San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

December 16, 2021

Mr. John Roach
Guardian Industries, LLC
11535 E Mountain View Ave
Kingsburg, CA 93631

Re: Notice of Preliminary Decision – Title V Permit Renewal
Facility Number: C-598
Project Number: C-1203310

Dear Mr. Roach:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Guardian Industries, LLC at 11535 E Mountain View, Kingsburg, California.

The notice of preliminary decision for this project has been posted on the District's website (www.valleyair.org). 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,

Brian Clements
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email
cc: Laura Yannayon, EPA (w/enclosure) via EPS

Samir Sheikh
Executive Director/Air Pollution Control Officer

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

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

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

www.valleyair.org www.healthyairliving.com

Printed on recycled paper.

SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation
Guardian Industries, LLC
C-598

TABLE OF CONTENTS

I. PROPOSAL 1
II. FACILITY LOCATION 2
III. EQUIPMENT LISTING 2
IV. GENERAL PERMIT TEMPLATE USAGE 2
V. SCOPE OF EPA AND PUBLIC REVIEW 2
VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE 5
IX. PERMIT SHIELD 30
X. CALIFORNIA ENVIRONMENTAL QUALITY ACT 30
XI. PERMIT CONDITIONS 31

ATTACHMENTS 31

A. DRAFT RENEWED TITLE V OPERATING PERMIT
B. PREVIOUS TITLE V OPERATING PERMIT
C. DRAFT ATC C-598-11-4
D: PROJECT C-1210374
E. DETAILED SUMMARY LIST OF FACILITY PERMITS

TITLE V PERMIT RENEWAL EVALUATION

Flat Glass Manufacturing Plant

Engineer: Vanesa Sandoval
Date: December 14, 2021

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

Contact Name: John Roach
Phone: (559) 896-6400

Responsible Official: Paul Warsing
Title: Plant Manager

Project #: C-1203310
Deemed Complete: August 19, 2020

I. PROPOSAL

Guardian Industries, LLC was issued their initial Title V permit on January 14, 1999. 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 issuance of the latest renewed Title V permit, renewed March 30, 2017.

The facility included proposed modification to permit requirements in their application. The modification that are administrative in nature have been addressed during this renewal and are discussed in further detail under the appropriate rule they referenced.

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

Guardian Industries, LLC 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 C.

IV. GENERAL PERMIT TEMPLATE USAGE

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

V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated or Evaluated

- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 2410, Prevention of Significant Deterioration, (adopted June 16, 2011)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended August 15, 2019)
- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001 ⇒ amended August 15, 2019)
- District Rule 4601, Architectural Coatings (amended December 17, 2009 ⇒ amended April 16, 2020)
- District Rule 4702, Internal Combustion Engines (amended November 14, 2013 ⇒ amended August 19, 2021)

- 40 CFR Part 60, Subpart A, General Provisions (amended October 7, 2020)

- 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (amended June 29, 2021)

- 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (amended December 4, 2020)

- 40 CFR Part 64, Compliance Assurance Monitoring (adopted October 22, 1997)

- 40 CFR Part 68, Chemical Accident Prevention Provisions (amended December 19, 2019)

- 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners (amended March 21, 2021)

- 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction (amended April 10, 2020)

B. Rules Removed

Consent Decree 15-13426 required Guardian to complete various compliance and permitting actions including the installation and operation of improved pollution controls and emissions monitoring, and incorporate these requirements into the Title V permit of every facility in the jurisdictions covered by the decree. After fulfilling the requirements of the decree, Guardian petitioned U.S. EPA for its termination for several facilities including its Kingsburg location as allowed under the terms. U.S. EPA and the District have determined that Guardian's Kingsburg location has satisfied all the requirements of the decree per *The United States District Court for the Eastern District of Michigan*, Civil No. 15-13426, and therefore, references to the consent decree in permit conditions will be removed, although the substantive requirements from the decree will remain in effect on the renewed Title V permit.

C. Rules Added

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

D. Rules Not Updated

- District Rule 1070, Inspections (amended December 17, 1992)

- District Rule 1080, Stack Monitoring (amended December 17,1992*)*
- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (adopted December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (adopted December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2410, Prevention of Significant Deterioration, (adopted June 16, 2011)
- 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 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)

- 40 CFR 61, Subpart N, National Emission Standards for Inorganic Arsenic Emissions From Glass Manufacturing Plants (amended February 27, 2014)

- 40 CFR Part 61, Subpart M, National Emission Standards for Asbestos (amended July 20, 2004)

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 Updated

No rules were updated.

B. Rules Added

No rules were added.

C. Rules Not Updated

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

- Title 17 California Code of Regulations (CCR) Section 93115, Airborne Toxic Control Measure for Stationary Compression Ignition Engines (adopted February 26, 2004)

VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to Federally Enforceable requirements; therefore, this compliance section will only address rules that have been amended or adopted since the issuance of the last renewed Title V permit.

1. District Rule 1081 – Source Sampling

The purpose of this rule is to ensure that any source operation which emits or may emit air contaminants provides adequate and safe facilities for use in sampling to determine compliance. This rule also specifies methods and procedures for source testing, sample collection, and compliance determination. This rule has not been updated since the last renewal however, the facility has proposed to removed conditions 29 and 50 from the current permit requirements for unit C-598-4-17.

Condition 29 requires permanent previsions to allow for collection of stack gas and equipment to be able to safely collect the gases. This condition was met at start-up and is no longer required.

Condition 50 is a duplicate condition of condition 40 of the current permit requirements. Therefore condition 50 was removed.

2. District Rule 2201 – <u>New and Modified Stationary Source Review Rule</u>

District Rule 2201 has been amended since this 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 NSR permit actions have already been incorporated into the current Title V permit. The updated requirements of this rule are therefore not applicable at this time. However the facility proposed to update permit unit C-598-4 and incorporate ATC C-598-11-4 as follows.

<u>C-598-4-19: 212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (DS), AN ELECTROSTATIC PRECIPITATOR (PARTICULATE DEVICE - PD), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, TIN FLOAT BATH, ANNEALING LEHR WITH SIX 0.36 MMBTU/HR-EACH ESYS NATURAL GAS-FIRED RETURN AIR ANNEALING LEHR BURNERS (RET BURNERS), TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)</u>

The facility proposed to update condition 55 of the current permit requirements to remove the reference to previous ATC. In addition, the reference to condition 53 of the current permit requirements was updated to reference the corresponding condition 50 of the proposed permit requirements. The condition has been revised and is included as condition 52 of the draft permit requirements.

In addition, the facility has proposed to incorporate ATC #C-598-11-4 (Attachment C) resulting from project C-1210374 (see attachment D) into their Title V operating permit. ATC #C-598-11-4 proposed to modify their 2.5 MMBtu/hr test flare serving the back-up emergency fuel system to remove its emergency designation and references to Rule 4311.

3. District Rule 2410 – Prevention of Significant Deterioration

The purpose of this rule is the prevention of significant deterioration (PSD) program is a construction permitting program for new major stationary sources and major modifications to existing major stationary sources located in areas classified as attainment or in areas that are unclassifiable for any criteria air pollutant. The intent of this Rule is to incorporate the federal PSD rule requirements into the District's Rules and Regulations by incorporating the federal requirements by reference. This rule has not been updated since the last renewal however, the facility has proposed to removed conditions 29 and 39 from the current permit requirements for unit C-598-4-17.

Condition 29 of the current permit requirements requires permanent previsions to allow for collection of stack gas and equipment to be able to safely collect the gases. This condition was met at start-up and is no longer required.

Condition 39 of the current permit requirements has been has been combined with condition 38 of the current permit requirements. The resulting condition is include as condition 36 of the draft permit requirements.

4. District Rule 2520 – Federally Mandated Operating Permits

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

5. District Rule 4601 – Architectural Coatings

District Rule 4601 was amended on April 16, 2020. However, the amended rule is not SIP-approved by EPA. The previous version of this rule (amended December 17, 2009) is SIP-approved and is still valid for this project. Therefore, there will be no further discussion.

6. District Rule 4702 – Internal Combustion Engines

The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter

(PM), and sulfur oxides (SOx) from internal combustion engines. This rule applies to any internal combustion engine rated at 25 brake horsepower or greater. The last amended version of the rule, which is not SIP approved, requires lowering NOx and VOC emissions for spark-ignited IC engines, clarifying definitions, and updating test methods. In addition Particulate Matter Emission Control Requirements were added to the rule as Section 5.8, and as such the purpose of the rule was amended to encompass the new requirements.

The diesel-fired engines permitted as C-598-1-6, -2-6, 3-6, -8-5 and -10-4 are compression-ignited emergency standby engines equipped with nonresettable elapsed time meter as required by the exemption in Section 4.2. The amended sections of this rule are not applicable to exempt engines. The amendments to District Rule 4702 do not result in a modification to the existing permit requirements. Therefore, no further discussing is required.

7. 40 CFR Part 60, Subpart A – <u>General Provisions</u>

Section 60.8(f) of Subpart A has been amended to require the reporting of specific emissions test data in test reports regardless of whether the report is submitted electronically or in paper format. The data elements will provide clarity and more appropriately define and limit the extent of elements reported for each test method included in a test report. The amendment to this section ensure that emissions test reporting includes all data necessary to assess and assure the quality of the reported emissions data and that the reported information appropriately describes and identifies the specific unit covered by the emissions test report. Also, Section 60.17(g) was amended to add ASTM D6911-15 to the list of incorporations by reference.

<u>C-598-4-19: 212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (DS), AN ELECTROSTATIC PRECIPITATOR (PARTICULATE DEVICE - PD), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, TIN FLOAT BATH, ANNEALING LEHR WITH SIX 0.36 MMBTU/HR-EACH ESYS NATURAL GAS-FIRED RETURN AIR ANNEALING LEHR BURNERS (RET BURNERS), TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)</u>

Conditions 54 and 55 on the draft permit requires compliance with Section 60.13 for continuous emission monitor system (CEMS) monitoring requirements. Since the permit is not subject to Section 60.8 and 60.17(g) the amendment to this Subpart do not require any change to the permit conditions.

8. 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§60.4200 - Applicability

This subpart is applicable to owners and operators of stationary compression ignited internal combustion engines that commence construction after July 11, 2005, where the engines are:

1) Manufactured after April 1, 2006, if not a fire pump engine.
2) Manufactured as a National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

Since permit unit C-598-10-4, an emergency standby IC engine, was installed after July 11, 2005 and manufactured after April 1, 2006, this subpart applies to this unit. All other engines at the facility were installed prior to July 11, 2005 and manufactured prior to April 1, 2006 therefore, this subpart does not apply to units C-598-1-6, -2-6, 3-6, and -8-5.

Sections 60.4201 through 60.4203 apply to engine manufacturers. Therefore, these sections will not be discussed unless they are referenced later by another section of this subpart.

§60.4205 – Emission Standards for Owners or Operators of Stationary Emergency IC Engines

Section 60.4205(b) states emergency stationary CI ICE that are 2007 model year and later with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in Section 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

Section 60.4202(a) states that Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

Section (a)(1) is not applicable as it applies to engines with a maximum engine power less than 37 KW (50 HP).

Section (a)(2) states for engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in

40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

Conditions 7 and 8 of the draft permit requirements ensure compliance with this section.

The smoke emission standard in 40 CFR 89.113 applies to compression-ignition non-road engines. An emergency-standby IC engine is not a non-road engine as defined in 40 CFR 89 Subpart A; therefore, section 40 CFR 89.113 does not apply.

Section 60.4206 states that CI engines must meet the applicable emission standards for the entire life of said engines. The Tier 3 level emissions for the proposed engine will be listed on the permit as emission factors, ensuring that the emission standards are met over the entire life of the engine.

Section 60.4207(b) states that beginning October 1, 2010, 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 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Section 40 CFR 1090.305 for ultra low-sulfur diesel (ULSD) fuel states that the maximum sulfur content of diesel fuel shall not exceed 15 ppm.

Condition 6 of the draft permit requirements ensures compliance with this section.

Section 60.4208 lists deadline dates for importing or installing stationary CI engines produced in the previous model year. None of the deadline dates affect the engine at this facility. Therefore, this section does not apply.

Section 60.4209(a) applies to emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines. The engine must be equipped with a non-resettable hour meter prior to startup of the engine.

Condition 11 of the draft permit requirements ensures compliance with this section.

Section 60.4210 applies only to engine manufacturers. Therefore, this section will not be discussed unless it is referenced later by another section of this subpart.

Section 60.4211(a) states that owners or operators who comply with the emission standards specified in this subpart must operate and maintain the

stationary CI engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.

Condition 1 of the draft permit requirements ensures compliance with this section.

Section 60.4211(b) applies to pre-2007 model year engines. Permit unit C-598-10 was installed in 2008; therefore, this section does not apply.

Section 60.4211(c) states that stationary CI internal combustion engine that are 2007 model year and later must comply with the emission standards specified in Section 60.4204(b) or Section 60.4205(b), or if the engine is a CI fire pump engine is manufactured during or after the model year that applies to a fire pump engine power rating in table 3 to this subpart, the owner or operator must comply with the emission standards specified in Section 60.4205(c), by purchasing an engine certified to the emission standards in Section 60.4204(b), or Section 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

Conditions 7 and 8 of the draft permit requirements ensure compliance with this section.

Section 60.4211(d) applies to owners or operators who must comply with the emission standards specified in Section 60.4204(c) or Section 60.4205(d). Permit unit C-598-10-4 is not subject to the emission standards specified in Sections 60.4204(c) or 60.4205(d). Therefore, this section does not apply.

Section 60.4211(e) applies to owners or operators of modified or reconstructed stationary CI internal combustion engines. Permit unit C-598-10 has not be modified or reconstructed; therefore, this section does not apply.

Section 60.4211(f) applies to owners or operators of an emergency stationary ICE. This section states the emergency stationary ICE shall be operated according to the requirements in paragraphs (f)(1) through (3). 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 the engine is not operated 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.

Condition 9 of the draft permit requirements ensures compliance with this section.

Section 60.4212 applies to stationary CI engine with a displacement of less than 30 liters per cylinder and required to conduct performance tests pursuant to Section 60.4211(b). Section 60.4211(b) does not apply to permit unit C-598-10- therefore, performance tests are not required and this section does not apply.

Section 60.4213 applies to CI engines with a displacement of greater than or equal to 30 liters per cylinder. The displacement is less than 30 liters per cylinder for permit unit C-598-10, therefore, this section does not apply.

Section 60.4214(a) states that non-emergency stationary CI engines that are greater than 3,000 hp, or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 175 hp and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section. Permit unit C-598-10 is a post-2007 model year emergency engine rated less than 3,000 hp and has a displacement less than 10 liters per cylinder. Therefore, this section does not apply.

Section 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.

Condition 14 of the draft permit requirements ensures compliance with this section.

Section 60.4214(c) applies to stationary CI engines equipped with a diesel particulate filter. Therefore, this section does not apply.

Sections 60.4215 and 60.4216 apply to engines operated outside the continental United States. Therefore, these sections do not apply.

Section 60.4217 applies to engines that use special fuels and cannot meet the emission limits that the engine was originally certified to. Permit unit C-598-10-4 is diesel-fired and meet the emission limits that the engines were originally certified to, this section does not apply.

9. 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Section 63.6595(a)(6) states upon start-up of a new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 5 of the draft PTO requirements requires the engine to be in compliance with this subpart.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 5 of the draft PTO requirements requires the engine to be in compliance with this subpart.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 5 of the draft PTO requirements requires the engine to be in compliance with this subpart.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 5 of the draft PTO requirements requires the engine to be in compliance with this subpart.

Section 63.6603 states that compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

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

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Conditions 7 thru 10 of the draft PTO requirements ensure compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Conditions 7 thru 10 of the draft PTO requirements ensure compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Conditions 7 thru 10 of the draft PTO requirements ensure compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Conditions 7 thru 10 of the draft PTO requirements ensure compliance with this section.

§63.6604(b) states that beginning January 1, 2015, existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

The engines in this facility are not allow to provide electricity to any other entity in case of emergency as listed in sections, 63.6640(f)(2)(ii) and (iii); and 63.6640(f)(4)(ii). Therefore, this section does not apply.

Section 63.6612 includes the initial performance tests and other initial compliance demonstrations for existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions. The existing engines there are no applicable emissions limitations

to comply from this subpart. As such, no initial performance tests are required.

Section 63.6625(e)(3) states that an existing emergency or black start stationary RICE located at an area source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 12 of the draft PTO requirements ensures compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 12 of the draft PTO requirements ensures compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 12 of the draft PTO requirements ensures compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 10 of the draft PTO requirements ensures compliance with this section.

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

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 11 of the draft PTO requirements ensures compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 11 of the draft PTO requirements ensures compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 11 of the draft PTO requirements ensures compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 9 of the draft PTO requirements ensures compliance with this section.

Section (h) states that a new, reconstructed, or existing stationary engine, 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.

