

7200

December 12, 1997

Mr. M. P. Kelly  
Operations Integrity Manager  
Exxon Company, U.S.A.  
P.O. Box 5025  
Thousand Oaks, CA 91359-5025

Re: Platform Heritage to  
Platform Harmony Gas Pipeline -  
DPP Revisions Approval and  
Lease Term Application Approval

Dear Mr. Kelly:

Exxon Company, U.S.A. (Exxon), on August 25, 1997, submitted a Project Description, an Environmental Report and a Development and Production Plan (DPP) revision to the Minerals Management Service (MMS). The DPP revisions are for a 12.75 inch outside diameter gas pipeline from Platform Heritage to Platform Harmony in the Santa Ynez Unit (SYU). Additionally, Exxon submitted a Lease Term Pipeline application on October 1, 1997 and Amendments to the Project Description on October 23, 1997.

#### **DPP Background**

The SYU DPP was approved on September 20, 1985 after a Joint Environmental Impact Statement/Report (EIS/EIR) was prepared by the MMS, the California State Lands Commission and the County of Santa Barbara and after the California Coastal Commission (CCC) concurred with Exxon's consistency certifications for both the Outer Continental Shelf (OCS), state waters and onshore portions of the project.

In 1987, Exxon proposed revisions to the SYU DPP. A summary of these revisions was sent out for review and comment to other agencies, including the CCC. MMS conducted a technical and an environmental review of these revisions, including the preparation of an Environmental Assessment (EA). In January 1988, the CCC agreed with its Executive Director's determination that no additional consistency review of these revisions was needed. The MMS approved these revisions to the DPP on April 4, 1988.

In 1991, Exxon proposed revisions to the SYU DPP concerning the SYU pipelines and power cables. On November 13, 1991, the CCC agreed with its Executive Director's determination that no additional consistency review of Exxon's proposed revisions to its DPP was needed. Additionally, the revisions included activities previously reviewed by the CCC and did not cause coastal zone effects substantially different from those reviewed by the CCC in the original consistency certification. The MMS approved the revisions to the DPP on December 20, 1991.

### **Current Proposal**

Exxon currently proposes to install a 7 mile long, 12.75" outside diameter gas pipeline from Platform Heritage to Platform Harmony in-lieu-of a pipeline to shore. The current proposal also includes some topside modifications and the installation of a steel catenary riser (SCR) on Platform Harmony. The window for installation of the pipeline is March to December 1998 and the installation is expected to take 2 to 4 weeks. Exxon additionally proposes to use a dynamically positioned (DP) vessel for the pipeline installation. This would eliminate anchoring during the installation operations. Anchoring by the DP vessel and support vessel is not planned during pipeline installation activities for the proposed project. Although unplanned, anchoring could occur during the project under emergency/safety operations. Also, as part of the proposed project and this approval, Exxon has committed to fulfilling mitigation measures which were included in Exxon's Project Description and Environmental Report. These mitigation measures can be found in Enclosure 3.

Additionally, Exxon proposes to design, fabricate, install, and test the Platform Heritage to Platform Harmony gas pipeline, pipeline risers, and pig launcher and receiver in accordance with 30 CFR 250 Subpart J. Other piping and components on the platform would be designed, fabricated, installed and tested in accordance with 30 CFR 250 Subpart H.

### **Project Review**

The MMS has completed a technical, regulatory and environmental review of Exxon's proposed project and revisions to the DPP. As part of this review, Exxon's Environmental Report and Project Description were sent to 14 Federal, State, and local agencies, and the Joint Oil/Fisheries Liaison Office.

The MMS environmental review of Exxon's proposal involved the preparation of an EA. The EA was completed on December 3, 1997. Based on this environmental review, the MMS has concluded that the proposal does not constitute a major Federal action significantly affecting the quality of the human environment and the DPP revision is consistent with the protection of the marine, coastal and human environmental. The review resulted in the Finding Of No Significant Impacts (FONSI). A copy of the EA and FONSI was provided to Exxon on December 8, 1997.

In addition to the environmental review, an in-depth technical, regulatory, and safety review of Exxon's proposal was conducted. This included consultation with the MMS Office of Structural and Technical Support in the Gulf of Mexico Region. Our review concludes that the proposal is based upon sound engineering and scientific principles and meets or exceeds regulations in CFR 250 and other regulatory requirements, including 30 CFR 250 Subpart H and J for the gas pipeline and piping.

