



November 27, 2023

Ms. Connie Cuellar
Vitro Flat Glass LLC
3333 S Peach Ave
Fresno, CA 93725

Re: Final - Authority to Construct / Certificate of Conformity (Significant Mod)
Facility Number: C-948
Project Number: C-1231995

Dear Ms. Cuellar:

The Air Pollution Control Officer has issued Authority to Construct (ATC) C-948-11-23 with a Certificate of Conformity to Vitro Flat Glass LLC at 3333 S Peach Ave in Fresno, CA 93725. This project authorizes the routine replacement of eight of the ten existing furnace burners. Enclosed are the ATC and a copy of the notice of final action that has been posted on the District's website (www.valleyair.org).

Notice of the District's preliminary decision to issue the ATC was posted on October 5, 2023. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on October 9, 2023. No comments were received following the District's preliminary decision on this project.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

Prior to operating with the modifications authorized by the ATC, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms are found on the District's website at www.valleyair.org/permits/TVforms.

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

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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Sincerely,

A handwritten signature in blue ink that reads "Brian Clements for". The signature is fluid and cursive.

Brian Clements
Director of Permit Services

Enclosures

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



AUTHORITY TO CONSTRUCT

PERMIT NO: C-948-11-23

ISSUANCE DATE: 11/27/2023

LEGAL OWNER OR OPERATOR: VITRO FLAT GLASS LLC

MAILING ADDRESS: 3333 S PEACH AVE
FRESNO, CA 93725

LOCATION: 3333 S PEACH AVE
FRESNO, CA 93725

EQUIPMENT DESCRIPTION:

MODIFICATION OF 208 MMBTU/HR OXY-FUEL FIRED FLOAT GLASS FURNACE, FIRING ON NATURAL GAS WITH #2 FUEL OIL AS STANDBY, VENTED THROUGH A UNITED MCGILL DRY SCRUBBER/COOLING TOWER AND A UNITED MCGILL MODEL 3-500 ELECTROSTATIC PRECIPITATOR USING SO₂ AS A LUBRICANT FOR THE GLASS AND EQUIPPED WITH A SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM: REPLACE EIGHT 20.0 MMBTU/HR FURNACE BURNERS

CONDITIONS

1. Authority to Construct (ATC) C-948-11-21 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
3. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

C-948-11-23 : Nov 27 2023 8:25AM -- HONGM : Joint Inspection NOT Required

4. If the emission unit's actual emissions exceed 425,250 lb-NO_x per calendar year, 130,500 lb-SO_x per calendar, 14,310 lb-PM₁₀ per calendar year, 14,310 lb-PM_{2.5} per calendar year, or 120 lb-VOC per calendar year, the permittee must report to the District the annual emissions of each pollutant exceeded as calculated pursuant to paragraph 40 CFR 51.165(a)(6)(iii) and any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection. Such information must be submitted to the District for a period of 5 calendar years beginning the year of operation under ATC C-948-11-23 and shall be submitted within 60 days of the end of each calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 (amended 12/17/92) using the equation $E=3.59 \times P^{0.62}$ if P is less than or equal to 30 tons per hour, or $E=17.37 \times P^{0.16}$ if P is greater than 30 tons per hour. [District Rule 4202] Federally Enforceable Through Title V Permit
8. 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]
9. The furnace and burners shall be operated so as to minimize the NO_x emissions to the maximum extent possible without adversely affecting the product quality and furnace integrity. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The glass furnace shall be vented to a dry scrubber/electrostatic precipitator system anytime the furnace is operating. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The addition of liquid caustic soda to cooling tower water may be allowed to reduce corrosion and solid build-up, and ensure good working conditions for electrostatic precipitator. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily glass pull rate for this facility shall not exceed 650 U.S. short tons per day. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
14. Particulate Matter emissions (as PM₁₀) shall not exceed 18.80 pounds per hour from the electrostatic precipitator. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Particulate Matter emissions (as PM₁₀) shall not exceed 0.20 pounds per ton glass pulled on a block 24-hour average from the glass melting furnace. [District Rule 4354] Federally Enforceable Through Title V Permit
16. Oxides of nitrogen (NO_x) emissions shall not exceed 2.8 lb NO_x/ton, based on a 24-hour block average, as defined by Rule 4354. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
17. Oxides of nitrogen (NO_x) emissions shall not exceed 2.5 lb NO_x/ton, based on a 30-day rolling average, as defined by Rule 4354. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
18. SO_x emissions from the dry scrubber/electrostatic precipitator system shall not exceed 16.25 pounds per hour based on a 24-hour rolling average when firing the furnace on natural gas, nor 49.9 pounds per hour based on a 24-hour rolling average when firing the furnace on standby fuel oil #2. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Oxides of sulfur (SO_x) emissions shall not exceed 1.7 lb SO_x/ton, based on a 24-hour block average, as defined by Rule 4354. In no case shall SO_x emissions exceed 1.2 lb SO_x/ton on a rolling 30-day average. [District Rule 4354] Federally Enforceable Through Title V Permit
20. Sulfur compound emissions shall not exceed 2,000 ppmv as SO₂. [District Rule 4801]
21. SO_x emissions from the surface passivation process shall not exceed 10 pounds per hour. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

