations. [40 CFR Part 64; PSD SJ 76-44, X.G.9] Federally Enforceable Through Title V Permit
59. During each day of operation, the permittee shall record electrostatic precipitator voltage and current readings and compare the readings with the acceptable range of current and voltage levels established. Upon detecting any excursion from the acceptable range of current or voltage readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable [40 CFR Part 64; PSD SJ 76-44, X.G.10] Federally Enforceable Through Title V Permit
60. Permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, and the quantity of glass pulled. The permittee shall also maintain records of all source tests, operating parameters established during source testing, all maintenance and repair performed, any periods of malfunction, and all periods of startup, idling, and shutdown. This information shall be made available on site during normal business hours from Monday through Friday, and submitted to the APCO upon request. [District Rules 1070 and 4354, 6.3; PSD SJ 76-44, X.E.3, X.G.7, and X.I.2] Federally Enforceable Through Title V Permit
61. Permittee shall maintain daily records of NOx and SOx emission rates in lb/ton of glass pulled to demonstrate compliance with the NOx and SOx emission limits. [District Rules 1070, 2201, and 4354, 6.3; PSD SJ 76-44, X.G.8] Federally Enforceable Through Title V Permit
62. Permittee shall maintain records of NOx and SOx emission rates in lb/ton of glass pulled on a "30-day rolling average" to demonstrate compliance with the NOx and SOx emission limits. [District Rules 1070, 2201, and 4354, 6.3] Federally Enforceable Through Title V Permit
63. Permittee shall maintain records of the CO emission rates in ppmvd referenced at 8% O2 on a "3-hour rolling average" to demonstrate compliance with the CO emission limits. [District Rules 1070 and 4354, 6.3] Federally Enforceable Through Title V Permit
64. Permittee shall maintain records of the PM10 emission rate in lb/ton of glass pulled on a "block 24-hour average" to demonstrate compliance with the PM10 emission limit. [District Rules 1070 and 4354, 6.3] Federally Enforceable Through Title V Permit
65. Permittee shall maintain records of the VOC emissions using an approved parametric monitoring arrangement, and shall record the operating values of the key system operating parameters at the approved recording frequency. [District Rules 1070 and 4534, 6.3] Federally Enforceable Through Title V Permit
66. Permittee shall maintain records of the following items: 1) source tests and source test results; 2) the acceptable range each approved key system operating parameter, as established during source test; 3) glass furnace maintenance and repair; 4) date, time and duration of any add-on control device routine maintenance; and 5) malfunctions. [District Rule 4534, 6.3] 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.

67. Records shall be maintained and shall contain: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, or any periods during which the CEM is inoperative; and the CEM emission measurements. [District Rules 1080, 7.3 and 4354, 6.3; 40 CFR Part 64; PSD SJ 76-44, X.G.1] Federally Enforceable Through Title V Permit
68. All records required by this permit shall be maintained, retained on-site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, and 4354, 6.3; PSD SJ 76-44, X.G.6] Federally Enforceable Through Title V Permit
69. The EPA shall be notified by facsimile or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the PSD permit. In addition, the EPA shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in the PSD permit, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in Section IV.B of the PSD permit. [PSD SJ 76-44, IV.A, IV.B, and IV.C] 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:** C-598-5-3

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

140.0 HP RAW MATERIAL UNLOADING AND STORAGE TO INCLUDE: TRUCK HOPPER; RAW MATERIAL CONVEYOR; BUCKET ELEVATOR; AND BINS FOR SAND, SODA ASH, CULLET, DOLOMITE, SALTCAKE, AND LIMESTONE SERVED BY VARIOUS FLEX-KLEEN BV SERIES FABRIC COLLECTORS.

## PERMIT UNIT REQUIREMENTS

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1. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. PM concentration shall not exceed 0.05 grains/scf. [District NSR Rule and District Rule 4201] Federally Enforceable Through Title V Permit
4. PM10 emissions shall not exceed 5.0 lbs/day. [District NSR Rule and District Rule 4202] Federally Enforceable Through Title V Permit
5. Records of the daily process throughput shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Dust collector filters shall be inspected at least once every two weeks while not in operation for any tears, holes, abrasions, and scuffs which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Records of dust collector inspection, maintenance, and repair shall be maintained. These records shall include identification of the dust collector, date of inspection, any corrective action taken as a result of inspection, and initials of the personnel performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collectors shall be inspected weekly while in operation for visible emissions. If excessive 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. The facility shall conduct weekly visual inspections to determine whether visible emissions are present. If visible emissions are present, the facility will conduct a USEPA Method 9 test within 72 hours to determine if visible emissions are in excess of Ringelmann #1 or 20% opacity. If visible emissions can not be eliminated, the facility will conduct a EPA Method 5 test within 30 days of detection of visible emissions to demonstrate compliance with the particulate matter emission limit. [District Rule 2520, 9.3.2 and District Rule 1081] Federally Enforceable Through Title V Permit
10. The results of each source test shall be submitted to District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
11. Compliance with the PM10 daily emission limit (DEL) for this unit shall be determined using arithmetic mean, pursuant to District Rule 1081 (amended December 16, 1993) of 3-one hour test runs for PM10. This shall be multiplied by the appropriate factor to determine compliance. [District Rule 2520, 9.3.2 and District Rule 1081] 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:** C-598-6-3

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

213.0 HP RAW MATERIAL WEIGHTING, MIXING, AND DELIVERY TO INCLUDE: ROUGE AND CHARCOAL HOPPERS, SCALES, CONVEYORS, AND CRUSHER SURGE HOPPER SERVED BY AIR VENT DUST BAGS AND VARIOUS FLEX-KLEEN BV SERIES FABRIC COLLECTORS.

## PERMIT UNIT REQUIREMENTS

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1. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. PM concentration shall not exceed 0.05 grains/scf. [District NSR Rule and District Rule 4201] Federally Enforceable Through Title V Permit
4. PM10 emissions shall not exceed 5.0 lbs/day. [District NSR Rule and District Rule 4202] Federally Enforceable Through Title V Permit
5. Records of the daily process throughput shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Dust collector filters shall be inspected at least once every two weeks while not in operation for any tears, holes, abrasions, and scuffs which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Records of dust collector inspection, maintenance, and repair shall be maintained. These records shall include identification of the dust collector, date of inspection, any corrective action taken as a result of inspection, and initials of the personnel performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collectors shall be inspected weekly while in operation for visible emissions. If excessive 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. The facility shall conduct weekly visual inspections to determine whether visible emissions are present. If visible emissions are present, the facility will conduct a USEPA Method 9 test within 72 hours to determine if visible emissions are in excess of Ringelmann #1 or 20% opacity. If visible emissions can not be eliminated, the facility will conduct a EPA Method 5 test within 30 days of detection of visible emissions to demonstrate compliance with the particulate matter emission limit. [District Rule 2520, 9.3.2 and District Rule 1081] Federally Enforceable Through Title V Permit
10. The results of each source test shall be submitted to District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
11. Compliance with the PM10 daily emission limit (DEL) for this unit shall be determined using arithmetic mean, pursuant to District Rule 1081 (amended December 16, 1993) of 3-one hour test runs for PM10. This shall be multiplied by the appropriate factor to determine compliance. [District Rule 2520, 9.3.2 and District Rule 1081] 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:** C-598-7-3

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

30 HP SHEET GLASS SEAMER SERVED BY AN INDUSTRIAL CLEAN AIR PULSE CLEAN 500 SERIES MODULAR IV FABRIC COLLECTOR.

## PERMIT UNIT REQUIREMENTS

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1. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. PM concentration shall not exceed 0.05 grains/scf. [District NSR Rule and District Rule 4201] Federally Enforceable Through Title V Permit
4. PM10 emissions shall not exceed 5.0 lbs/day. [District NSR Rule and District Rule 4202] Federally Enforceable Through Title V Permit
5. Records of the daily process throughput shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Dust collector filters shall be inspected at least once every two weeks while not in operation for any tears, holes, abrasions, and scuffs which might interfere with the PM collection efficiency and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Records of dust collector inspection, maintenance, and repair shall be maintained. These records shall include identification of the dust collector, date of inspection, any corrective action taken as a result of inspection, and initials of the personnel performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Dust collectors shall be inspected weekly while in operation for visible emissions. If excessive 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. The facility shall conduct weekly visual inspections to determine whether visible emissions are present. If visible emissions are present, the facility will conduct a USEPA Method 9 test within 72 hours to determine if visible emissions are in excess of Ringelmann #1 or 20% opacity. If visible emissions can not be eliminated, the facility will conduct a EPA Method 5 test within 30 days of detection of visible emissions to demonstrate compliance with the particulate matter emission limit. [District Rule 2520, 9.3.2 and District Rule 1081] Federally Enforceable Through Title V Permit
10. The results of each source test shall be submitted to District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
11. Compliance with the PM10 daily emission limit (DEL) for this unit shall be determined using arithmetic mean, pursuant to District Rule 1081 (amended December 16, 1993) of 3-one hour test runs for PM10. This shall be multiplied by the appropriate factor to determine compliance. [District Rule 2520, 9.3.2 and District Rule 1081] 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:** C-598-8-3

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

ONE 157 HP CUMMINS MODEL V-504-F2 DIESEL-FUELED I.C. ENGINE POWERING A WATER PUMP FOR FIRE PROTECTION

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
5. On and after May 3, 2013, the permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
6. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
7. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
8. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
9. 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
10. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. This engine shall be operated only for maintenance, testing, and 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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
13. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 4702 and 2520, 9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
14. 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 Rules 4702 and 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
16. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. 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 1070, 4702, 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] 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:** C-598-9-1

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

474.5 HP CATERPILLAR MODEL #XQ350-3406 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. 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]
4. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201, 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this engine shall not exceed any of the following limits 6.12 g-NOx/hp-hr, 0.76 g-CO/hp-hr, or 0.05 g-VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The PM10 emissions rate shall not exceed 0.08 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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
9. This engine shall not be used to produce power 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
10. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. On and after May 3, 2013, the permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [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.

13. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. 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
16. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201, 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. 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
19. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 4702 and 2520, 9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. 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 Rules 4702 and 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
22. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
23. 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 1070, 4702, 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] 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:** C-598-10-2

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

168 BHP CATERPILLAR MODEL C6.6 ACERT TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE  
POWERING A WATER PUMP

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. 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]
4. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201, 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. Emissions from this IC engine shall not exceed any of the following limits: 2.51 g-NOx/bhp-hr, 1.34 g-CO/bhp-hr, or 0.18 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed 0.112 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. 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
9. This engine shall not be used to produce power 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
10. On and after May 3, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
11. On and after May 3, 2013, the permittee 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 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
12. On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [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.

13. On and after May 3, 2013, the engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
14. On and after May 3, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
15. 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
16. 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 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
17. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201, 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
18. 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
19. The permittee shall maintain monthly records that include the type of fuel purchased, the amount of fuel purchased, and the date of fuel purchase. [District Rules 4702 and 2520, 9.4 and 17 CCR 93115] Federally Enforceable Through Title V Permit
20. 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 Rules 4702 and 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
21. On and after May 3, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
22. On and after May 3, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070, 2520, 9.4 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
23. 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 1070, 4702, 2520, 9.4, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] 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:** C-598-11-2

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The flare shall only be fired on commercial LPG. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions rates from the combustion of LPG in the flare shall not exceed any of the following limits: 0.068 lb-NOx/MMBtu, 0.0164 lb-SOx/MMBtu, 0.026 lb-PM10/MMBtu, 0.370 lb-CO/MMBtu, or 0.063 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Sulfur content of gas flared shall not exceed 15 grain-S/100 scf. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
6. A flame shall be present at all times when combustible gases are vented through this flare. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
7. A flame sensing or heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present, shall be operational. [District Rule 4311] Federally Enforceable Through Title V Permit
8. Operation of the flare shall not exceed either of the following limits: 12 hours per day or 200 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of the daily and annual duration of flare operation, amount of gas burned, the nature of the emergency situation, and copies of LPG bills. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
10. 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 2201 and 4311] 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:** C-598-12-0

**EXPIRATION DATE:** 01/31/2016

**EQUIPMENT DESCRIPTION:**

FACILITY GLASS CUTTING OPERATIONS INCLUDING MAIN LINE, TEMPERING LINE, COATER AND OFFLINE CUTTING TABLES USING MINERAL SPIRITS

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. The permittee shall maintain records of annual consumption of mineral spirits. [District Rule 1160]

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

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# ATTACHMENT C

Detailed Facility List

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**Detailed Facility Report**

For Facility=598 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

<b>GUARDIAN INDUSTRIES CORP</b>		<b>FAC #</b>	<b>C 598</b>	<b>TYPE:</b>	<b>TitleV</b>	<b>EXPIRE ON:</b>
<b>11535 E MOUNTAIN VIEW AVE</b>		<b>STATUS:</b>	<b>A</b>	<b>TOXIC ID:</b>	<b>40112</b>	<b>01/31/2016</b>
<b>KINGSBURG, CA 93631</b>		<b>TELEPHONE:</b>	<b>5598966400</b>			<b>AREA:</b> <b>7 /</b>
						<b>INSP. DATE:</b> <b>07/17</b>

