



July 24, 2023

Mr. Alan Rogers Owens-Brockway Glass Container 14700 W. Schulte Road Tracy, CA 95376

### Re: Notice of Final Action - Title V Permit Renewal Facility Number: N-593 Project Number: N-1220108

Dear Mr. Rogers:

The District has issued the Final Renewed Title V Permit for Owens-Brockway Glass Container (see enclosure). The preliminary decision for this project was made on June 06, 2023. No comments were received following the District's preliminary decision on this project.

The public notice for issuance of the Final Title V Permit will be posted on the District's website (<u>www.valleyair.org</u>).

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

Sincerely,

Brian Clements Director of Permit Services

Enclosures

- cc: Courtney Graham, CARB (w/enclosure) via email
- cc: Gerardo Rios, 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

FACILITY: N-593-0-6

### EXPIRATION DATE: 07/31/2027

# FACILITY-WIDE REQUIREMENTS

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rule 110 (San Joaquin)] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rule 110 (San Joaquin)] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/18/14). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility-wide Requirements for N-593-0-6 (continued)

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility-wide Requirements for N-593-0-6 (continued)

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating or colorant with a VOC content in excess of the applicable limits specified in Table 1 (Coatings) and Table 2 (Colorants) of District rule 4601 (4/16/20), unless exempted under Section 4.0 of District Rule 4601 (4/16/20). [District Rule 4601] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (4/16/20) shall be stored in closed containers when not in use. [District Rule 4601] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (4/16/20). [District Rule 4601] Federally Enforceable Through Title V Permit
- 26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

Facility-wide Requirements for N-593-0-6 (continued)

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

**PERMIT UNIT: N-593-2-11** 

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E= 3.59 x P^0.62 if P is less than or equal to 30 tons per hour, or E= 17.31 x P^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The pressure differential, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
- 8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 13. The permittee shall monitor and record the stack concentration (in ppmv) of NH3 at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
- 14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Records of the weekly NH3 concentration from the glass treatment operations shall be maintained. [District Rule 4102]
- 27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

**PERMIT UNIT: N-593-3-6** 

### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

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

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

### **EQUIPMENT DESCRIPTION:**

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

# PERMIT UNIT REQUIREMENTS

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

EXPIRATION DATE: 07/31/2027

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

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

### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

# PERMIT UNIT REQUIREMENTS

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

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

### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

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

**PERMIT UNIT:** N-593-7-6

### EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

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

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

**PERMIT UNIT:** N-593-8-6

### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

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

#### PERMIT UNIT: N-593-10-19

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

- 9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
- 10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
- 11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
- 12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 15. NOx, CO, VOC, SOx, and PM10 emissions during idling shall not exceed the amount as calculated using the following equation: NOx, CO, VOC, SOx, or PM10 (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
- 16. The SOx and PM10 emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
- 18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
- 19. The glass pull rate shall not exceed 417 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 20. The glass pull rate shall not exceed 146,000 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
- The weight percent of cullet per batch shall not be less than 17.5%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. NOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 69.50 lb-NOx/hr and 4.0 lb-NOx/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 23. NOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 26.06 lb-NOx/hr and 1.5 lb-NOx/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 24. SOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 15.64 lb-SOx/hr and 0.9 lb-SOx/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

- 25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O2 or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O2 or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- PM10 emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 6.59 lb-PM10/hr and 0.5 lb-PM10/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 28. Particulate matter emissions shall not exceed 17.5 lb/hr. [40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
- 29. Ammonia emissions (NH3) shall not exceed 10 ppmvd @ 8% O2, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NOx/day, 300.0 lb-PM10/day, and 105.0 lb-filterable PM10/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
- Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM10/year. [District NSR Rule] Federally Enforceable Through Title V Permit
- 32. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 34. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM10 (lb/ton of glass pulled and lb/hr), SOx (lb/ton of glass pulled and lb/hr), and NOx (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
- 35. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
- 36. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

- 48. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 49. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
- 50. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 51. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ñ 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 52. Any visible emission monitoring exceedance showing air contaminant discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
- 53. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
- 54. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
- 55. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
- 56. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
- 57. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
- 58. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit

