



**Santa Barbara County  
Air Pollution Control District**

Our Vision  Clean Air

H.B. Case No.: 2016-13-m2  
Petitioner: ExxonMobil  
Permit No.: 8092  
Date Rec'd: 4/8/19  
Time Rec'd: 1429  
Filing Fee Paid: \$611.00

## PETITION FOR VARIANCE

**Type of Variance Requested:**

Emergency \_\_\_\_\_ Interim<sup>1</sup> \_\_\_\_\_ 90-Day \_\_\_\_\_ Regular x

Length of Variance Requested: Start Date 6/6/19  
End Date 6/5/21

<sup>1</sup> A 90-Day or Regular Variance must be filed concurrently with an Interim Variance

### 1. PETITIONER INFORMATION

A. Please provide the name, address and phone number of the Petitioner.

Name: ExxonMobil Production Company  
(a division of Exxon Mobil Corporation)  
Address: 22777 Springwoods Village Parkway  
Spring, TX 77389  
Phone Number: (832) 625-4563

B. Please provide the name, address and phone number of the person authorized to receive correspondence regarding this Petition if different from response in 1.A.

Name: Jing Wan  
Address: 12000 Calle Real  
Goleta, CA 93117  
Phone Number: (805) 961-4078

C. The Petitioner is (please check one):

- 1) An Individual ( )
- 2) Partnership ( )
- 3) Corporation (X)
- 4) Public Agency ( )
- 5) Other Entity (please describe)

2. Location of equipment for which the variance is requested if different from response in 1.A.

The equipment is located at POPCO's gas processing plant. The plant is approximately 25 miles northwest of Santa Barbara, California

3. List any District permits that are applicable to the equipment subject to this variance request.

PTO and Part 70 Operating Permit 8092

4. Briefly describe the equipment that is the subject of this Petition.

The Stretford Unit tail gas H<sub>2</sub>S analyzer (AE-405) was designed by Ametek/Western Research. It continuously measures the H<sub>2</sub>S concentration in the Stretford tail gas using UV light sources and photomultiplier tubes. The operation and maintenance is described in detail in the POPCO SBCAPCD-approved *Continuous Emission Monitoring Plan* which is incorporated by reference in the operating permit for the facility. The tail gas from the Stretford unit is incinerated in Boilers B-801 A and B and is limited to 100 ppm H<sub>2</sub>S.

#### FINDINGS REQUIRED FOR THE GRANTING OF A VARIANCE

In order for the Hearing Board to grant a variance to a Petitioner authorizing the operation of a source in violation of any rule, regulation or order of the District, the Hearing Board is required to make "findings" in accordance with the requirements specified in California Health and Safety Code §42352, et. seq. and District rules and regulations. The Hearing Board's variance decision will take into consideration information you provide in this Petition. Please ensure your responses are complete and thorough. Please use additional pages as necessary.

A. Please state 1) what District rule, regulation or order you either are or will be in violation of, and 2) the date said violation will or did occur. Include as appropriate the applicable permit conditions for which variance relief is being sought.

As a result of the Plains All American Pipeline (AAPL) Line 901 failure, there is an extended shutdown of operations at the ExxonMobil (EM) Santa Ynez Unit. ExxonMobil is currently not in violation of the following Rules and Conditions. Information below is based on the original petition for the variance and will be applicable when operations resume.

*SBCAPCD Rule 206, Permit 8092, Condition 9.C7(a)(i) except during startup and shut down operations, H<sub>2</sub>S residual concentration in the Stretford tail gas is limited to 100 ppmvd. Compliance with this limit shall be determined via the DAS on a six-minute basis.*

*Analyzer AE-405 occasionally reads very high when compared to a sample measure by sorbent tube or third party laboratory. At times the analyzer reads well over 100 ppm when the H<sub>2</sub>S concentration measured by the other means is in single digits or not detectable.*

*SBCAPCD Rule 206, Permit 8092, Condition 9.C.12 and 9.C.12 (a) POPCO shall implement the APCD-approved CEM plan and meet the requirements set forth in APCD Rule 328 and 40 CFR 51 and 40CFR 60.*

- B. Please describe how compliance with the District rule, regulation or order listed in Section A above is beyond your reasonable control. In addition to any other relevant factors, please include in your discussion 1) what actions you have taken to comply or seek a variance, which were timely and reasonable under the circumstances.

