

**SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT
SOUTHERN REGION
34946 Flyover Court
Bakersfield, California 93308
(661) 392-5500**

STAFF REPORT

January 14, 2026

SHORT VARIANCE

DOCKET NO: S-25-33S

FACILITY: Alon Bakersfield Refining
6451 Rosedale Highway
Bakersfield, CA 93308

LOCATION: 6451 Rosedale Highway
Bakersfield, CA 93308

RULE VIOLATION: 2070 – *Standards for Granting Applications*
2201 – *New and Modified Source Review Rule*
2520 – *Federally Mandated Operating Permits*
4306 – *Boilers, Steam Gens, and Process Heaters*

PERMIT NUMBERS: See recommendations

EPA AIRS NUMBER: 06-029-S0033

NOV NUMBER: N/A

TYPE OF BUSINESS: Renewable Diesel Production

NATURE OF THE PROBLEM:

Alon Bakersfield Refining (ALON) operates a hydrogen generation unit which includes a 233 MMBtu/hr specialized furnace that provides heat to convert methane and steam into hydrogen. The hydrogen is used as part of a chemical reaction that converts fats, oils, and greases into renewable diesel, naphtha, propane, and butane. After the hydrogen unit is started up, it must be run continuously. If the hydrogen unit is shut down, the entire renewable fuels production process must be shut down. NOx emissions from the furnace are controlled by a Selective Catalyst Reduction (SCR) system and emissions are monitored by a Continuous Emissions Monitoring System (CEMS).

ALON plans to shut down the furnace to conduct scheduled maintenance. The furnace permit allows for 2 hours of operation with excess NOx emissions during start-up and shutdown periods. Due to the complexity of the furnace, ALON must adjust the temperature slowly during start-up and shutdown in order to avoid damaging the refractory and the burners. ALON has attached a detailed description, with their petition, which indicates a shut down time of up to 9 hours and a start-up time of up to 96 hours. During the extended start-up and shut down, the SCR will not operate while the exhaust temperature drops below a certain level. This will result in increased NOx emissions. Therefore, ALON is requesting a non-consecutive 105-hour period to exceed the 2-hour shutdown/start-up time and to operate with excess NOx emissions during the

shutdown, and subsequent start-up of the furnace after the scheduled maintenance is completed.

PETITIONER'S REQUEST:

ALON has requested a short variance from the applicable requirements of District Rules 2070, 2201, 2520 and 4306 in addition to the applicable conditions of the subject permits. The requested short variance would be effective for a non-consecutive 105-hour period to occur sometime between January 6, 2026, and March 15, 2026, inclusive. If granted, the short variance would allow ALON to exceed the 2-hour shutdown/start-up time and to operate with excess NOx emissions during the shutdown, and subsequent start-up of the furnace after the scheduled maintenance is completed.

EXCESS EMISSIONS:

ALON has provided detailed emissions calculations with their petition. They have calculated that excess NOx emissions for a full 105-hour variance period would be up to **646 pounds of NOx**. The district has reviewed the calculations and determined they are appropriate for the variance.

IMMEDIATE COMPLIANCE:

ALON 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.***

ALON will be in violation of applicable requirements of District Rules 2070, 2201, 2520, and 4306, in addition to the applicable conditions of the subject permits when the furnace shutdown and start-up times exceed 2 hr/day and when they operate with excess NOx emissions during the extended shutdown and start-up times.

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.***

The furnace requires regular maintenance to stay in compliance and prevent breakdowns. The furnace cannot be safely shutdown or started up within the 2 hours allowed. Requiring ALON to stay in compliance would risk damaging the furnace and refractory, which would be unreasonable.

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

Once the shutdown procedure is complete, the furnace will not operate until the maintenance work is done and ALON commences the start-up procedures.

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

Once the shutdown procedure is complete, the furnace will not operate until the maintenance work is done and ALON commences the start-up procedures.

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

ALON will take all practicable measures to shut down and start-up the furnace in a manner that will minimize the possibility of excess emissions.

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.***

The subject furnace is equipped with an operating and functional CEMS that will monitor all emissions during the variance period. The information will be made available to the District upon request

ADDITIONAL COMMENTS:

A nuisance as defined in District Rule 4102 is not expected to occur as a result of this variance. Continuing operations during the variance period is not likely to create an immediate threat or hazard to public health or safety.

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

RECOMMENDATIONS:

Should the Southern Region Hearing Board make the required findings and move to grant a short variance to Alon Bakersfield Refining, the District recommends the following conditions:

1. The requested variance period would be for a non-consecutive 105-hour period to occur sometime between January 6, 2026, and March 15, 2026, inclusive. If granted, the short variance would allow ALON to exceed the 2-hour shutdown/start-up time and to operate with excess NOx emissions during the shutdown, and subsequent start-up of the furnace after the scheduled maintenance is completed.
2. Variance relief shall be granted from the applicable requirements of District Rules 2070, 2201, 2520 and 4306 in addition to the following conditions of the listed permits to operate:

S-33-0-3	Condition 5
S-33-55-25	Conditions 13, 14, 15, and 16
3. The variance shall allow ALON to exceed the 2-hour shutdown/start-up time and to operate with excess NOx emissions during the shutdown, and subsequent start-up of the furnace after the scheduled maintenance is completed.
4. Excess emissions during this variance period shall not exceed **646 pounds of NOx**.

5. Excess emissions fee will be assessed at the conclusion of the variance at \$3.00 per pound. Additionally, should the total excess emissions exceed one ton (2,000 pounds), the facility shall pay \$3.75 for each pound of total excess emissions. Payment of the excess/mitigation emission fees shall occur within 30 days after the end of the variance. Payment shall be made to the District and shall be directed to the "Miscellaneous Incentive Grant – Hearing Board," account.
6. Should the facility experience operational conditions likely to cause a public nuisance, ALON shall cease the operations causing the problems and take all necessary actions to abate the problem immediately.
7. A Federal Title V deviation report shall be submitted to the District within 10 days 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 reports must be sent to the facility inspector.
8. At the conclusion of this variance ALON must be in compliance with all their permit conditions and applicable District Rules. If ALON will not achieve compliance prior to conclusion of this variance they must contact the District as soon as practicable and before the variance period ends.
9. By March 30, 2026, or no later than 15 calendar days after ALON completes the maintenance, whichever occurs first, ALON shall submit to the District a summary report. If the report due date should fall on a date the District is closed, it shall be due the next day the District is open. The report shall include the following:
 - A. A summary of the activities conducted during the variance period;
 - B. The date(s), time(s), and total duration the permitted equipment was out of compliance;
 - C. The total amount of excess emissions during the variance period;
 - D. The required certification of truth, accuracy, and completeness, signed by the designated responsible official of the Corporation, as required by Sections 9.13.1 and 10.0 of District Rule 2520 – *Federally Mandated Operating Permits*.
10. All reports and notifications shall be submitted to the attention of:

Shannon Moore, Air Quality Specialist
SJVAPCD, Compliance Department
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Telephone: (559) 230-5874
E-mail: shannon.moore@valleyair.org
11. 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.