PETITION FOR VARIANCE
BEFORE THE HEARING BOARD OF THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PETITIONER: AIR PRODUCTS AND CHEMICALS INC. CASE NO: 4276-17

FACILITY ID: 101656

FACILITY ADDRESS: 700 N Henry Ford Ave.
[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

City, State, Zip: Wilmington, CA 90744

1. TYPE OF VARIANCE REQUESTED (more than one box may be checked; see Attachment A, Item 1, before selecting)

☒ INTERIM ☒ SHORT ☐ REGULAR ☐ EMERGENCY ☐ EX PARTE EMERGENCY

2. CONTACT: Name, title, company (if different than Petitioner), address, and phone number of persons authorized to receive notices regarding this Petition (no more than two authorized persons).

Roger Han
Air Products and Chemicals, Inc.
700 N. Henry Ford Ave.
Wilmington, CA *Zip* 90744
☎ (310)952-9172 *Ext.*
Fax ( )
E-mail hanhr@airproducts.com

Ramsey Haddad
Air Products and Chemicals, Inc.
23300 S. Alameda St.
Carson, CA *Zip* 90810
☎ (951)539-2277 *Ext.*
Fax ( )
E-mail haddadrs@airproducts.com

3. RECLAIM Permit ☒ Yes ☐ No Title V Permit ☒ Yes ☐ No

Persons with disabilities may request this document in an alternative format by contacting the Clerk of the Board at 909-396-2500 or by e-mail at clerkofboard@aqmd.gov.

If you require disability-related accommodations to facilitate participating in the hearing, contact the Clerk of the Board at least five (5) calendar days prior to the hearing.

[ALL DOCUMENTS FILED WITH CLERK'S OFFICE BECOME PUBLIC RECORD]

4. **GOOD CAUSE:** Explain why your petition was not filed in sufficient time to issue the required public notice. (Required only for Emergency and Interim Variances; see Attachment A, Item 4)

On April 5th 2024, revisions to AQMD Rule 1118 were adopted that included amended language in (j)(10) to install a "continuous flow measurement device" for Hydrogen Clean Service Flares within 18 months of rule adoption. The Air Products Wilmington facility had previously calculated flow using a series of temperature and pressure readings in its flare header system. After it was determined that the existing system did not meet the criteria of a "continuous flow measurement device", a project was initiated to install a meter in time for this deadline.

Air Products submitted a SCAQMD permit amendment application on June 26, 2025 and ordered equipment meeting the criteria for compliance with Rule 1118 on September 24, 2024.

Air Products started to commission this flow measurement device on September 17, 2025. During commissioning, the equipment manufacturer (Panametrics) discovered a critical and previously unknown manufacturing error in the pairing of the transducers of the probes used in this device that rendered the device irreparably nonfunctional. Specifically, the transducers were incorrectly paired.

Air Products immediately contacted Panametrics Management to troubleshoot the issue. Panametrics indicated that the existing transducers cannot be fixed to resolve the issue. Panametrics indicated that the only option is to manufacture replacement transducers. See attached letter dated October 3rd, 2025 from Panametrics. These probes are manufactured in Ireland and typically have a 15-week lead time. Based on the letter from Panametrics, the new fully paired transducers will be completed and shipped to the site by October 31, 2025. Air Products anticipates that the commissioning process will take approximately two weeks once the new transducers are delivered.

5. Briefly describe the type of business and processes at your facility.

The Air Products and Chemicals, Inc. Wilmington Hydrogen Plant produces up to approximately 86 MMSCFD of hydrogen gas for sale via pipeline to several local refinery customers. The hydrogen plant produces hydrogen from refinery off-gas by the steam-hydrocarbon reforming process, followed by purification. Steam is generated in the hydrogen plant by heat recovery. An on-site boiler makeup water treatment system provides high quality makeup water to the steam generating system. During normal operation, heat for the reforming process is supplied by firing a low-Btu refinery off-gas from local refineries as the primary fuel. The hydrogen plant operates up to 24 hours per day, 7 days per week, and 365 days per year.