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
C-598-1-4	1,115 HP IC ENGINE GENERATOR 1	3020-10 F	1	820.00	820.00	A	1,115 HP CUMMINS MODEL 7421 DIESEL-FUELED I.C. ENGINE #1, POWERING A 750 KW EMERGENCY GENERATOR
C-598-2-4	1,115 HP IC ENGINE GENERATOR 2	3020-10 F	1	820.00	820.00	A	1,115 HP CUMMINS MODEL 7421 DIESEL-FUELED I.C. ENGINE #2, POWERING A 750 KW EMERGENCY GENERATOR
C-598-3-4	1,115 HP IC ENGINE GENERATOR 3	3020-10 F	1	820.00	820.00	A	1,115 HP CUMMINS MODEL 7421 DIESEL-FUELED I.C. ENGINE #3, POWERING A 750 KW EMERGENCY GENERATOR
C-598-4-10	232 MMBtu/hr furnace	3020-02 H	1	1,128.00	1,128.00	A	212.0 MMBTU/HR FLOAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (CIU1), AN ELECTROSTATIC PRECIPITATOR (C/U2), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION (CIU3), TIN FLOAT BATH, ANNEALING LEHR, TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITOR (CEMS)
C-598-5-3	140.0 HP UNLOADING & STORAGE	3020-01 D	1	345.00	345.00	A	140.0 HP RAW MATERIAL UNLOADING AND STORAGE TO INCLUDE: TRUCK HOPPER; RAW MATERIAL CONVEYOR; BUCKET ELEVATOR; AND BINS FOR SAND, SODA ASH, CULLET, DOLOMITE, SALTCAKE, AND LIMESTONE SERVED BY VARIOUS FLEX-KLEEN BY SERIES FABRIC COLLECTORS.
C-598-6-3	213.0 HP UNLOAD/BATCH	3020-01 E	1	451.00	451.00	A	213.0 HP RAW MATERIAL WEIGHTING, MIXING, AND DELIVERY TO INCLUDE: ROUGE AND CHARCOAL HOPPERS, SCALES, CONVEYORS, AND CRUSHER SURGE HOPPER SERVED BY AIR VENT DUST BAGS AND VARIOUS FLEX-KLEEN BY SERIES FABRIC COLLECTORS.
C-598-7-3	30 HP GLASS SEAMER	3020-01 B	1	129.00	129.00	A	30 HP SHEET GLASS SEAMER SERVED BY AN INDUSTRIAL CLEAN AIR PULSE CLEAN 500 SERIES MODULAR IV FABRIC COLLECTOR.
C-598-8-3	157 HP IC EMERGENCY ENGINE	3020-10 B	1	129.00	129.00	A	ONE 157 HP CUMMINS MODEL V-504-F2 DIESEL-FUELED I.C. ENGINE POWERING A WATER PUMP FOR FIRE PROTECTION
C-598-9-1	474.5 bhp IC engine	3020-10 D	1	525.00	525.00	A	474.5 HP CATERPILLAR MODEL #XQ350-3406 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
C-598-10-2	168 bhp IC engine	3020-10 B	1	129.00	129.00	A	168 BHP CATERPILLAR MODEL C6.6 ACERT TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A WATER PUMP
C-598-11-2	2.5 MMBtu/hr Flare	3020-02 F	1	666.00	666.00	A	2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4)
C-598-12-0	Glass Cutting Operation	3020-06	1	116.00	116.00	A	FACILITY GLASS CUTTING OPERATIONS INCLUDING MAIN LINE, TEMPERING LINE, COATER AND OFFLINE CUTTING TABLES USING MINERAL SPIRITS



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# ATTACHMENT D

Guardian's Proposed Changes to Title V Permit  
and District's Responses

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**Guardian's Proposed Changes to the Title V Permit to Operate and District's Responses:**

Guardian proposed several changes to the Title V Permit to Operate as part of the Title V permit renewal. Guardian's proposed changes are listed below along with District's Responses:

**1. Guardian's Request (Section #2.1.1 of Application<sup>1</sup>) – Removal of Unnecessary Requirements for Emergency IC Engine**

Condition #9 listed on the current PTO C-598-10-2 for 168 bhp emergency standby IC engine reads as follows:

- *This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract.*

Guardian would like to clarify that the permitted equipment does not drive an electrical generator. Rather, it is designed to drive emergency cooling pumps for the furnace in the case that the main pumps fail. As such, this requirement is not relevant to Permit Unit C-598-10-2, and Guardian requests that Condition #9 be removed.

**District's Response:**

The District concurs that this condition is not applicable to the 168 bhp emergency standby IC engine under current PTO C-598-10-2 as the engine does not drive an electrical generator. Therefore, this condition is removed and is not included on the proposed PTO C-598-10-3.

**2. Guardian's Request (Section #2.1.2 of Application) – Removal of NESHAP Subpart ZZZZ Requirements from Permit Unit C-598-10 (168 bhp Emergency Standby IC Engine)**

Guardian states that as described in Section 3 of the Title V permit renewal application as well as noted in the compliance plan included in Appendix E of the application, the diesel-fueled emergency engine permitted under PTO C-598-10-2 is subject to New Source Performance Standards (NSPS) Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. Pursuant to 40 CFR 63.6590(c), this engine need only to comply with the requirements of NSPS Subpart IIII in order to achieve compliance with the National Emissions Standards for Hazardous Air

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<sup>1</sup> Item numbers stated within the parenthesis refer to the section numbers in Guardian's application package for Title V permit renewal.

Pollutants (NESHAP) Subpart ZZZZ. Thus, Guardian requests that all conditions in PTO C-598-10-2 for which NESHAP Subpart ZZZZ is the only underlying requirement be removed and replaced with the appropriate requirements under NSPS IIII. Similarly, Guardian requests that the citations for the underlying requirements in the conditions of PTO C-598-10-2 be updated to reflect the appropriate citations to NSPS Subpart IIII. Guardian has detailed the specific applicable requirements under NSPS Subpart IIII in this application. Further regulatory analysis regarding the applicability of NSPS Subpart IIII and the associated applicable requirements for this engine can be found in the compliance plan included in Appendix E and the narrative summary in Section 3.

### **District's Response:**

40 CFR 60 Subpart ZZZZ §63.6590(c)(1) implies that a new stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR part 60 subpart IIII for compression ignition engines. No further requirements apply for such engines under Subpart ZZZZ. In addition, 40 CFR 60 Subpart ZZZZ §63.6590(a)(2)(iii) states that a stationary RICE located at an area source of HAP emissions is new if construction of the stationary RICE commenced on or after June 12, 2006.

Since RICE currently permitted under C-598-10-2 was installed after June 12, 2006, it is considered 'new' for Subpart ZZZZ purpose and as indicated above must meet the requirements of Subpart ZZZZ by meeting the applicable requirements of 40 CFR 60 Subpart IIII.

Therefore, the proposed PTO '-10-3 has been revised to remove Subpart ZZZZ conditions and include the applicable conditions of Subpart IIII (for details please see 40 CFR Subpart IIII discussion under Section VIII.F of the Title V permit renewal evaluation).

### **3. Guardian's Request (Section #2.1.3 of Application) – Modification of Permit Language Regarding Oil and Filter Changes**

Condition #8 of PTOs C-598-1-4, '-2-4, and '-3-4; condition #6 of PTO '-8-3; and condition #12 of PTO '-9-1 require the engines' oil and filters be changed every 500 hours of operation or every 12 months, whichever comes first. In accordance with 40 CFR 63, Subpart ZZZZ, Table 2d, Item 4 and 40 CFR 63.6625(i), facilities have an option to use an oil analysis program to extend the life of the oil in lieu of following the oil change schedule prescribed under Table 2d. Consequently, Guardian requests to modify condition #8 of PTOs '-1-4, '-2-4, and '-3-4; condition #6 of PTO '-8-3; and condition #12 of PTO '-9-1 such that Guardian is given the flexibility to change the engines' oil at the frequency specified in the permit or at the time specified under an oil analysis program.

The proposed modification to these existing conditions is as follows:

- *On and after May 3, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. **In lieu of performing scheduled oil changes on the engine, an oil analysis program may be implemented in accordance with the requirements of 40 CFR 63.6625(i).***

Note that PTO '-10-2 also currently includes this oil change requirement (condition #12) and currently does not state that the oil analysis program option is available. However, Guardian anticipates that this condition will be eliminated from the permit as the engine under PTO C-598-10-2 is subject to NSPS Subpart IIII and complies with NESHAP Subpart ZZZZ through compliance with NSPS Subpart IIII.

### **District's Response:**

40 CFR NESHAP Subpart ZZZZ §63.6625(i) states that for a stationary CI engine that is subject to the work, operation or management practices listed under items 1 or 4 of Table 2d of Subpart ZZZZ, the owners or operators have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to Subpart ZZZZ. Since Guardian has requested to utilize an oil analysis program in order to extend the specified oil change requirements, the following condition will be included on the proposed PTOs '-1-5, '-2-5, '-3-5, '-8-4, and '-9-2 pursuant to Subpart ZZZZ §63.6625(i):

- *The permittee has the option of utilizing an oil analysis program in order to extend the oil changing requirement of every 500 hours of operation or every 12 months, whichever comes first. The oil analysis must be performed every 500 hours of operation or every 12 months, whichever comes first. 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 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 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 63 Subpart ZZZZ]*

## **PROVISIONS FOR FLAT GLASS MANUFACTURING LINE (SECTION 2.2)**

Guardian's flat glass manufacturing line is currently permitted under PTO C-598-4-10. The subsections 2.2 thru 2.6 below detail the revisions Guardian is proposing to make to the requirements in the Title V permit pertaining to the flat glass manufacturing line.

### **4. Guardian's Request (Section #2.2.1 of Application) – Reorganization of Permit Unit Requirements**

Condition #13 of PTO C-598-4-10 defines start-up, shutdown and idling. For purposes of content flow within the Title V Permit, Guardian requests relocating condition #13 such that it appears prior to condition #3 as the subsequent conditions specify required actions during start-up, shutdown, and idling.

#### **District's Response:**

Condition #13 of current PTO '4-10 is placed prior to condition #3 on the proposed PTO '4-12.

### **5. Guardian's Request (Section #2.2.2 of Application) – Removal of Permit Unit Requirements**

Condition #65 listed on the current PTO C-598-4-10 reads as follows:

- *Permittee shall maintain records of the VOC emissions using an approved parametric monitoring arrangement, and shall record the operating values of the key system operating parameters at the approved recording frequency.*

The underlying requirement of SJVAPCD Rule 4354, Section 6.3.2 does not specify that records of emissions be kept, but rather, records of the system operating parameters. Thus, Condition #65 is redundant to Condition #55, which states Guardian will monitor and record furnace temperature to meet the parametric monitoring requirement. As such, Condition #65 is not necessary, and Guardian requests that it be removed.

#### **District's Response:**

Section 6.3.1.5 requires the operators to maintain daily records of the VOC emission rate in units matching Table 2, only if a CEMS is used. Since no VOC CEMS are used, the requirement of Section 6.3.1.5 of maintaining daily records of the VOC emission rate is not applicable.

However, Section 6.3.2 states that for pollutants monitored using an approved parametric monitoring arrangement, operators shall record the operating values of

the key system operating parameters at the approved recording frequency. Guardian currently monitors the furnace temperature, as alternate monitoring in lieu of installing and operating a VOC CEMS. This alternate monitoring has been previously approved by the District.

Conditions #55, 56, and 57 on current PTO require monitoring and recordkeeping of the furnace temperature readings and the furnace melter crown temperature that meets the recordkeeping requirements of Section 6.3.2 of an approved parametric monitoring arrangement. Therefore, condition #65 on current PTO can be removed.

**6. Guardian's Request (Section #2.2.3 of Application) – Modification of Permit Language Regarding Source Testing Methods for VOC**

Condition #39 of PTO C-598-4-10 states that source testing to measure VOCs must be conducted using EPA Method 25A or other SIP approved Rule 4354 methods. Section 6.5.3 of SJVAPCD Rule 4354, as amended on May 19, 2011, states source testing for VOC shall be conducted using:

- *EPA Method 25A expressed in terms of carbon or ARB Method 100. EPA Method 18 or ARB Method 422 shall be used to determine emissions of exempt compounds.*

The May 19, 2011 version of District Rule 4354 is SIP approved. As such, Guardian requests that condition #39 be revised so that the acceptable test methods for VOC are detailed in condition #39 itself. Guardian proposes that condition #39 be revised to read as follows:

- *Source testing to measure VOCs (ppmv) shall be conducted using EPA Method 25A, ARB Method 100, EPA Method 18, and/or ARB Method 422.*

Note that the proposed language above does not include the requirement that Method 25A be expressed in terms of carbon, as required under the existing permit condition and Rule 4354. Guardian has previously conducted source testing to measure VOCs in terms of carbon and SJVAPCD has responded that it prefers these results to be expressed in terms of methane. Thus, the proposed language above reflects this preference. Guardian requests that SJVAPCD approve this practice by incorporating the proposed language into the renewed Title V permit and granting Guardian's request for permit shield for SJVAPCD Rule 4354.

**District's Response:**

Condition #39 listed on the current permit '4-10 reads as follows:

- *Source testing to measure VOCs (ppmv) shall be conducted using EPA Method 25A, expressed in terms of carbon or other SIP approved Rule 4354 test methods, and in accordance with District Rule 1081, Section 6.0 (12/16/93). [District Rules 1081 and 4354, 6.5]*

Current version of Rule 4354 (last amended 5/19/11) is SIP approved. Therefore, condition #39 on current permit '-4-10 can be revised as follows in accordance with Section 6.5.3 of Rule 4354:

- *Source testing to measure VOCs (ppmv) shall be conducted using EPA Method 25A, expressed in terms of methane, or ARB Method 100, and in accordance with District Rule 1081. EPA Method 18 or ARB Method 422 shall be used to determine emissions of exempt compounds. [District Rules 1081 and 4354]*

District Rule 1020, Definitions (2/21/13), Section 3.53 defines that VOC is any compound containing at least one (1) atom of carbon, except for the exempt compounds listed under Section 3.53. Therefore, VOC emission limits listed in condition #18 on current permit '-4-10 are stipulated as mass rates of hydrocarbon compounds and not as elemental carbon. Therefore, condition can be revised as stated above to allow VOC source test results expressed in terms of methane.

## **7. Guardian's Request (Section #2.2.4 of Application) – Modification of Permit Language Regarding Applicability of Emission Limitations During Periods of Routine Maintenance**

Condition #40 of PTO C-598-0-4 refers to opacity limitation requirements under SJVAPCD Rule 4101. Specifically, this condition states no air containments can 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. Required periodic maintenance of the electrostatic precipitator under PTO C-598-4-10 has historically caused emissions with an opacity greater than 20% for more than three minutes in an hour.<sup>2</sup> However, Condition #9 of PTO C-598-4-10 acknowledges that it is not feasible to meet emissions limits contained in PTO C-598-4-10 during periods of routine maintenance of add-on control devices. For this reason, Condition #9 of PTO C-598-4-10 provides Guardian with relief from the applicable emissions limits for NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, and PM<sub>10</sub> by stating that the emission limitations for these pollutants do not apply during periods of routine maintenance of add-on control systems as long as the routine maintenance does not exceed 144 hours total per calendar year. Thus, it is reasonable that such relief may also apply to generic emissions limitations such as those of SJVAPCD Rule 4101. Guardian requests that opacity be added to this condition such that opacity limitations also do not apply during times when routine maintenance of equipment is occurring as long as routine maintenance does not exceed 144 hours per calendar year. Guardian

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<sup>2</sup> Typically, glass plants in the District have had to apply for a variance in these instances.

believes that routine maintenance allows for compliance with opacity requirements during normal operation of equipment, and as such, is necessary.