Information below was submitted in the petition for Variance Order 2016-13-M1. The facility continues to be preserved while AAPL reestablishes pipeline operations or until an alternative temporary means of oil transportation is permitted. As provided by California Health and Safety Code §42357, ExxonMobil is requesting a modification to the final compliance date of Variance Order 2016-13-M1 for good cause. Permit conditions listed herein are either infeasible or impractical until processing resumes. Startup is not within the control of the petitioner.

Information in italics provides details submitted in the petition for Variance Order 2015-15-R. This order was extended for one year by Variance Order 2016-13-R. During the original petition timeframe, the extent of the facility impact was not clear. The failure has since caused an extended suspension of operations at ExxonMobil's Santa Ynez Unit. Facility equipment has been preserved to manage its integrity over the longer term due to the uncertainty around the recommencement timing of production operations. The facility may be preserved for an extended period while AAPL reestablishes pipeline operations.

As provided by California Health and Safety Code §42357, ExxonMobil is requesting a modification to the final compliance date of Variance Order 2016-13-R for good cause. Permit conditions listed are either infeasible or impractical until processing resumes. Startup is not within the control of the petitioner.

*On May 23, 2015 startup operations at the POPCO facility commenced following an extended shut down. Unexpected Stretford tail gas H<sub>2</sub>S readings over 100 ppm H<sub>2</sub>S were measured. It was believed that these readings were related to an analyzer error and multiple absorbent tube samples were taken that verified that the H<sub>2</sub>S concentration was in the <1 ppm range. Instrumentation technicians inspected the analyzer but could not find any mechanical issue with the equipment. The concentration spiked several times but decreased as the facility reached steady state. The readings again spiked on June 2, 2015. During that spike a sorbent tube reading was obtained which also indicated <1 ppm H<sub>2</sub>S. An off gas sample was taken during the spike and was analyzed by an outside laboratory. Those results confirmed 0 ppm H<sub>2</sub>S in the tail gas during an analyzer reading of 101 ppm H<sub>2</sub>S.*

*Although the analyzer is consistently passing weekly calibration checks it appears that constituents in the tail gas stream are being falsely read as H<sub>2</sub>S during certain operating conditions. POPCO has contacted the manufacturer of the analyzer and is working with them to identify possible corrective actions or replacements for the unit. Several other analyzer manufacturers are also being contacted. It appears that the lead time for replacement equipment is approximately 24 weeks.*

*The analyzer is providing verification that the H<sub>2</sub>S in the tail gas stream is below 100 ppm H<sub>2</sub>S during most operating ranges. However, POPCO permit requires that compliance with the concentration limit be determined via the DAS on a six-minute basis. The H<sub>2</sub>S limit during these periods is being met as measured by the sorbent tube readings; however the analyzer is not continuously verifying this permit condition during these spikes.*

*The analyzer is still in service and is providing H<sub>2</sub>S readings that are slightly higher than actual values but is verifying compliance during most periods except for the spikes. During the spikes the analyzer readings far exceed the actual H<sub>2</sub>S. During periods where AE-405 exceeds 100 ppm ExxonMobil will take a sorbent tube sample to determine actual tail gas concentration if the event lasts at least 60 minutes.*

- C. Please describe how you would be impacted if you were required to immediately comply with the District rule, regulation or order the subject of this variance request. In addition to any other relevant factors, please discuss why such impacts would result in 1) an arbitrary or unreasonable taking of property, or 2) the practical closing and elimination of a lawful business.

