



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT

Pacific OCS Region

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To: Necitas C. Sumait, Regional Supervisor
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From: Chima Ojukwu, Supervisor, Lease Management Section,
BOEM Pacific Regional Office

RE: Completion of the Periodic Review Development and Production Plan for
Platform Harmony

Date:

Background

Under its regulations, the Bureau of Ocean Energy Management (BOEM) will periodically review the activities conducted under the approved Development and Production Plan (DPP) and may require operators to submit updated information on their activities. BOEM will base the frequency and extent of this review on the significance of any changes in available information and onshore or offshore conditions affecting or affected by the activities in the approved DPP.

On May 22, 2024, BOEM approved the Record Title Assignment for the offshore California Santa Ynez Unit (SYU) properties (Lease Numbers: OCS-P 0180, 0181, 0182, 0183, 0187, 0188, 0189, 0190, 0191, 0192, 0193, 0194, 0195, 0326, 0329 and 0461) from Exxon Mobil Corporation (BOEM Co. No. LA 00276) to Sable Offshore Corp. (BOEM Co. No. LA 03726). Sable plans a phased return-to-production of the SYU properties beginning with Platform Harmony.

SYU has been shut-in since June 2015 following the May 2015 Refugio onshore pipeline oil spill and expects a return to production in 2025. This oil spill occurred at an onshore segment of the pipeline that is outside the jurisdiction of BOEM and Bureau of Safety and Environmental Enforcement (BSEE).

BOEM Pacific Regional Office (BOEM Pacific) reviewed the DPP for Platform Harmony pursuant to the Outer Continental Shelf Lands Act (OCSLA) and the BOEM implementing regulations at 30 CFR § 550.284(a), which states, “The Regional Supervisor will periodically review the activities you conduct under your approved EP, DPP, or DOCD and may require you to submit updated information on your activities. BOEM will base the frequency and extent of this review on the significance of any changes in available information and onshore or offshore conditions affecting, or affected by, the activities in your approved EP, DPP, or DOCD.”

This memorandum provides the results of BOEM’s periodic review of the DPP for Platform Harmony. BOEM will complete the review of the DPPs for two other platforms in the SYU, Heritage and Hondo, after BSEE pre-production safety inspections are completed.

Review Process and Determination

From November 2024 to present, BOEM Pacific identified and reviewed the DPP for Platform Harmony. The documents reviewed are listed below and each is further discussed in the following section.

1. “Programmatic Environmental Impact Statement for Oil and Gas Decommissioning Activities on the Pacific Outer Continental Shelf,” BOEM Pacific and BSEE Pacific Regional Office (BSEE Pacific) (October 2023 EIS No. 2023-0145) (Decommissioning PEIS).
2. Final Environmental Impact Report (EIR) for the Rincon Phase 2 Decommissioning Project, California State Lands Commission (CSLC), July 2024 (Final EIR for Rincon).
3. Reports on the May 2015 onshore Refugio oil spill affecting the pipeline that transports production from Federal platforms in SYU to the onshore processing facility (Reports on May 2015 Refugio Oil Spill).
 - A. “2015 Refugio Oil Spill After-Action Report and Improvement Plan,” Santa Barbara County Office of Emergency Management, July 6, 2016 (SB OEM After-Action Report).
 - B. “REFUGIO OIL SPILL RESPONSE EVALUATION REPORT: Summary and Recommendations from the Office of Spill Prevention and Response,” California Department of Fish and Wildlife Office of Spill Prevention and Response (CDFW Spill Response), May 2016 (CDFW Report).
 - C. “Refugio Beach Oil Spill Final Damage Assessment and Restoration Plan/Environmental Assessment,” California Department of Fish and Wildlife, California State Lands Commission, California Department of Parks and Recreation, University of California, The Department of the Interior, U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration, June 2021 (Damage Assessment).
 - D. “Failure Investigation Report Plains Pipeline, LP, Line 901 Crude Oil Release, May 19, 2015, Santa Barbara County, California,” Pipeline and Hazardous Materials Safety Administration (PHMSA), May 2016 (PHMSA Report).
 - E. Consent Decree. *United States v. Plains All American Pipeline, L.P. and Plains Pipeline, L.P.*, Civil Action No. 2:20-cv-02415 (C.D. Cal 2020) (Consent Decree).
4. Requirements associated with oil spill blowout (30 CFR § 550.243(h)) and oil spill financial responsibility (OSFR) for offshore facilities (30 CFR Part 553) (Oil Spill Blowout and OSFR).