**District's Response:**

Condition #9 listed on the current PTO '-4-10 reads as follows:

- *NO<sub>x</sub>, CO, VOC, SO<sub>x</sub> and PM<sub>10</sub> emission limitations shall not apply during periods of routine maintenance of an add-on emission control system(s) as long as the routine maintenance does not exceed 144 hours total per calendar year for all add-on controls and the routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354, 5.10]*

Guardian has requested to include an exemption from opacity in this condition during periods of routine maintenance of add-on emission control systems. However, this condition is based on Section 5.10 of Rule 4354 that only exempts NO<sub>x</sub>, CO, VOC, SO<sub>x</sub> and PM<sub>10</sub> emissions limits of Section 5.1 through 5.4 during routine maintenance of add-on emission control systems. Sections 5.1 through 5.4 of Rule 4354 do not include opacity. In addition, there is nothing in District Rule 4101 that exempts sources from the applicable opacity limits during maintenance or testing. Therefore, condition #9 of current PTO '-4-10 cannot be revised to include exemption from opacity limits of Rule 4101.

**8. Guardian's Request (Section #2.2.5 of Application) – Modification of Permit Language Regarding Parametric Monitoring**

Condition #55 of current PTO C-598-4-10 requires Guardian to install, operate, and maintain a monitoring system to measure and record the furnace temperature. This condition, with Conditions #56 and #57, satisfies the parametric monitoring alternative specified in SJVAPCD Rule 4354, 5.9.2.3.

For further clarity in the permit, Guardian requests that Condition #55 be revised to specifically indicate that the parametric monitoring of the furnace temperature is in lieu of direct VOC monitoring (i.e. VOC CEMS). Guardian proposes the condition be revised to read as follows:

- *The permittee shall install, operate, and maintain a monitoring and recording system to accurately measure and record the furnace temperature at least once per hour. **This approved parametric monitoring is in lieu of direct VOC monitoring.***

**District's Response:**

Section 5.9.2.3 of Rule 4354 states that in lieu of installing and operating a CEMS for VOC, the operator may propose key system operating parameter(s) and



frequency of monitoring and recording for VOC's, provided it meets the requirements of Sections 5.9.2.3.1 through 5.9.2.3.4. Guardian currently monitors the furnace temperature, as alternate monitoring in lieu of installing and operating a VOC CEMS that has been previously approved by the District. Conditions #55 thru 57 on current PTO satisfy the approved parametric monitoring in lieu of VOC CEMS.

Therefore, condition #55 can be revised as follows for clarity as requested by Guardian:

- *Permittee shall install, operate, and maintain a monitoring and recording system to accurately measure and record the furnace temperature at least once per hour. **This approved parametric monitoring is in lieu of installing and operating a CEMS for VOC emissions.** [District Rule 4354]*

**9. Guardian's Request (Section #2.2.5 of Application) – PTO C-598-4-10, Condition #58**

Condition #58 of current PTO C-598-4-10 requires that Guardian establish parameters for primary and secondary voltage and current and review the parameters annually. This requirement is derived directly from PSD Permit Number SJ-76-44-B, Condition X.G.9 which allows Guardian to use parametric monitoring in lieu of directly measuring PM<sub>10</sub>.

For further clarity in the permit, Guardian requests that Condition #58 be revised to specifically indicate that the parametric monitoring of the primary and secondary voltage and current is in lieu of direct PM<sub>10</sub> measurement (i.e., PM<sub>10</sub> CEMS). Guardian proposes the condition be revised to read as follows:

- *Permittee shall establish parameters for primary and secondary voltage and current, which provides a reasonable assurance of ongoing compliance with emission limitations stated in this permit. The initial parameters shall be established using 6 months of historical operating data and manufacturer/supplier recommendations. These parameters shall be reviewed annually and revised if necessary based on PM<sub>10</sub> source test result date, historical operating data and manufacturer/supplier recommendations. **This approved parametric monitoring is in lieu of direct PM<sub>10</sub> monitoring.** [District Rules 2410 and 4354; and 40 CFR Part 64]*

**District's Response:**

Section 5.9.4.1 requires the operators to propose key system operating parameter(s) and frequency of monitoring and recording to meet provisions of Sections 5.9.4.1.1 thru 5.9.4.1.4. Whereas Section 5.9.4.2 states that in lieu of parametric monitoring, the operator may elect to implement a PM<sub>10</sub> CEMS that meets the requirements of Section 6.6.1, and that is approved by the APCO and EPA.

Guardian currently monitors the primary and secondary voltage and current across each field of the electrostatic precipitator in order to satisfy the PM<sub>10</sub> monitoring requirements of this rule. This is alternate monitoring in lieu of installing and operating a PM<sub>10</sub> CEMS that has been previously approved by the District. These requirements are also based on PSD Permit Number SJ-76-44-B, Condition X.G.9 which allows Guardian to use parametric monitoring in lieu of directly measuring PM<sub>10</sub>.

Therefore, condition #58 can be revised as follows for clarity:

- *Permittee shall establish parameters for primary and secondary voltage and current, which provides a reasonable assurance of ongoing compliance with emission limitations stated in this permit. The initial parameters shall be established using 6 months of historical operating data and manufacturer/supplier recommendations. These parameters shall be reviewed annually and revised if necessary based on PM<sub>10</sub> source test result date, historical operating data and manufacturer/supplier recommendations. **This approved parametric monitoring is in lieu of installing and operating a CEMS for PM<sub>10</sub> emissions.** [District Rules 2410 and 4354; and 40 CFR Part 64]*

#### 10. Guardian's Request (Section #2.2.5 of Application) – PTO C-598-4-10, Condition #64

Condition #64 listed on the current PTO '-4-10 reads as follows:

- *Permittee shall maintain records of the PM<sub>10</sub> emission rate in lb/ton of glass pulled on a "block 24-hour average" to demonstrate compliance with the PM<sub>10</sub> emission limit. [District Rules 1070 and 4354, 6.3]*

The underlying requirement of SJVAPCD Rule 4354, Section 6.3.2 does not specify that records of emissions be kept, but rather, records of the system operating parameters. It seems that this condition may be inadvertently included in the permit under the requirement of Rule 4354, Section 6.3.1.7, which does not apply as Guardian does not operate a PM<sub>10</sub> CEMS. Thus, Guardian requests that Condition #64 be revised to read as follows:

- ***Permittee shall maintain records of the electrostatic precipitator primary and secondary voltage and current at least once per day.***

#### District's Response:

Section 6.3.1.7 requires the operators to maintain daily records of the PM<sub>10</sub> emission rate in lb/ton glass pulled, only if a CEMS is used. Since no PM<sub>10</sub> CEMS are used,

the requirement of Section 6.3.1.7 of maintaining daily records of the PM<sub>10</sub> emission rate in lb/ton glass pulled is not applicable.

Section 6.3.2 states that for pollutants monitored using an approved parametric monitoring arrangement, operators shall record the operating values of the key system operating parameters at the approved recording frequency. Guardian currently monitors the primary and secondary voltage and current across each field of the electrostatic precipitator in order to satisfy the PM<sub>10</sub> monitoring requirements of this rule in lieu of PM<sub>10</sub> CEMS. This alternate monitoring has been previously approved by the District. Therefore, condition #64 on current PTO '4-10 can be revised to read as follows:

- *Permittee shall maintain records of the electrostatic precipitator primary and secondary voltage and current at least once per day. [District Rules 1070 and 4354]*

**11. Guardian's Request (Section #2.2.6 of Application) – PTO C-598-4-10, Condition #14**

Condition #14 of current PTO C-598-4-10 states emissions limits that are consistent with PSD Permit SJ-76-44-B. However, the PSD Permit NO<sub>x</sub> limit of 3.25 lb/ton based on a rolling 30-day average is less stringent than the NO<sub>x</sub> limit under SJVAPCD Rule 4354, Section 5.1.1. Thus, Guardian requests that Condition #14 be revised to read as follows:

- *NO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 107.92 lb/hr or 3.70 lb/ton of glass pulled, based on a block 24-hour average; or 3.2 lb/ton of glass pulled, based on a rolling 30-day average.*

**District's Response:**

Guardian's flat glass furnace is currently subject to Tier 4 NO<sub>x</sub> emission limit of 3.2 lb/ton glass produced (standard option) of Table 1 of District Rule 4354. Guardian has already demonstrated compliance with this limit via source tests. Therefore, condition #14 of current PTO '4-10 can be revised as follows to ensure continued compliance:

- *NO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 107.92 lb/hr or 3.70 lb/ton of glass pulled, based on a block 24-hour average; or 3.2 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201, 2410, and 4354]*

## 12. Guardian's Request (Section #2.2.6 of Application) – PTO C-598-4-10, Condition #16

Condition #16 of current PTO C-598-4-10 does not include a statement regarding what time basis on which the PM<sub>10</sub> limit of 0.7 lb/ton should be calculated. Per SJVAPCD Rule 4354, Section 5.4.1, this limit is based on a block 24-hour average. Thus, Guardian requests that Condition #16 be revised accordingly. As discussed in this application, Guardian's flat glass manufacturing line is subject to certain provisions of NSPS Subpart CC, including emission standards for particulate matter (filterable only). As such, Guardian is requesting to add the appropriate filterable PM emission limit to Condition #16. Guardian requests that Condition #16 be revised to read as follows:

- *PM<sub>10</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, idling, shall not exceed either of the following limits: 20.42 lb/hr or 0.7 lb/ton of glass pulled, **based on a block 24-hour average. Filterable PM emissions shall not exceed 0.45 lb/ton.***

### District's Response:

Pursuant to Section 5.4.1 of Rule 4354, Guardian's flat glass furnace is subject to PM<sub>10</sub> emission limit of Table 4. This table lists a maximum PM<sub>10</sub> emission limit of 0.70 pounds per ton of glass produced based on a block 24-hour average. Therefore, condition #16 on current PTO '4-10 can be revised as follows:

- *PM<sub>10</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, idling, shall not exceed either of the following limits: 20.42 lb/hr or 0.7 lb/ton of glass pulled, **based on a block 24-hour average.** [District Rules 2201, 2410, 4202, and 4354]*

However, as previously determined under District projects C-1051269 and C-1130125, the flat glass furnace permitted under C-598-4 is not subject to 40 CFR Subpart CC. The reason is summarized below:

§60.290 states that a glass manufacturing facility is subject to NSPS Subpart CC if the affected facility commences construction or modification after June 15, 1979. Guardian's glass furnace was constructed prior to June 15, 1979.

§60.2 defines modification as any physical change in, or change in the method of operation of, an existing facility which increases the amount of any pollutant (to which the standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted. In addition, §60.14(a) states that any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of Section 111 of the Act. §60.14(b)

further states that the emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable.

The only air pollutant to which Subpart CC applies is particulate matter emissions. The existing affected facility was originally constructed prior to 6/15/79 and none of the District projects, including C-1051269 and C-1130125, constituted an NSPS modification as there was no increase in emission rates for particulate matter emissions. Therefore, 40 CFR 60 Subpart CC is not applicable and it is not necessary to include the filterable PM emissions rate of 0.7 lb/ton per §60.292 to this condition.

**13. Guardian's Request (Section #2.2.7 of Application) – Permit Shield for District Rule 4354**

Guardian has many requirements surrounding the operation of the flat glass manufacturing line. These requirements are primarily in place due to Guardian's PSD Permit and SJVAPCD Rule 4354. As a part of this Title V Permit renewal, Guardian requests that SJVAPCD grant a permit shield for Rule 4354 based on the conditions present in the renewed Title V Permit. In this application, Guardian has outlined all applicable requirements under Rule 4354 and believes that the resultant renewed Title V Permit will contain provisions ensuring compliance with Rule 4354.

In an email request received on Jan 11, 2017, Guardian clarified that they are actually requesting to grant an "Application Permit Shield" to allow operation under the existing permit condition, when a timely and complete Title V Permit renewal application has been submitted, until such time as renewal permit is issued.

**District's Response:**

Section 13.1.2 of District Rule 2520 states as follows regarding the application shields:

"Stationary Sources for which timely and complete renewal applications have been submitted may continue to operate until the renewal is either issued or denied. Under the renewal application shield, the existing permit shall not expire and the conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied."

Therefore, based on Section 13.1.2 of Rule 2520, the following condition will be included on the facility-wide permit C-598-0-5:

- If a timely and complete Title V Permit renewal application has been submitted to the District, the permittee may continue to operate until the renewal is either issued or denied. Under the renewal application shield, the existing permit shall

not expire and the conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. [District Rule 2520]

## **Section # 2.2.8 – Incorporation of PSD SJ-76-44-B Conditions into the Title V Permit**

Guardian revised its existing PSD permit for the rebuild of the existing flat glass furnace and addition of control equipment in May 2006 (PSD Permit Number SJ-76-44-B). Several permit conditions from PSD Permit SJ-76-44-B have not been fully incorporated into Guardian's Title V Operating Permit. Also, Guardian has identified the need to revise the PSD permit in certain places due to the SIP approval of SJVAPCD's PSD program and authorization of SJVAPCD to administer PSD permits within the district, even if issued prior to the effective date of SIP approval.<sup>3</sup> In this application, Guardian has addressed both of these items by proposing revisions to certain conditions (or the addition of conditions) in the Title V permit for the purpose of 1) maintaining consistency between the Title V permit and the PSD permit, and 2) updating conditions to properly reflect SJVAPCD's authority to administer Guardian's PSD permit. For conditions which require a revision to the underlying condition / applicable requirement contained in the PSD permit, Guardian intends to submit an application to formally revise the PSD permit. Guardian expects to submit the application to revise the PSD permit shortly after the submittal of this application such that all revisions may be incorporated into the renewed Title V permit.

