



## HEARING BOARD STAFF REPORT

**TYPE:** REGULAR VARIANCE

**CASE NO:** 2017-02-R

**DATE:** February 01, 2017

### 1.0 **GENERAL INFORMATION:**

- 1.1 **PETITIONER NAME:** ExxonMobil Production Company (ExxonMobil)
- 1.2 **EQUIPMENT LOCATION:** Petitioner operates the equipment described in the Petition on Offshore lease tract OCS-P-0188
- 1.3 **PERMIT NUMBER(S):** Part 70/Permit to Operate 9100
- 1.4 **FACILITY NAME/ID:** Platform Hondo, FID 08009
- 1.5 **FACILITY DESCRIPTION:** Platform Hondo is part of the *Exxon – Santa Ynez Unit (SYU)* Project stationary source (SSID # 01482). The *Exxon – SYU Project* stationary source consists of five facilities: Platform Harmony (FID 08018), Platform Heritage (FID 08019), Platform Hondo (FID 08009), Las Flores Canyon Oil and Gas Plant (FID 01482), and POPCO Gas Plant (FID 03170). ExxonMobil Production Company (ExxonMobil), an unincorporated division of Exxon Mobil Corporation, is the sole owner and operator of the facility.

- 2.0 **REASON FOR THE VARIANCE REQUEST:** As a result of the Plains All American Pipeline (AAPL) Line 901 failure on May 19, 2015, ExxonMobil experienced facility impacts. Due to these impacts, SYU onshore and offshore facilities are preparing for an extended suspension of operations. On June 16, 2015, all platform gas being sent onshore was terminated. Facility equipment is not operating normally and is being preserved to manage its integrity over the longer term. This preservation process may involve the temporary and intermittent use of equipment, not reflective of normal operating conditions. Line 901 remains shutdown and Plains continues to work with local and federal agencies to reestablish pipeline operations. Although it is unclear when the restart of the Petitioners facility may occur, it is anticipated that all of the equipment will eventually be operated again. Since the facility is not in operation, the Petitioner is requesting coverage from performing measurement and/or recordkeeping of process parameters that do not exist during this extended shutdown. Any emissions related to the granting of this variance are expected to be within permitted limits.

- 3.0 **BACKGROUND:** A Petition for Variance Order 2017-02-R was submitted on January 10, 2017 by ExxonMobil Production Company. If granted, 2017-02-R would grant enforcement relief from February 01, 2017 through January 31, 2018, or the date the facility resumes operations, whichever occurs first. A Regular Variance was requested due to the unknown timeline for the AAPL repair.

- 4.0 **PERMITTING HISTORY:** Since the original permitting of Platform Hondo, PTO 9100 has been re-evaluated numerous times, with the most recent being in March of 2016.



**5.0 COMPLIANCE HISTORY:** The permit conditions listed in 6.0 have historically been performed in compliance with District rules and regulations.

**6.0 REGULATORY ANALYSIS:** The following permit conditions of Part 70 Permit to Operate 9100 and rule requirements are applicable to the variance request:

- **Condition 9.C.2 (Combustion Equipment - Flare)**

- *c. Monitoring: The equipment in this section are subject to all the monitoring requirements listed in District Rule 359.G. The test methods in Rule 359.E. shall be used. In addition, ExxonMobil shall:*
  - *i Flare Volumes - The volumes of gas flared during each planned event shall be monitored by use of District-approved flare header flow meters. Unplanned flaring shall be monitored on an aggregate basis and shall be the difference between the total flare volume and the volume of gas flared during planned flaring events. The meters shall be calibrated and operated consistent with ExxonMobil's District approved Process Monitor Calibration and Maintenance Plan. An event is defined as any flow recorded by the flare header flow meters that exceeds the event flow rate thresholds listed below where the duration is 60 seconds or greater. During an event, any subsequent flows recorded by the flare header flow meter within 5 minutes after the flow rate drops below the minimum detection level of the meter shall be considered as part of the event.*
    - *(1) All planned flaring not classified as an event pursuant to the above definition shall be aggregated as a single quarterly volume and recorded in the Planned Other flaring category. Notwithstanding the above definition of an event, continuous flaring is prohibited for the Planned Other and Unplanned Other flaring categories.*
  - *ii Purge/Pilot Gas - ExxonMobil shall continuously monitor the purge/pilot fuel gas using gas detector tubes (or District-approved equivalent). The readings from these gas detector tubes shall be adjusted upward to take into account the average non-hydrogen sulfide reduced sulfur compounds in the fuel gas (if any) consistent with ExxonMobil's District approved Fuel Gas Sulfur Reporting Plan. ExxonMobil shall record in a log the results of each gas detector tube reading using a District-approved format. ExxonMobil shall also perform annual total sulfur content and HHV measurements of the fuel gas using ASTM or other District-approved methods. ExxonMobil shall utilize District-approved sampling and analysis procedures.*
  - *iii Flaring Sulfur Content - The hydrogen sulfide content of produced gas combusted during flaring events shall be measured on the schedule pursuant to the District-approved Flare Gas Sulfur Reporting Plan using District-approved ASTM methods. On an annual basis, ExxonMobil shall also measure the non-hydrogen sulfide reduced sulfur compounds and these values shall be added to the hydrogen sulfide measurements to obtain the total sulfur content. ExxonMobil shall perform additional testing of the sulfur content and hydrogen sulfide content, using approved test methods, as requested by the District.*
  - *iv Pilot Flame Detection - ExxonMobil shall continuously monitor each pilot to ensure that a flame is present at each pilot at all times.*
- *d. Recordkeeping: The equipment listed in this section is subject to all recordkeeping requirements listed in Rule 359.H. In addition, ExxonMobil shall:*



- *i Flare Event Logs - All planned flaring events shall be recorded in a log. The log shall include: date; duration of flaring events (including start and stop times); quantity of gas flared; total sulfur content; hydrogen sulfide content; high heating value; reason for each planned flaring event, including the processing unit or equipment type involved; the total heat input (MMBtu) per event; and, the type of event (e.g., Planned - Continuous LP, Planned - Other). The volumes of gas combusted and resulting mass emissions of all criteria pollutants for each type of event shall also be summarized for a cumulative summary for each day, quarter and year.*
- *ii The total volume of gas combusted and resulting in mass emissions of all criteria pollutants from unplanned flaring events shall be summarized for each quarter and year.*
- *iii Pilot/Purge Gas Volume - The volume of pilot/purge fuel gas combusted in the flare shall be recorded on a weekly, quarterly and annual basis.*
- *iv Infrequent Flaring Events - ExxonMobil shall track and log the number of planned infrequent flaring events (as defined by District P&P 6100.004) from each processing unit or equipment type in a manner approved by the District.*
- *v Propane Fuel Gas Use - Record in a log or electronic file each usage of propane in a District-approved format and maintain documentation of the sulfur content of each fuel shipment as certified in the fuel suppliers billing vouchers.*
- **Condition 9.C.3 (Fugitive Hydrocarbon Emissions Components)**
  - *b. Operational Limits: Operation of the equipment listed in this section shall conform to the requirements listed in District Rule 331.D and E. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. In addition ExxonMobil shall meet the following requirements:*
    - *i. VRS Use - The vapor recovery and gas collection (VR & GC) systems at Platform Hondo shall be in operation when equipment connected to these systems are in use. These systems include piping, valves, and flanges associated with the VR & GC systems. The VR & GC systems shall be maintained and operated to minimize the release of emissions from all systems, including pressure relief valves and gauge hatches.*
- **Condition 9.C.6(Tanks/Sump/Separators)**
  - *b. Operational Limits: All process operations from the Group A equipment listed in this section shall meet the requirements of District Rule 325, Sections D.3, D.4, E, F and G. All process operations from the Group B equipment listed in this section shall meet the requirements of District Rule 325, Sections F.5 and F.6. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. In addition, ExxonMobil shall:*
    - *i VRS Use - The vapor recovery systems shall be in operation when the equipment connected to the VRS systems at the facility are in use. The VRS system includes piping, valves, and flanges associated with each VRS system. Each VRS system shall be maintained and operated to minimize the release of emissions from all systems, including pressure relief valves and gauge hatches.*
  - *c. Monitoring: The equipment listed in this section are subject to all the monitoring requirements of District Rule 325.H (for Group A units only). The test methods outlined in District Rule 325.G shall be used, as applicable. In addition, ExxonMobil shall:*