5. Letter titled “Periodic Review of SYU Development and Production Plans” from BSEE Pacific, February 27, 2025 (BSEE Pacific Inspection Result Letters).
6. Annual Plan of Operation (APO) provided to BSEE Pacific by SYU operators for every year between 2010 and 2015 (prior to 2015 shut-in), including proposed unit development and operation activities (2010 to 2015 APOs).
7. “Offshore Oil and Gas Development and Production Activities in the Southern California Planning Area, Biological Assessment, Endangered and Threatened Species,” BOEM, September 2023 (2023 BA) and “Endangered Species Act Section 7(a)(2) Biological and Conference Opinion: Development and Production of Oil and Gas Reserves and Beginning Stages of Decommissioning within the Southern California Planning Area of the Pacific Outer Continental Shelf Region,” (consultation #2023-02183 issued on February 27, 2024 (2024 BiOp)).
8. Other Information Reviewed.
 - A. “Programmatic Environmental Assessment of the Use of Well Stimulation Treatments (WST) on the Southern California Outer Continental Shelf,” BOEM Pacific and BSEE Pacific, February 2016 (PEA on WST).
 - B. Historical data for flaring and venting activity reported for the SYU (Flaring).
 - C. “Port Access Route Study: The Pacific Coast From Washington to California” (Docket No. USCG–2021–0345) as published by the United States Coast Guard (USGS), June 5, 2023 (PAC-PARS).
 - D. National Pollutant Discharge Elimination System (NPDES) Permit issued by the U.S. Environmental Protection Agency (EPA) (NPDES Permit).
 - E. “Worst Case Discharge Analysis (Volume I)” and “Oil Spill Response Equipment Capabilities Analysis (Volume II),” BSEE, February 29, 2016 (WCD Reports).

The review resulted in the following findings:

1. No additional revisions to the DPP for Platform Harmony are needed at this time.
2. Recent revisions to all DPPs in the BOEM Pacific Region, including for Platform Harmony, were required and completed in November 2024 to incorporate mandatory Terms and Conditions from the 2024 BiOp.

Findings of Periodic Review of Platform Harmony DPP

1. Decommissioning PEIS.
 - A. No revision required to the Platform Harmony DPP due to the contents of this document. The Decommissioning PEIS is a programmatic document that does not prescribe outcomes; BOEM Pacific will conduct further project-specific

environmental review when decommissioning applications are submitted to BSEE Pacific.

2. Final EIR for Rincon.

- A. No revision required to the Platform Harmony DPP due to the contents of this document. The State of California's ongoing decommissioning efforts for oil and gas facilities in State waters are within the level of impacts analyzed in the original Platform Harmony DPP and associated Final Environmental Impact Statement/Report (EIS/EIR). The decommissioning of Rincon analyzed in the EIR, and other reviews done by the CSLC, did not describe those actions as overlapping with the Platform Harmony DPP.

3. Reports on the May 2015 Refugio Oil Spill.

A. Santa Barbara (SB) Office of Emergency Management (OEM) After-Action Report.

- i. All American Pipeline, L.P. and Plains Pipeline, L.P. (Plains) were the owner and operator of the pipeline (Line 901) that leaked onshore and migrated to waters offshore California. The Line 901 pipeline section which ruptured is entirely onshore and not regulated by either BOEM or BSEE.
- ii. No revision required to the Platform Harmony DPP. The purpose of the SB OEM 2015 Refugio Oil Spill After-Action Report and Improvement Plan is to identify areas of strength and opportunities for improvement based on the lessons learned associated with the County's response to the onshore oil spill that migrated to State waters. The report focuses on the planning, organization, equipment, training, and exercise capabilities, and opportunities for improvement specific to the County.