### **14. Guardian's Request (Section #2.2.8.1 of Application) – PSD Permit Condition Additions to the Title V Permit**

The following conditions of PSD Permit SJ-76-44-B need to be added to Guardian's Title V Permit under Permit Unit C-598-4:

- **PSD SJ-76-44-B, Condition X.C.3** – The performance evaluation of the CEMS may be conducted as part of any performance test.
- **PSD SJ-76-44-B, Condition X.E.1** - CEMS shall be in operation during each idling period.
- **PSD SJ-76-44-B, Condition X.F.2.f** – Performance tests shall be conducted in accordance with 40 CFR 60.8(f). In lieu of test methods specified in this Permit, equivalent methods may be used with prior written approval from the District.<sup>4</sup>

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<sup>3</sup> 77 Federal Register [FR] 65305

<sup>4</sup> Note that the language of Condition X.F.2.f directly from PSD Permit SJ-76-44-B reads "... equivalent methods may be used with prior written approval from EPA." Guardian has replaced the reference to EPA with a reference to SJVAPCD in order to reflect SJVAPCD's authority to administer PSD Permit SJ-76-44-B.

- **PSD SJ 76-44-B, Condition X.G.3** - Excess emissions shall be defined as any instance in which the block 24-hour average NO<sub>x</sub> or SO<sub>x</sub> concentration<sup>5</sup>, as measured by CEMS, exceeds the maximum hourly emission limits set forth in Condition X.D of PSD Permit Number SJ 76-44-B.<sup>6</sup>
- **PSD SJ 76-44-B, Condition X.G.4** - A period of monitor down time shall be any unit operating hour in which sufficient data are not obtained to validate the hour for NO<sub>x</sub>, SO<sub>x</sub> or O<sub>2</sub> emission rates.

**District's Response:**

The following conditions will be included on the proposed PTO '4-12 to ensure compliance with the PSD requirements:

- *The performance evaluation of the CEMS may be conducted as part of any performance test. [District Rule 2410]*
- *CEMS shall be in operation during each idling period. [District Rule 2410]*
- *Performance tests shall be conducted in accordance with 40 CFR 60.8(f). In lieu of the test methods specified in this permit, equivalent methods may be used with prior written approval from the District. [District Rule 2410]*
- *Excess emissions shall be defined as any instance in which the block 24-hour average NO<sub>x</sub> or SO<sub>x</sub> emissions, as measured by CEMS, exceeds the maximum hourly NO<sub>x</sub> or SO<sub>x</sub> emission limits listed in this permit. [District Rule 2410]*
- *A period of monitor down time shall be any unit operating hour in which sufficient data are not obtained to validate the hour for NO<sub>x</sub>, SO<sub>x</sub> or O<sub>2</sub> emission rates. [District Rule 2410]*

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<sup>5</sup> In an email received on Jan 11, 2017, Guardian requested to remove the word "concentration" because all of the current permit emission limits are stated in units of mass. Guardian stated that the use of the word "concentration" may create confusion from a compliance perspective and requested to replace it with the word "emissions" preserving the same meaning and numerical limits while eliminating confusion.

<sup>6</sup> Note that the language of Condition X.G.3 directly from PSD Permit SJ-76-44-B reads "Excess emissions shall be defined as any operating hour in which the block-24 hour average..." To eliminate any possible misinterpretation associated with the phrase "any operating hour," Guardian notes that excess emissions are defined using a block 24-hour average as opposed to a rolling average. As such, Guardian has removed the phrase "any operating hour" from the condition language proposed to be incorporated into the renewed Title V Permit. Guardian intends to include this revision in its anticipated application to revise its current PSD permit.

**Section # 2.2.8.2 – Revisions to Title V Permit Conditions for Consistency with the PSD Permit Requirements**

The following section contains the conditions in the current Title V permit that Guardian is requesting to be revised to ensure consistency with specific conditions in PSD Permit SJ-76-44-B and/or properly reflect SJVAPCD's authority to administer PSD Permit SJ-76-44-B:

**15. Guardian's Request (Section #2.2.8.2 of Application)**

Condition #46 of facility-wide PTO C-598-0-4 currently states that all PSD required correspondence be sent to EPA. To be consistent with PSD Permit SJ-76-44-B, Condition XI, Guardian should also send correspondence to the SJVAPCD. As the SJVAPCD now administers PSD Permit SJ-76-44-B, Guardian proposes to remove the reference to send correspondence to EPA and simply replace the reference with the appropriate SJVAPCD contact information. Thus, Guardian requests Condition #46 be revised to read as follows:

- *All correspondence as required by the PSD permit shall be forwarded to **the San Joaquin Valley Unified APCD at the following mailing address: Air Pollution Control Officer, San Joaquin Valley Unified APCD, 1990 East Gettysburg Ave, Fresno, CA 93726-0244.***

**District's Response:**

Since the District administers the PSD program under District Rule 2410, condition #46 of the facility-wide permit to operate C-598-0-4 can be revised as follows to list the District as the only reporting authority:

- *All correspondence as required by the PSD requirements of this permit shall be forwarded to the District at the following address: Air Pollution Control Officer, San Joaquin Valley Air Pollution Control District, 1990 E Gettysburg Ave, Fresno, CA 93726-0244; Email: [svvapcd@valleyair.org](mailto:svvapcd@valleyair.org); Facsimile: (559) 230-6061.  
[District Rule 2410]*

**16. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Condition #7**

Condition #7 provides emission limits for NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> during idling. Currently, the emission limits listed are in the form of an equation. To be consistent with the NO<sub>x</sub> emission limit listed in PSD Permit SJ-76-44-B, Condition X.E.2, Guardian requests that Condition #7 be revised to read as follows:



- ***NOx emissions during idling shall not exceed 6,440 lbs/day.*** *SOx and PM<sub>10</sub> emissions during idling shall not exceed the emissions limits as calculated using the following equation: SOx, and PM<sub>10</sub> (lb/day) = (Applicable Emission limit (in lbs/ton)) x (Furnace permitted production capacity (in tons/day)).*

**District's Response:**

To be consistent with PSD requirements, condition #7 on the current PTO '4-10 can be revised to include the NOx emissions limit during idling as follows:

- *NOx emissions during idling shall not exceed 6,440 lbs/day. SOx and PM<sub>10</sub> emissions during idling shall not exceed the emissions limits as calculated using the following equation: SOx and PM<sub>10</sub> (lb/day) = (Applicable Emission limit (in lbs/ton)) x (Furnace permitted production capacity (in tons/day)). CO and VOC emissions during idling shall not exceed the emissions limits as calculated using the following equation: CO and VOC (lb/day) = (Applicable Emission limit (in lb/MMBtu)) x (Furnace Maximum Heat Input (in MMBtu/hr) x (24 hrs/day)).*  
*[District Rules 2410 and 4354]*

**17. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Conditions #21 and #46**

Conditions #21 and #46 on current PTO C-598-4-10 refer to CEMS monitoring requirements as specified in PSD Permit SJ-76-44-B, Condition X.C.4.

PSD Permit Condition X.C.4 States:

- *The CEMS shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Each 1-hour period in a block 24-hour average shall commence on the hour. The block 24-hour average will be calculated starting and ending at twelve-midnight.*

Title V Permit Condition #21 states:

- *Each one hour period will commence on the hour. The three hour average will be compiled from the three most recent one-hour periods. The block 24-hour average will be compiled of 24 one-hour periods, daily, starting from 12:00 AM to 11:59 PM, excluding periods of system calibration.*

Title V Permit Condition #46 states:

- *Results of CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA.*

To clarify, in accordance with PSD Permit SJ-76-44-B and SJVAPCD Rule 4354, three-hour averaging is specific to CO emissions, while 24-hour averaging is specific to NO<sub>x</sub> and SO<sub>2</sub> emissions. Guardian believes this is not straightforward based on the current wording of Conditions #21 and #46. Consequently, Guardian is requesting Conditions #21 and #46 be replaced with the two conditions below. Guardian also requests that these two revised conditions be arranged sequentially in the renewed Title V Permit.

First replacement condition:

- *The CEMS used to monitor emissions of NO<sub>x</sub> and SO<sub>x</sub> shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed consistent with procedures under 40 CFR 60.13. Each 1-hour period in a block 24-hour average shall commence on the hour. The block 24-hour average is the arithmetic average of the hourly emissions rates as measured over 24 one-hour periods, daily, starting from 12:00 AM to 11:59 PM, excluding periods of system calibration.*

Second replacement condition:

- *The CEMS used to monitor emissions of CO shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed consistent with procedures under 40 CFR 60.13. Each 1-hour period shall commence on the hour. The rolling three hour average is the arithmetic average of three contiguous 1-hour periods, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District and the ARB.*

Also, Guardian believes that the requirement to have the CEMS compute hourly averages based on four or more equally spaced data points is based on the underlying requirements of 40 CFR 60.13. §60.13 contains provisions for calculating a valid 1-hour average for operating hours during which less than four valid data points are collected (e.g., hours in which required maintenance or quality assurance activities are performed). Thus, in order for Guardian's permit to reflect this flexibility allowed under to also 40 CFR 60.13, the proposed language above references 40 CFR 60.13 instead of specifically requiring the use of "four or more data points equally spaced over each 1-hour period."

Note that Guardian has also proposed to remove the reference to "EPA" in order to reflect SJVAPCD's authority to administer PSD Permit SJ-76-44-B.

Finally, the Title V Permit currently does not specify the calculation of the rolling 30-day average in a similar manner to the rolling three hour average and block 24-hour averages above. Thus, Guardian requests that SJVAPCD add a condition into the permit for Permit Unit C-598-4 which incorporates the applicable definition from SJVAPCD Rule 4354, Section 3.36. Guardian proposes that the condition read as follows:

- *The rolling 30-day average is the arithmetic average of the valid daily emission rates over a contiguous 30-day period.*

**District's Response:**

Section 5.1 of Rule 4354 lists emission limits for NO<sub>x</sub> and SO<sub>x</sub> in Table 1 that are based on the block 24-hour average. Whereas, Section 5.2 of Rule 4354 lists emission limits for CO and VOC in Table 2 that are based on the rolling three hour average.

In addition, Sections 3.3 of Rule 4354 defines the 'block 24-hour average' as the arithmetic average of the hourly emission rates of a furnace as measured over 24 one-hour periods, daily, from 12:00 AM to 11:59 PM, excluding periods of system calibration.

Similarly, Sections 3.36.3 of Rule 4354 defines the 'rolling three-hour average' as the arithmetic average of the emission rates of a furnace over a contiguous period, excluding periods of system calibration. For rolling three hour averages, the averaged emissions are hourly emissions and the contiguous period is three hours.

Section 5.9 of Rule 4354 requires NO<sub>x</sub>, SO<sub>x</sub>, and CO CEMS to comply with requirements of Section 6.6, whereas Section 6.6.1.2 states that an approved CEMS must comply with the monitoring requirements of 40 CFR Part 60.13.

40 CFR §60.13(h) contains provisions for calculating a valid 1-hour average for operating hours during which less than four valid data points are collected (e.g., hours in which required maintenance or quality assurance activities are performed).

Therefore, the District concurs that conditions #21 and 46 on current PTO '-4-10 can be revised for clarity as follows:

- *The CEMS used to monitor emissions of NO<sub>x</sub> and SO<sub>x</sub> shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed consistent with procedures under 40 CFR 60.13. Each 1-hour period in a block 24-hour average shall commence on the hour. The block 24-hour average is the*

*arithmetic average of the hourly emissions rates as measured over 24 one-hour periods, daily, starting from 12:00 AM to 11:59 PM, excluding periods of system calibration. [District Rules 2201 and 4354; and 40 CFR 60.13]*

- *The CEMS used to monitor emissions of CO shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed consistent with procedures under 40 CFR 60.13. Each 1-hour period shall commence on the hour. The rolling three hour average is the arithmetic average of three contiguous 1-hour periods, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District and the ARB. [District Rules 1080 and 2410; and 40 CFR 60.13]*

In addition, the following new condition will be included for clarity on the proposed PTO '4-12 in accordance with Section 3.36.1 of Rule 4354:

- *The rolling 30-day average is the arithmetic average of the valid daily emission rates over a contiguous 30-day period. [District Rule 4354]*

**18. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Conditions #27 and #33**

Conditions #27 and #33 state that a source test plan must be submitted to the District for approval 15 days prior to testing. Conditions X.C.5 and X.F.1 of PSD Permit SJ-76-44-B, state that CEMS performance test protocols and source performance test protocols must be submitted no later than 30 days prior to testing. Guardian recognizes that the timeline stipulated by the PSD Permit for test protocol submittal is more stringent than that which currently appears in the Title V permit. However, Guardian also recognizes that the 15-day test protocol submittal timeline is the common practice for SJVAPCD. Thus, Guardian is not requesting a revision to this aspect of Conditions 27 and 33 for the purpose of being consistent with Conditions X.C.5 and X.F.1 of the PSD Permit. Guardian requests to add language consistent with the addition of Condition X.F.2.f of PSD Permit SJ-76-44-B (noted above) which allows the use of other equivalent test methods with written approval from EPA (now SJVAPCD).

Guardian proposes that Condition #27 be revised to read as follows:

- *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. **A compliance source test may be a performance test on the source and/or a CEMS unit.***

Guardian proposes that Condition #33 be revised to read as follows:

- *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 test methods and procedures specified in the permit, **or other equivalent methods with written approval by the District.** The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each test shall be submitted to the District within 60 days thereafter.*

Note that Guardian has also proposed to replace the reference to "EPA" with "the District" in order to reflect SJVAPCD's authority to administer PSD Permit SJ-76-44-B.

**District's Response:**

PSD Permit SJ-76-44-B condition X.C.3 states that the performance evaluation of the CEMS may be conducted as part of any performance test. Therefore, condition #27 on current PTO '4-10 can be revised as follows for clarity and consistence with PSD requirements:

- *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. **A compliance source test may be a performance test on the source and/or a CEMS unit.** [District Rules 1081 and 2410]*

Similarly, condition X.F.2 of PSD permit SJ-76-44-B includes the provision that in lieu of the specified test methods, equivalent methods may be used with prior written approval from EPA. Similarly, Section 6.5 of Rule 4354 contains the provision that compliance with the requirements of Section 5.0 shall be determined in accordance with the listed source test procedures or their equivalents as approved by the EPA, ARB, and the APCO. Therefore, condition #33 on current PTO '4-10 can be revised as follows for clarity:

- *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 test methods and procedures specified in this permit, **or other equivalent methods with written approval by the District.** The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2410]*

**19. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Condition #34**

Condition #34 stipulates source testing requirements for NO<sub>x</sub>. Guardian requests that Condition #34 be revised to include EPA Methods 1-4 in order to remain consistent with Conditions X.F.2.a and X.F.2.b of PSD Permit SJ-76-44-B. Also, Guardian has noted that ARB 100 is listed as a possible test method in Condition #34, but is not referenced in PSD Permit SJ-76-44-B. As such, Guardian requests that SJVAPCD approve the use of ARB 100 for NO<sub>x</sub> source testing with the renewal of this Title V Permit.