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 6 of the draft PTO requirements ensures compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 6 of the draft PTO requirements ensures compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 6 of the draft PTO requirements ensures compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 4 of the draft PTO requirements ensures compliance with this section.

Section 63.6630(a) states that initial compliance with each emission limitation, operating limitation, and other requirement that applies to the engines shall be demonstrated according to Table 5 of this subpart.

Section (b) states during the initial performance test, each operating limitation in Tables 1b and 2b of this subpart shall be established.

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

The engines at this facility are not subject to the items in Tables 1b, 2b and 5 of this subpart and no initial testing is required. Therefore, no further discussion is required.

Section 63.6640(a) requires continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart must be demonstrated.

(b) The owner or operator must report each instance in which the engine did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to

demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(e) The owner or operator must also report each instance in which the engine did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart:

An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) An emergency stationary RICE must be operated 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 the engine is not operated 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) The emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this

section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(3) & (4) Emergency stationary RICE located at major sources or area source 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.

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 13 of the draft PTO requirements ensures compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 13 of the draft PTO requirements ensures compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 13 of the draft PTO requirements ensures compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 11 of the draft PTO requirements ensures compliance with this section.

Per Section 63.6645(a) the owner or operator must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following:

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

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), the stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions with a startup date before the effective date of this subpart, must submit an Initial Notification not later than December 13, 2004, or no later than 120 days after the source becomes subject to this subpart, whichever is later.

(c) If a new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, an Initial Notification shall be submitted not later than 120 days after becoming subject to this subpart.

(d) As specified in §63.9(b)(2), a stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions with a startup date before the effective date of this subpart and are required to submit an initial notification, the Initial Notification shall be submitted not later than July 16, 2008, or no later than 120 days after the source becomes subject to this subpart, whichever is later.

(e) A new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions with a startup date on or after March 18, 2008 and are required to submit an initial notification, must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), the notification should include the information in §63.9(b)(2)(i) through (v), and a statement that the stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If required to conduct a performance test, the Notification of Intent to conduct a performance test shall be submitted at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, a Notification of Compliance Status shall be submitted according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, the Notification of Compliance Status must be submitted before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

The engines at this facility are not subject to emissions or operating limitations in this subpart. However, it is subject to the other management practices in this subpart, and are complying with the requirements of this subpart.

Per Section 63.6650 the owner or operator of an engine subject to this subpart,

(a) Must submit each report in Table 7 of this subpart that applies to the engine.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), each report must be submitted by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission

and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If engine is operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(h) If the engine operates as an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

The engines subject to this subpart at this facility do not fall in any category in Table 7. Additionally, this unit is not subject to emissions or operating limitations in this subpart.

Per Section 63.6655(a) if the owner or operator must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5) of this section.

(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.

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 17 of the draft PTO requirements ensures compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 17 of the draft PTO requirements ensures compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 17 of the draft PTO requirements ensures compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 15 of the draft PTO requirements ensures compliance with this section.

Section (e) states that records of the maintenance conducted on the stationary RICE shall be retained in order to demonstrate that stationary RICE and after-treatment control device (if any) is operated and maintained according to the maintenance plan if the stationary RICE is one of the following:

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 16 of the draft PTO requirements ensures compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 16 of the draft PTO requirements ensures compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 16 of the draft PTO requirements ensures compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 14 of the draft PTO requirements ensures compliance with this section.

Section 63.6660 includes duration of time records must be kept.

(a) Records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) Each record must be 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).

C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 18 of the draft PTO requirements ensures compliance with this section.

C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 18 of the draft PTO requirements ensures compliance with this section.

C-598-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

Condition 18 of the draft PTO requirements ensures compliance with this section.

C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 16 of the draft PTO requirements ensures compliance with this section.

10. 40 CFR Part 64 – Compliance Assurance Monitoring

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet 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; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
3) The unit must have a pre-control potential to emit of greater than the major source thresholds.

Pollutant	Major Source Threshold (lb/year)
VOC	20,000
NO_X	20,000
CO	200,000
PM_{10}	140,000
SO_X	140,000

40 CFR Part 64 defines a control device as equipment, other than inherent process equipment, that is used to destroy or remove air pollutants prior to discharge to the atmosphere.

a) C-598-1-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR

This unit is not equipped with an add-on control. Therefore, CAM is not required for this unit.

b) C-598-2-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR

This unit is not equipped with an add-on control. Therefore, CAM is not required for this unit.

c) C-596-3-6: 1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR

This unit is not equipped with an add-on control. Therefore, CAM is not required for this unit.

d) C-598-4-19: 212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (DS), AN ELECTROSTATIC PRECIPITATOR (PARTICULATE DEVICE - PD), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, TIN FLOAT BATH, ANNEALING LEHR WITH SIX 0.36 MMBTU/HR-EACH ESYS NATURAL GAS-FIRED RETURN AIR ANNEALING LEHR BURNERS (RET BURNERS), TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

This unit has emission factors for NOx, SOx, PM10, CO and VOC. The glass manufacturing line has add-on controls in the form of high temperature scrubber, electrostatic precipitator, and selective catalytic reduction (SCR) system. The add-on controls do not control SOx and CO emissions. Therefore, CAM is not triggered for SOx or CO.

Per 40 CFR 64.2(b)(vi) for units that comply with Part 70 or 71 continuous monitoring are not subject to CAM. The CEMS for this unit monitors NOx and VOC emissions. Conditions 52 through 55, 56, 69, 71, 72 and 87 on

the draft permits ensures compliance with Part 70 or 71. Therefore, this unit does not trigger CAM for NOx or VOC.

The unit has PM10 emissions limits of 20.42 lb/hr or 0.7 lb/ton glass pulled. The unit equipped with an add-on control for PM10 in the form of an electrostatic precipitator. The electrostatic precipitator is expected to have 95% control of PM10 emissions. Uncontrolled PM10 emissions are calculated as follows.

Uncontrolled PE = Daily PE ÷ (1 – Control Efficiency) x 365 day/year
= (20.42 lb/hr x 24 hr/day) ÷ (1 - 0.95) x 365 day/year
= 3,577,584 lb-PM10/year

The uncontrolled emission are greater than the major source threshold for PM10 of 140,000 lb/year. Therefore, CAM for PM10 is triggered for this unit. CAM is satisfied by establishing primary and secondary voltage and current where the unit meets compliance during source testing. The operator must keep daily records of voltage and current. Conditions 76, 77 and 87 of the draft permit requirements ensures compliance with CAM.

e) C-598-5-6: 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

This unit has a PM10 emissions limit of 5 lb-PM10/day. The operation is equipped with add-on controls in the form of several fabric filter dust collectors. Assuming the fabric filter dust collectors have a control efficiency of 95%, uncontrolled emissions are calculated as follows.

Uncontrolled PE = Daily PE ÷ (1 – Control Efficiency) x 365 day/year
= 5 lb-PM10/day ÷ (1 - 0.95) x 365 day/year
= 36,500 lb-PM10/year

The uncontrolled emission are less than the major source threshold for PM10 of 140,000 lb/year. Therefore, CAM is not triggered for this unit.

f) C-598-6-6: 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

This unit has a PM10 emissions limit of 5 lb-PM10/day. The operation is equipped with add-on controls in the form of several fabric filter dust

collectors. Assuming the fabric filter dust collectors have a control efficiency of 95%, uncontrolled emissions are calculated as follows.

Uncontrolled PE = Daily PE ÷ (1 – Control Efficiency) x 365 day/year
= 5 lb-PM10/day (1 - 0.95) x 365 day/year
= 36,500 lb-PM10/year

The uncontrolled emission are less than the major source threshold for PM10 of 140,000 lb/year. Therefore, CAM is not triggered for this unit.

g) C-598-7-6: SHEET GLASS SEAMER OPERATION SERVED BY AN INDUSTRIAL CLEAN AIR PULSE CLEAN 500 SERIES MODULAR IV FABRIC FILTER DUST COLLECTOR

This unit has a PM10 emissions limit of 5 lb-PM10/day. The operation is equipped with add-on controls in the form of several fabric filter dust collectors. Assuming the fabric filter dust collectors have a control efficiency of 95%, uncontrolled emissions are calculated as follows.

Uncontrolled PE = Daily PE ÷ (1 – Control Efficiency) x 365 day/year
= 5 lb-PM10/day (1 - 0.95) x 365 day/year
= 36,500 lb-PM10/year

The uncontrolled emission are less than the major source threshold for PM10 of 140,000 lb/year. Therefore, CAM is not triggered for this unit.

h) C-598-8-5: 157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

This unit is not equipped with an add-on control. Therefore, CAM is not required for this unit.

i) C-598-10-4: 168 BHP CATERPILLAR MODEL C6.6 ACERT TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING WATER PUMPS FOR GLASS FURNACE COOLING

This unit is not equipped with an add-on control. Therefore, CAM is not required for this unit.

j) C-598-11-5: 2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4)

This unit is not equipped with an add-on control. Therefore, CAM is not required for this unit.

k) C-598-12-2: FACILITY GLASS CUTTING OPERATIONS INCLUDING MAIN LINE, TEMPERING LINE, COATER AND OFFLINE CUTTING TABLES USING MINERAL SPIRITS

This unit is not equipped with an add-on control. Therefore, CAM is not required for this unit.

11. 40 CFR Part 68 – Chemical Accident Prevention Provisions

Condition #43 on draft facility-wide permit C-598-0-6 states that when the facility is subject 40 CFR Part 68, the facility shall submit to the proper authority a Risk Management Plan per Subpart G when mandated by the regulation. Since the actual requirements of 40 CFR Part 68 are not placed on the draft permit, it does not impact the permit conditions. Therefore, the amendment to this Subpart does not require any change to the permit conditions.

12. 40 CFR Part 82 Subpart B – Servicing of Motor Vehicle Air Conditioners

The purpose of 40 CFR Part 82 Subpart B is to implement section 609 of the Clean Air Act, as amended regarding the servicing of motor vehicle air conditioners (MVACs), and to implement section 608 of the Clean Air Act regarding certain servicing, maintenance, repair and disposal of air conditioners in MVACs and MVAC-like appliances.

These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

The amendments to this subpart do not result in a modification to the current permit requirement included as condition 21 of draft permit requirements of draft facility-wide permit C-598-0-6. Therefore, the modifications to this subpart are not addressed any further in this evaluation.

13. 40 CFR Part 82 Subpart F – Recycling and Emissions Reductions

The purpose of 40 CFR Part 82 Subpart F is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair, and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

These regulations apply to any person servicing, maintaining, or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this

subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

The amendments to this subpart do not result in a modification to the current permit requirement included as condition 20 of draft permit requirements of draft facility-wide permit C-598-0-6. Therefore, the modifications to this subpart are not addressed any further in this evaluation.

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 facility is not proposing to use any model general permit templates.

B. Requirements not Addressed by Model General Permit Templates

This Title V permit renewal application does not include any proposals for new permit shields or modifications to any pre-existing permit shields. The proposed renewed Title V permit therefore does not include any new or modified permit shields.

X. CALIFORNIA ENVIRONMENTAL QUALITY ACT

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

Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or

facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, a Title V permit renewal, is subject to a ministerial action that is exempt from CEQA.

XI. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

ATTACHMENTS

A. Draft Renewed Title V Operating Permit
B. Previous Title V Operating Permit
C. Draft ATC C-598-11-4
D: Project C-1210374
E. Detailed Summary List of Facility Permits

ATTACHMENT A

Draft Renewed Title V Operating Permit

FACILITY: C-598-0-6 **EXPIRATION DATE:** 01/31/2021

DRAFT

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, 9.8.1 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

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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 8011 and 8021] 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 8011 and 8031] Federally Enforceable Through Title V Permit

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 8011 and 8041] 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 8011 and 8051] 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 8011 and 8061] 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 8011 and 8071] 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

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

DRAFT

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-1-6 **EXPIRATION DATE:** 01/31/2021

EQUIPMENT DESCRIPTION:
1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-2-6 **EXPIRATION DATE:** 01/31/2021

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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-3-6 **EXPIRATION DATE:** 01/31/2021

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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-4-19 **EXPIRATION DATE:** 01/31/2021

EQUIPMENT DESCRIPTION:
212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (DS), AN ELECTROSTATIC PRECIPITATOR (PARTICULATE DEVICE - PD), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, TIN FLOAT BATH, ANNEALING LEHR WITH SIX 0.36 MMBTU/HR-EACH ESYS NATURAL GAS-FIRED RETURN AIR ANNEALING LEHR BURNERS (RET BURNERS), TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. During Furnace Start-up, 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
2. The Control Devices, SCR, DS, and PD, shall be in operation at all times during normal operations, and whenever technologically feasible including during Furnace Start-up, Idling and Shutdown conditions. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit
3. Permittee shall Operate the Furnace (except during Furnace Start-up, or Maintenance of the SCR, DS or PD) passing all stack gases through the SCR, and while the SCR is operating, Permittee shall continuously operate the SCR in accordance with good air pollution control practice for minimizing emissions to the extent practicable, consistent with 40 CFR 60.11(d), taking into consideration Ammonia Slip. [District Rule 2201] Federally Enforceable Through Title V Permit
4. At all times, including during Idling, a Furnace Start-up, a Control Device Start-up, Malfunction, and Maintenance, the Permittee shall maintain and operate the Furnace, all Control Devices, and any other associated air pollution control equipment in accordance with 40 CFR 60.11(d). [District Rule 2201] Federally Enforceable Through Title V Permit
5. The Furnace shall be in compliance with all applicable requirements of District Rule 4354 including during Furnace Start-up. [District Rule 4354] Federally Enforceable Through Title V Permit
6. 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
7. 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: SOx and PM10 (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] 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 (DS), the electrostatic precipitator (PD), and the selective catalytic reduction (SCR) system, prior to exhausting into the atmosphere. [District Rules 2201 and 2410] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Any Operating hour that is exempted from the applicable 30-day Rolling Average Emission Rate because of Maintenance being performed on a Control Device is subject to the following restrictions and must comply with the following requirements: Scheduled or preventative Maintenance of Control Devices shall occur and shall be completed while the Furnace connected to the Control Device(s) is not Operating, unless the Furnace connected to the Control Device is schedule to have a Continuous Operating Year. During a Continuous Operating Year, scheduled or preventative Maintenance on the Control Devices may be conducted while the Furnace connected to the Control Device(s) is Operating. All Control Device Maintenance occurring during a Continuous Operating Year must also be performed in accordance with the following requirements: i) Maintenance on all add-on Control Devices shall not exceed 144 hours total per Calendar Year; ii) Bypassing a SCR for the purpose of preventative Maintenance shall not exceed 144 hours per Calendar Year. Bypass of the SCR required as a result of bypassing the PD or DS shall count towards the 144 hour limit; iii) Bypassing a PD for the purpose of preventative Maintenance shall not exceed 144 hours per Calendar Year. Furthermore, if a PD is bypassed, the associated DS and SCR must be bypassed as well; and iv) Bypassing a DS for the purpose of preventive Maintenance shall not exceed 144 hours per Calendar Year. Bypass of the DS required as a result of bypassing the PD shall count towards the 144 hour limit. [District Rule 2201] Federally Enforceable Through Title V Permit

10. 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

11. 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

12. The glass pull rate shall not exceed 700 tons per day. [District Rules 2201, 2410 and 4354] Federally Enforceable Through Title V Permit

13. 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] Federally Enforceable Through Title V Permit

14. Permittee shall comply with an 80% 30-day Rolling Average NOx Removal Efficiency, except as provided in the following scenarios: Furnace Start-up, Control Device Start-up or Malfunction of the SCR, DS, or PD, and Maintenance of the Canals, SCR, DS, or PD. The Permittee shall demonstrate compliance with the 80% 30-day Rolling Average NOx Removal efficiency using a NOx CEMS. [District Rule 2201] Federally Enforceable Through Title V Permit

15. For no more than the 30 Days allowed for Furnace Start-up, the Furnace exhaust may bypass the SCR to avoid having the operating inlet temperature of the SCR fall below its operational range. During these bypass Days, the Permittee shall burn no more than five (5) million standard cubic feet of natural gas in that Furnace per Day. When technically feasible and available, the Permittee will operate the SCR on Furnace exhaust. [District Rule 2201] Federally Enforceable Through Title V Permit

16. For each Operating Day that the SCR does not operate or is not operating normally because of the Control Device Start-up or Malfunction of the SCR, DS, or PD for any period of time, the Permittee may exclude that Day's Removal Efficiency from the 30-day Rolling Average NOx Removal Efficiency. During the Days excluded from the 30-day Rolling Average NOx Removal Efficiency, a NOx CEMS shall be used to demonstrate compliance with the 8,400 pound per Day NOx limit on a 24-hour Block Average. [District Rule 2201] Federally Enforceable Through Title V Permit