B. CDFW Report.

- i. No revision required to the Platform Harmony DPP due to the contents of this document. This CDFW Report is an After-Action Report summarizing the CDFW Spill Response efforts for the May 19, 2015, Refugio Oil Spill. CDFW Spill Response serves as the lead State agency for oil spills in State waters and is the designated State On-Scene Coordinator for oil spills responses. The CDFW Report is an internal evaluation of performance and documents successes, challenges, best practices, and recommendations for improvement for State agency response. The CDFW Report contains a list of recommendations to assess CDFW's internal performance during the Refugio oil spill, including recommendations on coordination with Federal agencies (although the report does not specifically mention BOEM or BSEE). The current BSEE-approved Oil Spill Response Plan (OSRP) for SYU, dated November 2024, references coordination of spill response activities with CDFW. BSEE Oil Spill Preparedness Division is responsible for oversight and compliance with OSRP.

C. Damage Assessment.

- i. This Damage Assessment and Restoration Plan and Environmental Assessment (DARP/EA) has been prepared by the California Department of Fish and Wildlife, California State Lands Commission, California Department of Parks and Recreation, University of California, the Department of the Interior (DOI), U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration relating to the May 19, 2015, Refugio Beach Oil Spill.
- ii. No revision required to the Platform Harmony DPP due to the contents of this document. This damage assessment mostly considers natural resource damages within State waters and onshore.

D. PHMSA Report.

- i. On May 19, 2015, PHMSA issued a Corrective Action Order (CAO - CPF No. 5-2015-5011H, as amended) to shut down and purge Line 901. PHMSA later conducted an investigation and issued an investigative report on May 19, 2016. In their failure investigation report on the Refugio Oil Spill, PHMSA indicated that the proximate or direct cause of failure on Line 901 was external corrosion. At the time of rupture, Line 901 was operated by Plains. Line 901 transported heated crude from the ExxonMobil storage tanks in Las Flores Canyon westward to the Gaviota Pump Station, at a distance of approximately ten and seven tenths (10.7) miles. The pipeline section which ruptured is entirely onshore and not regulated by either BOEM or BSEE.
- ii. Findings from the PHMSA report state that historical cathodic protection records for Line 901 were reviewed and revealed protection levels that are typically sufficient to protect non-insulated coated steel pipe. However, the report notes that Lines 901 and 903 were insulated and there was an increasing frequency and extent of corrosion anomalies noted during in-line inspections. Ultimately PHMSA determined that the pipeline's cathodic protection system in the onshore portion of the pipeline outside BOEM and BSEE jurisdiction was not effective in preventing corrosion from occurring beneath the pipeline's coating and insulation system. Cathodic protection requirements to mitigate corrosive events are required by the DPP.
- iii. No revision required to the Platform Harmony DPP due to the contents of this document. Cathodic protection is required in BSEE regulations at 30 CFR § 250.1002. BSEE inspections provide oversight into its inclusion in pipelines, called rights-of-way (ROW). No information contained in the PHMSA report implicates operations at the Las Flores facility or any of the offshore facilities as a contributing factor to the Refugio Oil Spill. Further, BSEE regulates pipelines within Federal waters. For example, BSEE monitors pipelines and inspects the facilities for safety and compliance with regulatory standards. The conditions for approval of the pipeline ROWs between Platform Heritage and Platform Harmony

requires that the operator keep oil and gas pipelines in good working order. (*See* number 5 below.)