**District's Response:**

Section 6.5.1 of District Rule 4354 lists the following test methods for oxides of nitrogen – EPA Method 7E, EPA Method 19, or ARB Method 100.

Whereas, PSD Permit SJ-76-44-B conditions X.F.2.a and b list the following test methods:

- a. EPA Methods 1-4 and 7E if NO<sub>x</sub> emissions are measured in ppmv
- b. EPA Methods 1-4 and 19 if NO<sub>x</sub> emissions are measured on a heat input basis

Therefore, condition #34 on current PTO '-4-10 can be revised as follows for clarity and consistency with the above requirements:

- *Source testing to measure oxides of nitrogen (as NO<sub>2</sub>) shall be conducted in accordance with Rule 1081 using the following test methods: EPA Methods 1-4, 7E, or ARB Method 100 if NO<sub>x</sub> emissions are measured in ppmv; or EPA Methods 1-4, or 19 if NO<sub>x</sub> emissions are measured on heat input basis. [District Rules 1081, 2410, and 4354]*

Since the District now administers the PSD program under District Rule 2410, any applicable PSD requirements are incorporated directly into the Title V permit to operate. Therefore, there is no need to modify PSD permit to include ARB Method 100 as requested by Guardian.

**20. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Condition #36**

Condition #36 stipulates source testing requirements for SO<sub>x</sub>. Guardian requests that Condition #36 be revised to include EPA Methods 1-4 in order to remain consistent with Condition X.F.2.c of PSD Permit SJ-76-44-B.

**District's Response:**

Section 6.5.6 of District Rule 4354 lists the following test methods for oxides of sulfur – EPA Method 6C, EPA Method 8, or ARB Method 100.

Whereas, PSD Permit SJ-76-44-B condition X.F.2.c lists the following test methods for SO<sub>x</sub> emissions – EPA Methods 1-4 and 8 or 6C.

Therefore, condition #36 on current PTO '4-10 can be revised as follows for clarity and consistency with the above requirements:

- *Source testing to measure oxides of sulfur (as SO<sub>2</sub>) shall be conducted using EPA Methods 1-4, 6C, or 8, and in accordance with Rule 1081. [District Rules 1081, 2410, 4354, and 4801]*

**21. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Condition #37**

Condition #37 stipulates source testing requirements for PM<sub>10</sub>. Guardian requests that Condition #37 be revised to include EPA Methods 1-4 in order to remain consistent with Condition X.F.2.d of PSD Permit SJ-76-44-B. Also, Guardian has noted that EPA Methods 5 and 201 are listed as possible test methods in Condition #37, but are not referenced in PSD Permit SJ-76-44-B. As such, Guardian requests that SJVAPCD approve the use of EPA Methods 5 and 201 for PM<sub>10</sub> source testing with the renewal of this Title V Permit.

**District's Response:**

Section 6.5.9 of District Rule 4354 lists the test methods that are currently listed in condition #37 of current PTO '4-10. Whereas, PSD Permit SJ-76-44-B condition X.F.2.d lists the following test methods for PM<sub>10</sub> emissions – EPA Methods 1-4, 201A, and 202.

Therefore, condition #37 on current PTO '4-10 can be revised as follows for clarity and consistency with the above requirements:

- *Source testing to measure PM<sub>10</sub> including condensables, shall be conducted using EPA Methods 1-5, EPA Method 201, or EPA Method 201A in combination with EPA Method 202 (Condensables), and in accordance with Rule 1081. An operator choosing EPA Method 5 for filterable PM shall count all PM collected as PM<sub>10</sub>. [District Rules 1081, 2410, and 4354]*

However, since the District now administers the PSD program under District Rule 2410, any applicable PSD requirements are incorporated directly into the Title V permit to operate. Therefore, there is no need to modify PSD permit to include EPA Methods 5 and 201 for PM<sub>10</sub> emissions.

**22. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Condition #38**

Condition #38 stipulates source testing requirements for CO. Guardian requests that Condition #38 be revised to include EPA Methods 1-4 in order to remain consistent with Condition X.F.2.e of PSD Permit SJ-76-44-B. Also, Guardian has noted that ARB 100 is listed as a possible test method in Condition #38, but is not referenced in PSD Permit SJ-76-44-B. As such, Guardian requests that SJVAPCD approve the use of ARB 100 for CO source testing with the renewal of this Title V Permit.

**District's Response:**

Section 6.5.2 of District Rule 4354 lists the following test methods for CO emissions – EPA Method 10, or ARB Method 100. Whereas, PSD Permit SJ-76-44-B condition X.F.2.e lists the following test methods for CO emissions – EPA Methods 1-4 and 10.

Therefore, condition #38 on current PTO '4-10 can be revised as follows for clarity and consistency with the above requirements:

- *Source testing to measure CO (ppmv) shall be conducted using EPA Methods 1-4, EPA Method 10, or ARB Method 100, and in accordance with Rule 1081. [District Rules 1081, 2410, and 4354]*

However, since the District now administers the PSD program under District Rule 2410, any applicable PSD requirements are incorporated directly into the Title V permit to operate. Therefore, there is no need to modify PSD permit to include ARB Method 100 for CO emissions.

**23. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Condition #60**

Condition #60 provides a list of records Guardian is required to keep for Permit Unit C-598-4. Currently, Condition #60 does not reference lb/hour CEMS records in accordance with Condition X.E.3 of PSD Permit SJ-76-44-B. Thus, in order to be consistent with PSD Permit SJ-76-44-B, Guardian requests that Condition #60 be revised to read as follows:



- *Permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, and the quantity of glass pulled. The permittee shall also maintain records of all source tests, operating parameters established during source testing, all maintenance and repair performed, any periods of malfunction, and all periods of startup, idling, and shutdown. **The records shall include emission calculations in units of lbs/hr based on CEMS data.** This information shall be made available on site during normal business hours from Monday through Friday, and submitted to the APCO upon request.*

**District's Response:**

PSD Permit SJ-76-44-B condition X.E.3 states as follows:

- *The time, date and duration of each startup, shutdown, and idling period shall be recorded. The records shall include lbs/hour emission calculations based on the CEMS data. These records shall be kept for five years following the date of such events.*

Therefore, condition #60 on current PTO '-4-10 can be revised as follows to include the reference of lb/hour emission calculations based on the CEMS data, in accordance with Condition X.E.3 of PSD Permit SJ-76-44-B:

- *Permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, and the quantity of glass pulled. The permittee shall also maintain records of all source tests, operating parameters established during source testing, all maintenance and repair performed, any periods of malfunction, and all periods of startup, idling, and shutdown. The records shall include emission calculations in units of lbs/hr based on CEMS data. This information shall be made available on site during normal business hours from Monday through Friday, and submitted to the APCO upon request. [District Rules 1070, 2410, and 4354]*

**24. Guardian's Request (Section #2.2.8.2 of Application) – PTO C-598-4-10, Conditions #49 and #69**

Conditions #49 and #69 stipulate certain notification requirements in the event that excess emissions occur. The underlying requirement for Condition #49 is SJVAPCD Rule 1080, Section 9.0, which stipulates initial notification of excess emissions within 96 hours. The underlying requirement for Condition #69 is Condition IV of PSD Permit SJ-76-44-B, which stipulates initial notification within two working days. Further, Condition IV of PSD Permit SJ-76-44-B requires a follow-up notification within 15 days of the excess emissions event detailing certain aspects of the event. SJVAPCD requires a similar report to be submitted within 10 days under SJVAPCD Rule 1100. Thus, in order for Guardian's Title V Permit to contain notification procedures consistent with SJVAPCD practices, Guardian requests that conditions #49 and #69 be

consolidated into a single condition which follows SJVAPCD's 96-hour and 10-day timelines described above. Guardian proposes that the single condition read as follows:

- *Any violation of an emission standard shall be reported to the District pursuant to the timelines and content specified in SJVAPCD Rules 1080 and 1100.*

Note that Guardian has also proposed to replace "the EPA" with "the District" in order to reflect SJVAPCD's authority to administer PSD Permit SJ-76-44-B.

**District's Response:**

Condition #49 on current PTO '-4-10 is based on Section 9.0 of Rule 1080 which requires any violation of an emission standards, as shown by the stack-monitoring system, to be reported to the Air Pollution Control Officer within 96 hours. Whereas condition #69 on current PTO '-4-10 is based on PSD Permit SJ-76-44-B conditions IV.A, IV.B, and IV.C. It requires an initial notification to be sent to EPA within two working days and requires a follow-up written notification within 15 days of the excess emissions event detailing certain aspects of the event.

Guardian has requested to replace both conditions #49 and 69 with a single condition that would require any violation of an emission standard to be reported to the District pursuant to timelines and contents specified in District Rules 1080 and 1100. Whereas, condition #9 on the facility-wide permit C-598-0-4 requires deviations from permit conditions to be reported, as soon as reasonably possible, but no later than 10 days after detection based on District Rule 1100, which is less stringent than the reporting requirements of condition #69.

Replacing an existing permit reporting requirement with a less stringent reporting requirement is considered a relaxation of the existing reporting requirement and will constitute a Significant Modification of the Title V permit. Therefore, Guardian's request to replace existing conditions #49 and 69 of current permit '-4-10 with a new condition with less stringent reporting requirements cannot be granted under Title V renewal project. Guardian is advised to submit an Authority to Construct (ATC) application to undergo a Significant Modification of the Title V permit.

However, since the District now administers the PSD program under District Rule 2410, condition #69 of current PTO '-4-10 can be revised to list the District as the only reporting agency instead of EPA. In addition, since any applicable PSD requirement are now included in the Title V permit with a District Rule 2410 reference, this condition will be revised to replace all references to the PSD permit to the Title V permit. The revised condition is stated below with strikethrough for the deleted text and underlined for the new text for easy reference:

- *The ~~EPA~~ District shall be notified by facsimile or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner,*

*which results in an increase in emissions above any allowable emission limit stated in ~~the PSD~~ this permit. In addition, the ~~EPA~~ District shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in ~~the PSD~~ this permit, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in Section IV.B of the PSD this permit. [District Rule 2410]*

**25. Guardian's Request (Section #2.2.8.2 of Application) – Multiple Conditions of Title V Permit**

As noted in several of the proposed permit revisions above, Guardian has requested to update various conditions in the Title V Permit which contain references to EPA with references to the SJVAPCD in order to reflect SJVAPCD's authority to administer PSD Permit SJ-76-44-B. The below conditions in the Title V require similar updates but have not otherwise been addressed in this application:

- PTO C-598-0-4, Condition 43
- PTO C-598-0-4, Condition 44
- PTO C-598-4-10, Condition 31
- PTO C-598-4-10, Condition 32
- PTO C-598-4-10, Condition 43
- PTO C-598-4-10, Condition 44

**District's Response:**

Since the District now administers the PSD program under District Rule 2410, the reference to EPA will be changed to 'the District'. In addition, since any applicable PSD requirement are now included in the Title V permit with a District Rule 2410 reference, these conditions will be revised to replace all references to the PSD permit to the Title V permit. The revised conditions are stated below (strikethrough for the deleted text and underlined for the new text for easy reference):

Revised condition #43 of the facility-wide PTO C-598-0-4:

- *At all times, including periods of startup, shutdown and malfunction, Permittee shall, to the extent practicable, maintain and operate the facility equipment including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of*

*whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA District which may include, but is not limited to, monitoring results, opacity observations, review of operating maintenance procedures and inspection of the source. [~~PSD SJ 76-44, III District Rule 2410~~]*

Revised condition #44 of the facility-wide PTO C-598-0-4:

- *In the event of any changes in control or ownership of the facilities equipment to be constructed, the PSD requirements of this pPermit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of the PSD ~~Permit and its conditions~~ requirements of this permit by letter, a copy of which shall be forwarded to ~~EPA Region IX, the State Air Resources Board and the District.~~ [~~PSD SJ 76-44, VI District Rule 2410~~]*

In addition, condition #45 of the facility-wide PTO C-598-0-4 will also be revised as follows for consistency:

- *Permittee shall construct and operate this project in compliance with the PSD requirements of this permit and all other applicable federal, state, and local air quality regulations. The PSD requirements of this permit does not release the permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act. [~~PSD SJ 76-44, VIII]. [~~PSD SJ 76-44, VI District Rule 2410~~]~~*

Revised condition #31 of current PTO C-598-4-10:

- *Source tests shall be conducted at a minimum glass production pull rate equivalent to 90% of the maximum glass production pull rate achieved during the last year, unless otherwise approved by ~~EPA the District~~. In no case less than 420 tons glass pulled per day or 127.2 MMBtu/hr. [~~District Rules 2410 and 4354, 6.4, 6.5; PSD SJ 76-44, X.F.6~~]*

Revised condition #32 of current PTO C-598-4-10:

- *Upon written request from the Permittee, and adequate justification, ~~EPA the District~~ may waive a specific annual test and/or allow for testing to be done at less than 90% of maximum glass production pull rate achieved during the last year. [~~PSD SJ 76-44, X.F.7 District Rule 2410~~]*

However, conditions #43 and 44 of current PTO C-598-4-10 cannot be revised as these conditions enforce Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64.

**26. Guardian's Request (Section #2.3.1 of Application) – Consolidation of Permit Units C-598-5 and C-598-6 – Provisions for Dust Collectors**

Guardian operates multiple dust collectors on-site to control emissions from raw material delivery, unloading, storage, weighting, and mixing, and to control emissions from the sheet glass seamer. These permitted operations are identified under Permit Units C-598-5, C-598-6, and C-598-7.

