

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

STAFF REPORT

July 8, 2026

SHORT VARIANCE

DOCKET No. S-26-13S

FACILITY: Aera Energy LLC
PO Box 11164
Bakersfield, CA 93389

LOCATION: Section 32 SulfurOx Plant
Belridge Oil Field

RULE VIOLATION: 2070 – *Standards for Granting Applications*
2080 – *Conditional Approval*
2201 – *New and Modified Stationary Source Review Rule*
2520 – *Federally Mandated Operating Permits*
4101 – *Visible Emissions*
4102 – *Nuisance*
4201 – *Particulate Matter Concentration*
4301 – *Fuel Burning Equipment*
4305 – *Boilers, Steam Generators, and Process Heaters – Phase 2*
4306 – *Boilers, Steam Generators, and Process Heaters – Phase 3*
4320 – *Advanced Emission Reduction for Boilers, Steam Gen &
Process Heaters Greater than 5.0 MMBTU/HR*
4405 – *Oxides of Nitrogen Emissions from Existing Steam
Generators Used in Thermally Enhanced Oil Recovery –
Central and Western Kern County Fields*
4406 – *Sulfur Compounds from Oil-Field Steam Generators – Kern
County*
4801 – *Sulfur Compounds*

PERMIT NUMBERS: See Recommendations

EPA AIRS NUMBERS: 06-029-S1547

NOV NUMBER: N/A

TYPE OF BUSINESS: Crude Oil and Gas Production

NATURE OF THE PROBLEM:

AERA has light crude oil production operations within the Belridge Oil Field. Water and gases are produced with the light crude oil. The gases are separated and collected by the gas gathering system. The collected gases are compressed and piped to the Section 32 SOx Plant for processing. After sulfur and liquids are removed, the treated gas from the plant is sent to the field where its primary use is to fuel steam generators.

The 2-3 steam generator setting receives the above-described gas streams (produced/purchased blend and CVR) and is equipped with a sulfur treatment system (2-3 Sox plant) to reduce the sulfur in the CVR gas from the heavy oil wells.

For purposes of this variance, Area will need to bypass the 2-3 SOx plant to perform cleaning and other necessary maintenance on the plant. Normally, the scrubbed CVR gas contains less than 200 ppm sulfur. While the SOx plant is bypassed, CVR gas containing as much as 1550 ppm hydrogen sulfide (H₂S) will be burned in the steam generators at this setting.

AERA estimates the work can be accomplished in 24 hours, however AERA proposes that this variance allow up to 48 non-consecutive hours of SOx Plant downtime to ensure adequate recovery time in the event that any unexpected complications arise.

Therefore, AERA requests a short variance be granted for up to 48 hours of sulfur removal plant shutdown time between July 9, 2026, and September 7, 2026. It is expected that the hours will be consecutive, but AERA would like to reserve the option to have them non-consecutive.

PETITIONER'S REQUEST:

AERA has requested a short variance from applicable requirements of District Rules 2070, 2080, 2201, 2520, 4101, 4102, 4201, 4301, 4305, 4306, 4320, 4405, 4406, and 4801 in addition to applicable conditions of the subject permits. The requested variance would be for a non-consecutive 48 hour period to occur sometime between July 9, 2026, September 7, 2026, inclusive. If granted, the variance would allow AERA to shut down the 2-3 SOx Plant for annual cleaning/maintenance of the processing equipment.

EXCESS EMISSIONS:

AERA has calculated that in a worst case scenario the excess emissions for a full 48 hour period will be 2,274 pounds of SOx. AERA will ensure that work crews are adequately staffed and all necessary materials are readily available to minimize the time the plant is shut down.

The District has reviewed AERA's calculations and finds them to be adequate for this variance.

IMMEDIATE COMPLIANCE:

AERA 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.***

AERA will be in violation of applicable requirements of District Rules 2070, 2080, 2201, 2520, 4101, 4102, 4201, 4301, 4305, 4306, 4320, 4405, 4406, and 4801, in addition to the applicable conditions of the subject permits when they send field gas with a high concentration of H₂S to steam generators for combustion, which will result in the steam generators producing excess SOx emissions.