On December 12, 1997, the CCC's agreed with its Executive Director's determination that no additional consistency review of Exxon's proposed revisions to its DPP under the CZMA was necessary. Additionally, the revisions to the DPP will not cause coastal zone effects substantially different from those reviewed by the CCC, and do not materially alter the existing consistency certification concurrence for the SYU.

### Approvals

Therefore, based upon our technical, regulatory, safety, and environmental review of the documents listed in this letter, including all of Exxon's mitigation measures, the MMS hereby approves Exxon's proposed revisions to the approved SYU DPP for the Platform Heritage to Platform Harmony gas pipeline and the Lease Term Pipeline application. The approval is subject to all conditions found in Enclosures 1 and 2.

Before proceeding with the installation operations and associated activities, Exxon must contact the MMS District Supervisor, Camarillo to obtain any additional approvals and/or satisfy any additional requirements that he may have.

Additionally, the Santa Barbara APCD reserves the right vested under their air quality regulatory authority to inspect any control device, fuel, marine vessel engine or other emission sources expected to be used during the pipeline installation.

If you have any questions, please feel free to call Ms. Theresa Bell at (805) 389-7554 or myself at (805) 389-7560.

Sincerely,

*Thomas W. Dunaway*

Thomas W. Dunaway  
Regional Supervisor  
Development, Operations and Safety

Enclosures (3)

cc: Mr. Eugene Bromley, U.S. Environmental Protection Agency (w/encl.)  
Mr. Ed Cassano, Channel Islands National Marine Sanctuary (w/encl.)  
Mr. David Castanon, U.S. Army Corps of Engineers (w/encl.)  
Dr. William Hogarth, National Marine Fisheries Services (w/encl.)  
Ms. Diane Noda, U.S. Fish and Wildlife Service (w/encl.)  
Mr. Ed Ondak, U.S. Department of Transportation (w/encl.)  
Capt. E. E. Page, 11th U.S. Coast Guard District (w/encl.)  
Mr. Tim Setnicka, National Park Service (w/encl.)  
Mr. Richard Nitsos, California Dept. of Fish and Game (w/encl.)  
Mr. Pete Bontadelli, Oil Spill Prevention and Response Office (w/encl.)  
Ms. Susan Hansch, California Coastal Commission (w/encl.)  
Mr. Paul B. Mount II, California State Lands Commission (w/encl.)  
Mr. Dwight Sanders, California State Lands Commission (w/encl.)  
Mr. William Douros, County of Santa Barbara (w/encl.)  
Mr. Terry Dressler, Santa Barbara Air Pollution Control District (w/encl.)  
Dr. Craig Furaro, Joint Oil/Fisheries Liaison Office (w/encl.)

bcc: File: 1703-02a(1) Santa Ynez Unit DPP General Correspondence (w/ encl.) (w/original)  
1502-01a Santa Ynez Unit, Pipeline Permits (w/encl.) (w/copy)

RD (w/encl.)

B. Danenberger (w/encl.)

Chron (w/encl.)

RS/OEE (w/encl.)

DS/CMD (w/encl.)

C/EAS (w/encl.)

C/PPPS (w/encl.)

RSnyder (w/encl.)

JGShackell (w/encl.)

TBell (w/encl.)

ODOS:TBell/pfr:wp61:doc.:ltr.ppp:APPROV2.WPD

**Conditions of Approval**  
**Platform Heritage to Platform Harmony Gas Pipeline**  
**Santa Ynez Unit**  
**December 12, 1997**

**GENERAL**

1. Exxon shall assume sole responsibility for complying with applicable Federal, State and local laws and requirements and for obtaining all required permits related to this proposal prior to commencing pipelaying operations or activities on the OCS.
2. Exxon shall conduct the Platform Heritage to Platform Harmony gas pipeline installation operations as described in the documents submitted to the MMS for this project and shall fulfill all the commitments made in these documents.
3. Exxon shall submit to the Regional Supervisor, Office of Development, Operations and Safety (RS, ODOS) revised pages to the Santa Ynez Unit Development and Production Plan reflecting the approved changes within 45 days of this approval.
4. Exxon shall comply with all regulatory requirements provided in 30 CFR 250 Subpart J - Pipelines and Pipeline Rights-Of-Way, and in 30 CFR 250 Subpart H - Oil and Gas Production Safety Systems, and any applicable amendments thereof.
5. Exxon shall maintain the gas pipeline in good operating condition at all times. Additionally, the pipeline shall be designed and operated to accommodate a "smart" pig. (See enclosure 2 for pipeline inspection requirements)
6. Exxon must provide open and nondiscriminatory access to the pipeline to both owners and non-owners.