E. Consent Decree.

- i. On May 19, 2015, PHMSA issued a Corrective Action Order (CAO - CPF No. 5-2015-5011H, as amended) to shut down and purge Line 901. PHMSA investigated and issued an investigation report on May 19, 2016. A consent decree was signed between the parties, the Trustees, which include DOI; United States Department of Commerce, on behalf of the National Oceanic and Atmospheric Administration; CDFW; California Department of Parks and Recreation; California State Lands Commission; and the Regents of the University of California, and the Defendants, Plains, in March 2020.
- ii. The Consent Decree is an order approved by the U. S. District Court for the Central District of California before the trial of any claims and without adjudication or admission of any issue of fact or law and with the consent of the Parties. In the Consent Decree, the Defendants, Plains, agreed to the upgrade of leak detection system and additional training for employees who monitor the leak detection system. After the Refugio oil spill, the Trustees and the Defendants entered a cooperative Natural Resource Damage (NRD) Assessment process pursuant to 15 CFR § 990.14, the Trustees and Defendants jointly and independently planned and conducted a number of injury assessment activities, including gathering and analyzing data and other information that the Trustees used to determine and quantify resource injuries and damages. The Trustees identified several categories of injured and damaged natural resources and determined the cost to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources. By entering into this voluntary Consent Decree, Defendants did not admit or agree that the Trustees' NRD findings and determinations were accurate. Defendants instead agreed to several actions they would undertake without admitting fault.
- iii. No revision required to the Platform Harmony DPP due to the contents of this document. DPP already requires training for Emergency Response. BSEE inspected the leak detection system on Platform Harmony. The operator made several updates to components that were approved by BSEE. BSEE determined the leak detection system meets regulatory requirements.

4. Oil Spill Blowout and OSFR.

- A. Regarding oil spill blowout, BOEM Pacific reviewed requirements regarding Blowout Preventers (BOP), OSRP, and worst-case discharge (WCD) scenarios.
 - i. The approved WCD scenario from 2011 includes a statement that the Blow Out Prevention Equipment (BOPE) meets or exceeds the standards as defined in regulations 30 CFR Part 250.

- ii. Per 30 CFR Part 254, BSEE Pacific reviews and approves OSRPs. BSEE Pacific approved the OSRP for the SYU in November 2024.
- iii. The WCD scenario is comprised of three components: 1) topside discharge, 2) pipeline rupture, and 3) uncontrolled wellbore (blowout). BSEE Pacific is responsible for verifying the topside and pipeline rupture components of the scenario, while BOEM Pacific is responsible for calculating the blowout components. BOEM Pacific also reviewed the WCD Reports (*See* 8(E) below).
- iv. The WCD for the blowout component has remained the same since first evaluated by Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), a predecessor agency to BOEM, in 2011. While no immediate action is required, BOEM may need to reevaluate the WCD for the blowout scenario based on reports of reservoir conditions submitted to BOEM after resumption of continuous production because certain factors could potentially affect the WCD, including:
 - a. Changes in downhole reservoir conditions within the Monterey formation may affect the existing WCD. Information contained in the operator reports below may be cause for re-evaluation of the blowout WCD.
 - 1. 30 CFR § 550.1153 requires the operator to conduct annual Bottomhole Pressure (BHP) surveys on key wells to establish an average reservoir pressure. BHP surveys must be submitted to BOEM within 60 days after the date of the survey.
 - 2. 30 CFR § 550.1155 requires an operator to submit Sensitive Reservoir Information (SRI) reports to BOEM within 45-days of resuming continuous production.
 - b. Variations in the drilling scenario (i.e., changes in drilling targets, proposed well trajectories, and casing programs) which target pre-Monterey sandstone formations may affect the existing WCD. Should drilling resume, BOEM and BSEE would coordinate their respective review of any proposed well prior to drilling. These reviews typically occur when the operator submits an Application for Permit to Drill (APD) to BSEE.
- B. An operator is required to demonstrate OSFR for a Covered Offshore Facility based on a table matrix depicted in 30 CFR § 553.13(b)(1). The financial amount is based on a tiered WCD volume amount. As of March 13, 2025, BOEM Pacific has confirmed the SYU operator is in compliance with the OSFR coverage requirements.
- C. No revision required to the Platform Harmony DPP due to the contents of this document. BOEM reviewed oil spill blowout information in the DPP and found it compliant with the relevant BOEM regulations.