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

6. List the equipment and/or activity(s) that are the subject of this petition (see Attachment A, Item 6, Example #1). **Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For RECLAIM or Title V facilities, attach *only* the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this petition. You must bring the entire Facility Permit to the hearing.**

Equipment/Activity	Application/ Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)*
Relief Flare	561636	C46	

*Attach copy of denial letter

7. Briefly describe the activity or equipment, and why it is necessary to the operation of your business. A schematic or diagram may be attached, in addition to the descriptive text.

The relief flare is essential to the operation of the facility. It is what is defined as a "clean service flare", designed to safely combust the clean service streams (hydrogen, natural gas, low sulfur petroleum products) that can be generated at a hydrogen plant. The flare operates continuously and the hydrogen plant cannot run without it.

The equipment in question is a new device that will be used to measure vent gas flow to the flare. Vent gas flow is currently calculated using an alternate approved method. Vent gas flow is a required element of the monitoring plan under AQMD Rule 1118.

8. Is there a regular maintenance and/or inspection schedule for this equipment? Yes ☒ No ☐

If yes, how often: Annual Date of last maintenance and/or inspection NA

Describe the maintenance and/or inspection that was performed.

This is new equipment and maintenance has not been performed yet.

9. List all District rules, and/or permit conditions [indicating the specific section(s) and subsection(s)] from which you are seeking variance relief (if requesting variance from Rule 401 or permit condition, see Attachment A). Briefly explain how you are or will be in violation of each rule or condition (see Attachment A, Item 9, Example #2).

Rule	Explanation
Rule 1118 (j) (10) (A)	Have a continuous flow measuring device installed in a manner and at a location that allows for accurate measurements of the total volume of Vent Gas to each Flare.
Rule 3002(c)(1)	Not operating the facility in compliance with all terms, conditions and requirements specified in the Title V permit at all times as it relates to Rule 1118
Rule 203(b)	Equipment operated contrary to the conditions specified in the permit to operate as it relates to Rule 1118
Rule 2004(f)(1)	Not complying with permit condition applicable to the facility, as specified in the Facility permit as it relates to Rule 1118

10. Are the equipment or activities subject to this request currently under variance coverage? Yes ☐ No ☒

Case No.	Date of Action	Final Compliance Date	Explanation

11. Are any other equipment or activities at this location currently (or within the last six months) under variance coverage? Yes ☐ No ☒

Case No.	Date of Action	Final Compliance Date	Explanation

12. Were you issued any Notice(s) of Violation or Notice(s) to Comply concerning this equipment or activity within the past year? Yes ☐ No ☒

If yes, you must attach a copy of each notice.

13. Have you received any complaints from the public regarding the operation of the subject equipment or activity within the last six months? Yes ☐ No ☒

If yes, you should be prepared to present details at the hearing.

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

14. Explain why it is beyond your reasonable control to comply with the rule(s) and/or permit condition(s). Provide specific event(s) and date(s) of occurrence(s), if applicable.

Air Products took the necessary steps to timely comply with Rule 1118 for the revisions to AQMD Rule 1118. Air Products contracted with a top of the field vendor to engineer, manufacture, and install the equipment to ensure compliance with the requirements. Panametrics has provided similar installations for a number of facilities within the SCAQMD, including other Air Products' facilities. The manufacturing issue was discovered onsite by the Panametrics technician while attempting to calibrate the transducers, as part of preparing the equipment for installation and commissioning at the Wilmington Facility. Air Products could not discover this issue earlier because the pairing of the transducer is internal to the flowmeter. Panametrics has accepted full responsibility for the manufacturing error as described in the attached letter.

15. When and how did you first become aware that you would not be in compliance with the rule(s) and/or permit condition(s)? Provide specific event(s) and date(s) of occurrence(s).

The new flare flow measurement system was intended to be commissioned on September 17, 2025. Upon unsuccessful attempts at commissioning the flowmeter, the Panametrics field installation technician contacted their factory to determine how to troubleshoot the issue. After consideration of the errors that were observed in the field during commissioning, Panametrics traced the error back to the incorrect pairing of the transducers during the production of the flowmeter. Panametrics determined that new probes would have to be manufactured on September 18, 2025. AP initiated conversions with SCAQMD permitting staff on September 18, 2025. On September 23, 2025, it was confirmed by SCAQMD that if the meter was not installed by October 5, 2025, it would result in non-compliance; thus a decision was made to submit a petition for a variance.