17. For any Operating Day where Maintenance activities on the canals, SCR or DS/PD are performed, the Permittee may exclude the Maintenance Day from the 30-day Rolling Average NOx Removal Efficiency. For any Day which is excluded from the 30-day Rolling Average NOx Removal Efficiency, a NOx CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limit: NOx (SCR Maint) = [(MH×NOx (w/o SCR))/24] + [(NH×NOx (w/o SCR)×0.2)/24]. Where: NOx SCR Maint = NOx emission limit for the Furnace during Maintenance of Canals, SCR, DS, or PD, in pounds per Day; NOx w/o SCR = NOx emission limit (8,400 pounds per Day) for the Furnace using SCR during an event where the SCR is not operating; MH = Hours of Maintenance; and NH = Normal Hours = 24 - MH. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

18. Permittee shall Operate the Furnace (except during Furnace Start-up, or Maintenance of the DS or PD) passing all stack gases through a DS, and SOx emissions from the Furnace, except during periods of Start-up, Shutdown, Maintenance of the DS or PD, 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

19. For any Operating Day where Maintenance activities on DS or PD are performed, the Permittee may exclude the Maintenance Day from the 30-day Rolling Average Emission Rate. For any Day which is excluded from the 30-day Rolling Average Emission Rate, a SO2 CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per Day limit: SO2 (K Scrub Maint) = [(MH×3472)/24] + [(NH×1190)/24]. Where: SO2 (K Scrub Maint) = SO2 emission limit for the Furnace during a DS Maintenance Day, in pounds per Day; MH = Hours of Maintenance; and NH = Normal Hours = 24 - MH. [District Rule 2201] Federally Enforceable Through Title V Permit

20. During Idling, the Permittee may exclude the SO2 emissions generated from that Furnace during that Operating Day (or Days) from the 30-day Rolling Average Emissions Rate for the Facility. During the Days excluded from the 30-day Rolling Average Emissions Rate, a SO2 CEMS shall be used to demonstrate the Permittee's compliance with a 1,190 pound per day SO2 limit. [District Rule 2201] Federally Enforceable Through Title V Permit

21. PM10 emissions from the Furnace, except during periods of Start-up, Shutdown, routine Maintenance, 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

22. Permittee shall Operate the Furnace passing all stack gases (except during Furnace Start-up, or Maintenance of the PD) through a PD, and except during periods of Furnace Start-up, Shutdown, or Maintenance of the DS or PD, the permittee shall not exceed a limit of 0.45 lb of PM per ton of glass produced. [District Rule 4201] Federally Enforceable Through Title V Permit

23. CO emissions from the Furnace, except during periods of Start-up, Shutdown, routine Maintenance, and Idling, shall not exceed either of the following limits: 22.05 lb/hr or 101 ppmv @ 8% O2 (equivalent to 0.104 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

24. VOC emissions from the Furnace, except during periods of Start-up, Shutdown, routine Maintenance, and Idling, shall not exceed either of the following limits: 0.83 lb/hr or 6.6 ppmv VOC @ 8% O2 (equivalent to 0.0039 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

25. CO emissions from the 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

26. Ammonia (NH3) emissions shall not exceed either of the following limits: 1.27 lb/hr or 10 ppmvd @ 8% O2, based on a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

27. Except during periods of Furnace Start-up, Shutdown, Control Device Startup, Malfunction of the DS and PD, and Maintenance of the DS or PD, the Permittee shall not exceed a H2SO4 emissions limit of 1.6 lb of H2SO4 per hour. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation: (ppmvd @ 8% O2) = ((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 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. [District Rule 4102]

29. Source testing to measure the NOx, SOx, and PM10 emission rates (lb/hr and lb/ton of glass pulled, measured in the stack after the Control Devices) 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

30. 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, 2410, 2520 and 4354] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. 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). Source testing to measure ammonia shall be conducted using BAAQMD ST-1B. [District Rules 1081, 2520 and 4354] Federally Enforceable Through Title V Permit

32. 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

33. 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] Federally Enforceable Through Title V Permit

34. 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] Federally Enforceable Through Title V Permit

35. For source testing purposes, the arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM and H2SO4 emission limits. The Permittee shall discard any invalid test runs, such as those that are compromised because of sample contamination. If a test run is discarded, the Permittee shall replace it with an additional valid test run. The Permittee shall report the results of the discarded test runs to the APCO and shall provide all information necessary to document why the test run was not valid. Source/stack testing shall not be conducted during, a Furnace Start-up, a Control Device Start-up, a Malfunction of the Furnace or relevant Control Device, or Maintenance of the Furnace or relevant Control Device. [District Rule 4354] Federally Enforceable Through Title V Permit

36. 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

37. 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. 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 Rules 2410 and 4354] Federally Enforceable Through Title V Permit

38. 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

39. Source testing to measure oxides of nitrogen (as NO2) shall be conducted in accordance with Rule 1081 using the following test methods: EPA Methods 1-4, 7E, or ARB Method 100 if NOx emissions are measured in ppmv; or EPA Methods 1-4, or 19 if NOx emissions are measured on heat input basis. [District Rules 1081, 2410 and 4354] Federally Enforceable Through Title V Permit

40. The initial performance test conducted after Furnace startup shall use the test procedures for a 'high NO2 emission site,' as specified in San Diego Test Method 100, to measure NO2 emissions. The source shall be classified as either a 'low' or 'high' NO2 emission site based on these test results. If the emission source is classified as a: a) 'high NO2 emission site,' then each subsequent performance test shall use the test procedures for a 'high NO2 emission site,' as specified in San Diego Test Method 100. b) 'low NO2 emission site,' then the test procedures for a 'highNO2 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 NO2 emission site. [District Rule 2410] Federally Enforceable Through Title V Permit

41. Source testing to measure oxides of sulfur (as SO2) shall be conducted using EPA Methods 1-4, 6C, or 8, and in accordance with Rule 1081. [District Rules 1081, 2410, 4354 and 4801] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

42. 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

43. Compliance with the PM emission limit of 0.45 lb of PM per ton of glass produced shall be demonstrated through annual stack tests and using EPA Test Method 5 (40 CFR Part 60, Appendix A-3). The Permittee shall conduct a PM stack test on the Furnace once each Calendar Year. [District Rule 2201] Federally Enforceable Through Title V Permit

44. 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

45. 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

46. 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

47. Compliance with the H2SO4 emission limits shall be demonstrated through annual stack tests using EPA Conditional Test Method CTM 13, 13A or B. The Permittee shall conduct a stack test each Calendar Year. [District Rule 2201] Federally Enforceable Through Title V Permit

48. 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]

49. 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 (after the Control Devices) 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

50. The permittee shall install, calibrate, certify, maintain, and operate NOx CEMS (on both the Inlet and Outlet of the SCR) and SO2 CEMS in accordance with the following requirements: a) NOx and SO2 CEMS shall continuously monitor and record the hourly NOx and SO2 emission concentrations (in parts per million [ppm]) during each Operating Day at the Furnace; b) NOx and SO2 CEMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 CFR 60.13, 40 CFR Part 60 - Appendix B (Performance Specification 2), and 40 CFR Part 60 - Appendix F (Quality Assurance Procedures); c) Events that will trigger CEMS certification include any subsequent Furnace Start-up or Control Device Start-up. The Permittee shall commence such CEMS re-certification no later than thirty (30) Days after Furnace Start-up concludes or a Control Device Start-up period concludes. If a Furnace Start-up and a Control Device Start-up happen at the same time, then the CEMS re-certification shall not be conducted until the first Operating Day after the later start-up event concludes. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

51. When CEMS data is required to be used to determine compliance with a NOx or SO2 emission rate (i.e., pounds per ton, pounds per day, or tons per year), the data acquisition and handling system for the CEMS shall convert the ppm values into pounds per hour values using an O2 CEMS or a flow monitor installed, calibrated, certified, maintained, and operated in accordance with 40 CFR 60.13, 40 CFR Part 60, Appendix B (Performance Specification 2 or 6, as applicable) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures). At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per Day for valid CEMS hourly data by the total Tons of glass produced during the Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per Ton emission rate for the Operating Day. The resulting number shall be recorded in units of pounds of pollutant per Ton of glass produced for the applicable Operating Day. [District Rules 1080, 2410 and 4354; and 40 CFR Part 64] Federally Enforceable Through Title V Permit

52. The Permittee shall not perform CEMS Certification or CEMS re-Certification during Idling, Furnace Start-up, Control Device Start-up, Malfunction of any Control Device, or Maintenance of any Control Device. By no later than thirty (30) Days after any CEMS Certification Event concludes, except as provided in condition #50 of this permit for a concurrent Furnace Start-up and Control Device Start-up, a new CEMS Certification or CEMS re-certification shall be performed. If a CEMS Certification Event occurs, the requirement to demonstrate compliance continuously with the applicable final NOx or SO2 emission limit will be suspended until CEMS Certification or CEMS re-Certification is complete (provided that the seven-day test required for CEMS Certification is commenced within thirty (30) Days following the conclusion of the CEMS Certification Event). [District Rule 2201] Federally Enforceable Through Title V Permit

53. 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

54. 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

55. 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

56. 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

57. The performance evaluation of the CEMS may be conducted as part of any performance test. [District Rule 2410] Federally Enforceable Through Title V Permit

58. CEMS shall be in operation during each idling period. [District Rule 2410] Federally Enforceable Through Title V Permit

59. 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

60. 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

61. 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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. 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

63. 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

64. 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

65. 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

66. 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

67. 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

68. Permittee shall maintain CEMS records that contain the following: the occurrence and duration of any 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

69. 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

70. 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

71. 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

72. 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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

73. 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

74. 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

75. Permittee shall maintain daily records of the total hours of operation and the type and quantity of fuel used. 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

76. 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, 2410 and 4354] Federally Enforceable Through Title V Permit

77. 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] Federally Enforceable Through Title V Permit

78. The Permittee shall record (1) the hourly NOx emissions (ppm) before and after the SCR as calculated using CEMS data; the hourly SO2 emissions (lb per hour) as calculated using CEMS data; (2) the daily production rate; and (3) if applicable, the 30-day rolling average emissions (removal efficiency or rate). [District Rules 1070, 2410 and 4354] Federally Enforceable Through Title V Permit

79. For any Operating Day(s) that the Permittee excludes from the relevant 30-day Rolling Average NOx Removal Efficiency or 30-day Rolling Average NOx or SO2 Emission Rate, the Permittee must record (1) the date; (2) the relevant exception pursuant to which the Permittee is excluding the emissions generated during that Operating Day (or Days) (i.e. Idling, Furnace Start-up, Control Device Start-up, Malfunction, or Maintenance; (3) a calculation of the applicable emission limit (in pounds of NOx and/or SO2 per Day) according to the equations specified in this permit; (4) the emissions recorded by the CEMS (in pounds of NOx and/or SO2 per Day); and (5) if it was a Malfunction an explanation and any corrective action taken. For any Operating Day(s) excluded for Maintenance of a Control Device or Furnace, the Permittee shall also record the total number of hours during which Maintenance occurred. [District Rule 2201] Federally Enforceable Through Title V Permit

80. The Permittee must keep the following records during Furnace Start-up: (1) the amount of salt cake added to the batch materials in pounds per Ton of total batch material (including cullet); (2) the total natural gas usage in that Furnace (in million standard cubic feet); (3) the excess oxygen percentage (as measured and recorded using a probe and a portable analyzer in the crown of each Furnace regenerator at least once per shift); and (4) a description of whether thermal blankets or similar techniques were used during this period. [District Rule 2201] Federally Enforceable Through Title V Permit

81. 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] Federally Enforceable Through Title V Permit

82. 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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

83. 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 4354] Federally Enforceable Through Title V Permit

84. 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

85. 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

86. 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

87. If increased production capacity at a Furnace is authorized by a revised Permit limit, the applicable pound per Day limit(s) established in this permit will be increased using the following formula: New pound per Day limit = original pound per Day limit x [COD(new)/COD(old)]. Where: COD(new) = New Daily Glass Production in Tons of glass per Day; and COD(old) = Original Daily Glass Production in Tons of glass per Day. [District Rule 2201] Federally Enforceable Through Title V Permit

88. Ammonia Slip shall mean emissions of unreacted ammonia that result from incomplete reaction of NOx and the reagent. [District Rule 2201] Federally Enforceable Through Title V Permit

89. CEMS Certification or CEMS re-Certifications shall mean the certification of a CEMS as required by 40 C.F.R. § 60.13, 40 C.F.R. Part 60 Appendix B (Performance Specification 2), and 40 C.F.R. Part 60 Appendix F (Quality Assurance Procedures. [District Rule 2201] Federally Enforceable Through Title V Permit

90. Control Device shall mean the SCR, DS, PD or similar add-on air pollution control device. [District Rule 2201] Federally Enforceable Through Title V Permit

91. Control Device Start-up shall mean the period of time from the initial commencement of operation of a Control Device until operation of the device is stable and the device has achieved normal operating conditions. A Control Device Start-up shall not exceed thirty (30) Days. Control Device Start-up does not include subsequent start-ups of the Control Device, unless the subsequent start-up of the Control Device occurs during a restart after a downtime of more than six months. [District Rule 2201] Federally Enforceable Through Title V Permit

92. Dry Scrubber and DS shall mean a pollution control system, sometimes referred to as a sorbent injection system, which involves the addition of an alkaline material into the gas stream to react with the acid gases. The acid gases react with the alkaline sorbents to form solid salts. There is no moisture added in the reaction chamber or reaction area. DSs include traditional add-on DS and ceramic filter systems. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

93. Furnace Start-up shall mean the period of time during which a Furnace's refractory is heated from ambient temperature to operating temperature. A Furnace Start-up shall last no more than 40 days and includes the slow heating of the Furnace refractory, initially with portable burners and transitioning to main burners once the Furnace reaches a temperature at which it can commence operation. Furnace Startup shall be considered complete the later of when (i) production commences, or (ii) when the operating inlet temperature of the DS reaches its operational range on a consistent basis. Furnace Start-up also includes the initial filling of the Furnace, following the heat-up, with cullet and/or raw materials, to a level at which production launch can commence. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit

94. Idling is defined as the operation of the Furnace at less than 25 percent of the permitted production capacity as stated on the Permit to Operate. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit

95. Maintenance shall mean activities necessary to keep Control Devices in normal operating condition, as described in condition #9 of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

96. Malfunction shall mean, consistent with 40 CFR 60.2, any sudden, infrequent, and not reasonably preventable failure of a Control Device to operate in a normal or usual manner, but shall not include failures that are caused in part by poor maintenance or careless operation. [District Rule 2201] Federally Enforceable Through Title V Permit

97. Particulate Device and PD shall mean a control device that uses filtration technology to reduce Particulate Matter emissions, including, but not limited to, electrostatic precipitators, baghouses, and ceramic filter systems. [District Rule 2201] Federally Enforceable Through Title V Permit

98. Removal Efficiency for NOx shall mean the percent reduction in concentration of NOx achieved by a Furnace's Control Device. This percent reduction shall be calculated by subtracting the Outlet concentration of NOx (corrected to 8% O2) from the Inlet concentration of NOx (corrected to 8% O2), dividing the difference by the Inlet concentration and then multiplying the result by 100. [District Rule 2201] Federally Enforceable Through Title V Permit

99. Selective Catalytic Reduction and SCR shall mean a pollution control device that reacts ammonia (NH3) or urea with NOx to form nitrogen (N2) and water (H2O) using a catalyst to speed the reaction. SCRs include traditional add-on SCRs and catalyst-impregnated ceramic filters. [District Rule 2201] Federally Enforceable Through Title V Permit

100. 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 Cold Tank Repair. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit

101. 24-hour Block Average shall be calculated by averaging all valid one- hour emissions data outputs (concentrations or pounds) for a given Operating Day and using the Daily Glass Production on that Operating Day where applicable. [District Rule 2201] Federally Enforceable Through Title V Permit

102. 30-day Rolling Average Emission Rate shall be expressed as pounds of pollutant emitted per Ton of glass produced and calculated at a Furnace in accordance with the following formula and sections i and ii below: 30-day average (lb E)/Ton=(CODE (lbs)+P29DE (lbs))/(CODProd (Tons)+P29DProd (Tons)), Where: 30-day average (lb E/Ton) = The 30-day Rolling Average Emission Rate; E = emissions of NOX or SO2; COD = Current Operating Day where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data; CODE = The daily emissions as measured by a CEMS on the COD, in pounds; CODProd = Daily Glass Production on the COD in Tons of glass; P29D = The Previous 29 Operating Days where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data; P29DE = The sum of the daily NOX or SO2 emissions as measured by a CEMS during the P29D, in pounds; P29DProd = The sum of the Daily Glass Production during the P29D, in Tons of glass; i. A new 30-day Rolling Average Emission Rate shall be calculated for each new Operating Day where the 30-day Rolling Average Emission Rate is the applicable standard and the CEMS measures at least 1 full hour of emissions data. Any Operating Day where the newly calculated 30-day Rolling Average Emission Rate exceeds the limit is a separate one Day violation; and ii. As specified in this permit, certain Abnormally Low Production Rate Days, Furnace and/or Control Device Startup Days, Malfunction Days, Idling, and Maintenance Days may be excluded from the 30-day Rolling Average Emission Rate. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