5. BSEE Pacific Inspection Result Letters.

- A. To address concerns regarding the continued safe operation of the SYU Platform Harmony, BOEM Pacific made a request to BSEE Pacific, asking for a summarization of its inspection and testing program and for BSEE Pacific to indicate if the results of the SYU inspections and testing are in accordance with regulatory requirements.
- B. BSEE Pacific's inspection results for the offshore pipelines associated with Platform Harmony and under BSEE jurisdiction are complete. BSEE Pacific provided a summary of inspection results for the Platform Harmony pipelines from 2023 and 2024. BSEE deemed all pipelines were in compliance with 30 CFR § 250.1005(a).
- C. BSEE Pacific provided a summary to BOEM Pacific of the platform inspection program. At the time, Platform Harmony Level I inspections were "deemed in compliance with 30 CFR § 250.919," while Level II-IV inspections for Platform Harmony were under review. In a later letter dated April 4, 2025, BSEE informed BOEM that all safety inspections required for the restart of Platform Harmony were complete and all regulatory requirements met.
- D. No revision required to the Platform Harmony DPP due to the contents of these documents. Because SYU is being restarted in phases, BSEE will provide results from ongoing inspections to BOEM that are specific to each platform upon BSEE completion. Currently, Platform Harmony has met all BSEE inspection requirements while inspections at the other two other platforms, Heritage and Hondo, remain ongoing.

6. 2010 to 2015 APOs.

- A. BOEM Pacific coordinated with BSEE Pacific to receive information about activities captured in the Annual Plans of Operation (APOs) for SYU to determine if any existing or currently planned future activities would trigger a revision of the approved DPP. An APO contains information about the planned operations of the Platform for the year. Due to the shut-in of SYU in June 2015 following the May 2015 Refugio Oil Spill, there have not been updated APOs as of the time of this review.
- B. No revision required to the Platform Harmony DPP due to the contents of these documents. BOEM Pacific determined the information provided in the APO does not trigger a DPP revision.

7. 2023 BA and 2024 Biological Opinion.

- A. No revision required to the Platform Harmony DPP due to the contents of these document. BOEM Pacific entered consultation with the National Marine Fisheries Service (NMFS) resulting in a biological opinion in 2024, the "Endangered Species

Act Section 7(a)(2) Biological and Conference Opinion: Development and Production of Oil and Gas Reserves and Beginning Stages of Decommissioning within the Southern California Planning Area of the Pacific Outer Continental Shelf Region,” (consultation #2023-02183 issued on February 27, 2024 (2024 BiOp)).

- B. BOEM’s 2023 BA supported the BiOp and updated species information, potential oil spill trajectories, and information from nearby oil spills. The assessment included a discussion of physical and behavioral effects to endangered species from sound (noise), collision hazards, water pollution, and oil spills.
 - C. The 2024 BiOp with NMFS includes non-discretionary terms and conditions related to reporting. On November 20, 2024, BOEM Pacific notified all southern California operators of mandatory DPP revisions to incorporate the new terms and conditions described in the 2024 BiOp. This DPP revision added new reporting requirements related to vessel use and the unlikely event of a collision with marine wildlife. Sable completed this mandatory revision in November 2024.
8. BOEM Pacific reviewed the following other information sources:
- A. PEA on WST.
 - i. BSEE Pacific confirmed that no WSTs are underway or proposed in SYU.
 - ii. No revision required to the Platform Harmony DPP due to the contents of this document. No revision to the DPP is required at this time because no WST is taking place or proposed at this time. If any lessee were to propose a WST that was not already a part of an approved DPP, the lessee would be required to provide an update to their DPP and BOEM Pacific would be required to conduct additional analyses under the National Environmental Policy Act to support any revised plan decision.
 - B. Flaring.
 - i. BOEM Pacific reviewed gas disposition volumes reported in thousand-cubic feet (MCF) via monthly Oil and Gas Operation Reports, type B (OGOR-B) (See 30 CFR § 250.1163 for reporting requirements). These monthly reports stored within the Technical Information Management System (TIMS) contain gas disposition as reported at the unit level, which here is a sum of all the platforms in SYU. BOEM Pacific queried TIMS for monthly gas disposition coded to flaring and venting between January 31, 1985, and April 18, 2015, since the shut-in of SYU, which is the most recent data available in the TIMS database.
 - ii. No revision required to the Platform Harmony DPP due to the contents of these documents. The DPP contains a description of flaring equipment as part of a pressure relief system. Therefore, the DPP recognizes the need for flaring but does not state any specific volume limits. Outer continental shelf (OCS) Environmental Assessments show the proposed activities conducted through the life of the project for the three SYU platforms were expected to exceed the DOI