16. List date(s) and action(s) you have taken since that time to achieve compliance. That the Petition Form HB-V, and any related instructions, include requirement that the Petitioner include a timeline in suitable, chronological format to address the events, dates, and actions called for by Questions 15 and 16, including the dates of communication with the South Coast AQMD to notify them of the occurrence(s) giving rise to the requested variance.

September xx, 2025 – AP installs flowmeter to comply with April 5, 2024 revisions to SCAQMD Rule 1118(j)(10).

September 17, 2025 – AP proceeds with commissioning new flowmeter. AP contacts vendor to discuss commissioning concerns and troubleshoot.

Xxx – Vendor proposes plan to xxx.

September 18, 2025 – AP contacts vendor to expedite shipment of replacement transducers.

September 18, 2025 – AP contacts SCAQMD to determine if there are other options for compliance until the replacement transducers are manufactured and arrive at site.

17. What would be the harm to your business during **and/or after** the period of the variance if the variance were not granted?

Economic losses: $ Significant lost revenue and production penalties

Number of employees laid off (if any): 0-10

Provide detailed information regarding economic losses, if any, (anticipated business closure, breach of contracts, hardship on customers, layoffs, and/or similar impacts).

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

Hardship on customers: The loss/turndown of our hydrogen could potentially cause one or more of Air Products' refinery customers to partially shut down, which would result in a significant economic impact. Additionally, there would be a loss in refinery production in Southern California.

18. Can you curtail or terminate operations in lieu of, or in addition to, obtaining a variance? Please explain.

The flow to the flare cannot be eliminated or re-routed while the facility is in operation. For the reasons stated above in Item #17, shutdown of the plant at this time would bear significant consequences, with potential ramifications on the availability/price of gasoline (among other refinery products) in Southern California and would have a significant economic impact on the population. A shutdown and restart of operations would result in an increase in emissions, whereas no excess emissions would otherwise occur.

19. Estimate excess emissions, if any, on a daily basis, including, if applicable, excess opacity (the percentage of total opacity above 20% during the variance period). If the variance will result in no excess emissions, insert "N/A" here and skip to No. 20.

Pollutant	(A) Total Estimated Excess Emissions (lbs/day)	(B) Reduction Due to Mitigation (lbs/day)	(C)* Net Emissions After Mitigation (lbs/day)
N/A			

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

* Column A minus Column B = Column C

Excess Opacity:_____%

20. Show calculations used to estimate quantities in No. 19, **or** explain why there will be no excess emissions.

The flare currently has a flow measurement system that is approved by the SCAQMD. This delay will not impact operations and the existing management system already provides a monitoring system to account for emissions from the flare. Emissions will continue to be reported in the previously approved manner.

21. Explain how you plan to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible.

N/A. There is no impact on emissions.

22. How do you plan to monitor or quantify emission levels from the equipment or activity(s) during the variance period, and to make such records available to the District? **Any proposed monitoring does not relieve RECLAIM facilities from applicable missing data requirements.**

Existing approved emission calculations will be used to monitor during the variance period.

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

23. How do you intend to achieve compliance with the rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed, modifications or process changes to be made, permit conditions to be amended, etc., dates by which the actions will be completed, and an estimate of total costs.

Receive and install the originally designed equipment as described in permit application.

Delivery is scheduled for November 7, 2025

Installation and commissioning is expected to take approximately two weeks from the time of delivery.

24. State the date you are requesting the variance to begin: October 5, 2025; and the date by which you expect to achieve final compliance: November 21, 2025.

If the regular variance is to extend beyond one year, you **must** include a **Schedule of Increments of Progress**, specifying dates or time increments for steps needed to achieve compliance. See District Rule 102 for definition of Increments of Progress (see Attachment A, Item 24, Example #3).

List Increments of Progress here:

25. List the names of any District personnel with whom facility representatives have had contact concerning this variance petition or any related Notice of Violation or Notice to Comply.