Permit Units C-598-5 and C-598-6 comprise Guardian's "batch house" processes. At the batch house, raw materials in bulk form are received, mixed to a certain specification depending on the desired glass characteristics, and then fed into the furnace. The equipment descriptions of PTOs C-598-5-3 and C-598-6-3 read as follows:

**C-598-5-3:**

*140.0 hp raw material unloading and storage to include: truck hopper; raw material conveyor; bucket elevator; and bins for sand, soda ash, cullet, dolomite, saltcake, and limestone served by various Flex-Kleen BV series fabric collectors.*

**C-598-6-3:**

*213.0 hp raw material weighting, mixing, and delivery to include: rouge and charcoal hoppers, scales, conveyors, and crusher surge hopper served by air vent dust bags and various Flex-Kleen BV series fabric collectors.*

Guardian believes it is most appropriate for the equipment under each of these PTOs to be represented as a single permit unit. SJVAPCD Policy APR 1025 indicates that a key consideration regarding whether equipment should be permitted as multiple permit units is whether the equipment is part of a larger continuous process. While many individual operations are part of the batch house (e.g., individual hoppers holding each material), overall, the batch house is a largely linear process - material is received, mixed, and fed into the furnace. The permit units above essentially split the batch house into two parts: 1) receiving/storage and 2) mixing/feeding. As the furnace operates continuously for decades, the batch house is also operating continuously to feed it. In practice, the receiving and feeding operations occur simultaneously and rely upon each other. On an hourly basis, individual operations within the batch house may not be considered continuous; however, on a daily basis, the batch house is largely operated at a steady state. Thus, from day to day, the batch house may be regarded as a continuous process.

Also, in many cases, the equipment referenced in each of the two existing permit units is actually the same physical equipment. Thus, it would reduce Guardian's recordkeeping burden associated with these permit units to consolidate the equipment into a single permit unit. Guardian also notes that the conditions currently in each PTO are identical. Therefore, Guardian believes that consolidating these permit units into a single permit unit would not constitute a relaxation of any requirement in place.

Per the rationale above, Guardian requests that permit units C-598-5 and C-598-6 be consolidated into a single permit unit with the following equipment description:

- *Raw material handling operations served by various Flex-Kleen BV series fabric dust collectors. Equipment operated includes a truck hopper, conveyors, a bucket elevator, storage bins, hoppers, scales, and a crusher surge hopper. Raw materials handled include sand, soda ash, cullet, dolomite, saltcake, limestone, rouge, charcoal, and various colorants.*

**District's Response:**

The consolidation of the permit units C-598-5 and '-6 will constitute NSR modification pursuant to District Rule 2201; therefore, it cannot be addressed during Title V renewal and Guardian is advised to submit an ATC application.

**27. Guardian's Request (Section #2.3.2 of Application) – Clarification of Source Testing Requirements for PTOs C-598-5, '-6, and '-7**

Conditions #10 and #11 of PTOs C-598-5-3, '-6-3, and '-7-3 list requirements specific to source testing of these units. Guardian is requesting minor revisions to these conditions as outlined below.

Condition #10 listed on current PTOs C-598-5-3, '-6-3, and '-7-3 reads as follows:

- *The results of each source test shall be submitted to District within 60 days thereafter.*

Guardian would like to clarify that source testing of the dust collectors is only required if visual inspections indicate that visible emissions exceeding Ringelmann #1 or 20% opacity are present and cannot be eliminated. In turn, Condition #10 is only relevant if a source test is required (i.e., if both criteria above are met). Thus, to clarify the conditional nature of the testing requirement, Guardian requests that Condition #10 under PTOs C-598-5-3, '-6-3, and '-7-3 be revised to read as follows:

- *In the case that a source test is required, the results of each source test shall be submitted to District within 60 days thereafter.*

**District's Response:**

The District concurs that the requirement of condition #10 listed on each of the current PTOs C-598-5-3, '-6-3, and '-7-3 is only applicable if a source test is required pursuant to condition #9 listed on each of these permits to demonstrate compliance with the visible emissions and particulate matter emission limit on each permit. Therefore, condition #10 will be revised as follows for clarity:

- *In the case that a source test is required, the results of each source test shall be submitted to District within 60 days thereafter. [District Rule 1081]*

## 28. **Guardian's Request (Section #2.3.2 of Application) – Title V, Permit Units C-598-5-3, '-6-3, and '-7-3, Condition #11**

Condition #11 listed on current PTOs C-598-5-3, '-6-3, and '-7-3 reads as follows:

- *Compliance with the  $PM_{10}$  daily emission limit (DEL) for this unit shall be determined using arithmetic mean, pursuant to District Rule 1081 (amended December 16, 1993) of 3-one hour test runs for  $PM_{10}$ . This shall be multiplied by the appropriate factor to determine compliance.*

Similar to Condition #10 under these PTOs, Condition #11 is only relevant if a source test is required. Consequently, Guardian requests that Condition #11 under PTO C-598-5-3, '-6-3, and '-7-3 be revised to read as follows:

- ***In the case that a source test is required, compliance with the  $PM_{10}$  daily emission limit (DEL) for this unit shall be determined using arithmetic mean, pursuant to District Rule 1081 (amended December 16, 1993) of 3-one hour test runs for  $PM_{10}$ . This shall be multiplied by the appropriate factor to determine compliance.***

### **District's Response):**

The District concurs that the requirements of condition #11 listed on each of the current PTOs C-598-5-3, '-6-3, and '-7-3 are only applicable if a source test is required pursuant to condition #9 listed on each of these permits to demonstrate compliance with the visible emissions and particulate matter emission limit on each permit. Therefore, condition #11 will be revised as follows for clarity:

- ***In the case that a source test is required, compliance with the  $PM_{10}$  daily emission limit (DEL) for this permit unit shall be determined using the arithmetic mean of three 1-hour test runs for  $PM_{10}$  emissions, pursuant to District Rule 1081. This shall be multiplied by the appropriate factor to determine compliance. [District Rules 1081 and 2520]***

## 29. **Guardian's Request (Section 2.4 of Application) – Provisions for Glass Cutting Operations PTO C-598-12**

Guardian's glass cutting operations are covered under Permit Unit C-598-12-0. Pursuant to Condition #3, Guardian is required to keep records of annual consumption of mineral spirits associated with the cutting operations. As part of the requested changes in this Title V permit renewal application, Guardian proposes to characterize

consumption of mineral spirits based on facility purchasing records. As the recordkeeping requirement applies over a full year, the facility's consumption of mineral spirits is likely at or near a steady state with the amount of mineral spirits purchased. Utilizing purchase records as a surrogate for consumption will reduce Guardian's recordkeeping burden associated with this requirement while still maintaining a conservative record of mineral spirit consumption. Thus, Guardian proposes to revise Condition #3 of PTO C-598-12-0 to read as follows:

- *The permittee shall maintain records of annual consumption of mineral spirits **based on facility purchasing records.***

**District's Response:**

The condition can be revised to allow Guardian to maintain records of the annual consumption of mineral spirits based on facility purchasing records.

**30. Guardian's Request (Section 2.5 of Application) – General Requested Changes**

Condition #2 of PTOs C-598-1-4, '-2-4, '-3-4, '-8-3, '-9-1, and '-10-2; and Condition #1 of PTOs '-11-2 and '-12-0 state:

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

This permit condition is identical to Condition #40 of Facility-Wide PTO C-598-0-4. As such, it is not necessary to list this opacity requirement as a separate condition under the specific PTOs as well, and Guardian requests that the conditions of the aforementioned PTOs be removed.

**District's Response:**

Opacity condition can be removed from individual permits as it is addressed by condition #40 of the facility-wide permit '-0-4.



**31. Guardian's Request (Section 2.6 of Application) – Other Changes Not Specifically Mentioned**

Guardian understands that Title V permit renewals require a significant amount of processing time by SJVAPCD. In Guardian's experience, the time between Title V permit renewal application submittal and permit issuance can span several months or longer. In that time, Guardian may identify the need to submit applications for other permit changes or construction authorizations. For example, Guardian has identified the need to revise certain administrative items in the PSD permit issued by EPA in 2006 (e.g., replace references to EPA with SJVAPCD). Guardian expects to submit an application in the near future to formally implement certain administrative changes to the PSD permit in order for those changes to ultimately be reflected in the Title V operating permit for the Facility. In general, Guardian expects that any permit revisions issued for applications between the submittal date of this Title V renewal application and the issuance date of the resultant renewed Title V permit will be incorporated into the resultant renewed Title V permit.

**District's Response:**

As discussed under District Rule 2201 discussion under Section VIII of the Title V permit renewal evaluation, the modifications addressed under the recently issued Authority to Construct (ATC) permit C-528-4-13 will be addressed under this Title V permit renewal, because this ATC has been implemented as verified by the District's Compliance Department.

**32. Guardian's Request (Section 3.1 of Application) – NSPS Subpart CC Requirements for Glass Manufacturing Facilities**

Guardian has requested to incorporate the applicable requirements of 40 CFR Subpart CC into the Title V permit '4-12.

**District's Response:**

As discussed under the District's Response to Guardian's proposed item #12 to incorporate 40 CFR Subpart CC into condition #16, Subpart CC is not applicable to the flat glass furnace permitted under PTO '4-10, as the furnace was constructed prior to June 15, 1979 and has not gone through a modification that meets the definition of modification in the 40 CFR.

**33. Guardian's Request (Section 3.2 of Application) – NSPS Subpart IIII Requirements for Emergency Water Pump Engine**

Permit Unit C-598-10-2 is a 168 horsepower diesel-fueled emergency stand-by engine powering a water pump for the furnace in the case that the main pumps fail for any reason. Note that the main pumps for the water cooling capabilities are electrically driven. This engine is subject to NSPS Subpart IIII. Below is a general summary of the applicable requirements for NSPS Subpart IIII. It is noted that this engine is also subject to NESHAP Subpart ZZZZ. Pursuant to 40 CFR 63.6590(c), compliance with all NESHAP Subpart ZZZZ requirements is achieved via compliance with NSPS Subpart IIII.

**District's Response:**

Please see the detailed discussion of 40 CFR Subpart IIII, applicable to the IC engine under permit C-598-10, under Section VIII of the Title V permit renewal evaluation.

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# ATTACHMENT E

PSD Permit Number: SJ 76-44-B  
Previously Issued to Guardian by EPA

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

May 26, 2006

Mr. Jeff Boocy  
Guardian Industries Corp.  
11535 East Mountain View Ave.  
Kingsburg, CA 93631

Re: Final Revised PSD Permit for Guardian Industries Corp.

Dear Mr. Boocy:

In accordance with provisions of the Clean Air Act, as amended (42 U.S.C. 7401 et seq.), the Environmental Protection Agency has reviewed the application submitted by Guardian Industries Corp. to revise its existing PSD permit, for the reconstruction of the existing flat glass furnace and addition of specified control equipment, located in Kingsburg, California.

A request for public comment regarding EPA's proposed action on the above application was published on April 19, 2006. EPA received no comments on this proposed action. After consideration of the pertinent Federal statutes and regulations, the EPA hereby issues a modified PSD permit for the facility described above. This action does not constitute a significant change from the proposed action set forth and offered for public comment.

This amendment to the PSD permit shall take effect immediately upon receipt by Guardian Industries Corp.

If you have any questions regarding this matter, please contact Laura Yannayon of our Permits Office at (415) 972-3534.

Sincerely,

A handwritten signature in black ink, appearing to read "Deborah Jordan".

Deborah Jordan  
Director, Air Division

Enclosure

cc: Errol Villegas, SJVAPCD (Fresno), w/ Enclosure  
Robert Fletcher, CARB, w/ Enclosure

**AUTHORITY TO CONSTRUCT / MODIFY  
ISSUED PURSUANT TO  
PREVENTION OF SIGNIFICANT DETERIORATION (PSD)  
REQUIREMENTS AT 40 CFR § 52.21**

**PSD PERMIT NUMBER: SJ-76-44-B  
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION IX**

**PERMITTEE:** Guardian Industries Corporation (Guardian)

**FACILITY LOCATION:** 11535 Mountain View Ave. in Kingsburg, California.

This Permit is issued pursuant to the Prevention of Significant Deterioration (PSD) requirements of the Clean Air Act, as amended, 42 U.S.C. §§ 7401 - 7671, et seq. Guardian is granted approval to construct/modify the existing glass manufacturing plant near Kingsburg, California, as described herein, in accordance with the permit application (and plans submitted with the permit application), federal regulations governing the Prevention of Significant Deterioration of air quality (40 CFR § 52.21), and other terms and conditions set forth in this PSD Permit.

Failure to comply with any condition or term set forth in this PSD Permit is subject to enforcement action pursuant to Section 113 of the Clean Air Act.

This PSD Permit does not relieve the Permittee from the responsibility to comply with any other applicable provisions of the Clean Air Act (including 40 CFR Parts 51, 52, 60, 61, 63, and 72 through 75), other federal, or San Joaquin Valley Unified Air Pollution Control District (District) requirements.

This PSD Permit becomes effective at the date of issuance pursuant to 40 CFR § 124.15(b)(3).

  
\_\_\_\_\_  
Deborah Jordan  
Director, Air Division

5/26/06  
\_\_\_\_\_  
Date

## PROJECT DESCRIPTION

The applicant is proposing to rebuild the melting furnace and increase glass manufacturing capacity from 600 to 700 tons per day, and the furnace heat capacity from 182 to 212 MM Btu/hr. The rebuilt float glass manufacturing line consists of a melting furnace, a tin float bath, an annealing lehr, and a united McGill 3-500 modular electrostatic precipitator. The new furnace will be equipped with the following control devices: a high temperature (dry) scrubber, a new electrostatic precipitator and a selective catalytic reduction (SCR) system. The furnace exhaust will be equipped with a continuous emissions monitoring system (CEMS) to measure NO<sub>x</sub>, SO<sub>x</sub> and O<sub>2</sub> concentrations.

## EQUIPMENT LIST

- Emission Unit 1 (E/U 01) = a float glass manufacturing line consisting of a 212 MM Btu/hr glass melting furnace (manufacturing capacity of 700 tons of glass per day), a tin float bath and annealing lehr. The furnace and annealing lehr exhaust gases are vented to Control Units 1, 2 and 3 in series.
- Control Unit 1 (C/U 01) = high temperature (dry) scrubber
- Control Unit 2 (C/U 02) = electrostatic precipitator
- Control Unit 3 (C/U 03) = selective catalytic reduction (SCR) system

## PERMIT CONDITIONS

### I. Permit Expiration

As provided in 40 CFR 52.21(r), this PSD Permit shall become invalid if construction:

- A. is not commenced (as defined in 40 CFR 52.21(b)(9)) within 18 months after the approval takes effect; or
- B. is discontinued for a period of 18 months or more; or
- C. is not completed within a reasonable time.

### II. Permit Notification Requirements

Permittee shall notify EPA Region 9 in writing or by electronic mail of the:

- A. date construction is commenced, postmarked within 30 days of such date.
- B. actual date of initial startup, postmarked within 15 days of such date.