air quality exemption (MMS regulations 30 CFR § 250.57) and were therefore analyzed. The air emission analysis showed that peak annual emissions for the unit would occur in 1992 and 2000, depending on the field development option. Results from this analysis were reported in emission rates by compound. Reported data shows that flaring activity reached its' peak during January 1994 at 578 MCF per day. This roughly corresponds with the expected peak in air emissions during 1992. Immediately prior to shut-in (2015) flaring for the entire unit was averaging 250 MCF per day over a 12-month period. This volume is less than half the volume flared during the peak period. SYU has not reported any flaring since June 2015. Flaring is within the limits found within the Platform Harmony DPP approval.

- iii. Air quality impacts from flaring fall under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD), which receives its authority by delegation from the EPA. On September 4, 1992, the EPA Administrator promulgated requirements (40 CFR Part 55) to establish air pollution control requirements for permitting, monitoring, fees, compliance, and enforcement for OCS sources subject to the CAA. EPA delegated authority to the SBCAPCD on November 8, 1993, to implement and enforce the requirements of 40 CFR Part 55. EPA delegated authority to the Ventura County Air Pollution Control District on January 27, 1994. Regulations at 40 CFR § 55.14 require OCS sources to comply with applicable onshore air quality rules in the corresponding onshore area when an OCS source is located at or within 25 nm from the State Seaward Boundary. Separate flaring and venting regulations are implemented by BSEE under 30 CFR § 250.1160 and 30 CFR § 250.1161. These regulations outline conditions when gas may be flared or vented, some of which require approval by the BSEE Regional Supervisor.
- iv. A review of information on the SBAPCD website shows approved permits to operate for the Platform Harmony in SYU. The permit for Platform Harmony (facility number 08018) can be viewed on the SBAPCD website here <https://map.ourair.org/>.

C. PAC-PARS.

- i. The U. S. Coast Guard (USCG) Traffic Separation Scheme (TSS) and proposed fairways take existing platform operations into consideration. The study established voluntary fairways for coastwise and nearshore vessel traffic to promote safety of navigation in the study area while the TSS is a specific area where vessel traffic is regulated to reduce the risk of collisions by separating opposing traffic flows.
- ii. No revision required to the Platform Harmony DPP due to the contents of this document. These requirements are voluntary, managed by USCG, and do not require changes to the DPP.

D. NPDES Permit.

- i. No revision required to the Platform Harmony DPP due to the contents of this document. Platform Harmony is permitted and covered under NPDES General Permit CAG280000 General Permit: Southern California Offshore Oil and Gas Exploration, Development and Production Operations. The permit establishes effluent limitations, prohibitions, reporting requirements, and other conditions on discharge from oil and gas facilities engaged in production, field exploration, developmental drilling, well completion, well treatment operations, well workover, and abandonment operations. The EPA issued NPDES General Permit CAG280000 on December 20, 2013; it is now expired. However, under 40 CFR § 122.6 an expired permit continues in force under 5 USC § 558(c) until the effective date of a new permit. BOEM Pacific is in communication with EPA as they work to re-issue the permit.

E. WCD Reports.

- i. Volume I, Worst Case Discharge Analysis, presents regional profiles regarding the range and type of WCDs associated with U.S. offshore drilling, and illustrates their potential for impacting the environment through oil spill fate and transport modeling. Volume II, Oil Spill Response Equipment Capabilities Analysis, presents a series of related analyses, including spill modeling using different response countermeasures, to reduce the potential for impacts, and develop recommendations for oil spill response plan requirements for all Regions within BSEE.
- ii. No revision required to the Platform Harmony DPP due to the contents of these documents. Oil spill blowout (30 CFR § 550.243(h)) and oil spill financial responsibility for offshore facilities (30 CFR Part 553) were considered and are compliant as discussed above (*See* number 4).

Recommended Next Steps

1. BOEM Pacific will notify the SYU operator that the review of the SYU DPP covering Platform Harmony is complete and that the review resulted in the following findings:
 - A. No revision required to the Platform Harmony DPP at this time.