22. Volatile Organic Compounds (VOC) emissions shall not exceed either of the following limits: 0.83 pounds per hour or 0.1 pounds per ton of glass pulled (as defined by Rule 4354), based on a rolling three-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
23. Carbon monoxide (CO) emissions shall not exceed either of the following limits: 21.13 pounds per hour or 0.9 pounds per ton (as defined by Rule 4354), based on a rolling three-hour average. [District Rules 2201 and 4354] Federally Enforceable Through Title V Permit
24. Ammonia (NH₃) emissions shall not exceed 1.25 lb/hr based on a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The permittee shall utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. [District Rule 2201] Federally Enforceable Through Title V Permit
26. NO_x, CO, VOC, SO_x and PM₁₀ emission limitations of District Rule 4354 shall not apply during periods of start-up, shutdown, and idling, as defined by Rule 4354 Section 3.0. Permittee shall notify the District at least 24 hours before initiating idling, shutdown and startup and this notification shall include: 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
27. NO_x, CO, VOC, SO_x and PM₁₀ emission limitations of District Rule 4354 shall not apply during periods of routine maintenance of an add-on emission control system as long as the routine maintenance does not exceed 144 hours total per calendar year for all add-on controls and the routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions. [District Rule 4354] Federally Enforceable Through Title V Permit
28. Annual source testing shall be conducted for VOC (lb/ton of glass pulled and lb/hr); CO (lb/ton of glass pulled and lb/hr); PM₁₀ (lb/ton of glass pulled and lb/hr); SO_x (lb/ton of glass pulled and lb/hr); and NO_x (lb/ton of glass pulled); and NH₃ (lb/hr) 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 Rules 1070, 1081 and 4354] Federally Enforceable Through Title V Permit
29. 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
30. Source 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) Stack Gas Flow rate - EPA Method 2; (6) Stack Gas Moisture Content - EPA Method 4; (7) Fuel Heating Value - ASTM Method D2015-85 or E711; (8) Oxides of Sulfur: EPA Method 6C, EPA Method 8, or ARB Method 100; (9) Filterable PM₁₀: EPA Method 5, EPA Method 201, or EPA Method 201A; (10) Ammonia: BAAQMD ST-1B. An operator choosing EPA Method 5 shall count all PM collected as PM₁₀; (11) Condensable PM₁₀: EPA Method 202 with the following procedures, (11a) 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, (11b) 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, (11c) 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 Rule 4354] Federally Enforceable Through Title V Permit
31. 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 capacity, 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