**NOTIFICATIONS**

7. Exxon shall provide notification, 30 days prior to commencement of in-water installation activity, to the United States Coast Guard's Aids to Navigation and Waterway Management Branch of the following information: the location of the work site; name and telephone number of the project engineer; size and placement of floating installation equipment; radio telephone frequencies and call signs of marine equipment; and the schedule for completing the project. The Aids to Navigation Branch should also be advised of any hazard to navigation so that appropriate information can be published in the Local Notice to Mariners for the benefit of the maritime community. A copy of this notification and any subsequent notices or modifications to the notice made during the course of the installation project should be submitted to the RS, ODOS as soon as the notification has been made.

8. Exxon shall provide the District Supervisor, Camarillo District (DS, C) a 72-hour advance notice of the commencement of installation activities. The following information shall be provided: installation date and approximate starting time; location of starting point; name of contractor and pipelay barge; availability of heliport facilities on the pipelay barge; approximate completion date; and other relevant information.
9. Exxon shall notify the RS, ODOS when the installation of the gas pipeline is completed.
10. Exxon shall immediately notify the MMS if a previously undetected archaeological resource site is discovered and the site should be avoided. If the archaeological resource site is unavoidable, Exxon shall immediately halt pipelaying operations and perform an investigation, according to MMS instructions, to assess whether the site is significant. If the site is significant, the MMS will inform Exxon how to protect the archaeological resource.
11. Exxon shall notify the DS, C at least 72-hours in advance of all hydrostatic tests so that the MMS may witness these tests. Location of the pressure recorder and approximate starting time are to be provided. All hydrostatic test data (3 copies) including procedure, hold time, charts and results shall be submitted to the RS, ODOS within 30 days after the completion of each test(s) conducted.

### **SPANS AND REMEDIATION**

12. Prior to commencement of gas production into the gas pipeline, Exxon shall remediate any spans determined by the MMS to be of critical length.
13. Exxon shall submit a post-installation visual (ROV) survey plan to the RS, ODOS for review and approval, at least 14 days prior to the survey.
14. After completion of the post-installation visual (ROV) survey to determine whether span supports will be required for span rectification, Exxon shall work with the MMS to identify any critical spans and any sensitive hard bottom communities. The post-installation visual survey shall include the measurement of height and length of both sides of any spans.
15. Exxon shall submit to the RS, ODOS for review and approval a Span Rectification Plan at least 14 days before span remediation occurs. Also, see condition number 38.
16. In the event that span remediation does take place, Exxon shall conduct a post span remediation ROV survey of the pipeline in the fan channel area to determine the actual location of the grout bags. The plan for the survey shall be submitted to the RS, ODOS, 30 days prior to the survey. Based on MMS's evaluation of these videotapes, MMS may

require Exxon to conduct a trawl survey(s) of the fan channel area, using normal commercial fishing methods and gear, to ensure that the pipeline is compatible with commercial fishing.

17. MMS may require additional maintenance along the pipeline route to further mitigate commercial fisheries impacts, based on MMS's review of the results of the external pipeline ROV survey and any trawl test(s).

### **TRAINING/MEETINGS WITH CONTRACTOR**

18. Exxon shall provide commercial fisheries training to all offshore personnel. The training program shall be approved by the Joint Oil/Fisheries Committee and MMS. A draft outline of the training program shall be submitted for review and approval to the RS, ODOS, 60 day prior to commencement of pipelaying activities.
19. Exxon shall provide marine mammal training to all offshore personnel. The training program shall be approved by the MMS. A draft outline of the training program shall be submitted for review and approval to the RS, ODOS, 60 day prior to commencement of pipelaying activities.
20. Exxon and Exxon's pipelaying contractor shall meet with the MMS to review archaeological avoidance procedures prior to commencing pipeline laying activities.

### **AIR QUALITY**

21. Pursuant to the Emissions Contingency Plan, Exxon will implement the plan no later than the day the 20-ton NO<sub>x</sub> level (80% of total project emissions level) has been reached. Exxon shall notify the RS, ODOS when the Emissions Contingency Plan is implemented.
22. Exxon shall implement the Emissions Contingency Plan on any day that the Santa Barbara County APCD notifies Exxon that NO<sub>2</sub> values observed at the Las Flores Canyon, El Capitan or Gaviota coastal monitoring stations exceed 50% of the state NO<sub>2</sub> standard. Exxon shall notify the RS, ODOS when the Emissions Contingency Plan is implemented.