103. 30-day Rolling Average NOx Removal Efficiency" shall be calculated each Day where the 30-day Rolling Average NOx Removal Efficiency is the applicable standard and the CEMS measures at least 1 full hour of emissions data. It is calculated by summing the Removal Efficiency 24-hour Block Averages from the Furnace for each Operating Day and previous twenty-nine (29) Operating Days when the 30-day Rolling Average NOx Removal Efficiency was the applicable standard and the CEMS measured at least 1 full hour of emissions data and then dividing by 30. A new 30-day Rolling Average NOx Removal Efficiency shall be calculated for each new Operating Day. Any Operating Day where the newly calculated 30-day Rolling Average NOx Removal Efficiency is less than the Removal Efficiency limit is a separate one-day violation. [District Rule 2201] Federally Enforceable Through Title V Permit

104. Compliance with SOx emission limits, where applicable to CEMS monitoring in this permit, shall be demonstrated by the measurement of SO2. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-5-6 **EXPIRATION DATE:** 01/31/2021

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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-6-6 **EXPIRATION DATE:** 01/31/2021

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 cannot be eliminated, the facility will conduct an 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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-7-6 **EXPIRATION DATE:** 01/31/2021

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

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 cannot be eliminated, the facility will conduct an 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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-8-5 **EXPIRATION DATE:** 01/31/2021

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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-10-4 **EXPIRATION DATE:** 01/31/2021

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

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-11-5 **EXPIRATION DATE:** 01/31/2021

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

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. 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-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
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 Rule 2201] 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 2201] 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 operation, and copies of LPG bills. [District Rule 2201] 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 Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

DRAFT

PERMIT UNIT: C-598-12-2 **EXPIRATION DATE:** 01/31/2021

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

PERMIT UNIT REQUIREMENTS

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

DRAFT

ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: C-598 **EXPIRATION DATE:** 01/31/2021

LEGAL OWNER OR OPERATOR: GUARDIAN INDUSTRIES, LLC
MAILING ADDRESS: 11535 E MOUNTAIN VIEW AVE
KINGSBURG, CA 93631-9211

FACILITY LOCATION: 11535 E MOUNTAIN VIEW AVE
KINGSBURG, CA 93631

FACILITY DESCRIPTION: GLASS MANUFACTURING

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Samir Sheikh
Executive Director / APCO

Brian Clements
Director of Permit Services

Sep 9 2021 4:54PM – SANDOVAV

FACILITY: C-598-0-5 **EXPIRATION DATE:** 01/31/2021

FACILITY-WIDE REQUIREMENTS

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, 9.8.1 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

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 Rules 2410 and 2520] 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 8011 and 8021] 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 8011 and 8031] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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 8011 and 8041] 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 8011 and 8051] 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 8011 and 8061] 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 8011 and 8071] 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] 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. 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

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

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-1-5 **EXPIRATION DATE:** 01/31/2021

EQUIPMENT DESCRIPTION:
1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 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

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-2-5 **EXPIRATION DATE:** 01/31/2021

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

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-3-5 **EXPIRATION DATE:** 01/31/2021

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

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-4-17 **EXPIRATION DATE:** 01/31/2021

EQUIPMENT DESCRIPTION:
212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (DS), AN ELECTROSTATIC PRECIPITATOR (PARTICULATE DEVICE - PD), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, TIN FLOAT BATH, ANNEALING LEHR WITH SIX 0.36 MMBTU/HR-EACH ESYS NATURAL GAS-FIRED RETURN AIR ANNEALING LEHR BURNERS (RET BURNERS), TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

PERMIT UNIT REQUIREMENTS

1. During Furnace Start-up, 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
2. The Control Devices, SCR, DS, and PD, shall be in operation at all times during normal operations, and whenever technologically feasible including during Furnace Start-up, Idling and Shutdown conditions. [District Rules 2410 and 4354] Federally Enforceable Through Title V Permit
3. Permittee shall Operate the Furnace (except during Furnace Start-up, or Maintenance of the SCR, DS or PD) passing all stack gases through the SCR, and while the SCR is operating, Permittee shall continuously operate the SCR in accordance with good air pollution control practice for minimizing emissions to the extent practicable, consistent with 40 CFR 60.11(d), taking into consideration Ammonia Slip. [District Rule 2201 and Consent Decree 15-13426, Para 11.a.i] Federally Enforceable Through Title V Permit
4. At all times, including during Idling, a Furnace Start-up, a Control Device Start-up, Malfunction, and Maintenance, the Permittee shall maintain and operate the Furnace, all Control Devices, and any other associated air pollution control equipment in accordance with 40 CFR 60.11(d). [District Rule 2201 and Consent Decree 15-13426, Para 29] Federally Enforceable Through Title V Permit
5. The Furnace shall be in compliance with all applicable requirements of District Rule 4354 including during Furnace Start-up. [District Rule 4354] Federally Enforceable Through Title V Permit
6. 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
7. 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: SOx and PM10 (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] 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 (DS), the electrostatic precipitator (PD), and the selective catalytic reduction (SCR) system, prior to exhausting into the atmosphere. [District Rules 2201 and 2410] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Any Operating hour that is exempted from the applicable 30-day Rolling Average Emission Rate because of Maintenance being performed on a Control Device is subject to the following restrictions and must comply with the following requirements: Scheduled or preventative Maintenance of Control Devices shall occur and shall be completed while the Furnace connected to the Control Device(s) is not Operating, unless the Furnace connected to the Control Device is schedule to have a Continuous Operating Year. During a Continuous Operating Year, scheduled or preventative Maintenance on the Control Devices may be conducted while the Furnace connected to the Control Device(s) is Operating. All Control Device Maintenance occurring during a Continuous Operating Year must also be performed in accordance with the following requirements: i) Maintenance on all add-on Control Devices shall not exceed 144 hours total per Calendar Year; ii) Bypassing a SCR for the purpose of preventative Maintenance shall not exceed 144 hours per Calendar Year. Bypass of the SCR required as a result of bypassing the PD or DS shall count towards the 144 hour limit; iii) Bypassing a PD for the purpose of preventative Maintenance shall not exceed 144 hours per Calendar Year. Furthermore, if a PD is bypassed, the associated DS and SCR must be bypassed as well; and iv) Bypassing a DS for the purpose of preventive Maintenance shall not exceed 144 hours per Calendar Year. Bypass of the DS required as a result of bypassing the PD shall count towards the 144 hour limit. [District Rule 2201 and Consent Decree 15-13426, Para 30.a] Federally Enforceable Through Title V Permit

10. 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

11. 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

12. The glass pull rate shall not exceed 700 tons per day. [District Rules 2201, 2410, and 4354] Federally Enforceable Through Title V Permit

13. 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] Federally Enforceable Through Title V Permit

14. Permittee shall comply with an 80% 30-day Rolling Average NOx Removal Efficiency, except as provided in the following scenarios: Furnace Start-up, Control Device Start-up or Malfunction of the SCR, DS, or PD, and Maintenance of the Canals, SCR, DS, or PD. The Permittee shall demonstrate compliance with the 80% 30-day Rolling Average NOx Removal efficiency using a NOx CEMS. [District Rule 2201 and Consent Decree 15-13426, Paras 11.b and 10.c] Federally Enforceable Through Title V Permit

15. For no more than the 30 Days allowed for Furnace Start-up, the Furnace exhaust may bypass the SCR to avoid having the operating inlet temperature of the SCR fall below its operational range. During these bypass Days, the Permittee shall burn no more than five (5) million standard cubic feet of natural gas in that Furnace per Day. When technically feasible and available, the Permittee will operate the SCR on Furnace exhaust. [District Rule 2201 and Consent Decree 15-13426, Para 10.c.i] Federally Enforceable Through Title V Permit

16. For each Operating Day that the SCR does not operate or is not operating normally because of the Control Device Start-up or Malfunction of the SCR, DS, or PD for any period of time, the Permittee may exclude that Day's Removal Efficiency from the 30-day Rolling Average NOx Removal Efficiency. During the Days excluded from the 30-day Rolling Average NOx Removal Efficiency, a NOx CEMS shall be used to demonstrate compliance with the 8,400 pound per Day NOx limit on a 24-hour Block Average. [District Rule 2201 and Consent Decree 15-13426, Para 10.c.ii] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

17. For any Operating Day where Maintenance activities on the canals, SCR or DS/PD are performed, the Permittee may exclude the Maintenance Day from the 30-day Rolling Average NOx Removal Efficiency. For any Day which is excluded from the 30-day Rolling Average NOx Removal Efficiency, a NOx CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per day limit: NOx (SCR Maint) = [(MH×NOx (w/oSCR))/24] + [(NH×NOx (w/oSCR)×0.2)/24]. Where: NOx SCR Maint = NOx emission limit for the Furnace during Maintenance of Canals, SCR, DS, or PD, in pounds per Day; NOx w/o SCR = NOx emission limit (8,400 pounds per Day) for the Furnace using SCR during an event where the SCR is not operating; MH = Hours of Maintenance; and NH = Normal Hours = 24 - MH. [District Rule 2201 and Consent Decree 15-13426, Para 10.c.iii] Federally Enforceable Through Title V Permit

18. Permittee shall Operate the Furnace (except during Furnace Start-up, or Maintenance of the DS or PD) passing all stack gases through a DS, and SOx emissions from the Furnace, except during periods of Start-up, Shutdown, Maintenance of the DS or PD, 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; Consent Decree 15-13426, Paras 16.a and 16.b] Federally Enforceable Through Title V Permit

19. For any Operating Day where Maintenance activities on DS or PD are performed, the Permittee may exclude the Maintenance Day from the 30-day Rolling Average Emission Rate. For any Day which is excluded from the 30-day Rolling Average Emission Rate, a SO2 CEMS shall be used to demonstrate compliance on a 24-hour Block Average with the following pound per Day limit: SO2 (K Scrub Maint) = [(MH×3472)/24] + [(NH×1190)/24]. Where: SO2 (K Scrub Maint) = SO2 emission limit for the Furnace during a DS Maintenance Day, in pounds per Day; MH = Hours of Maintenance; and NH = Normal Hours = 24 - MH. [District Rule 2201 and Consent Decree 15-13426, Para 16.b.ii] Federally Enforceable Through Title V Permit

20. During Idling, the Permittee may exclude the SO2 emissions generated from that Furnace during that Operating Day (or Days) from the 30-day Rolling Average Emissions Rate for the Facility. During the Days excluded from the 30-day Rolling Average Emissions Rate, a SO2 CEMS shall be used to demonstrate the Permittee's compliance with a 1,190 pound per day SO2 limit. [District Rule 2201 and Consent Decree 15-13426, Para 16.b.iii] Federally Enforceable Through Title V Permit

21. PM10 emissions from the Furnace, except during periods of Start-up, Shutdown, routine Maintenance, 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

22. Permittee shall Operate the Furnace passing all stack gases (except during Furnace Start-up, or Maintenance of the PD) through a PD, and except during periods of Furnace Start-up, Shutdown, or Maintenance of the DS or PD, the permittee shall not exceed a limit of 0.45 lb of PM per ton of glass produced. [District Rule 4201 and Consent Decree 15-13426, Paras 20.a and 20.b] Federally Enforceable Through Title V Permit

23. CO emissions from the Furnace, except during periods of Start-up, Shutdown, routine Maintenance, and Idling, shall not exceed either of the following limits: 22.05 lb/hr or 101 ppmv @ 8% O2 (equivalent to 0.104 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

24. VOC emissions from the Furnace, except during periods of Start-up, Shutdown, routine Maintenance, and Idling, shall not exceed either of the following limits: 0.83 lb/hr or 6.6 ppmv VOC @ 8% O2 (equivalent to 0.0039 lb/MMBtu), based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

25. CO emissions from the 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

26. Ammonia (NH3) emissions shall not exceed either of the following limits: 1.27 lb/hr or 10 ppmvd @ 8% O2, based on a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

27. Except during periods of Furnace Start-up, Shutdown, Control Device Startup, Malfunction of the DS and PD, and Maintenance of the DS or PD, the Permittee shall not exceed a H2SO4 emissions limit of 1.6 lb of H2SO4 per hour. [District Rule 2201 and Consent Decree 15-13426, Paras 22.a and 22.b] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation: (ppmvd @ 8% O2) = ((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 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. [District Rule 4102]

29. 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

30. Source testing to measure the NOx, SOx, and PM10 emission rates (lb/hr and lb/ton of glass pulled, measured in the stack after the Control Devices) 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

31. 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, 2410, 2520, and 4354] Federally Enforceable Through Title V Permit

32. 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). Source testing to measure ammonia shall be conducted using BAAQMD ST-1B. [District Rules 1081, 2520, and 4354] Federally Enforceable Through Title V Permit

33. 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

34. 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] Federally Enforceable Through Title V Permit

35. 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] Federally Enforceable Through Title V Permit

36. For source testing purposes, the arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM and H2SO4 emission limits. The Permittee shall discard any invalid test runs, such as those that are compromised because of sample contamination. If a test run is discarded, the Permittee shall replace it with an additional valid test run. The Permittee shall report the results of the discarded test runs to the APCO and shall provide all information necessary to document why the test run was not valid. Source/stack testing shall not be conducted during, a Furnace Start-up, a Control Device Start-up, a Malfunction of the Furnace or relevant Control Device, or Maintenance of the Furnace or relevant Control Device. [District Rule 4354 and Consent Decree 15-13426, Para 31] Federally Enforceable Through Title V Permit

37. 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

38. 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

39. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

40. 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

41. Source testing to measure oxides of nitrogen (as NO2) shall be conducted in accordance with Rule 1081 using the following test methods: EPA Methods 1-4, 7E, or ARB Method 100 if NOx emissions are measured in ppmv; or EPA Methods 1-4, or 19 if NOx emissions are measured on heat input basis. [District Rules 1081, 2410, and 4354] Federally Enforceable Through Title V Permit

42. The initial performance test conducted after Furnace startup shall use the test procedures for a 'high NO2 emission site,' as specified in San Diego Test Method 100, to measure NO2 emissions. The source shall be classified as either a 'low' or 'high' NO2 emission site based on these test results. If the emission source is classified as a: a) 'high NO2 emission site,' then each subsequent performance test shall use the test procedures for a 'high NO2 emission site,' as specified in San Diego Test Method 100. b) 'low NO2 emission site,' then the test procedures for a 'highNO2 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 NO2 emission site. [District Rule 2410] Federally Enforceable Through Title V Permit

43. Source testing to measure oxides of sulfur (as SO2) 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

44. 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

45. Compliance with the PM emission limit of 0.45 lb of PM per ton of glass produced shall be demonstrated through annual stack tests and using EPA Test Method 5 (40 CFR Part 60, Appendix A-3). The Permittee shall conduct a PM stack test on the Furnace once each Calendar Year. [District Rule 2201 and Consent Decree 15-13426, Para 21] Federally Enforceable Through Title V Permit

46. 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

47. 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

48. 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

49. Compliance with the H2SO4 emission limits shall be demonstrated through annual stack tests using EPA Conditional Test Method CTM 13, 13A or B. The Permittee shall conduct a stack test each Calendar Year. [District Rule 2201 and Consent Decree 15-13426, Para 23] Federally Enforceable Through Title V Permit

50. 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

51. 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]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

52. 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 (after the Control Devices) 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

53. The permittee shall install, calibrate, certify, maintain, and operate NOx CEMS (on both the Inlet and Outlet of the SCR) and SO2 CEMS in accordance with the following requirements: a) NOx and SO2 CEMS shall continuously monitor and record the hourly NOx and SO2 emission concentrations (in parts per million [ppm]) during each Operating Day at the Furnace; b) NOx and SO2 CEMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 CFR 60.13, 40 CFR Part 60 - Appendix B (Performance Specification 2), and 40 CFR Part 60 - Appendix F (Quality Assurance Procedures); c) Events that will trigger CEMS certification include any subsequent Furnace Start-up or Control Device Start-up. The Permittee shall commence such CEMS re-certification no later than thirty (30) Days after Furnace Start-up concludes or a Control Device Start-up period concludes. If a Furnace Start-up and a Control Device Start-up happen at the same time, then the CEMS re-certification shall not be conducted until the first Operating Day after the later start-up event concludes. [District Rule 2201 and Consent Decree 15-13426, Paras 25 and 26] Federally Enforceable Through Title V Permit

54. When CEMS data is required to be used to determine compliance with a NOx or SO2 emission rate (i.e., pounds per ton, pounds per day, or tons per year), the data acquisition and handling system for the CEMS shall convert the ppm values into pounds per hour values using an O2 CEMS or a flow monitor installed, calibrated, certified, maintained, and operated in accordance with 40 CFR 60.13, 40 CFR Part 60, Appendix B (Performance Specification 2 or 6, as applicable) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures). At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per Day for valid CEMS hourly data by the total Tons of glass produced during the Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per Ton emission rate for the Operating Day. The resulting number shall be recorded in units of pounds of pollutant per Ton of glass produced for the applicable Operating Day. [District Rules 1080, 2410, and 4354; and 40 CFR Part 64; Consent Decree 15-13426, Para 27] Federally Enforceable Through Title V Permit