- 59. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 60. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 61. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 62. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 63. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
- 64. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
- 65. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
- 66. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 67. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 68. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 69. The throughput for each electrostatic precipitator dust silo shall not exceed 1.81 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 70. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
- 71. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule] Federally Enforceable Through Title V Permit
- 72. The pressure differential, as indicated by the pressure differential gauge on each bin vent filter, shall stay between 0.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit

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

#### **PERMIT UNIT: N-593-11-12**

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E= 3.59 x P^0.62 if P is less than or equal to 30 tons per hour, or E= 17.31 x P^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The pressure differential, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
- 8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 13. The permittee shall monitor and record the stack concentration (in ppmv) of NH3 at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
- 14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Records of the weekly NH3 concentration from the glass treatment operations shall be maintained. [District Rule 4102]
- 27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: N-593-12-17

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

- 9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
- 10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
- 11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
- 12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 15. NOx, CO, VOC, SOx, and PM10 emissions during idling shall not exceed the amount as calculated using the following equation: NOx, CO, VOC, SOx, or PM10 (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
- 16. The SOx and PM10 emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
- 18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
- 19. The glass pull rate shall not exceed 250 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 20. The glass pull rate shall not exceed 87,235 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
- 21. The weight percent of cullet per batch shall not be less than 13.6%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. NOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 41.67 lb-NOx/hr and 4.0 lb-NOx/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 23. NOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 15.63 lb-NOx/hr and 1.5 lb-NOx/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 24. SOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 9.38 lb-SOx/hr and 0.9 lb-SOx/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

- 25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O2 or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O2 or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 27. PM10 emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 3.78 lb-PM10/hr and 0.5 lb-PM10/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 28. Ammonia emissions (NH3) shall not exceed 10 ppmvd @ 8% O2, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NOx/day, 300.0 lb-PM10/day, and 105.0 lb-filterable PM10/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
- Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM10/year. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM10 (lb/ton of glass pulled and lb/hr), SOx (lb/ton of glass pulled and lb/hr), and NOx (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
- 34. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
- 35. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

- 47. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 48. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
- 49. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 50. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ñ 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 51. Any visible emission monitoring exceedance showing air contaminant discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
- 52. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
- 53. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
- 54. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
- 55. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
- 56. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
- 57. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit

- 58. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 59. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 60. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 61. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 62. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
- 63. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
- 64. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
- 65. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 66. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 67. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 68. The throughput for each electrostatic precipitator dust silo shall not exceed 1.23 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 69. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
- 70. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule] Federally Enforceable Through Title V Permit
- 71. The pressure differential, as indicated by the pressure differential gauge on each bin vent filter, shall stay between 0.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit

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

#### PERMIT UNIT: N-593-13-14

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

- 9. Start-up is defined as the period of time, after initial construction of a furnace rebuild, during which a glass melting furnace is heated to operating temperature by the primary furnace combustion system and instrumentation are brought to stabilization. Shutdown is defined as the period of time during which a glass melting furnace is purposely allowed to cool from operating temperature and molten glass is removed from the tank for the purposes of a furnace rebuild. Idling is defined as the operation of the furnace at less than 25 percent of the permitted production capacity or fuel use capacity as stated on the Permit to Operate. [District Rule 4354] Federally Enforceable Through Title V Permit
- 10. During startup, the permittee shall comply with the requirements of Section 5.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
- 11. The duration of shutdown of the furnace, as measured from the time the furnace operations drop below the idle threshold (operation of the furnace at less than 25 percent of the permitted glass production capacity or fuel use capacity) to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354] Federally Enforceable Through Title V Permit
- 12. The emission control systems shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 13. During periods when the furnace is in idle state, the glass throughput shall not exceed 50 tons per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. The emission control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 15. NOx, CO, VOC, SOx, and PM10 emissions during idling shall not exceed the amount as calculated using the following equation: NOx, CO, VOC, SOx, or PM10 (lb/day) = Applicable emission limit (lb/ton) x Furnace permitted production capacity (tons/day). [District Rule 4354] Federally Enforceable Through Title V Permit
- 16. The SOx and PM10 emission limits of this permit shall not apply during routine maintenance of the respective add-on control systems. The routine maintenance in each calendar year shall not exceed 144 hours total for all add-on controls and routine maintenance shall be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
- 17. The furnace shall be fired on PUC regulated natural gas or LPG/propane fuel only. [District NSR Rule] Federally Enforceable Through Title V Permit
- 18. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
- 19. The glass pull rate shall not exceed 340 tons during any one day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 20. The glass pull rate shall not exceed 124,100 tons during any rolling 12-month period. [District NSR Rule] Federally Enforceable Through Title V Permit
- 21. The weight percent of cullet per batch shall not be less than 13.6%. Batch weight distribution data shall be available for District inspection during normal operating hours. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. NOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 56.67 lb-NOx/hr and 4.0 lb-NOx/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 23. NOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 21.25 lb-NOx/hr and 1.5 lb-NOx/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 24. SOx emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 12.75 lb-SOx/hr and 0.9 lb-SOx/ton of glass pulled, based on a 30-day rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit

- 25. CO emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 300 ppmvd @ 8% O2 or 1.0 lb-CO/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 26. VOC emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed any of the following limits: 20 ppmvd @ 8% O2 or 0.25 lb-VOC/ton of glass pulled, based on a 3-hour rolling average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- PM10 emissions from the glass furnace, except during periods of start-up, shutdown, and idling, shall not exceed either of the following limits: 5.38 lb-PM10/hr and 0.5 lb-PM10/ton of glass pulled, based on a block 24-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
- 28. Ammonia emissions (NH3) shall not exceed 10 ppmvd @ 8% O2, based on a 24-hr average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Daily combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) shall not exceed any of the following limits: 3,392.2 lb-NOx/day, 300.0 lb-PM10/day, and 105.0 lb-filterable PM10/day. [District NSR Rule and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
- Combined emissions from furnaces N-593-10 (22-C), N-593-12 (22-A), and N-593-13 (22-B) computed over a rolling 12-month period shall not exceed 55 tons-PM10/year. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. All required source testing shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Performance testing shall be conducted for VOC (ppmv and lb/ton of glass pulled), CO (ppmv and lb/ton of glass pulled), PM10 (lb/ton of glass pulled and lb/hr), SOx (lb/ton of glass pulled and lb/hr), and NOx (lb/ton of glass pulled) emissions at least once every calendar year. To qualify as an annual performance test, the test date shall be at least 6 months after, and not more than 18 months after the initial and the previous annual performance test. [District NSR Rule, Rule 4354, and 40 CFR 52.233(g)] Federally Enforceable Through Title V Permit
- 34. Furnace conditions during source testing shall be representative of normal operations, with a glass production rate equal to or greater than 60 percent of the permitted glass production capacity. The source test may be conducted at a glass production rate lower than 60 percent of the permitted glass production rate, provided that the permittee demonstrates that the proposed alternative glass production rate is representative of normal operations and the proposed alternative glass production rate is approved by the APCO in writing. [District Rule 4354] Federally Enforceable Through Title V Permit
- 35. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures specified in this permit. The District must be notified 45 days prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

- 47. Results of the CEM system shall be averaged over the appropriate averaging period, using consecutive 15-minute samples in accordance with all applicable requirements of 40 CFR 60.13, or by other methods deemed equivalent by mutual agreement with the District, California Air Resources Board, and EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 48. Records of the following items shall be maintained: the occurrence and duration of any malfunction, performance testing, calibrations, checks, adjustments, and any period during which the CEM is inoperative, and the CEM emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
- 49. Cylinder gas audits (CGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 50. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ñ 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 51. Any visible emission monitoring exceedance showing air contaminant discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
- 52. Any violation of an emission standard, as shown by the stack CEMS, shall be reported to the APCO within 96 hours of detection. [District Rule 1080] Federally Enforceable Through Title V Permit
- 53. The operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shutdown a CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
- 54. Permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions; nature and cause of excess emissions (averaging period used for data reporting shall correspond to the averaging period for each respective emission standard); corrective actions taken and preventative measures adopted; applicable time and data for each period during a CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred or when the CEMS has not been inoperative, repaired, or adjusted. [District Rule 1080] Federally Enforceable Through Title V Permit
- 55. The permittee shall monitor and record the furnace temperature daily. [District Rule 4354] Federally Enforceable Through Title V Permit
- 56. The furnace temperature shall be maintained at or above the level for which compliance with the permitted VOC limit has been demonstrated. If the measured furnace temperature is less than the minimum furnace temperature limit, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
- 57. The permittee shall keep records of the date and time of the furnace temperature readings and the furnace temperature during the source test that showed compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit

- 58. The permittee shall install, operate, and maintain a continuous monitoring and recording system to accurately measure and record the electrostatic precipitator secondary current and secondary voltage. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 59. The average daily total power input into the electrostatic precipitator shall be calculated by multiplying the average daily secondary amperage by the average daily secondary voltage, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 60. The average daily total power input of the electrostatic precipitator shall be maintained at or above the level for which compliance with the permitted PM10 limit has been demonstrated. If the measured average daily total power input into the electrostatic precipitator drops below the level for which compliance with the permitted PM10 limit has been demonstrated, the permittee shall conduct a certified PM10 source test within 60 days to re-establish the minimum average daily total power input limit. In lieu of conducting a certified PM10 source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the average daily total power input to or above the minimum level), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 61. The permittee shall keep records of the date of the measure electrostatic precipitator average daily total power input and the minimum electrostatic precipitator daily total power input established during the source test that showed compliance with the PM10 emission limit of this permit. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 62. The 3-hour block average production-based metal HAP mass emission rate shall not exceed 0.02 lb/ton of glass produced, except during periods of startup, shutdown, or malfunction. Compliance with this requirement shall be verified by keeping product data records. [40 CFR 63.11451 and 40 CFR 63.11455(a)] Federally Enforceable Through Title V Permit
- 63. Permittee shall keep a copy of the Initial Notification and Notification of Compliance Status for 40 CFR 63 Subpart SSSSSS. [40 CFR 63.11457(a)(1)] Federally Enforceable Through Title V Permit
- 64. Permittee shall keep records of the product data. The product data shall include the amount (weight or weight percent) of each ingredient in the batch formation, including all glass manufacturing metal HAP compounds. [40 CFR 63.11457(a)(4)] Federally Enforceable Through Title V Permit
- 65. Replacement filters numbering at least 10% of the total number of filters in the largest bin vent filter using each type of filter shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 66. Each bin vent filter cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
- 67. Visible emissions from the exhaust of each bin vent filter shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 68. The throughput for each electrostatic precipitator dust silo shall not exceed 1.64 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 69. PM10 emissions from each electrostatic precipitator dust silo shall not exceed 0.00034 lb/ton. [District Rule 2201] Federally Enforceable Through Title V Permit
- 70. Each bin vent filter shall be equipped with a pressure differential gauge to indicate the pressure drop across the filter. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District NSR Rule] Federally Enforceable Through Title V Permit
- 71. The pressure differential, as indicated by the pressure differential gauge on each bin vent filter, shall stay between 0.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit

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

**PERMIT UNIT: N-593-20-6** 

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

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

PERMIT UNIT: N-593-21-6

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

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

**PERMIT UNIT: N-593-22-6** 

#### **EXPIRATION DATE: 07/31/2027**

#### **EQUIPMENT DESCRIPTION:**

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

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

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

**PERMIT UNIT:** N-593-27-7

## EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

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

- 10. The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
- 17. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 21. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

**PERMIT UNIT: N-593-29-7** 

## EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

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

- 10. The owner or operator shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. The owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
- 14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
- 17. This engine shall not be used for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 21. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, San Joaquin County Rule 404, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

**PERMIT UNIT: N-593-32-7** 

## EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

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

- 10. The owner or operator shall keep records of the maintenance conducted on the engine to demonstrate that the engine and the associated emissions control equipment (if any) is being operated and maintained according to the manufacturer's maintenance plan. These records shall include, but are not limited to the date, hour meter reading, action performed (e.g., engine oil and filter change/analysis, air filter inspection, hoses and belt inspection, etc.), name of the individual conducting maintenance and company affiliation. [40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 11. This engine shall be operated only for maintenance and testing of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
- 13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 15. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 17 CCR 93115, and 40 CFR Part 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, District Rule 4801 and San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