### **MISCELLANEOUS**

23. During installation and installation-related activities, Exxon shall provide the MMS access to the site or sites of all activities, including but not limited to, the pipelaying barge, support vessels, ROV vessels, and vessels used during span rectification operations.

24. Exxon shall depict, during installation operations, the existing oil emulsion pipeline on the computerized navigation system for the pipelaying operations onboard the pipelaying barge.
25. In the event that a sensitive hard bottom community is observed, Exxon shall adjust the pipeline route to avoid the community whenever it is feasible to do so.
26. Exxon shall maintain and light any buoy installed to mark the touchdown point of the steel catenary riser (SCR). Exxon shall meet with the MMS to discuss issues related to the buoy, at least 30 days prior to installation. Exxon shall comply with any U.S. Coast Guard requirements, regarding this lighted buoy.

#### **PLANS/DELIVERABLES**

27. Exxon shall submit to the RS, ODOS for review and approval an inspection/monitoring plan for the SCR and riser support assembly, 60 days prior to installation. At least 60 days prior to submittal of the plan, Exxon shall meet with the MMS to discuss the components to be included in the inspection/monitoring plan.
28. Exxon shall submit to the RS, ODOS the detail design, load and fatigue analysis of the riser support assembly, at least 90 days prior to installation.
29. Exxon shall develop a Compliance Monitoring Plan for the Platform Heritage to Platform Harmony gas pipeline installation operations. At least 60 days before commencement of pipelaying activities, Exxon shall meet with MMS to discuss the requirements of this plan. Exxon shall submit this plan to the RS, ODOS for review and approval, 30 days prior to commencement of pipelaying activities. Exxon shall submit the Compliance Monitoring Plan Report within 90 days after the completion of pipelaying activities.
30. Exxon shall submit to the RS, ODOS for review the welding specifications and a welding inspection plan for the pipeline, SCR and riser support structure which includes critical flaw size and the inspection capabilities, 90 days prior to any welding.
31. Exxon shall submit to the RS, ODOS for review and approval a Critical Operations and Curtailment Plan which lists conditions (weather and other constraints) under which pipelaying activities will not proceed. The plan should include information on Emergency/Safety anchoring. Exxon shall submit the Critical Operations and Curtailment Plan 60 days prior to pipelaying activities.
32. Exxon shall submit to the RS, ODOS for review and approval an Execution Plan for the installation of the pipeline, the steel catenary riser (SCR) and associated appurtenances, 60 days prior to installation activities.

33. Exxon shall submit to the RS, ODOS for review and approval the detailed design and the analysis for the deck extensions on Platforms Heritage and Harmony, 60 days prior to installation.
34. Exxon shall submit to the RS, ODOS mill test reports and any additional documentation to demonstrate that the material used for the tapered stress joint complies with NACE MR 0175, 60 days prior to installation.
35. Exxon shall submit to the RS, ODOS a detailed pipeline installation schedule, at least 30 days prior to commencement of pipeline installation activities. This schedule shall include all activities associated with the project (including vessel arrival and mobilization, all ROV or SSS surveys, and pipeline span rectification) along with the location of the activity, vessels and/or equipment being used for the activity, and projected timing for the activity.
36. Exxon shall provide nautical charts of the Platform Heritage to Platform Harmony gas pipeline, including the exact location of the steel catenary riser (SCR) and the pipeline's riser to the surface at Platform Harmony, complete with bathymetry and Loran C overlays to the Joint Oil/Fisheries Liaison Office within two weeks of project completion. The charts shall be made available free of charge. Exxon shall provide the RS, ODOS with a copy of this submittal.
37. Exxon shall submit the as-built drawings of the new gas pipeline to the National Ocean Service in order to update nautical charts, within 90 days of completion of pipelaying operations. Charting information should be sent to:

Source Data Branch N/CS26  
National Ocean Service NOAA  
1315 East West Highway  
Silver Spring, MD 20910-3282

Exxon shall provide the RS, ODOS with a copy of this submittal.

