

**SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT
CENTRAL REGION
1990 E. Gettysburg
Fresno, CA 93726
(559) 230-5950**

STAFF REPORT

July 15, 2026

SHORT VARIANCE

DOCKET No. C-26-11S

PETITIONER: Vitro Flat Glass LLC
3333 South Peach Avenue
Fresno, CA 93725

LOCATION: Same as above

RULE VIOLATIONS: 1080 – *Stack Monitoring*
2070 – *Standards for Granting Applications*
2201 – *New and Modified Stationary Source Review Rule*
2520 – *Federally Mandated Operating Permits*
4101 – *Visible Emissions*
4354 – *Glass Melting Furnaces*
California Health and Safety Code section 41701

PERMIT NUMBERS: C-948-0-4 and C-948-11-22

EPA AIRS NUMBER: 06-019-C0948

NOV NUMBER: N/A

TYPE OF BUSINESS: Flat Glass Manufacturer

NATURE OF THE PROBLEM:

VITRO operates a 206 MMBtu per hour Oxy-fuel/natural gas-fired furnace that heats raw material into molten glass to produce flat architectural glass.

Oxides of nitrogen (NOx) emissions are reduced with an oxy-fuel process that removes the available nitrogen from the combustion air. To control oxides of sulfur (SOx) and particulate matter (PM) the exhaust gas is routed through a wet scrubber and an Electrostatic Precipitator (EP). The EP operates by establishing a high voltage electrical charge on the discharge plates inside the unit. PM from the exhaust stream passes through the discharge plates, receiving an electrical charge. The charged particulate is then deposited on the grounded collector plates and is periodically knocked off with pneumatic rappers, falling into a hopper and routed back into the glass manufacturing process.

VITRO engineering staff monitors the voltage in the EP of solid material build up. Based on historic trends, the routine maintenance of EP shutdown and cleanout is scheduled every 18 months. Historically, EP voltage begins to vary more than normal, indicating material build-up required maintenance. In June 2024, the EP was shut down for cleaning for 4-5 days, and the same is expected for this clean out.

The emissions control equipment must be bypassed in order to clean out the EP. District Rule 4354 allows for excess NO_x, VOC, CO, SO_x, and PM₁₀ emissions for up to 144 hours per year during maintenance of emissions control equipment. If everything goes as planned, VITRO will complete all the maintenance within 144 hours (six days).

In addition, VITRO's facility wide permit and District Rule 4101 limits visible emissions to no more than Ringelmann 1 or 20% opacity for more than 3 minutes in any one hour. VITRO expects excess visible emissions to be as high as 30% opacity while the emissions control equipment is bypassed and total estimated Excess Emissions are 2,254 lbs. of SO_x & 6,370 lbs. of PM₁₀. During bypass, the exhaust stream will be diverted to the bypass stack. This will also bypass the continuous emissions monitoring system (CEMS) and the continuous opacity monitoring system (COMS) required by the permit and Rule 4354 which are both located in the main stack.

Therefore, VITRO has requested a short variance to bypass the emissions control and monitoring systems, and to operate with excess visible emissions, while they conduct the scheduled maintenance. Variance protection is necessary because the glass-melting furnace, once heated up, operates non-stop for many years in what is known as a "campaign." A shut off or cool down may cause significant damage to the furnace and can take several days. Getting a furnace back to operational temperature can take several weeks.

PETITIONER'S REQUEST:

VITRO has requested a short variance from the applicable requirements of District Rules 1080, 2070, 2201, 2520, 4101, 4354, and California Health and Safety Code (CH&SC) section 41701, in addition to the applicable conditions of the subject permits. The requested short variance will be from July 12, 2026, through July 17, 2026, inclusive. If granted, the variance would allow the continued operation of the glass melting furnace and continued glass production while bypassing the emissions control and monitoring systems so VITRO can perform maintenance on the EP and ancillary equipment. In addition, the variance will allow excess visible emissions during the bypass.

EXCESS EMISSIONS:

District Rule 4354 allows for excess NO_x, VOC, CO, SO_x, and PM₁₀ emissions for up to 144 hours (six days) per year during maintenance of emission control equipment. VITRO estimates this project will take less than six days to complete. In addition, VITRO will mitigate excess emissions by reducing daily production permit conditions limit visible emissions to 20% opacity and they are expecting visible emissions to be as high as 30% opacity during the variance period.

IMMEDIATE COMPLIANCE:

VITRO is currently in compliance.

COMMENTS ON REQUIRED FINDINGS:

1. *That the petitioner for a variance is, or will be, in violation of Section 41701 or of any rule, regulation, or order of the District.*

When visible emissions exceed 20 percent opacity and the emission control and monitoring systems are bypassed, VITRO will be in violation of District Rules 1080, 2070, 2201, 2520, 4101, 4354, and CH&SC section 41701, as well as applicable conditions of the permits.

2. ***That, due to conditions beyond the reasonable control of the petitioner, requiring compliance would result in either (1) an arbitrary or unreasonable taking of property, or (2) the practical closing and elimination of a lawful business.***

It is beyond the reasonable control of the petitioner to keep the EP operational at all times. The District requires the equipment to be operated in accordance with the manufacturer's specifications, which requires periodic repair and maintenance. VITRO's engineering staff routinely monitor the EP voltage for changes in the field strength, which is an indication of material buildup that leads to a loss of power. Vitro has determined that an EP cleanout is needed to maintain compliance with District Rules. In order to complete the maintenance, it is necessary to shut down and bypass the emissions control equipment. Because a glass melting furnace is designed to run continuously for a multi-year campaign, requiring compliance would require the glass furnace to shut down and to stop production; this would be the practical closing and elimination of a lawful business.