55. The Permittee shall not perform CEMS Certification or CEMS re-Certification during Idling, Furnace Start-up, Control Device Start-up, Malfunction of any Control Device, or Maintenance of any Control Device. By no later than thirty (30) Days after any CEMS Certification Event concludes, except as provided in condition #53 of this permit (which was condition #55 of ATC C-598-4-17) for a concurrent Furnace Start-up and Control Device Start-up, a new CEMS Certification or CEMS re-certification shall be performed. If a CEMS Certification Event occurs, the requirement to demonstrate compliance continuously with the applicable final NOx or SO2 emission limit will be suspended until CEMS Certification or CEMS re-Certification is complete (provided that the seven-day test required for CEMS Certification is commenced within thirty (30) Days following the conclusion of the CEMS Certification Event). [District Rule 2201 and Consent Decree 15-13426, Para 28] Federally Enforceable Through Title V Permit

56. 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

57. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

58. 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

59. 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

60. The performance evaluation of the CEMS may be conducted as part of any performance test. [District Rule 2410] Federally Enforceable Through Title V Permit

61. CEMS shall be in operation during each idling period. [District Rule 2410] Federally Enforceable Through Title V Permit

62. 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

63. 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

64. 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

65. 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

66. 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

67. 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

68. 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

69. 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

70. 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

71. Permittee shall maintain CEMS records that contain the following: the occurrence and duration of any 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

72. 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

73. 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

74. 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

75. 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

76. 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

77. 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

78. Permittee shall maintain daily records of the total hours of operation and the type and quantity of fuel used. 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

79. 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, 2410, and 4354] Federally Enforceable Through Title V Permit

80. 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] Federally Enforceable Through Title V Permit

81. The Permittee shall record (1) the hourly NOx emissions (ppm) before and after the SCR as calculated using CEMS data; the hourly SO2 emissions (lb per hour) as calculated using CEMS data; (2) the daily production rate; and (3) if applicable, the 30-day rolling average emissions (removal efficiency or rate). [District Rules 1070, 2410, and 4354; Consent Decree 15-13426, Para 41] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

82. For any Operating Day(s) that the Permittee excludes from the relevant 30-day Rolling Average NOx Removal Efficiency or 30-day Rolling Average NOx or SO2 Emission Rate, the Permittee must record (1) the date; (2) the relevant exception pursuant to which the Permittee is excluding the emissions generated during that Operating Day (or Days) (i.e. Idling, Furnace Start-up, Control Device Start-up, Malfunction, or Maintenance; (3) a calculation of the applicable emission limit (in pounds of NOx and/or SO2 per Day) according to the equations specified in this permit; (4) the emissions recorded by the CEMS (in pounds of NOx and/or SO2 per Day); and (5) if it was a Malfunction an explanation and any corrective action taken. For any Operating Day(s) excluded for Maintenance of a Control Device or Furnace, the Permittee shall also record the total number of hours during which Maintenance occurred. [District Rule 2201 and Consent Decree 15-13426, Para 42] Federally Enforceable Through Title V Permit

83. The Permittee must keep the following records during Furnace Start-up: (1) the amount of salt cake added to the batch materials in pounds per Ton of total batch material (including cullet); (2) the total natural gas usage in that Furnace (in million standard cubic feet); (3) the excess oxygen percentage (as measured and recorded using a probe and a portable analyzer in the crown of each Furnace regenerator at least once per shift); and (4) a description of whether thermal blankets or similar techniques were used during this period. [District Rule 2201 and Consent Decree 15-13426, Para 43] Federally Enforceable Through Title V Permit

84. 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] Federally Enforceable Through Title V Permit

85. 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

86. 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

87. 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

88. 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

89. 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

90. Guardian Industries, LLC's rights under paragraphs 32-38 of the Consent Decree (United States of America and State of Iowa vs. Guardian Industries, Civil No. 15-13426) shall remain in effect after the implementation of Authority to Construct (ATC) permit C-598-4-17. [Consent Decree 15-13426, Paras 32 thru 38] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

91. Permittee may elect to use the following alternative compliance option in lieu of complying with the NOx emission limits required in this permit, provided that Permittee satisfies the following requirements: a) If Permittee is able to reduce the 30-day Rolling Average Emission Rate into the SCR to less than 8.0 lb NOx per Ton of glass produced for at least 180 consecutive Days of normal Operation (excluding periods that qualify as Maintenance, Malfunction, Furnace Start-up, Control Device Start-up, or Idling), Permittee may notify the District, that it elects to comply with a 30-day Rolling Average Emission Rate of 1.6 lb NOx per Ton of glass produced (measured after the SCR) in lieu of the final NOx emission limit(s) in this permit. Permittee shall comply with a 30-day Rolling Average Emission Rate of 1.6 lb NOx per Ton of glass produced 60 Days after Permittee provides notice to the District. After electing to comply with the alternative compliance option in this condition, Permittee may not revert to complying with the final NOx emission limit(s) in this permit. If the District determines that Permittee has not satisfied any of the following criteria, Permittee must continue complying with the applicable final NOx emission limit(s) in this permit; b) Permittee's notice must include all 30-day rolling average data for NOx for the 12-month period prior to the date the notice is submitted. Permittee must clearly identify any Days that it believes are exempted from the 30-day Rolling Average Emission Rate and indicate which exemption applies (i.e., Maintenance, Malfunction, Furnace or Control Device Startup, or Idling); c) Permittee's notice must identify any equipment that it installed and explain all actions that it took in order to achieve reduced emissions at the Furnace for which it seeks an Alternative Compliance Option. Permittee shall continue to operate any equipment and continue all actions necessary to maintain such emissions reductions; d) Permittee may not elect to comply with an alternative compliance option for a Furnace that has had any exceedances of the Final NOx Emission Limit(s) required by this permit within the last twelve (12) months prior to the election allowed by this section; and e) Permittee must continue to operate the SCR at all times as required in this permit. However, Permittee may also comply with a NOx limit for Idling. [Consent Decree 15-13426, Para 12] Federally Enforceable Through Title V Permit

92. If increased production capacity at a Furnace is authorized by a revised Permit limit, the applicable pound per Day limit(s) established in this permit will be increased using the following formula: New pound per Day limit = original pound per Day limit x [COD(new)/COD(old)]. Where: COD(new) = New Daily Glass Production in Tons of glass per Day; and COD(old) = Original Daily Glass Production in Tons of glass per Day. [District Rule 2201 and Consent Decree 15-13426, Para 17] Federally Enforceable Through Title V Permit

93. Ammonia Slip shall mean emissions of unreacted ammonia that result from incomplete reaction of NOx and the reagent. [District Rule 2201 and Consent Decree 15-13426, Para 6.c] Federally Enforceable Through Title V Permit

94. Calendar Year shall mean the period commencing on January 1 and ending on December 31 of the same year. [Consent Decree 15-13426, Para 6.d] Federally Enforceable Through Title V Permit

95. CEMS Certification or CEMS re-Certifications shall mean the certification of a CEMS as required by 40 C.F.R. § 60.13, 40 C.F.R. Part 60 Appendix B (Performance Specification 2), and 40 C.F.R. Part 60 Appendix F (Quality Assurance Procedures. [District Rule 2201 and Consent Decree 15-13426, Para 6.i] Federally Enforceable Through Title V Permit

96. CEMS Certification Event shall mean any event that triggers the requirement to complete a first CEMS Certification or subsequent CEMS re- Certification. [Consent Decree 15-13426, Para 6.j] Federally Enforceable Through Title V Permit

97. Cold Tank Repair shall refer to the process of stopping glass production, stopping the flow of fuel, fully cooling down the Furnace, replacing some or all of the refractory in the Furnace, the crown and/or the regenerators (if applicable), and beginning a new campaign by starting up the Furnace again by firing fuel again and starting the production of glass. Cold Tank Repair, for the purposes of this permit, does not include any refractory repairs conducted when the Furnace is still hot, and repairs solely required for restart of a Furnace which has temporarily ceased Operation due to economic reasons. [Consent Decree 15-13426, Para 6.k] Federally Enforceable Through Title V Permit

98. Continuous Operating Year shall mean a Calendar Year during which the Furnace Operates on every Day of that Calendar Year. [Consent Decree 15-13426, Para 6.n] Federally Enforceable Through Title V Permit

99. Control Device shall mean the SCR, DS, PD or similar add-on air pollution control device. [District Rule 2201 and Consent Decree 15-13426, Para 6.o] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

100. Control Device Start-up shall mean the period of time from the initial commencement of operation of a Control Device until operation of the device is stable and the device has achieved normal operating conditions. A Control Device Start-up shall not exceed thirty (30) Days. Control Device Start-up does not include subsequent start-ups of the Control Device, unless the subsequent start-up of the Control Device occurs during a restart after a downtime of more than six months. [District Rule 2201 and Consent Decree 15-13426, Para 6.p] Federally Enforceable Through Title V Permit

101. Daily Glass Production shall mean the Tons of glass produced per Day from the Furnace (commonly known as "pulled") as calculated by the measurement method or the weight method. It will be calculated using a weighted average of approximately 12 samples taken throughout a Day to give a daily production rate. [Consent Decree 15-13426, Para 6.r] Federally Enforceable Through Title V Permit

102. Day shall mean a calendar day unless expressly stated to be a business day. In computing any period of time where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day. A Day starts at 12:00 a.m. and ends at 11:59 p.m. [Consent Decree 15-13426, Para 6.s] Federally Enforceable Through Title V Permit

103. Dry Scrubber and DS shall mean a pollution control system, sometimes referred to as a sorbent injection system, which involves the addition of an alkaline material into the gas stream to react with the acid gases. The acid gases react with the alkaline sorbents to form solid salts. There is no moisture added in the reaction chamber or reaction area. DSs include traditional add-on DS and ceramic filter systems. [District Rule 2201 and Consent Decree 15-13426, Para 6.v] Federally Enforceable Through Title V Permit

104. Furnace shall mean a unit comprised of a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass. [Consent Decree 15-13426, Para 6.z] Federally Enforceable Through Title V Permit

105. Furnace Start-up shall mean the period of time during which a Furnace's refractory is heated from ambient temperature to operating temperature. A Furnace Start-up shall last no more than 40 days and includes the slow heating of the Furnace refractory, initially with portable burners and transitioning to main burners once the Furnace reaches a temperature at which it can commence operation. Furnace Startup shall be considered complete the later of when (i) production commences, or (ii) when the operating inlet temperature of the DS reaches its operational range on a consistent basis. Furnace Start-up also includes the initial filling of the Furnace, following the heat-up, with cullet and/or raw materials, to a level at which production launch can commence. [District Rules 2410 and 4354: Consent Decree 15-13426, Para 6.aa] Federally Enforceable Through Title V Permit

106. H2SO4 shall mean sulfuric acid mist. [Consent Decree 15-13426, Para 6.cc] Federally Enforceable Through Title V Permit

107. Inlet shall mean the concentration of NOx (in ppmv corrected to 8% O2) measured prior to a SCR. [Consent Decree 15-13426, Para 6.ee] Federally Enforceable Through Title V Permit

108. Idling is defined as the operation of the Furnace at less than 25 percent of the permitted production capacity as stated on the Permit to Operate. [District Rules 2410 and 4354; and Consent Decree 15-13426, Para 6.dd] Federally Enforceable Through Title V Permit

109. Maintenance shall mean activities necessary to keep Control Devices in normal operating condition, as described in condition #9 of this permit (which was condition #11 of ATC C-598-4-17). [District Rule 2201 and Consent Decree 15-13426, Para 6.gg] Federally Enforceable Through Title V Permit

110. Malfunction shall mean, consistent with 40 CFR 60.2, any sudden, infrequent, and not reasonably preventable failure of a Control Device to operate in a normal or usual manner, but shall not include failures that are caused in part by poor maintenance or careless operation. [District Rule 2201 and Consent Decree 15-13426, Para 6.hh] Federally Enforceable Through Title V Permit

111. NOx shall mean the sum of oxides of nitrogen in the flue gas, collectively expressed as NO2. [Consent Decree 15-13426, Para 6.ii] Federally Enforceable Through Title V Permit

112. Operate, Operation, Operating and Operated shall mean any time when fuel is fired in a Furnace. [Consent Decree 15-13426, Para 6.ll] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

113. Operating Day shall mean any day where any fuel is fired in a Furnace. [Consent Decree 15-13426, Para 6.mm] Federally Enforceable Through Title V Permit

114. Outlet shall mean the NOx concentration (in ppmv corrected to 8% O2) measured after a SCR. [Consent Decree 15-13426, Para 6.nn] Federally Enforceable Through Title V Permit

115. Particulate Device and PD shall mean a control device that uses filtration technology to reduce Particulate Matter emissions, including, but not limited to, electrostatic precipitators, baghouses, and ceramic filter systems. [District Rule 2201 and Consent Decree 15-13426, Para 6.pp] Federally Enforceable Through Title V Permit

116. Particulate Matter and PM shall mean any finely divided solid or liquid material, other than uncombined water, as measured using EPA Test Method 5 (40 CFR. Part 60 Appendix A-3). [Consent Decree 15-13426, Para 6.qq] Federally Enforceable Through Title V Permit

117. Removal Efficiency for NOx shall mean the percent reduction in concentration of NOx achieved by a Furnace's Control Device. This percent reduction shall be calculated by subtracting the Outlet concentration of NOx (corrected to 8% O2) from the Inlet concentration of NOx (corrected to 8% O2), dividing the difference by the Inlet concentration and then multiplying the result by 100. [District Rule 2201 and Consent Decree 15-13426, Para 6.ww] Federally Enforceable Through Title V Permit

118. Selective Catalytic Reduction and SCR shall mean a pollution control device that reacts ammonia (NH3) or urea with NOx to form nitrogen (N2) and water (H2O) using a catalyst to speed the reaction. SCRs include traditional add-on SCRs and catalyst-impregnated ceramic filters. [District Rule 2201 and Consent Decree 15-13426, Para 6.yy] Federally Enforceable Through Title V Permit

119. 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 Cold Tank Repair. [District Rules 2410 and 4354; Consent Decree 15-13426, Para 6.k] Federally Enforceable Through Title V Permit

120. SO2 shall mean the pollutant sulfur dioxide. [Consent Decree 15-13426, Para 6.aaa] Federally Enforceable Through Title V Permit

121. Ton and Tons shall mean short ton (equal to 2000 pounds) or short tons. [Consent Decree 15-13426, Para 6.ddd] Federally Enforceable Through Title V Permit

122. 24-hour Block Average shall be calculated by averaging all valid one- hour emissions data outputs (concentrations or pounds) for a given Operating Day and using the Daily Glass Production on that Operating Day where applicable. [District Rule 2201 and Consent Decree 15-13426, Para 6.fff] Federally Enforceable Through Title V Permit

123. 30-day Rolling Average Emission Rate shall be expressed as pounds of pollutant emitted per Ton of glass produced and calculated at a Furnace in accordance with the following formula and sections i and ii below: 30-day average (lb E)/Ton=(CODE (lbs)+P29DE (lbs))/(CODProd (Tons)+P29DProd (Tons)), Where: 30-day average (lb E/Ton) = The 30-day Rolling Average Emission Rate; E = emissions of NOX or SO2; COD = Current Operating Day where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data; CODE = The daily emissions as measured by a CEMS on the COD, in pounds; CODProd = Daily Glass Production on the COD in Tons of glass; P29D = The Previous 29 Operating Days where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data; P29DE = The sum of the daily NOX or SO2 emissions as measured by a CEMS during the P29D, in pounds; P29DProd = The sum of the Daily Glass Production during the P29D, in Tons of glass; i. A new 30-day Rolling Average Emission Rate shall be calculated for each new Operating Day where the 30-day Rolling Average Emission Rate is the applicable standard and the CEMS measures at least 1 full hour of emissions data. Any Operating Day where the newly calculated 30-day Rolling Average Emission Rate exceeds the limit is a separate one Day violation; and ii. As specified in this permit, certain Abnormally Low Production Rate Days, Furnace and/or Control Device Startup Days, Malfunction Days, Idling, and Maintenance Days may be excluded from the 30-day Rolling Average Emission Rate. [District Rule 2201 and Consent Decree 15-13426, Para 6.ggg] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

124. 30-day Rolling Average NOx Removal Efficiency" shall be calculated each Day where the 30-day Rolling Average NOx Removal Efficiency is the applicable standard and the CEMS measures at least 1 full hour of emissions data. It is calculated by summing the Removal Efficiency 24-hour Block Averages from the Furnace for each Operating Day and previous twenty-nine (29) Operating Days when the 30-day Rolling Average NOx Removal Efficiency was the applicable standard and the CEMS measured at least 1 full hour of emissions data and then dividing by 30. A new 30-day Rolling Average NOx Removal Efficiency shall be calculated for each new Operating Day. Any Operating Day where the newly calculated 30-day Rolling Average NOx Removal Efficiency is less than the Removal Efficiency limit is a separate one-day violation. [District Rule 2201 and Consent Decree 15-13426, Para 6.hhh] Federally Enforceable Through Title V Permit