38. Exxon shall perform a post-construction Side Scan Sonar (SSS) survey with supplemental ROV to identify all potential fishing hazards within the project area. The survey shall be conducted within 30 days of completion of pipeline construction activities and any span remediation. Prior to commencement of the post-construction SSS, Exxon shall consult with the Camarillo District Geophysicist for SSS guidelines and final report requirements. The final report (2 copies) shall be submitted to the RS, ODOS within 90 days of the survey completion. Any hazards identified from the survey will be made compatible with commercial fishing to the extent practical.

39. Exxon shall submit to the RS, ODOS proof of installation within 90 days after completion of pipeline construction. Such proof shall be in accordance with the regulations at 30 CFR 250.158(b). The key points to be identified in the "as-built" drawings shall include but are not limited to, any flanges, valves, spans, the touchdown point of the SCR, span supports and power cable crossings. Exxon shall submit a digital copy of the "as-built" maps on floppy disc(s) or CD-ROM in cad, dwg, dxf, or dxt format.
40. Exxon shall keep track of all anchor placement locations during pipeline installation if any anchoring occurs. Exxon shall submit to the RS, ODOS a report (3 copies) which describes all anchors and the actual location of the placement of these anchors, within 90 days of completion of the installation. The actual anchor placement locations shall be provided in Latitude-Longitude, X-Y and Loran C coordinate systems. Exxon shall submit a digital copy of the anchor placement locations in map(s) on floppy disc(s) or CD-ROM in cad, dwg, dxf, or dxt format.
41. Exxon shall submit to the RS, ODOS, within 90 days of completion of installation activities, the welders certifications and qualifications, welding inspection reports and results for the SCR, including but not limited to, ultrasonic testing (UT), x-ray, magnetic particle and dye penetrant. Exxon shall keep at the local office, all welding inspection reports and results for the pipeline, SCR and the riser support assembly for the life of the project. If the project is sold then Exxon shall transfer these records to the new owner.

## Enclosure 2

**PIPELINE INSPECTION REQUIREMENTS****Platform Heritage to Platform Harmony Gas Pipeline**

1. Exxon shall maintain the gas pipeline in a good and safe operating condition at all times.
2. Exxon shall inspect the ocean surface along the pipeline route for leakage a minimum of once every week by boat or aircraft. Records of these inspections with the dates, methods, and results shall be maintained at the field location by the pipeline operator and submitted to the Regional Supervisor, Office of Development, Operations and Safety (RS, ODOS), annually by April 1.
3. Exxon shall conduct external and internal inspections in alternating years by a third party, within an interval not to exceed thirteen months, on all oil, gas, and water pipelines (i.e. external - April 1993, internal - April 1994, external - May 1995). Inspection plans are to be submitted to the RS, ODOS by the pipeline operator for approval a minimum of 30 days before the survey is conducted. Records of the inspections with results shall be maintained at the field location and submitted to the RS, ODOS within 60 days after the actual survey is conducted. If a pipeline safety or commercial fishing hazard is found to exist, a report detailing the problem must be submitted along with the records.

External surveys shall be conducted using a ROV with video and sonar, a high- or ultra-high resolution Side Scan Sonar (SSS), or other method acceptable to the RS, ODOS to identify burial conditions, protrusions, structural integrity, damage, or corrosion to the pipeline(s). The external survey should include inspection of the pipeline risers and riser clamps; any grout bags, spans, debris or any other object which might constitute a pipeline safety concern or hazard to commercial fisherman or other users; identification of any weight or any other coating damage; observations of the rectifiers or anodes; and visual inspection above the splash zone. Videotape recordings must be traceable to survey map coordinates. Also, SSS shall be used at least once every 6 years as an external survey.

ROV mounted video systems should be functionally suitable for prevailing visibility conditions. The use of black and white video should be considered as *it may perform better than color for many engineering surveillance objectives* when high levels of back scatter are present.

The final report for the external survey shall be submitted in duplicate and include a description of all aspects of the survey and a map indicating locations of *burial conditions, spans, debris, any grout bags, coating damage, anode* along the pipeline route, with exact locations of problem areas. The final report shall include a original of the annotated video tape with all objects which might constitute a pipeline safety concern or hazard to commercial fisherman or other users. One digital copy of maps on floppy disc(s) in cad, dwg, dxf, or dxt format.

Internal surveys shall be conducted to identify corrosion and/or damage using a internal "smart" pig survey tool approved by the RS, ODOS. One copy of the survey logs shall be submitted along with the results. Additionally, one copy of any software to analyze the survey and any digital data is to be included in the report of the survey results.