As a result of the Plains All American Pipeline (AAPL) Line 901 failure, there is an extended shutdown of operations at the ExxonMobil (EM) Santa Ynez Unit. ExxonMobil is currently not in violation of APCD Rules and Conditions. The terms of Variance Order 2015-15-R requires the repair or installation of AE 405 before the end of the variance period. Immediate compliance with the variance would require installation of the analyzer which is not warranted for reasons described in Section B.

- D. If you were required to immediately comply with the District rule, regulation or order the subject of this variance request, please describe what impact, if any that would have on air contaminants.

As a result of the Plains All American Pipeline (AAPL) Line 901 failure, there is an extended shutdown of operations at the ExxonMobil (EM) Santa Ynez Unit. ExxonMobil is currently not in violation of APCD Rules and Conditions. The terms of Variance Order 2015-15-R requires the repair or installation of AE 405 before the end of the variance period. Immediate compliance with the variance would require installation of the analyzer which is not warranted for reasons described in Section B. There are no air contaminant impacts related to this petition because the facility is temporarily shut down.

- E. Please describe what consideration you have given to curtailing of operations in lieu of obtaining a variance.

As a result of the Plains All American Pipeline (AAPL) Line 901 failure, there is an extended shutdown of operations at the ExxonMobil (EM) Santa Ynez Unit.

- F. Please describe what steps and measures you will take to reduce excess pollutant emissions the maximum extent feasible during the requested variance period.

There will be no excess emissions associated with this variance.

- G. If requested to do so by the District, please describe how you will monitor or otherwise quantify and report to the District any pollutant emissions associated with the granting of your variance.

There are no air contaminant impacts related to this petition.

6. SUPPLEMENTAL FINDINGS IF APPLYING FOR AN EMERGENCY VARIANCE PURSUANT TO RULE 506 (EMERGENCY VARIANCE FOR BREAKDOWNS)

Information in italics below provides details regarding the 2015 malfunction of the analyzer provided in the petition for Variance Order 2015-15-R.

A. Please provide the date and time the breakdown was reported to the District

Date: 6/3/15 Time: 08:33

B. Breakdown number (as provided by the District): 10745

C. Please provide a description of the "breakdown condition", including equipment involved and the cause to the extent it is known. *Analyzer AE-405 is reading tail gas concentrations in excess of 100 ppm. Sorbent tube samples indicate very low ( $\leq 1$ ) ppm H<sub>2</sub>S.*

D. Please describe why the continued operation of your facility in a "breakdown condition" is not likely to cause an immediate threat or hazard to public health or safety and will not interfere with the attainment or maintenance of any primary national ambient air quality standard. *This analyzer failure will not result in any excess emissions and, therefore, will not cause a standard violation or a threat or hazard to public safety or health. The analyzer will remain in service, except during maintenance, to confirm that tail gas H<sub>2</sub>S limitation of 100 ppm is met.*

7. Will the operation of the equipment subject to this variance result in violation of District Rule 303, Nuisance? The granting of this variance will not result in injury, detriment, nuisance, or annoyance to the public, and will not endanger the health or safety of the public or cause injury or damage to business or property.

8. Please state whether or not any civil or criminal case involving the equipment subject to this variance is pending any court. No case involving the same or identical equipment is pending in any court, civil or criminal, for which ExxonMobil is aware.

The undersigned is authorized to submit the above Petition on behalf of the Petitioner and further states under penalty of perjury under the laws of the State of California, that the above Petition, including any attachments and the items therein set forth, are true and correct.

DATE: 4/8/19

SIGNATURE: 

TITLE: California Operations Asset Manager

PRINT NAME: Jing Wan

**Variance Filing Fees:** All variance Petitions must be accompanied by the requisite filing fee at the time of filing or include a letter from the Petitioner on company letterhead authorizing the District to debit the filing fee from the company's reimbursable account. You may also pay your filing fees by credit card using the attached form. Current variance filing fees may be found under Rule 210, schedule F, Sections 12a and 12b at <http://www.sbcapcd.org/fees.htm>.