Timothy Ebiner Ext._____

_____ Ext._____

If the petition was completed by someone other than the petitioner, please provide their name and title below.

_____

Name Company Title

The undersigned, under penalty of perjury, states that the above petition, including attachments and the items therein set forth, is true and correct.

Executed on October 3, 2025, at 700 N Henry Ford. Ave. Wilmington, California

_____ Roger Han

Signature Print Name

Title: Plant Manager

---

26. SMALL BUSINESS and TABLE III SCHEDULE A FEES: To be eligible for reduced fees for small businesses, individuals, or entities meeting small business gross receipts criterion [see District Rule 303(h)], you must complete the following:

Declaration Re Reduced Fee Eligibility

1. The petitioner is
   a) ☐ an individual, or
   b) ☐ an officer, partner or owner of the petitioner herein, or a duly authorized agent of the petitioner authorized to make the representations set forth herein.

If you selected 1a, above, skip item 2.

2. The petitioner is
   a) ☐ a business that meets the following definition of Small Business as set forth in District Rule 102:

   SMALL BUSINESS means a business which is independently owned and operated and meets the following criteria, or if affiliated with another concern, the combined activities of both concerns shall meet these criteria:

   (a) the number of employees is 10 or less; **AND**

   (b) the total gross annual receipts are $500,000 or less **or**

   (iii) the facility is a not-for-profit training center.

   -OR-

   b) ☐ an entity with total gross annual receipts of $500,000 or less.

3. Therefore, I believe the petitioner qualifies for reduced fees for purpose of filing fees and excess emission fee calculations, in accordance with Rule 303(h).

I declare under penalty of perjury that the foregoing is true and correct.

Executed on_____, at _____, California

_____ _____

Signature Print Name

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

Baker Hughes

03/10/2025

Dear Air Products Management,

I am writing on behalf of Panametrics to express our sincere apologies for the recent delay in fulfilling your order (4506526645), which was caused by an engineering oversight within our operations.

During the production of your flowmeter, our engineer did not provide sufficiently clear internal instructions to the production team regarding the correct pairing of transducers. As a result, the transducers supplied were not properly matched, leading to the delivery of a non-functioning flowmeter. We fully acknowledge the inconvenience and disruption this has caused to your operations and regret the negative impact it has had on your schedule.

Unfortunately, it is not possible to re-work the existing transducers to correct this issue. To resolve the matter, we have commenced the production of replacement transducers for your order. We anticipate that the new, fully paired transducers will be completed and ready for delivery by 31 October 2025. We are making every effort to expedite this process and minimise further disruption to your activities. Our field service engineer will be dispatched immediately to replace the incorrect units and ensure proper installation.

Additionally, we have taken immediate steps to strengthen our internal procedures. We have implemented enhanced process controls and mandatory verification steps to ensure that all future orders are accurately fulfilled, and similar errors are prevented from recurring.

Please accept our sincerest apologies for this incident and any inconvenience it has caused. We value our relationship with Air Products and remain committed to delivering the highest standards of quality and reliability. Should you have any further concerns or require additional information, please do not hesitate to contact me directly.

Thank you for your understanding and continued trust in Panametrics.

Yours faithfully,

Jody Bleach

Jody Bleach

Project Engineering Manager

Panametrics

FACILITY PERMIT TO OPERATE
AIR PRODUCTS AND CHEMICALS, INC.

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: FLARE					
FLARE, X-113, GROUND LEVEL, WITH A CYCLONE SEPARATOR, HEIGHT: 68 FT ; DIAMETER: 32 FT A/N: 561636	C46	D32		CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, D12.3, D12.4, D90.3, H23.11
FUGITIVE EMISSIONS, MISCELLANEOUS, (PUMPS, COMPRESSORS, VALVES, FLANGES, PRV) A/N: 561636	D56				H23.2
Process 4: R-219 EQUIPMENT SUBJECT TO SOURCE SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS	E57				H23.4
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E62			VOC: (9) [RULE 1113, 2-5-2016; RULE 1171, 2-1-2008; *RULE 1171, 5-1-2009*]	K67.4
RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT	E63			VOC: (9) [RULE 1171, 2-1-2008; *RULE 1171, 5-1-2009*]; VOC: (5) [RULE 1122, 10-1-2004; *RULE 1122, 5-1-2009*]	H23.13

* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
AIR PRODUCTS AND CHEMICALS, INC.

SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans, with the following exceptions:

a. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) which become effective after December 31, 1993.

b. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) after the facility has received final certification of all monitoring and reporting requirements specified in Section F and Section G.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

List of approved plans:

Application	Rule
626540	1118

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE: COMPLIANCE PLAN
Air Products & Chemicals, Inc.

Rule 1118 Flare Monitoring and Reporting Plan

A/N 626540

Site Location: 700 N. Henry Ford Avenue, Wilmington, CA 90744

ADMINISTRATIVE REQUIREMENTS:

This facility shall be subject to the terms and conditions of this plan unless this plan is suspended, revoked, modified, reissued or denied. Failure to maintain a valid plan is a violation of Rule 1118.

It is the responsibility of the facility to comply with other District Rules and Regulations and with all laws, ordinances and regulations of other government agencies which are applicable to the operation of the equipment.

This plan does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code or the Rules and Regulations of the AQMD. This plan cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other governmental agencies.

CONDITIONS:

1. The owner or operator shall perform monitoring and recording of the operating parameters for the flare in accordance with this approved compliance plan, dated April 23, 2021, and other applicable requirements of Rule 1118(g). Monitoring and recording of the below flare pursuant to this approved plan shall be performed at all times, except when out of service for reasons described in Rule 1118(g)(5)(A).

Flare Device ID	Type of Service
C46	Clean

Rule 1118 Flare Monitoring and Reporting Plan

A/N 626540

2. The owner/operator shall use the 'on' status of stage burner valve no. 1 as the flow indicator to C46 for flaring of vent gases from V-137. The owner/operator shall implement algorithms to the plant's DCS to calculate and record continuously the volumetric flare gas flow rate based on the pressure in this line. The calculation shall be based on the staging curve provided by the flare manufacturer and corrected to a gas molecular weight of 20.81 lb/lb-mole.

   The owner/operator shall use the on/off status of stage burner valves no. 1A, 2, 3, 4 and 5 as flow indicators to C46 for all flaring scenarios except for flaring of vent gases from V-137. The owner/operator shall implement algorithms to the plant's DCS to calculate and record continuously the volumetric flare gas flow rate based on the number of staged burner valves that are 'on' and the pressure that exists in the supply header. The calculation shall be based on the staging curve provided by the flare manufacturer and corrected to a gas molecular weight of 11.31 lb/lb-mole.

3. With the dedicated stage burner valve no. 1 in the always 'on' status for V-137 vent stream, the start of a flare event shall be defined when the plant is in operation and V-137 vent gas is being generated (pressure exists in line). The end of a flare event shall be defined when the plant is not in operation and V-137 vent gas is not being generated (no pressure exists in line). Volumetric flare gas flow rate and emissions shall be calculated separately (for stage burner valve 1 and valves 1A/2/3/4/5) and combined in the plant's DCS for the purpose of total criteria pollutant emissions reporting for Rule 1118.

4. A flare event lasting 24 hours or less shall be considered a single flare event even when the vent occurs in two consecutive days. When a flare event continues for more than 24 hours, each calendar day shall be a separate flare event.

5. The vent gas flow rate shall be assumed to be at the maximum design capacity of the flare when the last burner stage valve (no. XV-9040) is not in the fully closed position.

Rule 1118 Flare Monitoring and Reporting Plan

A/N 626540

6. Volumetric flow rates of vent gases shall be corrected to standard conditions of 14.7 psia and 68°F and recorded as one-minute averages.