3. ***That the closing or taking would be without a corresponding benefit in reducing air contaminants.***

VITRO would lose \$200,000 per day due to lost sales, labor costs, and energy costs if they were not allowed to continue to manufacture glass. The closing or taking would also be without a corresponding benefit in reducing air contaminants as the furnace would have to be shut down and then restarted after completion of the work. The proposed maintenance period is expected to take no more than six days. The shutdown of the furnace would take several days, and the startup would take several weeks. The shutdown could result in damage to the furnace as well. To start the furnace back up, VITRO would have to submit a start-up plan to the District and bring in a specialized crew to bring a glass melting furnace up to temperature without causing any damage. A cold start of the furnace would produce considerable emissions before the furnace comes up to temperature and the EP is hot enough to restart. For these reasons, a closing or taking would be without a corresponding benefit in reducing air contaminants.

4. ***That the applicant for the variance has given consideration to curtailing operations of the source in lieu of obtaining a variance.***

VITRO considered curtailing operations but found that it would not obviate the need for a variance. Curtailing production will not limit visible emissions to below 20% opacity.

5. ***During the period, the variance is in effect, that the applicant will reduce excess emissions to the maximum extent feasible.***

VITRO will perform the work as expeditiously as practicable.

6. ***During the period the variance is in effect, that the applicant will monitor or otherwise quantify emission levels from the source, if requested to do so by the District, and***

report these emissions levels to the District pursuant to a schedule established by the District.

VITRO will monitor visible emissions from the bypass stack daily using personnel certified in visible emissions evaluations. This information will be provided to the District at the end of the variance.

GENERAL COMMENTS:

A nuisance as defined in District Rule 4102 is not expected to occur as a result of this variance. Nor would continued operations likely create an immediate threat or hazard to public health or safety.

It should be noted that the Environmental Protection Agency (EPA), which monitors major sources, might not recognize this variance, should it be granted. VITRO should be aware that the EPA could take enforcement action on this matter if it deems such action is appropriate.

RECOMMENDATIONS:

Should the Central Region Hearing Board make the required findings and move to grant a short variance to VITRO, the District would recommend the following conditions:

1. The variance shall be effective from July 12, 2026, through July 17, 2026, inclusive, or until the scheduled maintenance is completed and the emissions control equipment is returned to compliant operation, whichever occurs first.
2. Relief shall be granted from the requirements of the applicable sections of District Rules 1080, 2070, 2201, 2520, 4101, 4354, and CH&SC section 41701. In addition to the following permit conditions:
 - A. Conditions 6 and 23 of C-948-0-4 and
 - B. Conditions 2, 7, 11, 12, 15, 16, 22 & 34, of C-948-11-22.
3. The variance shall allow the continued operation of the glass melting furnace and continued glass production with excess visible emissions while bypassing the emission control equipment and emissions monitoring equipment.
4. VITRO shall notify the District 48 hours prior to going into bypass mode. Notification shall be sent by email to Preet Bath at Preet.Bath@valleyair.org.
5. Visible emissions shall not exceed 30% opacity or Ringelmann 3 during the variance period.
6. VITRO shall conduct a visible emissions evaluation 1 time per day during daylight hours. Determination of visible emissions shall be made in accordance with EPA Method 9 with a minimum of 24 consecutive observations recorded in fifteen-second intervals. The person(s) monitoring visible emissions shall be certified by CARB to read visible

emissions. A written report of each visible emissions evaluation shall be maintained and a copy shall be provided to the District along with the summary report.

7. VITRO shall document the bypass time and shall count it towards their 144 hours of annual maintenance allowed per Rule 4354, section 5.10.
8. At the conclusion of this variance VITRO must be in compliance with all their permit conditions and applicable District Rules. If VITRO will not achieve compliance prior to conclusion of this variance they must contact the District as soon as possible and before the variance period ends.
9. A Federal Title V deviation report shall be submitted to the District within 10 days of discovery each time a Federal Title V permit condition is violated. It should be noted that multiple deviation reports may need to be submitted during this variance period. The deviation report must be sent to the facility inspector.
10. Should the facility experience operational conditions likely to cause a public nuisance, VITRO shall cease operations causing the problems and take all necessary actions to abate the problem immediately.
11. By August 2, 2026, or no later than 15 calendar days after returning the emissions control equipment to compliant operation, whichever occurs first, VITRO shall submit to the District a summary report. If the report due date should fall on a day the District is closed, it shall be due the next business day. The report shall include the following:
 - A. A summary of all actions and activities undertaken during the variance period,
 - B. The date(s), time(s), and duration that the emission control equipment was offline,
 - C. Documentation of the visible emissions observations, including the name of person(s) responsible for conducting the visible emission evaluation and copies of their CARB certification, and
 - D. The required certification of truth and accuracy, and completeness, signed by the designated responsible official of the limited liability company, as required by Sections 9.13.1 and 10.0 of District Rule 2520 – *Federally Mandated Operating Permits*.
12. The end of variance summary report shall be submitted to the attention of:

Will Coon
SJVAPCD, Compliance Department
1990 E. Gettysburg Avenue
Fresno, CA 93726
Telephone: (559) 230-5878
E-mail: will.coon@valleyair.org
13. Failure to comply with any condition of this variance may render the variance null and void with the possibility of enforcement action taken that may include monetary penalties.