CONDITIONS CONTINUE ON NEXT PAGE

32. For source testing purposes, the arithmetic average of three 30-consecutive-minute test runs shall be used to determine compliance with NO_x, CO, VOC, SO_x, and NH₃ emission limits. [District Rule 4354] Federally Enforceable Through Title V Permit
33. For source testing purposes, the arithmetic average of three 60-consecutive-minute test runs shall be used to determine compliance with PM₁₀ emission limits. [District Rule 4354] Federally Enforceable Through Title V Permit
34. During source testing, for a given pollutant, if two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the furnace, even if the averaged emissions of all three test runs is less than the applicable limit. [District Rule 4354] Federally Enforceable Through Title V Permit
35. Source testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 days of performance testing. [District Rule 1081] Federally Enforceable Through Title V Permit
36. The continuous emission monitor system (CEMS) shall be properly installed in the electrostatic precipitator stack and operated in accordance with the manufacturer's specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
37. The CEMS and data acquisition system shall monitor for NO_x, CO, SO_x, and opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
38. The CEMS shall meet the performance specification requirements in 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures); and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rules 1080 and 4354] Federally Enforceable Through Title V Permit
39. Results of CEMS must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
40. Records of CEMS shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of CEMs, and emission measurements. [District Rule 1080] Federally Enforceable Through Title V Permit
41. Permittee shall submit a CEMS written report for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CFM 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. [District Rules 1080 and 2520] Federally Enforceable Through Title V Permit
42. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the CEMS constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080] Federally Enforceable Through Title V Permit
43. Operator shall notify the District no later than eight hours after the detection of a breakdown of the CEMS. The operator shall inform the District of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1080] Federally Enforceable Through Title V Permit
44. The facility shall maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] 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 automated data for a maximum of 30 days per calendar year provided the CEM data are sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit

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46. The permittee shall operate and maintain a monitoring and recording system to accurately measure and record the furnace melter crown temperature at least once per day. [District Rule 4354] Federally Enforceable Through Title V Permit
47. The furnace melter crown temperature shall be maintained at or above 1,800 °F. If the measured furnace temperature is less than 1,800 °F, the permittee shall conduct a certified VOC source test within 60 days to re-establish the minimum temperature limit. In lieu of conducting a certified VOC source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must then correct the violation (return the furnace temperature to or above the minimum temperature limit), show compliance has been re-established, and resume monitoring procedures. If the deviation is a result of a qualifying breakdown condition pursuant to District Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4354] Federally Enforceable Through Title V Permit
48. The permittee shall operate and maintain a monitoring and recording system to accurately measure and record the secondary current and secondary voltage across each field of the electrostatic precipitator at least once per hour. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
49. The average hourly total power input into the electrostatic precipitator shall be maintained at or above 0.23 kW. The average hourly total power input shall be the sum of the average power inputs to each field of the electrostatic precipitator. The average power inputs to each field shall be calculated by multiplying the average hourly secondary current for that field by the average hourly secondary voltage for that field, both recorded by the continuous monitoring system. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
50. If the measured average total power input into the electrostatic precipitator falls below the acceptable level specified within this permit, the permittee shall conduct a certified source test within 60 days to re-establish the acceptable secondary voltage and/or secondary current range/level. 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 hourly voltage and/or current input to or above the minimum acceptable levels), 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
51. The permittee shall maintain daily records of total hours of operation, quantity of glass pulled, NO_x and SO_x emission rates in lb/ton of glass pulled (both block 24-Hr & rolling 30-day averages), CO emission rate in lb/ton of glass pulled (rolling 3-hour average) and quantity & type of fuel used. 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. [District Rule 4354] Federally Enforceable Through Title V Permit
52. The permittee shall keep records of the date and time of the furnace melter crown temperature readings and the furnace melter crown temperature measured during the most recent source test that demonstrated ongoing compliance with the VOC emission limit. [District Rule 4354] Federally Enforceable Through Title V Permit
53. The permittee shall keep records of the date and time of the electrostatic precipitator total power input readings and the minimum electrostatic precipitator total power input measured during the source test that demonstrated ongoing compliance with the PM10 emission limit. [District Rule 4354 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
54. The permittee shall maintain records of SO_x usage (lb/hr) in the surface passivation process. [District Rule 2201] Federally Enforceable Through Title V Permit
55. The permittee shall maintain records of NH₃ emission rates in lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
56. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR Part 61, Subpart N] Federally Enforceable Through Title V Permit

57. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Fresno County Rule 404, District Rule 4202, Fresno County Rule 405, District Rule 4801, and Fresno County Rule 406. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
58. The requirements of District Rule 4301, 40 CFR 60, Subpart CC & 40 CFR 61, Subpart N were determined to be not applicable to this unit. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
59. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District, ARB, or EPA inspection upon request. [District Rules 1070 and 4354] Federally Enforceable Through Title V Permit