125. Compliance with SOx emission limits, where applicable to CEMS monitoring in this permit, shall be demonstrated by the measurement of SO2. [District Rule 2201] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-5-5 **EXPIRATION DATE:** 01/31/2021

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 1081and 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-6-5 **EXPIRATION DATE:** 01/31/2021

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 1081and 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-7-4 **EXPIRATION DATE:** 01/31/2021

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

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 1081and 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-8-4 **EXPIRATION DATE:** 01/31/2021

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

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-10-3 **EXPIRATION DATE:** 01/31/2021

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. 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

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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-11-3 **EXPIRATION DATE:** 01/31/2021

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

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-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
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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-12-1 **EXPIRATION DATE:** 01/31/2021

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

PERMIT UNIT REQUIREMENTS

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

ATTACHMENT C

Draft ATC C-598-11-4

AUTHORITY TO CONSTRUCT

PERMIT NO: C-598-11-4 **ISSUANCE DATE:** 10/13/2021

LEGAL OWNER OR OPERATOR: GUARDIAN INDUSTRIES, LLC
MAILING ADDRESS: 11535 E MOUNTAIN VIEW AVE
KINGSBURG, CA 93631-9211

LOCATION: 11535 E MOUNTAIN VIEW AVE
KINGSBURG, CA 93631

EQUIPMENT DESCRIPTION:
MODIFICATION OF 2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4): REMOVE EMERGENCY DESIGNATION AND RULE 4311 REFERENCES

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. 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 Rule 2201] 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 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

C-598-11-4 : Oct 13 2021 11:30AM – HONGM : Joint Inspection NOT Required

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 operation, and copies of LPG bills. [District Rule 2201] 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 Rule 2201] Federally Enforceable Through Title V Permit

ATTACHMENT D

Project C-1210374

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Modification of Test Flare for Glass Furnace Backup Fuel System

Facility Name:	Guardian Industries, LLC	Date:	October 4, 2021
Mailing Address:	11535 E Mountain View Ave Kingsburg, CA 93631	Engineer:	Mungi Hong
		Lead Engineer:	Jerry Sandhu
Contact Person:	John Roach		
Telephone:	(559) 891-4138		
E-Mail:	jroach@guardian.com		
Application #:	C-598-11-4		
Project #:	C-1210374		
Deemed Complete:	April 5, 2021		

I. Proposal

Guardian Industries, LLC has requested an Authority to Construct (ATC) permit for the modification of a 2.5 MMBtu/hr test flare serving the backup emergency fuel system for a glass manufacturing line (C-598-4). The facility has proposed the following:

- Remove emergency designation. As a result of this project, this unit can operate at any circumstances at a maximum limit of 2 hours/day and 200 hours/day.

- Remove Rule 4311 reference from permit conditions. Pursuant to Section 4.2 of Rule 4311 (12/17/20), flares that combust only propane, butane, or a combination of propane and butane are exempt from Rule 4311. Per Permit to Operate (PTO) C-598-11-3, this unit is only fired on LPG. Therefore, this unit is no longer subject to Rule 4311 requirements.

Since the facility's proposal above results in change in permit conditions, pursuant to Section 3.25.1.1 of District Rule 2201, this project meets the definition of a modification.

The draft ATC is included in Appendix A and a copy of the current PTO is included in Appendix B.

Guardian Industries, LLC received their initial Title V Permit on January 14, 1999. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). However, the facility has not requested that this project be processed in that manner; therefore, Guardian Industries, LLC will be required to submit a Title V minor modification application prior to operating under the revised provisions of the ATC issued with this project.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (8/15/19)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (8/15/19)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4311	Flares (12/17/20)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

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

III. Project Location

The facility is located at 11535 E Mountain View Ave in Kingsburg, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

Guardian Industries Corporation is a glass manufacturing plant. In the event of an emergency, the glass furnace (C-598-4) cannot be shut down without fuel flow for very long before damage is done to the glass furnace as it begins to cool down rapidly. During periods when the facility has its natural gas supply cut off, such as during natural gas curtailment, the glass furnace is fired on liquefied petroleum gas (LPG). Prior to introducing LPG into the glass furnace, the correct fuel to air mixture must be obtained (Wobbe Index). The flare is used to burn LPG gas until the appropriate Wobbe index is achieved and the fuel mixture can be sent to the glass furnace. Typically, the appropriate Wobbe Index for LPG will be achieved within 10 minutes.

The facility has not proposed to change the current operation schedule of 2 hours/day and 200 hours/year.

V. Equipment Listing

Pre-Project Equipment Description:

C-598-11-3:	2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4)

Proposed Modification:

C-598-11-4: MODIFICATION OF 2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4): REMOVE EMERGENCY DESIGNATION AND RULE 4311 REFERENCES

Post-Project Equipment Description:

C-598-11-4: 2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4)

VI. Emission Control Technology Evaluation

The flare associated with this project has the potential to emit NOx, SOx, PM_{10}, CO, and VOC emissions due to the combustion of LPG. The flare uses a heat sensing ignition system.

VII. General Calculations

A. Assumptions

- The flare is a source of combustion emissions.
- The flare will only burn commercial LPG as fuel (current PTO).
- Maximum heat input rating = 2.5 MMBtu/hr (current PTO).
- Propane Heating Value: 91.5 MMBtu/10^3 gallons (AP-42, Section 1.5 (July 2008)).
- Maximum sulfur content of LPG is 15 grains per 100 scf (current PTO).
- Maximum operating schedule: 12 hr/day and 200 hr/yr (current PTO).

B. Emission Factors

There is no change in emission factors as a result of this project. Therefore, the pre-project emissions factors are equal to the post-project emissions factors. The emission factors are taken from the initial permitting project for the flare (C-1133409), and are also listed on the current PTO.

Flare Emission Factors		
Pollutant	**Emission Factor (lb/MMBtu)**	**Source**
NO_X	0.068	Project C-1133409
SO_X	0.0164 (15 gr/100 scf)	mass balance equation below
PM_{10}	0.026	Project C-1133409
CO	0.370	Project C-1133409
VOC	0.063	Project C-1133409

The SO_X EF is calculated as follows:

[15 x (0.10 lb/10^3 gal)] x (10^3 gal/91.5 MMBtu) = 0.0164 lb/MMBtu

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Daily PE1 = Emissions Factor (lb/MMBtu) x Heat Rating (MMBtu/hr) x Daily Operation (hr/day)

Daily PE1				
Pollutant	EF	Heat Rating	Operation	PE1
	lb/MMBtu	MMBtu/hr	hr/day	lb/day
NOx	0.068	2.5	12	2.0
SOx	0.0164	2.5	12	0.5
PM_{10}	0.026	2.5	12	0.8
CO	0.370	2.5	12	11.1
VOC	0.063	2.5	12	1.9

Annual PE1 = Emissions Factor (lb/MMBtu) x Heat Rating (MMBtu/hr) x Annual Operation (hr/year)

Annual PE1				
Pollutant	EF	Heat Rating	Operation	PE1
	lb/MMBtu	MMBtu/hr	hr/year	lb/year
NOx	0.068	2.5	200	34
SOx	0.0164	2.5	200	8
PM_{10}	0.026	2.5	200	13
CO	0.370	2.5	200	185
VOC	0.063	2.5	200	32

2. Post-Project Potential to Emit (PE2)

Since there is no change in emission factors, heat rating, or operation hours, PE1 = PE2.

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

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

The SSPE1 can be calculated by adding the PE1 from all units with valid ATCs or PTOs and the sum of the ERCs that have been banked at the source and which have not been used on-site ($Total_{ERC}$).

$SSPE1_{Total} = SSPE1_{Permit\ Unit} + Total_{ERC}$

The SSPE calculations are included in Appendix D.

SSPE1 (lb/year)						
Permit Unit	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**	**NH_3**
C-598-1-5	570	0	21	58	5	0
C-598-2-5	570	0	21	58	5	0
C-598-3-5	570	0	21	58	5	0
C-598-4-17	871,360	316,890	179,078	193,158	7,271	11,125
C-598-5-5	0	0	1,825	0	0	0
C-598-6-5	0	0	1,825	0	0	0
C-598-7-4	0	0	1,825	0	0	0
C-598-8-4	487	0	35	105	39	0
C-598-10-3	46	0	2	25	3	0
C-598-11-3	34	8	13	185	32	0
C-598-12-1	0	0	0	0	100,000	0
$SSPE1_{Permit\ Unit}$	**873,637**	**316,898**	**184,666**	**193,647**	**107,360**	**11,125**
ERC C-1433-2	46,981	0	0	0	0	0
ERC C-1434-5	0	20,868	0	0	0	0
$Total_{ERC}$	46,981	20,686	0	0	0	0
SSPE1	**920,618**	**337,584**	**184,666**	**193,647**	**107,360**	**11,125**

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

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

The SSPE2 can be calculated by adding the PE2 from all units with valid ATCs or PTOs and the sum of the ERCs that have been banked at the source and which have not been used on-site ($Total_{ERC}$).

$SSPE2_{Total} = SSPE2_{Permit\ Unit} + Total_{ERC}$

SSPE2 (lb/year)						
Permit Unit	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**	**NH_3**
C-598-1-5	570	0	21	58	5	0
C-598-2-5	570	0	21	58	5	0
C-598-3-5	570	0	21	58	5	0
C-598-4-17	871,360	316,890	179,078	193,158	7,271	11,125
C-598-5-5	0	0	1,825	0	0	0
C-598-6-5	0	0	1,825	0	0	0
C-598-7-4	0	0	1,825	0	0	0

C-598-8-4	487	0	35	105	39	0
C-598-10-3	46	0	2	25	3	0
C-598-11-4	34	8	13	185	32	0
C-598-12-1	0	0	0	0	100,000	0
$SSPE2_{Permit\ Unit}$	**873,637**	**316,898**	**184,666**	**193,647**	**107,360**	**11,125**
ERC C-1433-2	46,981	0	0	0	0	0
ERC C-1434-5	0	20,868	0	0	0	0
$Total_{ERC}$	46,981	20,686	0	0	0	0
$SSPE2_{Total}$	**920,618**	**337,584**	**184,666**	**193,647**	**107,360**	**11,125**

5. Major Source Determination

Rule 2201 Major Source Determination:

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

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months), pursuant to the Clean Air Act, Title 3, Section 302, US Codes 7602(j) and (z)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 70.2

Rule 2201 Major Source Determination (lb/year)						
	NO_X	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO**	**VOC**
SSPE1	873,637	316,898	184,666	184,666	193,647	107,360
SSPE2	873,637	316,898	184,666	184,666	193,647	107,360
Major Source Threshold	20,000	140,000	140,000	140,000	200,000	20,000
Major Source?	Yes	Yes	Yes	Yes	No	Yes

Note: PM2.5 assumed to be equal to PM10

This source is an existing Major Source for NOx, SOx, PM_{10}, $PM_{2.5}$, and VOC emissions and will remain a Major Source for the said pollutants. No change in other pollutants are proposed or expected as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore, the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO_2	VOC	SO_2	CO	PM	PM_{10}
Estimated Facility PE before Project Increase	437	54	158	97	92	92
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source?	Yes	No	No	No	No	No

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

6. Baseline Emissions (BE)

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

Pursuant to District Rule 2201, BE = PE1 for:

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

otherwise,

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

NOx, SOx, PM_{10}, and VOC

As seen in Section VIII below, offsets are not required for any pollutants in this project. Therefore, no further discussion is required.

CO

As the facility is not a major source for CO emissions, BE = PE1.

7. SB 288 Major Modification

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

Since this facility is a major source for NOx, SOx, PM_{10}, and VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if further SB 288 Major Modification calculation is required. As calculated in Section VII.C above:

SB 288 Major Modification Thresholds			
Pollutant	**Project PE2 (lb/year)**	**Threshold (lb/year)**	**SB 288 Major Modification Calculation Required?**
NO_x	34	50,000	No
SO_x	8	80,000	No
PM_{10}	13	30,000	No
VOC	32	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification and no further discussion is required.

8. Federal Major Modification / New Major Source

Federal Major Modification

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

As defined in 40 CFR 51.165, Section (a)(1)(v) and part D of Title I of the CAA, a Federal Major Modification is any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. The significant net emission increase threshold for each criteria pollutant is included in Rule 2201.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. In step 1, emission decreases cannot cancel out the increases. Step 2 allows consideration of the project's net emissions increase as described in 40 CFR 51.165 and the Federal Clean Air Act Section 182 (e), as applicable.

Per section VII.C.5 of this document, this facility is a Major Source for NOx, SOx, PM_{10}, $PM_{2.5}$, and VOC emissions. Thus, analysis is required to determine if this project is a Federal Major Modification. Note that the San Joaquin Valley air basin is in attainment for CO; therefore, no CO significance threshold value is listed in Rule 2201. This analysis will be limited to NOx, SOx, PM_{10}, $PM_{2.5}$, and VOC emissions only.

Step 1: Project Emissions Increase

For modified existing emissions units, according to 40 CFR 51.165(a)(2)(ii)(C), the project's emission increase for each pollutant is equal to the sum of the differences between the projected actual emissions (PAE) and the baseline actual emissions (BAE). Please note that in step 1, since the District is classified as extreme non-attainment for ozone, no NOx and VOC emission decreases associated with the proposed project shall be accounted for.

Project Emissions Increase = ∑(PAE – BAE)

As described in 40 CFR 51.165(a)(1)(xxviii)(B), when using historical data and company's expected business activity to determine PAE, the portion of the emissions after the project that the existing unit could have accommodated (Unused Baseline Capacity, UBC) before the project (during the same 24-month baseline period used to determine BAE) and that are unrelated to the particular project (including emissions increases due to product demand growth) are to be excluded.

Otherwise, according to 40 CFR 51.165(a)(1)(xxvii)(B)(4), when determining PAE, in lieu of using the method described in 40 CFR 51.165 (a)(1)(xxviii)(B)(1)-(3), *Projected Actual Emissions*, the owner/operator may elect to use emissions unit's Potential to Emit. If appropriate projected actual emissions are not provided by the applicant, then the emissions unit's Potential to Emit is used to calculate the emissions increase.

Since the project proponent has not provided information required to calculate PAE, the District will use the PE2 to calculate the emissions increase. Also, to be conservative, the District will assume BAE = 0:

Project Emissions Increase = ∑PE2

Project Emissions Increase

Per District Policy APR 1150, for purposes of determining if a new or modified emission unit is part of a Federal Major Modification, if the annual emission increase for the emission unit when divided by 365 is less than or equal to 0.5 lb/day, such an increase shall be rounded to 0. The sum of the emission increases from new or modified emission units involved in this project that round to 0 shall not constitute a Federal Major Modification.

The total project annual emissions increase calculated in the table above when divided by 365 is:

34 lb-NOx/year ÷ 365 days/year = 0 lb-NOx/day
8 lb-SOx/year ÷ 365 days/year = 0 lb-SOx/day
13 lb-PM_{10}/year ÷ 365 days/year = 0 lb-PM_{10}/day
13 lb-$PM_{2.5}$/year ÷ 365 days/year = 0 lb-$PM_{2.5}$/day
32 lb-VOC/year ÷ 365 days/year = 0 lb-VOC/day

In conclusion, the project's combined total emission increases are summarized and are compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	**Total Emissions Increases (lb/yr)**	**Thresholds (lb/yr)**	**Federal Major Modification?**
NO_x*	0	0	No
VOC*	0	0	No
PM_{10}	0	30,000	No
$PM_{2.5}$	0	20,000	No
SO_x	0	80,000	No

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

Since none of the Federal Major Modification Thresholds is being surpassed with this project, this project does not constitute a Federal Major Modification and step 2 is not required and no further discussion is required.

New Major Source

As demonstrated above, this facility is an existing Major Source; therefore, this facility is not a New Major Source pursuant to 40 CFR 51.165 a(1)(iv)(A)(3).

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

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 52.21 (b) (23) definition of significant)

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10
- VOC

I. Project Location Relative to Class 1 Area

As demonstrated in the "PSD Major Source Determination" Section above, the facility was determined to be a existing PSD Major Source. Because the project is not located within 10 km (6.2 miles) of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

II. Project Emission Increase – Significance Determination

a. Evaluation of Calculated Post-project Potential to Emit for New or Modified Emissions Units vs PSD Significant Emission Increase Thresholds

As a screening tool, the post-project potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if the total potentials to emit from all new and modified units are below the applicable thresholds, no futher PSD analysis is needed.