7. Except for flare events originating from automatic vent valve PV-223 only (Hydrogen vent gas stream), the owner/operator shall calculate emissions of criteria pollutants for each flare event using the methods described in Attachment B of Rule 1118 and the appropriate HHV, NHV, and Cs values specified in Pages 9 through 13 of the revised FMRP dated 4/23/21. Whenever two (2) or more automatic vent valves (PV-3, PV-578, PV-220 and PV-223) are opened concurrently during a flare event, the worst case HHV, NHV, and sulfur content stream shall be used to calculate flare emissions for all flaring scenarios resulting from burner stage valves 1A/2/3/4/5.

8. The owner/operator shall sample and analyze the Syngas and Hydrogen vent streams to the flare once a year pursuant to the methods listed in Rule 1118(j). The total sulfur content can be considered 0 and the analysis shall be for HHV and NHV only. Samples shall be taken within 30 minutes, but no sooner than 15 minutes, of the start of a flare event.

   The owner/operator shall determine the gas composition of the PSA Purge Gas vent stream to the flare by material balance around the PSA process using measured PSA inlet feed (Syngas) and Hydrogen product flows, along with Syngas and Hydrogen composition from the sample analyses required above. The HHV and NHV of the PSA Purge Gas shall be calculated using the gas composition determined above and known heating value of each individual component. The total sulfur content for PSA Purge Gas can be considered 0.

   The owner/operator shall use the in-line mass spectrometer and RECLAIM-certified total sulfur analyzer to determine the gas composition, HHV, NHV, and total sulfur content of the Process Feed Gas stream to the flare.

   In the event the HHV of the Syngas, PSA Purge Gas and/or H_2 vent streams deviate by 10% or more from 304 Btu/Scf, 273 Btu/Scf, and 324 Btu/Scf, respectively, the owner/operator shall

Rule 1118 Flare Monitoring and Reporting Plan

A/N 626540

submit an application to the Executive Officer to modify the HHV used to calculate emissions pursuant to Attachment B of Rule 1118.

In the event the NHV of the Syngas and/or PSA Purge Gas vent streams deviate by 10% or more from 262 Btu/Scf and 242 Btu/Scf, respectively, the owner/operator shall submit an application to the Executive Officer to modify the NHV used to calculate emissions pursuant to Attachment B of Rule 1118.

9. The owner/operator shall calculate emissions for a flare event that occurs even when all four (4) automatic vent valves (PV-3, PV-578, PV-220 and PV-223) are in the fully closed position by using the method described in Attachment B of Rule 1118 and the HHV, NHV, and Cs values for Process Feed Gas, which are continuously measured as specified in condition no. 8.

10. For flare events originating from PV-223 only, the operator shall calculate NOx emissions using the following equation and emission factor. Emissions of other criteria pollutants (ROG, CO, PM10, and SOx) are considered zero under this flaring scenario.

Hydrogen Vent Gas Stream		
Air Pollutant	Equation	EF
NOx	$E_v = V_v \times 324 \times EF$	0.068 lb/mmBtu

Where;

E_V = Vent gas emissions, calculated, lbs

V_v = Volumetric flow of vent gas, measured in million standard cubic foot (mmScf) at 14.7 psia and 68°F

Rule 1118 Flare Monitoring and Reporting Plan

A/N 626540

11. The natural gas flow to the pilots shall be based on usage from monthly gas bills from the Gas Company. If gas bills are not available by the time quarterly reports are being prepared, the pilot gas usage shall be based on the maximum design capacity of 1600 SCFH for the pilots.

12. The owner/operator shall monitor the flare at all times for presence of a pilot flame using a thermocouple that will alarm the owner/operator in the event of a flame out. The owner/operator shall reignite the pilot immediately after a pilot flame out occurs.

13. The owner/operator shall notify the Executive Officer within one hour of any unplanned flare event with emissions exceeding either 100 pounds of VOC or 500 pounds of sulfur dioxide, or exceeding 500,000 standard cubic feet of flared vent gas. The owner/operator shall also notify the Executive Officer by telephone at least 24 hours prior to the start of a planned flare event with emissions exceeding either 100 pounds of VOC or 500 pounds of sulfur dioxide, or 500,000 standard cubic feet of combusted vent gas.