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 AERA to comply with applicable District rules and permit conditions while the Sulferox Plant is shut down for the scheduled maintenance work. AERA could shut down the gas flow, but it will also stop 720 barrels per day of oil production which would result in a loss of approximately \$50,400.00 per day, at a price of \$70/bbl. It would be a taking of property if AERA were not allowed to manage their equipment in a way that assures long term compliance.

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

Due to the estimated amount of emissions and the short duration of the proposed maintenance activities, a closing or taking would be without a corresponding benefit in reducing air contaminants. A closing or taking would cause the surrounding oil fields to cease production and result in the loss of 720 barrels per day of production at the Belridge Oil Field with a financial loss of approximately \$50,400.00 per day.

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

Operational curtailment was considered but since the scheduled work is expected to take no more than 48 non-consecutive hours, shutting down the surrounding oil field was not considered economically viable. AERA will mitigate excess emissions by ensuring that work crews are adequately staffed and all necessary materials are readily available to minimize the time the plant is shut down

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

AERA will ensure the work crews are adequately staffed and that all necessary materials are readily available to minimize the amount of sulfur treatment plant downtime. In addition, the field gas is mixed with clean PUC quality gas before combustion in the steam generators which will help reduce SO_x 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.***

Fuel gas flow rates and actual H₂S content will be monitored during the plant shutdown via existing meters and Draeger tubes. This data will be used to estimate actual excess emissions.

ADDITIONAL 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 US Environmental Protection Agency (EPA), which monitors major sources, might not recognize this variance, should it be granted. AERA 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 AERA, the District recommends the following conditions:

1. The variance shall be effective for a non-consecutive 48 hour period to occur sometime between July 9, 2026, and September 7, 2026, inclusive, or until all necessary cleaning and maintenance work is completed on the SO_x Plant is returned to normal operation, whichever occurs first.
2. Variance protection shall be granted from the applicable requirements of District Rules 2070, 2080, 2201, 2520, 4101, 4102, 4201, 4301, 4305, 4306, 4320, 4405, 4406, and 4801 in addition to the following conditions:

PERMIT NUMBER	CONDITION NUMBER
S-1547-0-5	Condition 10
S-1547-0359-34	Condition 10
S-1547-0745-28	Condition 15
S-1547-0746-27	Condition 16
S-1547-0747-26	Condition 17
S-1547-0748-26	Condition 17
S-1547-0749-30	Condition 15
S-1547-0733-25	Condition 14
S-1547-0744-26	Condition 17
S-1547-0760-21	Condition 11
S-1547-0834-25	Condition 17
S-1547-0835-29	Condition 17

3. The variance shall allow field gas with excess H₂S to enter the fuel gas distribution system. In addition, it will allow the steam generators utilizing the gas as fuel to exceed their permitted SO_x emission limits.
4. AERA shall sample, analyze/measure, and record the sulfur content of the field gas entering into the fuel distribution system each day while the Sulferox Plant is bypassed.

5. Excess Emissions shall not exceed **2,274** pounds of SO_x over the duration of the variance period.
6. Excess emissions fee will be assessed at the conclusion of the variance at \$3.25 per pound. Additionally, should the total excess emissions per pollutant exceed one ton (2,000 pounds), AERA shall pay three dollars and seventy-five cents (\$3.75) of mitigation fees 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.
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 report must be sent to the facility inspector.
8. Should the District receive complaints or if the facility experiences operational conditions likely to cause a public nuisance, AERA shall cease the operations causing the complaints or problems and take all necessary actions to abate the problem immediately.
9. AERA shall notify the District least 24 hours, but no earlier than 96 hours, prior to shutting down the 2-3 SO_x Plant. Notification shall be sent by email to Renee Chavez at renee.chavez@valleyair.org.
10. By September 22, 2026, or no later than 15 calendar days after the Sulferox Plant returns to normal operation, whichever occurs first, AERA 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 the activities performed during the variance period,
 - B. Records of volume of gas sent to the steam generators and the H₂S concentration of the gas,
 - C. A calculation of the excess emissions, and
 - D. The required certification of truth, 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*.
11. The end of variance summary report shall be submitted to the attention of

Will Coon, Air Quality Specialist
SJVAPCD, Compliance Department
1990 E Gettysburg Avenue
Fresno, CA 93726
Telephone: (559) 230-5878
E-mail: will.coon@valleyair.org
12. 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.