4. Exxon shall send a Notice to Mariners containing information on the survey be published at least 30 days before conducting any external survey operation.
5. Exxon shall visually inspect the gas pipeline upon the report of any equipment being dropped overboard which might damage a pipeline or construction occurring within its vicinity and a report submitted to the Camarillo District Supervisor describing the incident and the results of the investigation.
6. Exxon shall inspect the pipeline protected anodes annually within an interval not to exceed thirteen months by taking measurements of pipe-to-electrolyte potential measurements. Records of these inspections with results and conclusions are to be submitted annually with the internal or external survey report.

Exxon is encouraged to inspect and report the condition of any offshore power cables at the same time external surveys for adjacent pipelines are conducted.

Enclosure 3

**Mitigation Measures Included in Exxon's Project Description, August 1997**

Exxon will complete the installation of the pipeline while minimizing emission as an important design criteria. Exxon shall:

+ Limit total project construction emissions from installation of the pipeline to less than 25 tons of any affected pollutant (except carbon monoxide) when within 25 miles of SYU, during any consecutive 12 month period, as defined by Santa Barbara APCD Rules 201.D.2 and 202.F.3.

+ Require the contractors to utilize appropriate means to reduce engine emissions, as necessary, to stay below the above limits.

+ Prepare an emissions basis report prior to pipeline installation that contains the following information for all marine vessel I.C. engines and other construction I.C. engines used during the pipeline installation: specifications; emission control devices; emission factors; usage constraints; load factors; determination of daily use; and measurement of fuel consumption. Submit report to MMS with a copy provided to Santa Barbara APCD.

+ Determine, on a daily basis, fuel use and emissions from the installation of the pipeline when within 25 miles of SYU. Submit information daily to MMS with a copy provided to Santa Barbara APCD. At the conclusion of the project, Exxon will prepare and submit a summary of the emissions produced to document that the total emissions did not exceed the 25 tons per year limit described above.

+ Prepare a contingency plan prior to pipeline installation for the scenario where the total project emissions of any affected pollutant, except CO, is projected to exceed 80% of the above 25 ton/year limit. This plan would identify potential measures that could be implemented by the contractors to reduce, defer or eliminate emissions without adversely impacting safety or completion of the project. Submit plan to MMS with a copy provided to Santa Barbara APCD.

Exxon will obtain, if necessary, an Authority to Construct/ Permit to Operate from the Santa Barbara APCD for the fugitive emissions associated with the operation of the topsides equipment.

Exxon will make the following notifications to properly alert agencies, fishermen, and other interested parties, as required, of this project.

- Notify U.S. Coast Guard (USCG), fishermen, agencies and other interested parties, as required, at least 15 days prior to commencement of onsite installation activities.

- Notify USCG, fishermen, agencies and other interested parties, as required, within 72 hours after the installation of the pipeline has been completed.

Exxon will provide the following deliverables to the MMS and other interested parties, as required, on this project.

- Detailed schedule of installation activities.
- Compliance monitoring plan to allow tracking of project conditions and other requirements.
- Required plans describing anticipated construction procedures for the installation of the pipeline and other requirements.(i.e. execution plan, anchor plan, curtailment plan, contingency plan, lease term pipeline application, etc.)
- As-built maps, PFDs, P&IDs and SAFE Charts of pipeline facilities after completion of project.
- Results of post-installation geophysical survey over the project area. Include sidescan sonar mosaic and maps and table of all debris, anomalies, and bottom scarring.
- Log of all items lost overboard. Include date, time, location, depth, description of item and status of debris removal.
- Pre and post survey (ROV) results for any span rectifications, if required, to show need and to verify proper placement of supports.
- Daily reports (work days only) summarizing status of project activities.
- Post-earthquake response plan for pipelines (prior to start up of pipeline operation).

Exxon will implement the following mitigation measures during construction of the pipeline to reduce environmental and other impacts.

- Conduct a pre-construction environmental compliance meeting with the contractors to review Exxon's commitments, approval conditions and impact reduction measures for this project. Invite agency representatives to attend this meeting.
- Schedule installation to avoid gray whale migration period; if not possible, work with NMFS and MMS to plan and implement appropriate mitigation.
- Require all offshore personnel to view the WSPA Fisheries and Wildlife Training Program video.