PSD Significant Emission Increase Determination: Potential to Emit (tons/year)					
	NO_2	**SO_2**	**CO**	**PM**	**PM_{10}**
Total PE from New and Modified Units	0.0	0.0	0.1	0.0	0.0
PSD Significant Emission Increase Thresholds	40	40	100	25	15
PSD Significant Emission Increase?	No	No	No	No	No

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

10. Quarterly Net Emissions Change (QNEC)

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

VIII. Compliance Determination

Rule 2201 New and Modified Stationary Source Review Rule

As discussed in Section I, the proposed modification constitute an NSR modification pursuant to Section 3.25.1.1 of District Rule 2201.

3.25.1.1 Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.

As seen above in Section I, the facility has proposed to remove emergency designation for permit C-598-11. Since the proposed modification results in a change in method of operation of an existing emissions unit, this project is subject to District Rule 2201.

A. Best Available Control Technology (BACT)

1. BACT Applicability

Pursuant to District Rule 2201, Section 4.1, BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

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

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

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

As discussed above in Section I, the facility is proposing to remove emergency designation for permit C-598-11. By going from emergency to non-emergency, it will conservatively be assumed that the method of the flare operation is changing and the flare is changing to a different source category. Therefore, the flare will be treated as a new emissions unit for BACT purposes.

As seen above, the PEs for NOx, SOx, PM_{10}, and VOC are equal to or less than 2 lb/day. Therefore, BACT is not triggered. Although the PE for CO is greater than 2 lb/day, BACT is not triggered for CO since the SSPE2 for CO is not greater than 200,000 lb/year, as demonstrated in Section VII.C.5 above.

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

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

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

There are no modified emissions units associated with this project for BACT purposes. Therefore, BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification for any pollutant. Therefore, BACT is not triggered for any pollutant.

B. Offsets

1. Offset Applicability

Pursuant to District Rule 2201, Section 4.5, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

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

Offset Determination (lb/year)					
	NO_X	**SO_X**	**PM_{10}**	**CO**	**VOC**
SSPE2	920,618	337,584	184,666	193,647	107,360
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets Triggered?	Yes	Yes	Yes	No	Yes

2. Quantity of District Offsets Required

As seen above, the facility SSPE2 for NO_X, SOx, PM_{10}, and VOC emissions are greater than the offset thresholds and offsets are triggered for these pollutants in this project.

However, in accordance with District Policy APR 1130, if the total project emissions increase averages less than or equal to 0.5 lb/day, the emission increase can be rounded to zero (0) lb/day, only for the purposes of determining whether New and Modified Source Review (NSR) rule requirements are triggered.

As shown in the Federal Major Modification section above, the total project average daily increase for the unit associated with this project when divided by 365 is:

Pollutant	Annual PE2 (lb/year)	Average Daily PE (lb/day)
NOx	34	0.0
SOx	8	0.0
PM_{10}	13	0.0
VOC	32	0.0

Therefore, as discussed above, according to District Policy APR 1130, the total project NOx, SOx, PM_{10}, and VOC annual emissions increase can rounded to zero for NSR rule requirement purposes. Since the emissions increase can be rounded to zero for these pollutants for NSR rule purposes, offsets are not required for these pollutants in this project.

C. Public Notification

1. Applicability

Pursuant to District Rule 2201, Section 5.4, public noticing is required for:

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

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

As demonstrated in Sections VII.C.7 and VII.C.8, this project does not trigger an SB 288 or a Federal Major Modification and the facility is not a New Major Source. Therefore, public noticing for this project for New Major Source, Federal Major Modification, or SB 288 Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project. Therefore, public noticing is not required for this project for PE > 100 lb/day.

c. Offset Threshold

Public notification is required if the pre-project Stationary Source Potential to Emit (SSPE1) is increased to a level exceeding the offset threshold levels. The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Thresholds				
Pollutant	**SSPE1 (lb/year)**	**SSPE2 (lb/year)**	**Offset Threshold**	**Public Notice Required?**
NO_X	920,618	920,618	20,000 lb/year	No
SO_X	337,584	337,584	54,750 lb/year	No
PM_{10}	184,666	184,666	29,200 lb/year	No
CO	193,647	193,647	200,000 lb/year	No
VOC	107,360	107,360	20,000 lb/year	No

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

d. SSIPE > 20,000 lb/year

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

SSIPE Public Notice Thresholds					
Pollutant	**SSPE2 (lb/year)**	**SSPE1 (lb/year)**	**SSIPE (lb/year)**	**SSIPE Public Notice Threshold**	**Public Notice Required?**
NO_x	920,618	920,618	0	20,000 lb/year	No
SO_x	337,584	337,584	0	20,000 lb/year	No
PM_{10}	184,666	184,666	0	20,000 lb/year	No
CO	193,647	193,647	0	20,000 lb/year	No
VOC	107,360	107,360	0	20,000 lb/year	No
NH_3	11,125	11,125	0	20,000 lb/year	No

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

e. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project does not constitute a Title V significant modification. Therefore, public noticing for Title V significant modifications is not required for this project.

2. Public Notice Action

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

D. Daily Emission Limits (DELs)

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

- 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]

- The flare shall only be fired on commercial LPG. [District Rule 2201]

- Sulfur content of gas flared shall not exceed 15 grain-S/100 scf. [District Rules 2201 and 4801]

- Operation of the flare shall not exceed either of the following limits: 12 hours per day or 200 hours per year. [District Rule 2201]

- A flame shall be present at all times when combustible gases are vented through this flare. [District Rule 2201]

- 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 2201]

E. Compliance Assurance

1. Source Testing

According to project C1133409, no source testing was required to demonstrate compliance with Rule 2201. Since there is no change in emission factors or emissions, no source testing is required.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201.

As discussed in Section I, the facility has proposed to remove emergency designation from this unit. Therefore, the following condition will be placed on the ATC.

- Permittee shall maintain records of the daily and annual duration of flare operation, amount of gas burned, the nature of the operation, and copies of LPG bills. [District Rule 2201]

Also, the following condition will be placed on the ATC.

- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 2201]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

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

In accordance with Rule 2520, Minor Permit Modifications are permit modifications that:

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

Additionally, Section 11.4 requires a description of the proposed change, the emissions resulting from the change, any new applicable requirements that will apply if the change occurs, suggested draft permits, compliance certification and an EPA 45-day review period of the proposed permit modification (or a shorter period if EPA has notified the District that EPA will not object to issuance of the permit modification, whichever is first).

As discussed above, the facility has not applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with a minor modification, prior to operating with the proposed modifications. Upon receipt of the minor modification application, the District will forward to EPA, for a 45-day review period, the proposed modified Title V permit, the ATCs issued in this project, a compliance certification form, and a copy of this evaluation, which demonstrates compliance with the minor permit modification requirements in Section 11.4. The facility may construct/operate under the ATC upon submittal of the Title V minor modification application.

The following condition will be added to the ATC to ensure compliance with this requirement:

- {1829} 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]

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. However, no subparts of 40 CFR Part 60 apply to fuel systems served by flares.

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

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to fuel systems served by flares.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). Based on past inspections of the facility, continued compliance is expected.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, continued compliance is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

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

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification of an existing source shall not result in an increase in cancer risk greater than the District's significance level (20 in a million) and shall not result in acute and/or chronic risk indices greater than 1.

As indicated above, there are no increases in emissions, changes in the method of operation, or modification to the equipment that would require a HRA associated with this project, therefore a HRA is not necessary and no further risk analysis is required.

Rule 4201 Particulate Matter Concentration

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

F-Factor for Propane: 8,578 dscf/MMBtu at 60 °F
PM_{10} Emission Factor: 0.026 lb-PM_{10}/MMBtu
Percentage of PM as PM10 in Exhaust: 100%
Exhaust Oxygen (O_2) Concentration: 3% (assumed)
Excess Air Correction to F Factor = $\frac{20.9}{(20.9 - 3)}$ = 1.17

$$GL = \left(\frac{0.026\ lb - PM}{MMBtu} \times \frac{7{,}000\ grain}{lb - PM} \right) / \left(\frac{8{,}578\ ft^3}{MMBtu} \times\ 1.17 \right)$$

$$GL = 0.018\, grain/dscf < 0.1\, grain/dscf$$

Therefore, compliance with District Rule 4201 requirements is expected and the following condition will be listed on the ATC:

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

Rule 4301 Fuel Burning Equipment

The purpose of this rule is to limit the emission of air contaminants from fuel burning equipment. This rule limits the concentration of combustion contaminants and specifies maximum emission rates for sulfur dioxide, nitrogen oxide and combustion contaminant emissions.

The flare is not fuel burning equipment by this definition; therefore, Rule 4301 does not apply.

Rule 4311 Flares

The purpose of this rule is to limit the emissions of volatile organic compounds (VOC), oxides of nitrogen (NOx), and sulfur oxides (SOx) from the operation of flares.

As discussed in Section I, pursuant to Section 4.2 of this rule, flares that combust only propane or butane or a combination of propane and butane are exempt from the requirements of this rule.

Pursuant to ATC C-598-11-4, the unit associated with this project will only be fired on LPG; therefore, this unit is exempt from the requirements of this rule. No further discussion is required.

Rule 4801 Sulfur Compounds

Rule 4801 requires that sulfur compound emissions (as SO_2) shall not exceed 0.2% by volume. Using the ideal gas equation, the sulfur compound emissions are calculated as follows:

Volume $SO_2 = \frac{n\ RT}{P}$

With:

N = moles SO_2
T (Standard Temperature) = 60°F = 520°R
P (Standard Pressure) = 14.7 psi
R (Universal Gas Constant) = $\frac{10.73\,\text{psi}\cdot\text{ft}^3}{\text{lb}\cdot\text{mol}\cdot{}^\circ\text{R}}$

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

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

Since 11.3 ppmv is ≤ 2000 ppmv; therefore, compliance with District Rule 4801 requirements is expected. The following permit condition will ensure continued compliance with this rule:

- Sulfur content of gas flared shall not exceed 15 grain-S/100 scf. [District Rules 2201 and 4801]

California Health & Safety Code 42301.6 (School Notice)

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

California Environmental Quality Act (CEQA)

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

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;

- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

District is a Lead Agency & GHG emissions increases are from the combustion of fossil fuel other than jet fuels

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

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

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

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

The GHG emissions increases associated with this project result from the combustion of fossil fuel(s), other than jet fuel, delivered from suppliers subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that for each emissions unit affected by the project the potential project emission increase is equal to or less than 2 lbs per day per pollutant except for CO emissions, which does not require a specific Best Available Control Technology determination. Therefore, the potential project emission increase is considerably below all annual criteria emissions CEQA significant thresholds. The activity will occur at an existing facility and involves negligible expansion of the existing or former use. Furthermore, the District determined that the activity will not have a significant effect on the environment. Therefore, the District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue ATC C-598-11-4 subject to the permit conditions on the attached draft ATC in Appendix A.

X. Billing Information

Annual Permit Fees			
Permit Number	**Fee Schedule**	**Fee Description**	**Annual Fee**
C-598-11-4	3020-02-F	2.5 MMBtu/hr flare	$731

Appendixes

A: Draft ATC and Emission Profile
B: Current PTO
C: Quarterly Net Emissions Change
D: SSPE Calculations

APPENDIX A
Draft ATC and Emissions Profile

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: C-598-11-4 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: GUARDIAN INDUSTRIES, LLC
MAILING ADDRESS: 11535 E MOUNTAIN VIEW AVE
KINGSBURG, CA 93631-9211

LOCATION: 11535 E MOUNTAIN VIEW AVE
KINGSBURG, CA 93631

EQUIPMENT DESCRIPTION:
MODIFICATION OF 2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4): REMOVE EMERGENCY DESIGNATION AND RULE 4311 REFERENCES

CONDITIONS

1. {1829} 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. 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 Rule 2201] 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 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Samir Sheikh, Executive Director / APCO

DRAFT

Brian Clements, Director of Permit Services

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061

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 operation, and copies of LPG bills. [District Rule 2201] 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 Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

Application Emissions

Permit #: C-598-11-4	**Last Updated**
Facility: GUARDIAN INDUSTRIES, LLC	08/16/2021 HONGM

Equipment Pre-Baselined: NO

	NOX	**SOX**	**PM10**	**CO**	**VOC**
Potential to Emit (lb/Yr):	34.0	8.0	13.0	185.0	32.0
Daily Emis. Limit (lb/Day)	2.0	0.5	0.8	11.1	1.9
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

APPENDIX B
Current PTO

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-598-11-3 **EXPIRATION DATE:** 01/31/2021

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

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-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
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

APPENDIX C
Quarterly Net Emissions Change (QNEC)

Quarterly Net Emissions Change (QNEC)

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

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post-Project Potential to Emit for each emissions unit, lb/qtr.
PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

As seen in Section VII.C, PE2 = PE1. Therefore, QNEC = 0.

APPENDIX D
SSPE Calculations

SSPE Calculations

1) C-598-1-5: **1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR**

A. Assumptions

Non-emergency operating schedule:	20 hours/year (current PTO)
Density of diesel fuel:	7.1 lb/gal
EPA F-factor (adjusted to 60 °F):	9,051 dscf/MMBtu
Fuel heating value:	137,000 Btu/gal
BHP to Btu/hr conversion:	2,542.5 Btu/bhp-hr
Thermal efficiency of engine:	commonly ≈ 35%
PM_{10} fraction of diesel exhaust:	0.96 (CARB, 1988)

B. Emissions Factor

Emission Factors (EF)		
Pollutant	g/bhp-hr	Source
NOx	11.6	Project C-970804
SOx	0.0051	Mass Balance Equation Below
PM_{10}	0.42	Project C-970804
CO	1.18	Project C-970804
VOC	0.1	Project C-970804

$$\frac{0.000015\ lb-S}{lb-fuel}\times\frac{7.1\ lb-fuel}{gallon}\times\frac{2\ lb-SO_2}{1\ lb-S}\times\frac{1\ gal}{137{,}000\ Btu}\times\frac{1\ bhp\ input}{0.35\ bhp\ out}\times\frac{2{,}542.5\ Btu}{bhp-hr}\times\frac{453.6\ g}{lb}=\ 0.0051\ \frac{g-SO_x}{bhp-hr}$$

C. Emissions Calculations

Annual PE (lb-pollutant/yr) = EF (g-pollutant/bhp-hr) x rating (bhp)
x operation (hr/yr) / 453.6 g/lb

Annual Emissions				
Pollutant	**Emissions Factor (g/bhp-hr)**	**Rating (bhp)**	**Annual Hours of Operation (hrs/year)**	**Annual PE (lb/yr)**
NO_x	11.6	1,115	20	**570**
SO_x	0.0051	1,115	20	**0**
PM_{10}	0.42	1,115	20	**21**
CO	1.18	1,115	20	**58**
VOC	0.1	1,115	20	**5**

2) C-598-2-5: **1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR**

A. Assumptions

Non-emergency operating schedule:	20 hours/year
Density of diesel fuel:	7.1 lb/gal
EPA F-factor (adjusted to 60 °F):	9,051 dscf/MMBtu
Fuel heating value:	137,000 Btu/gal
BHP to Btu/hr conversion:	2,542.5 Btu/bhp-hr
Thermal efficiency of engine:	commonly ≈ 35%
PM_{10} fraction of diesel exhaust:	0.96 (CARB, 1988)

B. Emissions Factor

Emission Factors (EF)		
Pollutant	g/bhp-hr	Source
NOx	11.6	Project C-970804
SOx	0.0051	Mass Balance Equation Below
PM_{10}	0.42	Project C-970804
CO	1.18	Project C-970804
VOC	0.1	Project C-970804

$$\frac{0.000015\ lb-S}{lb-fuel}\times\frac{7.1\ lb-fuel}{gallon}\times\frac{2\ lb-SO_2}{1\ lb-S}\times\frac{1\ gal}{137{,}000\ Btu}\times\frac{1\ bhp\ input}{0.35\ bhp\ out}\times\frac{2{,}542.5\ Btu}{bhp-hr}\times\frac{453.6\ g}{lb}=\ 0.0051\ \frac{g-SO_x}{bhp-hr}$$

C. Emissions Calculations

Annual PE (lb-pollutant/yr) = EF (g-pollutant/bhp-hr) x rating (bhp)
x operation (hr/yr) / 453.6 g/lb

Annual Emissions				
Pollutant	**Emissions Factor (g/bhp-hr)**	**Rating (bhp)**	**Annual Hours of Operation (hrs/year)**	**Annual PE (lb/yr)**
NO_x	11.6	1,115	20	**570**
SO_x	0.0051	1,115	20	**0**
PM_{10}	0.42	1,115	20	**21**
CO	1.18	1,115	20	**58**
VOC	0.1	1,115	20	**5**

3) C-598-3-5: **1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR**

A. Assumptions

Non-emergency operating schedule:	20 hours/year (PTO C-598-3-5)
Density of diesel fuel:	7.1 lb/gal
EPA F-factor (adjusted to 60 °F):	9,051 dscf/MMBtu
Fuel heating value:	137,000 Btu/gal
BHP to Btu/hr conversion:	2,542.5 Btu/bhp-hr
Thermal efficiency of engine:	commonly ≈ 35%
PM_{10} fraction of diesel exhaust:	0.96 (CARB, 1988)

B. Emissions Factor

Emission Factors (EF)		
Pollutant	g/bhp-hr	Source
NOx	11.6	Project C-970804
SOx	0.0051	Mass Balance Equation Below
PM_{10}	0.42	Project C-970804
CO	1.18	Project C-970804
VOC	0.1	Project C-970804

$$\frac{0.000015\ lb-S}{lb-fuel}\times\frac{7.1\ lb-fuel}{gallon}\times\frac{2\ lb-SO_2}{1\ lb-S}\times\frac{1\ gal}{137{,}000\ Btu}\times\frac{1\ bhp\ input}{0.35\ bhp\ out}\times\frac{2{,}542.5\ Btu}{bhp-hr}\times\frac{453.6\ g}{lb}=\ 0.0051\ \frac{g-SO_x}{bhp-hr}$$

C. Emissions Calculations

Annual PE (lb-pollutant/yr) = EF (g-pollutant/bhp-hr) x rating (bhp)
x operation (hr/yr) / 453.6 g/lb

Annual Emissions				
Pollutant	**Emissions Factor (g/bhp-hr)**	**Rating (bhp)**	**Annual Hours of Operation (hrs/year)**	**Annual PE (lb/yr)**
NO_x	11.6	1,115	20	**570**
SO_x	0.0051	1,115	20	**0**
PM_{10}	0.42	1,115	20	**21**
CO	1.18	1,115	20	**58**
VOC	0.1	1,115	20	**5**

4) C-598-4-17: **212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (DS), AN ELECTROSTATIC PRECIPITATOR (PARTICULATE DEVICE - PD), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, TIN FLOAT BATH, ANNEALING LEHR WITH SIX 0.36 MMBTU/HR-EACH ESYS NATURAL GAS-FIRED RETURN AIR ANNEALING LEHR BURNERS (RET BURNERS), TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)**

A. Assumptions

- Operating schedule is 8,760 hour/year (worst case).
- The maximum production rate is 700 tons of glass melted per day (current PTO).
- The glass furnace is exclusively fired on PUC quality natural gas or LPG as a backup fuel (current PTO).
- F-Factor for Natural Gas: 8,578 dscf/MMBtu corrected to 60°F (40 CFR 60 Appendix B).
- Heating value of natural gas is 1,000 Btu/scf (District Policy APR-1720).
- Grain conversion: 1 pound = 7,000 grains (AP-42-Appendix A-18).