14. The owner/operator shall conduct a Specific Cause Analysis for any flare event, excluding planned shutdown, planned startup and turnaround, resulting in any of the followings: (a) 100 pounds of VOC emissions. (b) 500 pounds of sulfur dioxide emissions. (c) 500,000 standard cubic feet of vent gas combusted. The analysis shall identify the cause and duration of the flare event and describe any mitigation and corrective action taken to prevent recurrence of a similar flare event in the future. Unless an extension is granted, the owner/operator shall submit a Specific Cause Analysis to the Executive Officer within 30 days of the event.

15. The owner/operator shall conduct an analysis and determine the relative cause for a flare event that results in combustion of more than 5,000 standard cubic feet of vent gas. A Specific Cause Analysis may be submitted to satisfy this condition.

FACILITY PERMIT TO OPERATE: COMPLIANCE PLAN
Air Products & Chemicals, Inc.

Rule 1118 Flare Monitoring and Reporting Plan

A/N 626540

16. The owner/operator shall maintain records of all the information required to be monitored and make such records available to District personnel upon request.
    a. Flare event data collected pursuant to paragraphs (g)(3), (g)(4), (g)(5), (g)(6), and (g)(8)(B) of Rule 1118 as applicable.
    b. Total daily and quarterly emissions of criteria pollutant from each flare and each flare event along with all information specified by Rule 1118(i)(6)(B).
    c. Monitoring record of automatic vent valves on/off positions pursuant to Condition No. 7, 9, and 10.
    d. Pilot flame failure report.
    e. Planned and unplanned flare gas flow meter downtime report that includes date, time, and explanation for taking the meter out of service.
    f. Sample results for gas composition, HHV, and NHV pursuant to Condition No. 8
    g. Specific Cause Analysis completed pursuant to Condition No. 14.
    h. Relative Cause Analysis completed pursuant to Condition No. 15.
    i. Annual acoustical pressure relief device leak survey.
    j. Video records pursuant to Rule 1118(g)(7).

Within 30 days after the end of each calendar quarter, the owner/operator shall submit a quarterly report to the AQMD Refiner Compliance Team at the below address. Item (a) through (h) shall be submitted quarterly in electronic format. Hard copy of item (i) shall be submitted with the quarterly report for the quarter which the survey was conducted. Item (j) shall be made available to the Executive Officer upon request.

All records required by this condition shall be certified for accuracy in writing by the responsible facility official and maintained for at least five years.

FACILITY PERMIT TO OPERATE: COMPLIANCE PLAN
Air Products & Chemicals, Inc.

Rule 1118 Flare Monitoring and Reporting Plan

A/N 626540

SOUTH COAST AIR QUALITY MGMT DISTRICT
REFINERY COMPLIANCE
1500 WEST CARSON STREET, SUITE 115
LONG BEACH, CA 90810

17. The operator/owner shall comply with all provisions of this approved Flare Monitoring and Recording Plan unless the plan is suspended, revoked, modified, reissued, or denied. Violation of any terms of the plan is a violation of Rule 1118.

James Chavez

From: Haddad,Ramsey S. <HADDADRS@airproducts.com>
Sent: Friday, October 3, 2025 2:11 PM
To: Clerk of Board
Cc: Han,Roger
Subject: [EXTERNAL] RE: Interim/Short Variance Petition for Air Products Wilmington (#101656) 4276-17

Hello,

As discussed on the phone, we would like to process this request as an ex parte and short rather than interim and short. Thank you for your help.

Ramsey

From: Haddad,Ramsey S.
Sent: Friday, October 3, 2025 12:28 PM
To: 'clerkofboard@aqmd.gov' <clerkofboard@aqmd.gov>
Cc: Han,Roger <HANHR@airproducts.com>
Subject: Interim/Short Variance Petition for Air Products Wilmington (#101656) 4276-17

Hello,

Attached please find the interim and short variance petition for Air Products Wilmington (Facility 101656). If you have any questions on the content of the petition, please reach out to me.

Air Products is requesting to pay the fees associated with this petition electronically. Please forward over details for invoice payment when available. Thank you

Ramsey Haddad
Air Products and Chemicals, Inc.
EHS Regulatory Programs Manager, CA HYCO
(951) 539-2277
haddadrs@airproducts.com