- Train all project related vessel operators on commercial fishing operations and wildlife that frequent the area. Training will be conducted by a person experienced in local conditions and requirements.
- Require construction vessels to utilize approved traffic corridors established by the Joint Oil/ Fisheries Committee.
- Require construction vessels to purchase sufficient low sulfur (< 0.05 wt % S) fuel to complete the pipeline installation.
- Require construction vessel I.C. engines and other associated I.C. engines to comply with SB APCD Rule 311 by using fuel containing less than 0.5 wt % S when operating offshore of Santa Barbara County.
- Keep Joint Oil/ Fisheries Liaison Office informed by providing daily status reports of the construction activities so that impacts to commercial fishing can be minimized.
- Require pipelay contractor to comply with the applicable sections of the Cultural Resources Plan approved for the SYU Expansion Project pipeline and power cable installation.
- Require pipelay contractor to comply with the Operations Curtailment Plan.
- Require contractors to provide as part of the anchor plan submittal appropriate techniques to minimize or avoid environmental impacts such as turbidity and anchor scaring during pipeline installation.
- Require contractors, to the extent reasonable and feasible, to recover all items lost overboard.
- Utilize an ROV to monitor installation activities during pipelaying operations.
- Require contractors to remove all installation equipment as soon as practicable after installation operations.

### **Mitigation Measures Included in Exxon's Environmental Report, August 1997**

Exxon will implement the following general measures:

- Notify all permitting agencies and other interested parties 15 days prior to the start of offshore construction and within 72 hours following completion of those activities.
- Hold a pre-construction environmental compliance meeting(s) with the contractors to review impact reduction measures and permit conditions that are applicable to them.

To further reduce the potential for impacts to hard bottom areas, Exxon will implement the following mitigation measure:

- Utilize an ROV to monitor installation activities during the pipelaying operation. This procedure will allow for a real-time assessment of sea floor conditions. If a sensitive hard bottom is observed, the pipeline route would be adjusted to avoid it whenever it is feasible to do so.

The following mitigation measures will be implemented by Exxon to further reduce and minimize impacts to air quality:

- Limit total project construction emissions from the installation of the pipeline to less than 25 tons of any affected pollutant (except carbon monoxide) when within 25 miles of SYU during any consecutive 12-month period, as defined by SBAPCD Rules 201.D.2 and 202.F.3.
- Require the contractors to utilize appropriate means to reduce engine emissions, as necessary, to stay below the 25 ton/year emissions limit.
- Prepare an emissions basis report prior to pipeline installation that contains the following *information for all marine vessel IC engines and other construction IC engines used during the pipeline installation*: specifications; emission control devices; emission factors; usage constraints; load factors; daily use determinations; and fuel consumption measurements. Submit the report to the MMS with a copy provided to the SBAPCD.
- Determine fuel use and emissions on a daily basis from installation of the pipeline when within 25 miles of SYU. Submit this information daily to the MMS with copies provided to the SBAPCD. At the conclusion of the project, Exxon will prepare and submit a summary exceed the 25-ton/year limit described above.
- Prepare a contingency plan prior to pipeline construction for the scenario where the total project emissions of any affected pollutant (except carbon monoxide), is projected to exceed 80% of the 25 ton/year limit. This plan would identify potential measures that could be implemented by the contractors to reduce, defer, or eliminate emissions without adversely impacting safety or completion of the project. Submit the plan to the MMS with a copy provided to the SBAPCD.
- Require construction vessels to purchase sufficient low sulfur fuel (less than 0.05% sulfur by weight) to complete the pipeline installation.

- Require construction vessel IC engines and other associated IC engines to comply with SBAPCD Rule 311 by using fuel with less than 0.5% sulfur by weight when operating offshore of Santa Barbara County.

To further reduce the potential for impacts to the benthic environment, Exxon will implement the following mitigation measures:

- Utilize an ROV to monitor installation activities during the pipelaying operation. This procedure will allow for a real-time assessment of sea floor conditions. If a sensitive hard bottom community is observed, the pipeline route would be adjusted to avoid it whenever it is feasible to do so.
- Require contractors, whenever feasible, to utilize appropriate installation techniques that minimize or avoid environmental impacts such as turbidity and anchor scaring.
- Conduct a post-installation visual survey (ROV) in the fan channel area to determine whether span supports will be required for span rectification. The results of the survey will be submitted to the MMS upon completion. If the MMS identifies sensitive hard bottom communities in the vicinity of any required span corrections, Exxon will work with the MMS to precisely locate them. Once these communities have been located, Exxon and Exxon's span support installation contractor would then meet with the MMS to discuss placement of the span supports prior to installation. The intent of this mitigation is to allow a precise positioning of the span supports to ensure that potential hard bottom community impacts are minimized. The MMS may also have a biologist or other observers on board during any required span corrections.