- C. date upon which initial performance tests will commence, in accordance with the provisions of Condition X.F.1., postmarked not less than 30 days prior to such date. Notification may be provided with the submittal of the performance test protocol required pursuant to Condition X.F.2.
- D. date upon which initial performance evaluation of the CEMS will commence in accordance with 40 CFR 60.13(c), postmarked not less than 30 days prior to such date. Notification may be provided with the submittal of the CEMS performance test protocol required pursuant to Condition X.C.5.

### III. Facilities Operation

At all times, including periods of startup, shutdown and malfunction, Permittee shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA which may include, but is not limited to, monitoring results, opacity observations, review of operating maintenance procedures and inspection of the source.

### IV. Malfunction Reporting

- A. Permittee shall notify EPA by facsimile, or electronic mail within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above the allowable emission limits stated in Section X.D. of this permit.
- B. In addition, Permittee shall notify EPA in writing or electronic mail within fifteen (15) days of any such failure described under Condition IV.A. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section X.D., and the methods utilized to mitigate emissions and restore normal operations.
- C. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or any law or regulation such malfunction may cause.

### V. Right to Entry

The EPA Regional Administrator, and/or an authorized representative, upon the presentation of credentials, shall be permitted:

- A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this PSD Permit; and
- B. during normal business hours, to have access to and to copy any records required to be kept under the terms and conditions of this PSD Permit; and
- C. to inspect any equipment, operation, or method subject to requirements in this PSD Permit; and
- D. to sample materials and emissions from the source(s).

#### **VI. Transfer of Ownership**

In the event of any changes in control or ownership of the facilities to be constructed, this PSD Permit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of this PSD Permit and its conditions by letter, a copy of which shall be forwarded to EPA Region 9.

#### **VII. Severability**

The provisions of this PSD Permit are severable, and, if any provision of the PSD Permit is held invalid, the remainder of this PSD Permit shall not be affected.

#### **VIII. Other Applicable Regulations**

Permittee shall construct and operate this project in compliance with this PSD permit and all other applicable federal, state, and local air quality regulations. This PSD permit does not release the Permittee from any liability for compliance with other applicable federal, state and local environmental laws and regulations, including the Clean Air Act.

#### **IX. Paperwork Reduction Act**

Any requirements established by this PSD Permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because this permit is not an "information collection request" within the meaning of 44 U.S.C. §§ 3502(4), 3502 (11), 3507, 3512, and 3518. Furthermore, this PSD Permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons. 44 U.S.C. § 3502(4) and § 3502(11); 5 CFR § 1320.5(a).





**X. Special Conditions****A. Reserved****B. Air Pollution Control Equipment and Operation**

1. Prior to startup of the rebuilt furnace, Permittee shall install, and thereafter continuously operate and maintain a high temperature (dry) scrubber (C/U1), electrostatic precipitator (C/U2), and selective catalytic reduction (SCR) system (C/U3) to control NO<sub>x</sub> and SO<sub>x</sub> emissions from E/U 01.
2. All flue gas emissions from the furnace shall be ducted to C/U1, C/U2, and C/U3, prior to exhausting into the atmosphere.
3. The aforementioned term "continuously operate" does not include periods of startup, shutdown and idling, as defined in Condition X.E. except as required by Condition X.E.7.
4. C/U1 shall be designed to meet a SO<sub>x</sub> emission limit of no more than 49.58 lb/hr, based on a block 24-hour average, for the life of the dry scrubber.
5. C/U2 shall be designed to meet a PM<sub>10</sub> emission limit of no more than 20.42 lb/hr, for the life of the electrostatic precipitator.
6. C/U3 shall be designed to meet a NO<sub>x</sub> emission limit of no more than 107.92 lb/hr, based on a block 24-hour average, for the life of the SCR catalyst.

**C. Continuous Monitoring Systems**

1. Prior to startup of the rebuilt furnace, Permittee shall install, and thereafter operate, maintain, certify, and quality-assure a continuous emission monitoring system (CEMS) which measures stack gas NO<sub>x</sub>, SO<sub>x</sub> and O<sub>2</sub> concentrations in ppmv and stack gas volumetric flowrate.
2. The CEMS shall meet the applicable requirements of 40 CFR 60 Appendix B, Performance Specifications 2 and 3 and 40 CFR Part 60 Appendix F, Procedure 1.
3. The performance evaluation of the CEMS may be conducted as part of any performance test.
4. The CEMS shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Each 1-hour period in a block 24-hour average shall commence on the hour. The block 24-hour average will be calculated starting and ending at twelve-midnight.
5. Permittee shall submit a CEMS performance test protocol to the EPA no later than 30 days prior to the test date to allow review of the test plan and to arrange for an observer to be present at the test. The performance test shall be conducted

in accordance with the submitted protocol, and any changes required by EPA. Permittee shall furnish the EPA a written report of the results of performance tests within 60 days of completion.

#### **D. Emission and Production Limits**

The following emission and production limits shall apply at all times, except as provided by the provisions of Condition X.E.

1. The glass production pull rate shall not exceed 700 tons per day.
2. NO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 107.92 lb/hr or 3.70 lb/ton of glass pulled, based on a block 24-hour average; or 3.25 lb/ton of glass pulled, based on a rolling 30-day average.
3. SO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 49.58 lb/hr or 1.7 lb/ton of glass pulled, based on a block 24-hour average; or 1.2 lb/ton of glass pulled, based on a rolling 30-day average.
4. PM<sub>10</sub> emissions from the glass melting furnace exhaust shall not exceed 20.42 lb/hr or 0.7 lb/ton of glass pulled.
5. CO emissions from the glass melting furnace exhaust shall not exceed 100 tons per year, based on a 12-month rolling average.

#### **E. Requirements during Startup, Shutdown and Idling Periods**

The emission limits in Section X.D. shall not apply during startup, shutdown and idling periods. During these periods, the following requirements shall apply:

1. The CEMS shall be in operation during each idling period.
2. While in an idling period, NO<sub>x</sub> exhaust emissions shall not exceed 6,440 lbs per day, based on a block 24-hour average.
3. The time, date and duration of each startup, shutdown and idling period shall be recorded. The records shall include lbs/hour emission calculations based on the CEMS data. These records shall be kept for five years following the date of such events.
4. Startup is defined as the period of time, after initial construction of the furnace rebuild, during which the glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. The startup period shall not exceed 208 days, beginning from the time of primary combustion system activation.
5. 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 purpose of a furnace rebuild.

6. 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 in this Permit.
7. Control Units 1, 2 and 3 (C/U1, C/U2 and C/U3) shall be in operation whenever technologically feasible during startup, idling and shutdown conditions.

#### F. Performance Tests

Within 60 days after achieving the maximum production rate the facility will operate at, but not later than 268 days after the initial startup of equipment, and annually thereafter (within 60 days of the initial performance test anniversary), Permittee shall conduct performance tests (as described in 40 CFR 60.8) for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub> and CO emissions.

1. Permittee shall submit a performance test protocol to EPA no later than 30 days prior to the test to allow review of the test plan and to arrange for an observer to be present at the test. The performance test shall be conducted in accordance with the submitted protocol, and any changes required by EPA.
2. Performance tests shall be conducted in accordance with the following:
  - a. EPA Methods 1-4 and 7E if NO<sub>x</sub> emissions are measured in ppmv.
  - b. EPA Methods 1-4 and 19 if NO<sub>x</sub> emissions are measured on a heat input basis.
  - c. EPA Methods 1-4 and 8 or 6C for SO<sub>x</sub> emissions.
  - d. EPA Methods 1-4 201A and 202 for PM<sub>10</sub> emissions.
  - e. EPA Methods 1-4 and 10 for CO emissions.
  - f. the provisions of 40 CFR Part 60.8 (f).

In lieu of the specified test methods, equivalent methods may be used with prior written approval from EPA.

3. The initial performance test conducted after furnace startup shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, to measure NO<sub>2</sub> emissions. The source shall be classified as either a 'low' or 'high' NO<sub>2</sub> emission site based on these test results. If the emission source is classified as a:
  - a. 'high NO<sub>2</sub> emission site,' then each subsequent performance test shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100.
  - b. (ii) 'low NO<sub>2</sub> emission site,' then the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, shall be performed once every five years to verify the source's classification as a 'low NO<sub>2</sub> emission site.'

4. For performance test purposes, sampling ports, platforms, and access shall be provided on the emission unit exhaust system in accordance with the requirements of 40 CFR 60.8(e).
5. Permittee shall furnish the EPA a written report of the results of performance tests within 60 days of completion.
6. All performance tests shall be conducted at a minimum glass production pull rate equivalent to 90% of the maximum glass production pull rate achieved during the last year.
7. Upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than 90% of maximum glass production pull rate achieved during the last year.
8. The CEMS shall be tested annually and quarterly in accordance with the requirements of 40 CFR 60 Appendix F, Procedure I.

#### G. Recordkeeping and Reporting

1. Permittee shall maintain CEMS records that contain the following: the occurrence and duration of any or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements.
2. Permittee shall submit a written report of all excess emissions to EPA semi-annually. The report is due on the 30<sup>th</sup> day following the end of the calendar quarter and shall include the following:
  - a. Time intervals, data and magnitude of the excess emissions, the nature and cause (if known), corrective actions taken and preventive measures adopted;
  - b. Applicable time and date of each period during which the CEMS was inoperative (monitor down time), except for zero and span checks, and the nature of system repairs or adjustments; and
  - c. A negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted.
3. Excess emissions shall be defined as any operating hour in which the block 24-hour average NO<sub>x</sub> or SO<sub>x</sub> concentration, as measured by the CEMS, exceeds the maximum hourly emission limits set forth in Condition X.D.
4. A period of monitor down time shall be any unit operating hour in which sufficient data are not obtained to validate the hour for NO<sub>x</sub>, SO<sub>x</sub> or O<sub>2</sub> emission rates.
5. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purpose of this permit.

6. All records required by this PSD Permit shall be retained for five years following the date of such measurements, maintenance, and reports.
7. Permittee shall maintain daily records of the total hours of operation and the quantity of glass pulled.
8. Permittee shall maintain daily records of the NO<sub>x</sub> and SO<sub>x</sub> emission rate in lb/ton of glass pulled.
9. Permittee shall establish parameters for primary and secondary voltage and current, which provides a reasonable assurance of ongoing compliance with emission limitations stated in this permit. The initial parameters shall be established using at least 6 months of historical operating data and manufacturer/supplier recommendations. These parameters shall be reviewed annually and revised if necessary based on PM10 source test result data, historical operating data and manufacturer/supplier recommendations.
10. During each day of operation, the Permittee shall record electrostatic precipitator voltage and current readings and compare the readings with the acceptable range of current and voltage levels established. Upon detecting any excursion from the acceptable range of current or voltage readings, the Permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable.

#### H. New Source Performance Standards

The proposed furnace rebuild is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of 40 CFR 60 Subparts A and CC.

#### I. Fuel Use

1. Only PUC quality natural gas or LPG as a backup fuel shall be used to fire Emission Unit 01.
2. Permittee shall keep daily records of the type and quantity of fuel used.

#### XI. Agency Notifications

All correspondence as required by this Authority to Construct shall be sent to:

- A. Director, Air Division (Attn: Air-5)  
EPA Region IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Email: [R9.AEO@epa.gov](mailto:R9.AEO@epa.gov)  
Fax: (415) 947-3579

- B. Air Pollution Control Officer  
San Joaquin Valley Unified APCD  
1990 East Gettysburg Ave  
Fresno, CA 93726-0244

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# ATTACHMENT F

Recently Issued Authority to Construct  
No. C-598-4-13

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## AUTHORITY TO CONSTRUCT

**PERMIT NO:** C-598-4-13

**ISSUANCE DATE:** 11/12/2015

**LEGAL OWNER OR OPERATOR:** GUARDIAN INDUSTRIES CORP  
**MAILING ADDRESS:** 11535 E MOUNTAIN VIEW AVE  
KINGSBURG, CA 93631-9211

**LOCATION:** 11535 E MOUNTAIN VIEW AVE  
KINGSBURG, CA 93631

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 212.0 MMBTU/HR FLOAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (C/U1), AN ELECTROSTATIC PRECIPITATOR (C/U2), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION (C/U3), TIN FLOAT BATH, ANNEALING LEHR, TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITOR (CEMS): INSTALL NOX AND O2 CEMS ANALYZERS ON INLET SIDE OF GLASS FURNACE EMISSION CONTROL SYSTEM

### CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Permittee shall comply with all requirements of Section 5.5 of District Rule 4354 (5/19/11) during startup. Startup exemption time shall not exceed 208 days, beginning from the time of primary combustion system activation. [District Rule 4354, 5.5; PSD SJ 76-44, X.E.4] Federally Enforceable Through Title V Permit
4. During startup, the stoichiometric ratio of the primary furnace combustion system shall not exceed 5% oxygen as calculated from the actual fuel and oxidant flow measurements for combustion in the furnace. [District Rule 4354, 5.5] Federally Enforceable Through Title V Permit
5. The emission control systems (ECS), C/Us 1, 2, and 3 shall be in operation at all times during normal operations, and whenever technologically feasible including during startup, idling and shutdown conditions. [District Rule 4354, 5.5, 5.6, 5.7; PSD SJ 76-44, X.E.7] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