B. Emissions Factor

Steady State Emission Factors:

Emission Factors				
Pollutant	EF (24 hr block avg)	EF (30 day rolling avg)	EF (lb/hr)	Source
NOx	3.70 lb/ton	3.2 lb/ton	107.92	Current PTO
SOx (glass furnace)	1.7 lb/ton	1.2 lb/ton	49.58	Current PTO
PM_{10}	0.7 lb/ton	N/A	20.42	Current PTO

Emission Factors			
Pollutant	EF (rolling three hour average)	EF (lb/hr)	Source
CO	101 ppmv @ 8% O_2	22.05	Current PTO
VOC	6.6 ppmv @ 8% O_2	0.83	Current PTO
NH_3	10 ppmv @ 8% O_2	1.27	Current PTO

Routine Maintenance Emission Factors:

The following routine maintenance emission factors were previously proposed by Guardian under project C-1130125:

Emission Factors		
Pollutant	EF1	EF1 (lb/hr)
NOx	16 lb/ton of glass produced	N/A
PM_{10}	N/A	22.0 lb/hr
SOx	3.65 lb/ton of glass produced	N/A

C. Emissions Calculations

NOx, SOx, and PM_{10}

The worst case annual emissions will be calculated using the routine maintenance emission factor listed above for 144 hours/year and the 30 day rolling average emission factor listed above for 8,616 hours/year.

PE (lb/year) = [EF, Maintenance (lb/ton) x Production Rate (ton/hr) ÷ 24 hr/day x 144 hr/year] + [EF, Steady State (lb/ton), 30 day Rolling Avg x Production Rate (ton/hr) ÷ 24 hr/day x 8,616 hr/year]

Annual PE					
Pollutant	**EF**	**Production Rate**	**-**	**Operation**	**PE**
	lb/ton	**ton/hr**	**hr/day**	**hr/yr**	**lb/yr**
NOx (Maintenance)	16.0	700	24	144	67,200
NOx (30 day Rolling Avg)	3.2	700	24	8,616	804,160
NOx (Total)	**-**	**-**		**-**	**871,360**
SOx (Maintenance)	3.65	700	24	144	15,130
SOx (30 day Rolling Avg)	1.2	700	24	8,616	301,560
SOx (Total)	**-**	**-**		**-**	**316,890**

PM_{10}

The worst case annual emissions will be calculated using the routine maintenance emission factor listed above for 144 hours/year and the 24 hour block average emission factor listed above for 8,616 hours/year.

PE (lb/year) = [EF, Maintenance (lb/hr) x 144 hr/year] + [EF, Steady State, 24 hour Block Avg (lb/ton) x Production Rate (ton/hr) ÷ 24 hr/day x 8,616 hr/year]

Annual PE					
Pollutant	**EF**	**Production Rate**	**-**	**Operation**	**PE**
	lb/hr	**ton/hr**	**hr/day**	**hr/yr**	**lb/yr**
PM_{10} (Maintenance)	22.0	-	-	144	3,168
PM_{10} (24 hr Block Avg)	0.7	700	24	8,616	175,910
PM_{10} (Total)	**-**	**-**		**-**	**179,078**

CO and VOC

The worst case annual emissions will be calculated using the emissions factor (lb/hr) listed above and a worst case operating schedule of 8,760 hours/year.

PE (lb/year) = EF (lb/ton) x Operation (hr/year)

Annual PE			
Pollutant	**EF**	**Operation**	**PE**
	lb/hr	**hr/yr**	**lb/yr**
CO	22.05	8,760	**193,158**
VOC	0.83	8,760	**7,271**

NH_3

PE (lb/year) = EF (lb/hr) x Operation (hr/yr)
= 1.27 lb/hr x 8,760 hr/year
= 11,125 lb/year

Total PE is summarized in the following table.

Annual Emissions	
Pollutant	Annual PE (lb/year)
NOx	871,360
SOx	316,890
PM_{10}	179,078
CO	193,158
VOC	7,271
NH_3	11,125

5) C-598-5-5: **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**

A. Assumptions

- PM concentration shall not exceed 0.05 grains/scf (current PTO)
- PM10 is the only emissions from this operation.
- Emissions are calculated based on operation schedule of 365 day/yr (worst case).
- PM10 emissions shall not exceed 5.0 lb/day (current PTO).

B. Emissions Factor

- PM10 emissions shall not exceed 5.0 lb/day (current PTO).

C. Emissions Calculations

Annual PE = Daily Emissions Limit x 365 day/hear
= 5 lb-PM_{10}/day x 365 day/year
= **1,825 lb-PM_{10}/year**

6) C-598-6-5: **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**

A. Assumptions

- PM concentration shall not exceed 0.05 grains/scf (current PTO)
- PM10 is the only emissions from this operation.
- Emissions are calculated based on operation schedule of 365 day/yr (worst case).
- PM10 emissions shall not exceed 5.0 lb/day (current PTO).

B. Emissions Factor

- PM10 emissions shall not exceed 5.0 lb/day (current PTO).

C. Emissions Calculations

Annual PE = Daily Emissions Limit x 365 day/hear
= 5 lb-PM_{10}/day x 365 day/year
= **1,825 lb-PM_{10}/year**

7) C-598-7-4: **SHEET GLASS SEAMER OPERATION SERVED BY AN INDUSTRIAL CLEAN AIR PULSE CLEAN 500 SERIES MODULAR IV FABRIC FILTER DUST COLLECTOR**

A. Assumptions

- PM concentration shall not exceed 0.05 grains/scf (current PTO)
- PM10 is the only emissions from this operation.
- Emissions are calculated based on operation schedule of 365 day/yr (worst case).
- PM10 emissions shall not exceed 5.0 lb/day (current PTO).

B. Emissions Factor

- PM10 emissions shall not exceed 5.0 lb/day (current PTO).

C. Emissions Calculations

Annual PE = Daily Emissions Limit x 365 day/hear
= 5 lb-PM_{10}/day x 365 day/year
= **1,825 lb-PM_{10}/year**

8) C-598-8-4: **157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP**

A. Assumptions

Non-emergency operating schedule:	100 hours/year (PTO C-598-8-4)
Density of diesel fuel:	7.1 lb/gal
EPA F-factor (adjusted to 60 °F):	9,051 dscf/MMBtu
Fuel heating value:	137,000 Btu/gal
BHP to Btu/hr conversion:	2,542.5 Btu/bhp-hr
Thermal efficiency of engine:	commonly ≈ 35%
PM_{10} fraction of diesel exhaust:	0.96 (CARB, 1988)
Conversion factor:	453.6 g/lb

B. Emissions Factor

The current permit does not list any emission factors, except for requirement of low sulfur fuel, so emission factors will be based on AP-42 as summarized in the table below:

Emission Factors (EF)			
Pollutant	lb/bhp-hr	g/bhp-hr	Source
NOx	0.031	14.06	AP-42 (10/96) Table 3.3-1
SOx	0.0051	0.0051	Mass Balance Equation Below
PM_{10}	0.0022	0.998	AP-42 (10/96) Table 3.3-1
CO	0.00668	3.03	
VOC	0.00247	1.12	

$$\frac{0.000015\ lb-S}{lb-fuel}\times\frac{7.1\ lb-fuel}{gallon}\times\frac{2\ lb-SO_2}{1\ lb-S}\times\frac{1\ gal}{137{,}000\ Btu}\times\frac{1\ bhp\ input}{0.35\ bhp\ out}\times\frac{2{,}542.5\ Btu}{bhp-hr}\times\frac{453.6\ g}{lb}=\quad 0.0051\quad\frac{g-SO_x}{bhp-hr}$$

C. Emissions Calculations

Annual PE (lb-pollutant/yr) = EF (g-pollutant/bhp-hr) x rating (bhp)
x operation (hr/yr) / 453.6 g/lb

Annual Emissions				
Pollutant	**Emissions Factor (g/bhp-hr)**	**Rating (bhp)**	**Annual Hours of Operation (hrs/year)**	**Annual PE (lb/yr)**
NO_x	14.06	157	100	**487**
SO_x	0.0051	157	100	**0**
PM_{10}	0.998	157	100	**35**
CO	3.03	157	100	**105**
VOC	1.12	157	100	**39**

9) C-598-10-3: **168 BHP CATERPILLAR MODEL C6.6 ACERT TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING WATER PUMPS FOR GLASS FURNACE COOLING**

A. Assumptions

Non-emergency operating schedule:	50 hours/year (PTO C-598-10-3)
Density of diesel fuel:	7.1 lb/gal
EPA F-factor (adjusted to 60 °F):	9,051 dscf/MMBtu
Fuel heating value:	137,000 Btu/gal
BHP to Btu/hr conversion:	2,542.5 Btu/bhp-hr
Thermal efficiency of engine:	commonly ≈ 35%
PM_{10} fraction of diesel exhaust:	0.96 (CARB, 1988)

B. Emissions Factor

The current permit does not list any emission factors, except for requirement of low sulfur fuel, so emission factors will be based on AP-42 as summarized in the table below:

Emission Factors		
Pollutant	**Emission Factor (g/bhp-hr)**	**Source**
NO_X	2.51	Engine Manufacturer
SO_X	0.0051	Mass Balance Equation Below
PM_{10}	0.112	ARB/EPA Certification
CO	1.34	ARB/EPA Certification
VOC	0.18	Engine Manufacturer

$$\frac{0.000015\ lb-S}{lb-fuel}\times\frac{7.1\ lb-fuel}{gallon}\times\frac{2\ lb-SO_2}{1\ lb-S}\times\frac{1\ gal}{137{,}000\ Btu}\times\frac{1\ bhp\ input}{0.35\ bhp\ out}\times\frac{2{,}542.5\ Btu}{bhp-hr}\times\frac{453.6\ g}{lb}=\quad 0.0051\quad\frac{g-SO_x}{bhp-hr}$$

C. Emissions Calculations

Annual PE (lb-pollutant/yr) = EF (g-pollutant/bhp-hr) x rating (bhp)
x operation (hr/yr) / 453.6 g/lb

Annual Emissions				
Pollutant	**Emissions Factor (g/bhp-hr)**	**Rating (bhp)**	**Annual Hours of Operation (hrs/year)**	**Annual PE (lb/yr)**
NO_x	2.51	168	50	**46**
SO_x	0.0051	168	50	**0**
PM_{10}	0.112	168	50	**2**
CO	1.34	168	50	**25**
VOC	0.18	168	50	**3**

10)C-598-12-1: **FACILITY GLASS CUTTING OPERATIONS INCLUDING MAIN LINE, TEMPERING LINE, COATER AND OFFLINE CUTTING TABLES USING MINERAL SPIRITS**

A. Assumptions

- VOC is the only pollutant emitted from this operation.
- Density of mineral spirits: 6.32 lb/gal (per MSDS)
- Volatility: 6.32 lb/gal (100% VOC by volume)
- Maximum Limit: 10,000 lbs/day and 100,000 lb/yr (project C-1130124)

B. Emissions Factor

The fugitive emission factors are based on the volatility rate of mineral spirits of 6.32 lb -VOC/gal or VOC content comprises 100% by volume of the total volatile content.

C. Emissions Calculations

Annual PE = Maximum Annual Limit (lb-VOC/year)
= **100,000 lb-VOC/year**

ATTACHMENT E

Detailed Summary List of Facility Permits

Detailed Facility Report

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

GUARDIAN INDUSTRIES, LLC
11535 E MOUNTAIN VIEW AVE
KINGSBURG, CA 93631

FAC # **C 598**
STATUS: **A**
TELEPHONE:

TYPE: **TitleV**
TOXIC ID: **40112**

EXPIRE ON: 01/31/2021
AREA: 8 /
INSP. DATE: 09/21

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
C-598-1-5	1,115 bhp IC engine	3020-10 F	1	900.00	900.00	A	1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #1 POWERING A 750 KW ELECTRICAL GENERATOR
C-598-2-5	1,115 bhp IC engine	3020-10 F	1	900.00	900.00	A	1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #2 POWERING A 750 KW ELECTRICAL GENERATOR
C-598-3-5	1,115 bhp IC engine	3020-10 F	1	900.00	900.00	A	1,115 BHP CUMMINS MODEL 7421 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE #3 POWERING A 750 KW ELECTRICAL GENERATOR
C-598-4-17	232 MMBtu/hr furnace	3020-02 H	1	1,238.00	1,238.00	A	212.0 MMBTU/HR FLAT GLASS MANUFACTURING LINE THAT INCLUDES: A REGENERATIVE GLASS MELTING FURNACE CONTROLLED BY A HIGH TEMPERATURE SCRUBBER (DS), AN ELECTROSTATIC PRECIPITATOR (PARTICULATE DEVICE - PD), AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, TIN FLOAT BATH, ANNEALING LEHR WITH SIX 0.36 MMBTU/HR-EACH ESYS NATURAL GAS-FIRED RETURN AIR ANNEALING LEHR BURNERS (RET BURNERS), TWO 10 MMBTU/HR NATURAL GAS FIRED REGENERATION BURNERS, AND A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)
C-598-5-5	140 hp electrical motors	3020-01 D	1	379.00	379.00	A	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
C-598-6-5	213 hp electrical motors	3020-01 E	1	495.00	495.00	A	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
C-598-7-4	30 hp electrical motors	3020-01 B	1	143.00	143.00	A	SHEET GLASS SEAMER OPERATION SERVED BY AN INDUSTRIAL CLEAN AIR PULSE CLEAN 500 SERIES MODULAR IV FABRIC FILTER DUST COLLECTOR
C-598-8-4	157 bhp IC engine	3020-10 B	1	143.00	143.00	A	157 BHP CUMMINS MODEL V-504-F2 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP
C-598-10-3	168 bhp IC engine	3020-10 B	1	143.00	143.00	A	168 BHP CATERPILLAR MODEL C6.6 ACERT TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING WATER PUMPS FOR GLASS FURNACE COOLING
C-598-11-3	2.5 MMBtu/hr flare	3020-02 F	1	731.00	731.00	A	2.5 MMBTU/HR RANSOME MANUFACTURING TEST FLARE SERVING THE BACK-UP EMERGENCY FUEL SYSTEM FOR THE GLASS MANUFACTURING LINE (C-598-4)

Detailed Facility Report

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

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
C-598-12-1	Miscellaneous - Glass cutting operation	3020-06	1	128.00	128.00	A	FACILITY GLASS CUTTING OPERATIONS INCLUDING MAIN LINE, TEMPERING LINE, COATER AND OFFLINE CUTTING TABLES USING MINERAL SPIRITS

Number of Facilities Reported: 1