To further reduce the potential for impacts to marine mammal, Exxon will implement the following mitigation measures:

- Should the project schedule change such that it encroaches on the gray whale migration period, Exxon will work with the NMFS and the MMS to plan and implement appropriate mitigation.
- Train all project related personnel and vessel operators as to the types of marine mammals likely to be encountered in the project area and the types of activities that have the most potential for affecting the animals.
- Contact Mr. Peter Howorth of the Marine Mammal Center for assistance at (805) 687-3255 should a marine mammal be observed to be in distress.
- Require all offshore personnel to view the Western State Petroleum Association Fisheries and Wildlife Training Program video.

To offset potential impacts associated with pipeline installation, and avoid potential conflicts with the commercial fishermen, now and in the future, Exxon has implemented or will implement the following mitigation measures:

- Require construction and operations vessels to utilize approved traffic corridors established by the Joint/Oil Fisheries Committee during vessel transits.
- Install a marker buoy at the touchdown location of the riser at Platform Harmony to alert fishermen to its presence.
- Conduct a post-construction geophysical survey of the construction area to identify any lost equipment or potential fishing hazards.
- Require contractors, to the extent reasonable and feasible, to recover all items lost overboard following construction. Logs will be maintained on the installation and support vessels that identify the date, time, location, depth, and description of any item lost overboard.
- Require contractors to remove all construction equipment from the project area as soon as practicable following installation operations.
- Notify fishermen at least 15 days prior to the commencement of construction activities. These notifications are normally sent to the U.S. Coast Guard; Joint Oil/Fisheries Liaison Office; Harbor Master's offices in Santa Barbara, Avila, Morro Bay, and Ventura; and the Marine Advisory Newsletter in Goleta.
- Require all offshore personnel to view the Western State Petroleum Association Fisheries Training Program video.
- Train all project vessel operators on commercial fishing operations and wildlife that frequent the project area.
- Keep the Joint Oil/Fisheries Liaison Officer in Santa Barbara informed by providing daily status reports of construction activities so that impacts on commercial fishing will be minimized.
- Consult with the Joint Oil/Fisheries Liaison Office to ensure installation design work is reviewed to minimize impacts to commercial fishing to the maximum extent feasible.
- Install and maintain the pipeline system, to the extent practical, to be compatible with fishing and shipping activities.

- Require the contractor to recover any fan channel span supports prior to demobilization in the unlikely event they escape.
- Conduct an ROV survey of the pipeline in the area of the fan channel to ensure that any span supports, if required, are installed correctly.
- Conduct an external ROV of the pipeline every other year, as required by the MMS, to verify the integrity of the pipeline and span supports, if any.
- In addition, Exxon continues to contribute to the Local Fishermen's Contingency Fund and has contributed to the Fisheries Enhancement Fund as part of the Santa Ynez Unit Expansion Project.

To ensure the protection of archaeological resources during pipeline installation, Exxon will adhere to the following procedures as agreed upon in consultation with the California State Historic Preservation Office (SHPO) and included in the SYU Expansion Project Cultural Resource Plan.

- Require contractors to avoid potential cultural resources by a 300-foot radius to the extent possible during all offshore construction activities. This protective zone is to account for routine uncertainties in using remote sensors to precisely locate potential archaeological resources in deep waters.
- Provide all vessel operators working in these areas with the coordinates of the probable location of the potential site and instruct them to remain outside of the 300-foot protective zone.
- If complete avoidance of the zone is not possible, further investigations of the affected zone may be conducted through more intensive geophysical field surveys or ROV inspection. If further study indicates that the affected location is the remains of a shipwreck, the significance of the resource would be evaluated, and a mitigation plan would be developed, if appropriate.
- Include a review of avoidance procedures for the cultural resource area near Platform Heritage during the pre-construction environmental compliance meeting.
- Utilize an ROV to monitor installation activities during pipelaying operations. The ROV would allow real time monitoring and detection of previously undetected archaeological resources. If a previously undetected archaeological resource site is encountered during pipelaying operations, the operator would immediately notify the MMS.