*for El Vij*

Arnaud Marjollet, Director of Permit Services

C-598-4-13 Nov 12 2015 2:25PM - GARCIAJ Joint Inspection NOT Required



6. The furnace shall be in compliance with all applicable requirements of District Rule 4354 (5/19/11) by the end of startup. [District Rule 4354, 7.0] Federally Enforceable Through Title V Permit
7. Furnace shutdown shall not exceed 20 days, measured from the time furnace operations drop below the idle threshold specified in Section 3.9 of District Rule 4354 (2/21/02) to when all emissions from the furnace cease. [District Rule 4354, 5.6] Federally Enforceable Through Title V Permit
8. NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> emissions during idling shall not exceed the emissions limits as calculated using the following equation: NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> (lb/day) = (Applicable Emission limit (in lbs/ton)) x (Furnace permitted production capacity (in tons/day)). CO and VOC emissions during idling shall not exceed the emissions limits as calculated using the following equation: CO and VOC (lb/day) = (Applicable Emission limit (in lb/MMBtu)) x (Furnace Maximum Heat Input (in MMBtu/hr) x (24 hrs/day)). [District Rule 4354, 5.7; PSD SJ 76-44, X.E.2] Federally Enforceable Through Title V Permit
9. Except as specified elsewhere in this permit, all emissions from the furnace shall be ducted to the high temperature (dry) scrubber (C/U1), the electrostatic precipitator (C/U2), and the selective catalytic reduction (SCR) system (C/U3), prior to exhausting into the atmosphere. [District Rule 2201; PSD SJ 76-44, X.B.2] Federally Enforceable Through Title V Permit
10. NO<sub>x</sub>, CO, VOC, SO<sub>x</sub> and PM<sub>10</sub> emission limitations shall not apply during periods of routine maintenance of an add-on emission control system(s) as long as the routine maintenance does not exceed 144 hours total per calendar year for all add-on controls and the routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354, 5.10] Federally Enforceable Through Title V Permit
11. 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
12. The furnace shall be fired exclusively on PUC quality natural gas or LPG as a backup fuel. [District Rule 2201; PSD SJ 76-44, X.I.1] Federally Enforceable Through Title V Permit
13. The glass pull rate shall not exceed 700 tons per day. [District Rules 2201 and 4354, 6.1; PSD SJ 76-44, X.D.1] Federally Enforceable Through Title V Permit
14. Start-up is defined as the period of time, after initial construction or 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 purpose 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, 3.0; PSD SJ 76-44, X.E.4, X.E.5, and X.E.6] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 107.92 lb/hr or 3.70 lb/ton of glass pulled, based on a block 24-hour average; or 3.25 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201 and 4354, 5.1; PSD SJ 76-44, X.D.2] Federally Enforceable Through Title V Permit
16. SO<sub>x</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 49.58 lb/hr or 1.7 lb/ton of glass pulled, based on a block 24-hour average; or 1.2 lb/ton of glass pulled, based on a rolling 30-day average. [District Rules 2201 and 4354, 5.3; PSD SJ 76-44, X.D.3] Federally Enforceable Through Title V Permit
17. PM<sub>10</sub> emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 20.42 lb/hr or 0.7 lb/ton of glass pulled. [District Rules 2201, 4202, and 4354, 5.4; PSD SJ 76-44, X.D.4] Federally Enforceable Through Title V Permit
18. CO emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 22.05 lb/hr or 101 ppmv @ 8% O<sub>2</sub> (equivalent to 0.104 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354, 5.2] Federally Enforceable Through Title V Permit
19. VOC emissions from the glass melting furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 0.83 lb/hr or 6.6 ppmv VOC @ 8% O<sub>2</sub> (equivalent to 0.0039 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354, 5.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. CO emissions from the glass melting furnace exhaust shall not exceed 100 tons per year, based on a 12-month rolling average [District Rule 2201 and PSD SJ 76-44 X.D.5] Federally Enforceable Through Title V Permit
21. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 1.27 lb/hr or 10 ppmvd @ 8% O<sub>2</sub>, based on a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
22. Each one hour period will commence on the hour. The three hour average will be compiled from the three most recent one-hour periods. The block 24-four hour average will be compiled of 24 one-hour periods, daily, starting from 12:00 AM to 11:59 PM, excluding periods of system calibration. [District Rules 2201 and 4354, 3.3] Federally Enforceable Through Title V Permit
23. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 8\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = ammonia solution injection rate (lb/hr) / (17 lb/lb mol) x ammonia concentration (%), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 8% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
24. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with 40 CFR 60.8(e) and EPA test methods and shall be equipped with safe permanent provisions to sample stack gases. 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; PSD SJ 76-44, X.F.4] Federally Enforceable Through Title V Permit
25. Source testing to measure the NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub> emission rates (lb/hr and lb/ton of glass pulled) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354, 6.4; PSD SJ 76-44, X.F.1] Federally Enforceable Through Title V Permit
26. Source testing to measure the CO emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O<sub>2</sub>) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354, 6.4; PSD SJ 76-44, X.F.1] Federally Enforceable Through Title V Permit
27. Source testing to measure the VOC and Ammonia emission rates (lb/hr and either lb/MMBtu or ppmvd @ 8% O<sub>2</sub>) shall be conducted annually (within 60 days of the initial performance test anniversary). [District Rules 1081, 2520, and 4354, 6.4] Federally Enforceable Through Title V Permit
28. 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
29. 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 Rule 4354, 6.4] Federally Enforceable Through Title V Permit
30. For source testing purposes, arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM<sub>10</sub> emission limits. [District Rule 4354, 6.4] Federally Enforceable Through Title V Permit
31. During source testing, for a given pollutant, 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, 6.4] Federally Enforceable Through Title V Permit
32. Source tests shall be conducted at a minimum glass production pull rate equivalent to 90% of the maximum glass production pull rate achieved during the last year, unless otherwise approved by EPA. In no case less than 420 tons glass pulled per day or 127.2 MMBtu/hr. [District Rule 4354, 6.4, 6.5; PSD SJ 76-44, X.F.6] Federally Enforceable Through Title V Permit
33. Upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than 90% of maximum glass production pull rate achieved during the last year. [PSD SJ 76-44, X.F.7] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

34. 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 test methods and procedures specified in this permit. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081; PSD SJ 76-44, X.F.2 and X.F.5] Federally Enforceable Through Title V Permit
35. Source testing to measure oxides of nitrogen (as NO<sub>2</sub>) (ppmv) shall be conducted using EPA Method 7E, or ARB Method 100, or oxides of nitrogen (as NO<sub>2</sub>) (heat input basis) shall be conducted using EPA Method 19 and in accordance with Rule 1081, section 6.0 (12/16/93). [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3.a and X.F.3.b] Federally Enforceable Through Title V Permit
36. The initial performance test conducted after furnace startup shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, to measure NO<sub>2</sub> emissions. The source shall be classified as either a 'low' or 'high' NO<sub>2</sub> emission site based on these test results. If the emission source is classified as a: a) 'high NO<sub>2</sub> emission site,' then each subsequent performance test shall use the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100. b) 'low NO<sub>2</sub> emission site,' then the test procedures for a 'high NO<sub>2</sub> emission site,' as specified in San Diego Test Method 100, shall be performed once every five years to verify the source's classification as a 'low NO<sub>2</sub> emission site.' [PSD SJ 76-44, X.F.3.a and X.F.3.b] Federally Enforceable Through Title V Permit
37. Source testing to measure oxides of sulfur (as SO<sub>2</sub>) shall be conducted using EPA Method 8 or EPA Method 6C, and in accordance with Rule 1081, section 6.0 (12/16/93). [District Rules 1081, 4801, and 4354, 6.5; PSD SJ 76-44, X.F.3.c] Federally Enforceable Through Title V Permit
38. Source testing to measure PM<sub>10</sub> including condensables, shall be conducted using EPA Method 5, EPA Method 201, or EPA Method 201A in combination with EPA Method 202 (Condensables), and in accordance with Rule 1081, section 6.0 (12/16/93). An operator choosing EPA Method 5 for filterable PM shall count all PM collected as PM<sub>10</sub>. [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3.d] Federally Enforceable Through Title V Permit
39. Source testing to measure CO (ppmv) shall be conducted using EPA Method 10 or ARB Method 100, and in accordance with Rule 1081, section 6.0 (12/16/93). [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3.e] Federally Enforceable Through Title V Permit
40. Source testing to measure VOCs (ppmv) shall be conducted using EPA Method 25A, expressed in terms of carbon or other SIP approved Rule 4354 test methods, and in accordance with District Rule 1081, Section 6.0 (12/16/93). [District Rules 1081 and 4354, 6.5] Federally Enforceable Through Title V Permit
41. Source testing to measure stack gas oxygen shall be conducted using EPA Method 3 or 3A or ARB Method 100. [District Rules 1081 and 4354, 6.5; PSD SJ 76-44, X.F.3] Federally Enforceable Through Title V Permit
42. Source testing to measure ammonia shall be conducted using BAAQMD ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
43. 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
44. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NO<sub>x</sub> and O<sub>2</sub> concentration at the inlet of the SCR system. Continuous emissions monitor(s) shall meet the requirements of 40 CFR part 51, 40 CFR parts 60.7 and 60.13, 40 CFR part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures), and applicable sections of Rule 1080 (Stack Monitoring) (as amended December 17, 1992) [District Rule 4102]
45. The applicant shall install, maintain, and operate a continuous emissions monitoring system (CEMS) to measure stack gas NO<sub>x</sub>, SO<sub>x</sub>, CO and O<sub>2</sub> concentration and stack gas volumetric flow rate and shall meet the performance specification requirements in 40 CFR, Part 60, Appendix B, Performance Specifications 2 and 3 or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the 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, 6.5 and 6.6, 2201, and 4354, 5.9 and 6.6; 40 CFR Part 64; PSD SJ 76-44, X.C.1 and X.C.2] Federally Enforceable Through Title V Permit

46. 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 agreement of the District, the ARB, and the EPA. [District Rules 1080, 6.7 and 2201 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
47. 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, Procedure 1. [District Rules 1080 and 4354, 6.6; 40 CFR Part 64; PSD SJ 76-44, X.C.2 and X.C.5] Federally Enforceable Through Title V Permit
48. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2 and 40 CFR 60.13; PSD SJ 76-44, X.C.4] Federally Enforceable Through Title V Permit
49. Cylinder Gas Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are 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 and 40 CFR 60 Appendix F; PSD SJ 76-44, X.F.8] Federally Enforceable Through Title V Permit
50. 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
51. Any violation of an emission standard, as shown by the stack-monitoring system, shall be reported to the APCO within 96 hours of detection. [District Rule 1080, 9.0; PSD SJ 76-44, X.G.5] Federally Enforceable Through Title V Permit
52. Any breakdown in the continuous emission monitors shall be reported as soon as reasonably possible, but no later than eight hours after detection, unless the owner or operator demonstrates to the APCO's satisfaction that a longer reporting period was necessary, and shall initiate repairs. The Owner/operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
53. The facility shall install and maintain equipment, facilities, and systems compatible with the District's 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 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
54. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
55. Permittee shall maintain CEMS records that contain the following: the occurrence and duration of any or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [District Rule 1080, 8.0; 40 CFR Part 64; PSD SJ 76-44, X.G.1] Federally Enforceable Through Title V Permit
56. 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 (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventive measures adopted; applicable time and date of 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, 8.0; 40 CFR Part 64; PSD SJ 76-44, X.G.2] Federally Enforceable Through Title V Permit
57. The permittee shall install, operate, and maintain a monitoring and recording system to accurately measure and record the furnace temperature at least once per hour. [District Rule 4354] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

58. The furnace temperature shall be maintained at or above 1,800 °F. If the measured furnace temperature is less than 1,800 °F, 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
59. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace melter crown temperature measured during the most recent source test that demonstrated ongoing compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit
60. Permittee shall establish parameters for primary and secondary voltage and current, which provides a reasonable assurance of ongoing compliance with emission limitations stated in this permit. The initial parameters shall be established using at least 6 months of historical operating data and manufacturer/supplier recommendations. These parameters shall be reviewed annually and revised if necessary based on PM10 source test result data, historical operating data and manufacturer/supplier recommendations. [40 CFR Part 64; PSD SJ 76-44, X.G.9] Federally Enforceable Through Title V Permit
61. During each day of operation, the permittee shall record electrostatic precipitator voltage and current readings and compare the readings with the acceptable range of current and voltage levels established. Upon detecting any excursion from the acceptable range of current or voltage readings, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable [40 CFR Part 64; PSD SJ 76-44, X.G.10] Federally Enforceable Through Title V Permit
62. Permittee shall maintain daily records of the total hours of operation, type and quantity of fuel used, and the quantity of glass pulled. The permittee shall also maintain records of all source tests, operating parameters established during source testing, all maintenance and repair performed, any periods of malfunction, and all periods of startup, idling, and shutdown. This information shall be made available on site during normal business hours from Monday through Friday, and submitted to the APCO upon request. [District Rules 1070 and 4354, 6.3; PSD SJ 76-44, X.E.3, X.G.7, and X.I.2] Federally Enforceable Through Title V Permit
63. Permittee shall maintain daily records of NOx and SOx emission rates in lb/ton of glass pulled to demonstrate compliance with the NOx and SOx emission limits. [District Rules 1070, 2201, and 4354, 6.3; PSD SJ 76-44, X.G.8] Federally Enforceable Through Title V Permit
64. Permittee shall maintain records of NOx and SOx emission rates in lb/ton of glass pulled on a "30-day rolling average" to demonstrate compliance with the NOx and SOx emission limits. [District Rules 1070, 2201, and 4354, 6.3] Federally Enforceable Through Title V Permit
65. Permittee shall maintain records of the CO emission rates in ppmvd referenced at 8% O2 on a "3-hour rolling average" to demonstrate compliance with the CO emission limits. [District Rules 1070 and 4354, 6.3] Federally Enforceable Through Title V Permit
66. Permittee shall maintain records of the PM10 emission rate in lb/ton of glass pulled on a "block 24-hour average" to demonstrate compliance with the PM10 emission limit. [District Rules 1070 and 4354, 6.3] Federally Enforceable Through Title V Permit
67. Permittee shall maintain records of the VOC emissions using an approved parametric monitoring arrangement, and shall record the operating values of the key system operating parameters at the approved recording frequency. [District Rules 1070 and 4354, 6.3] Federally Enforceable Through Title V Permit
68. Permittee shall maintain records of the following items: 1) source tests and source test results; 2) the acceptable range each approved key system operating parameter, as established during source test; 3) glass furnace maintenance and repair; 4) date, time and duration of any add-on control device routine maintenance; and 5) malfunctions. [District Rule 4354, 6.3] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

69. Records shall be maintained and shall contain: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, or any periods during which the CEM is inoperative; and the CEM emission measurements. [District Rules 1080, 7.3 and 4354, 6.3; 40 CFR Part 64; PSD SJ 76-44, X.G.1] Federally Enforceable Through Title V Permit
70. All records required by this permit shall be maintained, retained on-site for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 1070, 2201, and 4354, 6.3; PSD SJ 76-44, X.G.6] Federally Enforceable Through Title V Permit
71. The EPA shall be notified by facsimile or electronic mail transmission within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in the PSD permit. In addition, the EPA shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in the PSD permit, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in Section IV.B of the PSD permit. [PSD SJ 76-44, IV.A, IV.B, and IV.C] Federally Enforceable Through Title V Permit