### **PERMIT UNIT: N-593-36-5**

### EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

## PERMIT UNIT REQUIREMENTS

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

#### **PERMIT UNIT: N-593-37-5**

### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E= 3.59 x P^0.62 if P is less than or equal to 30 tons per hour, or E= 17.31 x P^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The pressure differential, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
- 8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 13. The permittee shall monitor and record the stack concentration (in ppmv) of NH3 at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
- 14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Records of the weekly NH3 concentration from the glass treatment operations shall be maintained. [District Rule 4102]
- 27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: N-593-38-5**

### EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E= 3.59 x P^0.62 if P is less than or equal to 30 tons per hour, or E= 17.31 x P^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The pressure differential, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
- 8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 13. The permittee shall monitor and record the stack concentration (in ppmv) of NH3 at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
- 14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Records of the weekly NH3 concentration from the glass treatment operations shall be maintained. [District Rule 4102]
- 27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: N-593-39-5**

### EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E= 3.59 x P^0.62 if P is less than or equal to 30 tons per hour, or E= 17.31 x P^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The pressure differential, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
- 8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 13. The permittee shall monitor and record the stack concentration (in ppmv) of NH3 at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
- 14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Records of the weekly NH3 concentration from the glass treatment operations shall be maintained. [District Rule 4102]
- 27. Records of the daily amount of glass treated from lines 22A & 22B shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: N-593-40-5**

### EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E= 3.59 x P^0.62 if P is less than or equal to 30 tons per hour, or E= 17.31 x P^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The pressure differential, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
- 8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 13. The permittee shall monitor and record the stack concentration (in ppmv) of NH3 at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
- 14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Records of the weekly NH3 concentration from the glass treatment operations shall be maintained. [District Rule 4102]
- 27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: N-593-41-5**

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation E= 3.59 x P^0.62 if P is less than or equal to 30 tons per hour, or E= 17.31 x P^0.16 if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
- 3. Visible emissions from the baghouse serving the hot end surface treatment systems shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
- 4. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The pressure differential, as indicated by the pressure differential gauge on the baghouse, shall stay between 1.0 to 8.0 inches of water column, when the equipment under this permit operates. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The material removed from the baghouse and transferred into the receiver shall be prevented from being re-entrained into the atmosphere. No material shall accumulate outside of the receiver. [District Rule 4102]
- 8. The receiver shall remain sealed at all times except during maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Emission rates from this unit shall not exceed either of the following limits: 0.01107 lb-PM10/lb-Monobutyltin Trichloride (MBTT) or 0.050 lb-VOC/lb-MBTT. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The maximum throughput of MBTT used in this hot end surface treatment system shall not exceed 1.66 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The maximum combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed 8.91 lb MBTT/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Ammonia (NH3) emissions combined for hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall not exceed either of the following limits: 1.8 lb/hr or 150 ppmvd. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

- 13. The permittee shall monitor and record the stack concentration (in ppmv) of NH3 at least once every week using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit. [District Rule 4102]
- 14. Source testing to determine the rate of VOC, expressed as lb-VOC/lb-MBTT, shall be conducted at least once every twelve (12) months. [District Rules 2201 and 1081] Federally Enforceable Through Title V Permit
- 15. VOC source testing shall be conducted using EPA Methods 18, 25, 25A, 25B, or ARB Method 100. Results shall be converted to lb-VOC/lb-MBTT. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 16. The stack gas velocities shall be determined using EPA Method 2, the stack gas moisture content shall be determined using EPA Method 4, and the gas analysis for the determination of dry molecular weight shall be determined using EPA Method 3. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The baghouse shall be inspected weekly while in operation for visible emissions. If visible emissions are observed, appropriate action shall be taken, such as baghouse maintenance, cleaning, or replacement of bags as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Baghouse filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The baghouse system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Pressure gauges shall be inspected weekly and the results shall be recorded and made available for District inspection upon request. Corrective actions shall be implemented on the control equipment if indicated by the inspections. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Records of baghouse maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Records of the hourly and daily amount of MBTT used in the line shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Records of the combined throughput of MBTT used in hot end surface treatment systems N-593-2, '-11, '-37, '-38, '-39, '-40, and '-41 shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Records of the weekly NH3 concentration from the glass treatment operations shall be maintained. [District Rule 4102]
- 27. Records of the daily amount of glass treated from line 22C shall be maintained and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: N-593-42-6**

### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

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

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

#### **PERMIT UNIT: N-593-43-4**

### EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

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

## PERMIT UNIT REQUIREMENTS

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

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

**PERMIT UNIT:** N-593-45-2

## EXPIRATION DATE: 07/31/2027

### **EQUIPMENT DESCRIPTION:**

480 BHP CATERPILLAR MODEL C9 DIESEL-FIRED (TIER 3 CERTIFIED) EMERGENCY ENGINE POWERING AN ELECTRICAL GENERATOR

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 4. This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 2.83 g-NOx/bhp-hr, 2.61 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.149 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 8. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 9. 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
- 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 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 11. 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 and 17 CCR 93115] Federally Enforceable Through Title V Permit

- 12. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 13. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201, 4102, and 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 14. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 15. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: N-593-46-3**

#### EXPIRATION DATE: 07/31/2027

#### **EQUIPMENT DESCRIPTION:**

TRANSPORTABLE GLASS CULLET CRUSHING AND TRUCK LOADOUT OPERATION UTILIZING A SELF-PROPELLED TRACK MOUNTED KEESTRACK MODEL R3 CRUSHING AND SCREENING PLANT POWERED BY A PERMIT EXEMPT 320 BHP VOLVO MODEL TAD 873VE TIER 4F CERTIFIED DIESEL-FIRED IC ENGINE

- 1. All haul roads and other roadways traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads. [District Rule 2201]
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
- 3. Water spray equipment shall be installed, maintained operational at all times, and utilized to provide adequate moisture to the process materials, as needed, to ensure visible emissions from the handling, conveying, and screening of the process materials do not exceed 5% opacity. [District Rule 2201]
- 4. The quantity of material processed by this equipment shall not exceed 640 tons in any one day and 9,600 tons in a rolling 12-consecutive month period. [District Rule 2201]
- 5. PM10 emissions from the handling, conveying, grinding, screening, and loadout of the process material shall not exceed 0.0038 pounds per ton of material processed. [District Rule 2201]
- 6. The permittee shall maintain a daily record of the quantity of material processed by this equipment (in tons). [District Rules 1070 and 2201]
- 7. The permittee shall maintain a record of the cumulative rolling 12-month total of the quantity of material processed by this equipment (in tons/year). The cumulative total shall be updated at least monthly. [District Rules 1070 and 2201]
- 8. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 2201]
- 9. All bulk material transport vehicles shall limit Visible Dust Emissions to 20% opacity by either limiting vehicular speed, maintaining sufficient freeboard on the load, applying water to the top of the load, or covering the load with a tarp or other suitable cover. [District Rules 8011 and 8031]
- 10. 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 or Rule 8011. [District Rule 8041]
- 11. Any new or existing public or private paved or unpaved road, road construction project, or road modification project shall implement the control measures and design criteria of, and comply with the requirements of District Rule 8061 (Paved and Unpaved Roads), unless specifically exempted under section 4.0 of Rule 8061. [District Rule 8061]
- 12. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other Districtapproved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in District Rule 8011. [District Rules 8071 and 8011]

- 13. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, the permittee shall apply water, gravel, road mix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in District Rule 8011. [District Rules 8071 and 8011]
- 14. Whenever any portion of the site becomes inactive, the permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in District Rule 8011. [District Rules 8071 and 8011]

**PERMIT UNIT: N-593-47-1** 

### **EXPIRATION DATE: 07/31/2027**

#### **EQUIPMENT DESCRIPTION:**

175 BHP JOHN DEERE MODEL 6068HFC28 DIESEL-FIRED EMERGENCY ENGINE (TIER 3 CERTIFIED) POWERING A FIRE PUMP

- 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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 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 III] Federally Enforceable Through Title V Permit
- 7. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
- 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 Part III] Federally Enforceable Through Title V Permit
- 9. Emissions from this IC engine shall not exceed any of the following limits: 2.69 g-NOx/bhp-hr, 0.90 g-CO/bhp-hr, or 0.14 g-VOC/bhp-hr. [District Rule 2201, 13 CCR 2423, 17 CCR 93115, and 40 CFR 60 Part IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.09 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423, 17 CCR 93115 and 40 CFR 60 Subpart III] Federally Enforceable Through Title V Permit
- 11. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems". 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 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 12. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702 and 17 CCR 93115]

- 13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
- 14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]