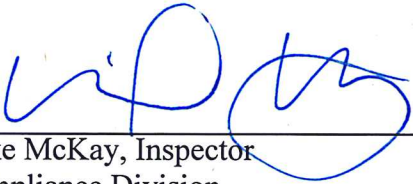
- i Analyze the process streams listed the Process Stream Sampling and Analysis permit condition below.
- d. Recordkeeping: The equipment listed in this section is subject to all the recordkeeping requirements listed in District Rule 325.F. In addition, ExxonMobil shall maintain logs for the information listed below. These logs shall be made available to the District upon request:
  - i On a monthly basis, the total oil emulsion and produced gas production along with the number of days per month of production.
  - ii Process stream analyses data as required from the Process Stream Sampling and Analysis permit condition.
- **Condition 9.C.9 (Compliance Verification Reports)**
  - Twice a year, ExxonMobil shall submit a compliance verification report to the District. Each report shall document compliance with all permit, rule or other statutory requirements during the prior two calendar quarters. The first report shall cover calendar quarters 1 and 2 (January through June) and the second report shall cover calendar quarters 3 and 4 (July through December). The reports shall be submitted by March 1st and September 1st each year. Each report shall contain information necessary to verify compliance with the emission limits and other requirements of this permit and shall document compliance separately for each calendar quarter. These reports shall be in a format approved by the District. Compliance with all limitations shall be documented in the submittals. All logs and other basic source data not included in the report shall be made available to the District upon request. The second report shall also include an annual report for the prior four quarters. Pursuant to Rule 212, a completed District Annual Emissions Inventory questionnaire should be included in the annual report or submitted electronically via the District website. ExxonMobil may use the Compliance Verification Report in lieu of the Emissions Inventory questionnaire if the format of the CVR is acceptable to the District's Emissions Inventory Group and if ExxonMobil submits a statement signed by a responsible official stating that the information and calculations of quantifies of emissions of air pollutants presented in the CVR are accurate and complete to best knowledge of the individual certifying the statement. The report shall include the following information:
    - b. Flare.
      - i. The volumes of gas combusted and resultant mass emissions for each flare category (i.e., Purge/Pilot; Continuous – LP; Continuous – AG; and Planned Other), shall be presented as a cumulative summary for each day, quarter and year. Unplanned flaring shall be presented as a cumulative summary for each quarter and year only.
      - iii. The highest total sulfur content and hydrogen sulfide content observed each week in the flare header.
      - iv. The monthly total sulfur content of flare purge and pilot fuel gas.
      - v. A copy of the Flare Event Log for the reporting period. Include a separate listing of all planned infrequent events that occurred more than four times per year from the same cause from the same processing unit or equipment type.
      - vi. Flare Gas Sulfur Content Logs for each platform per the District approved Flare Gas Plan



- vii. Rule 359.H Annual report for each platform per the District approved Flare Gas Plan
- e. Pigging. For each pig receiver and launcher, the number of pigging events per day, quarter and year.
- f. Tanks/Sumps/Separators.
  - i. On a monthly basis, the total oil emulsion and produced gas production along with the number of days per month of production.
- h. General Reporting Requirements.
  - iv. The produced gas, produced oil, fuel gas, and produced wastewater process stream analyses as required by the Process Stream Sampling and Analysis condition of this permit.
- **Condition 9.C.12 (Process Stream Sampling and Analysis)**
  - ExxonMobil shall sample analyze the process streams listed in Section 4.12 of this permit according to the methods and frequency detailed in that Section. All process stream samples shall be taken according to District approved ASTM methods and must follow traceable chain of custody procedures. [Re: District Rules 325, 331, 333, PTO 9100]
- **Condition 9.C.15 (Process Monitoring Systems - Operation and Maintenance)**
  - All platform process monitoring devices listed in Section 4.11.2 of this permit shall be properly operated and maintained according to manufacturer recommended specifications. ExxonMobil shall implement the District approved Process Monitor Calibration and Maintenance Plan for the life of the project. This Plan details the manufacturer recommended maintenance and calibration schedules. Where manufacturer guidance is not available, the recommendations of comparable equipment manufacturers and good engineering judgement will be utilized. [Re: PTO 9100]
- **Condition 9.C.18 (Facility Throughput Limitations)**
  - Platform Hondo production shall be limited to a monthly average of 100,000 barrels of oil emulsion per day and 85 million standard cubic feet of produced gas per day. ExxonMobil shall record in a log the volumes of oil emulsion and gas produced and the actual number of days in production per month. The above limits are based on actual days of operation during the month. [Re: PTO 9100]
- **Rule 325 (Crude Oil Production and Separation)**
  - D (Requirements for Storage Tanks)
    - 1. No person shall place, hold or store any crude oil in any tank battery unless all storage tanks in the tank battery, including wash tanks, produced water tanks and wastewater separators, are equipped with a leak-free, properly installed, maintained, and operated vapor recovery system. The vapor disposal portion of the vapor recovery system shall consist of one of the following:
      - b. Any other system which processes all vapors and has a reactive organic compound vapor removal efficiency of at least 90% by weight.
  - E (Requirements for Produced Gas)
    - 1. The emissions of produced gas shall be controlled at all times using a properly maintained and operated system that directs all produced gas, except gas used in a tank battery vapor recovery system, to one of the following:

- b. *A flare that combusts reactive organic compounds.*
- F (Requirements – Recordkeeping)
  - 4. *The operator shall maintain the following records annually:*
    - b. *The maximum vapor pressure of the liquid*
    - d. *The American Petroleum Institute gravity of the oil in the tanks.*
- **Rule 359 (Flares and Thermal Oxidizers)**
  - F. *Source Testing*
    - *Any owner or operator of a source subject to this Rule shall perform the following:*
      - 2. *Measure (a) the purge gas fuel sulfur content, if such gas is not a PUC quality gas or an inert gas, and (b) the gaseous fuel sulfur content and the net heating value for all gaseous fuel which constitute planned flaring. Measurement shall be performed triennially, except for sources which require federal Part 70 operating permits, in which case annual or more frequent testing shall be performed as required by applicable Part 64 Rules.*
  - G. *Monitoring and Recordkeeping*
    - *Any owner or operator of a source subject to this Rule shall perform the following, as applicable:*
      - 1. *Monitor the volume (in scf/month) of all gaseous fuel flared as part of planned/unplanned flaring, if subject to Section D.3. A flare volume monitoring plan shall be submitted to the Control Officer for approval as part of the flare minimization plan. A record of monitored volumes shall be kept by the owner or operator in a format prescribed and approved by the Control Officer, and shall be available for inspection upon request by the District.*
  - H. *Reporting*
    - *Any owner or operator of a source subject to this Rule shall provide the following reports, as applicable:*
      - 2. *The result of each test report for (a) purge gas S content (if applicable), (b) gaseous fuel S content and (c) gaseous fuel net heating value, obtained pursuant to Section F.2, shall be submitted to the Control Officer by March 1st of the year following the calendar year on which the testing occurred.*
      - 3. *Data for the monthly volumes (in scf/month) of gas flared per (i) planned continuous and (ii) planned intermittent flaring categories, obtained pursuant to Section G.1, shall be submitted annually to the Control Officer. Each calendar year data report shall be submitted by March 1st of the following calendar year.*

- 7.0 **EMISSIONS ANALYSIS:** Any emissions related to the granting of this variance are expected to be within permitted limits.
- 8.0 ***RESERVED***
- 9.0 **OTHER FACTORS:** none
- 10.0 **DISTRICT RECOMMENDATION:** The APCD supports the Petitioner's request and recommends the granting of a Regular Variance for ExxonMobil as listed in the attached draft variance order.
- 11.0 **ATTACHMENTS:**
- Attachment 1 – Draft Regular Variance Order 2017-02-R

  
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Mike McKay, Inspector  
Compliance Division

02/18/17  
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Date