



# MMS

Department of the Interior

---



---

Offshore Facility Decommissioning Costs  
Pacific OCS Region  
Executive Summary  
September 17, 2004



---

**OFFSHORE FACILITY DECOMMISSIONING COSTS  
PACIFIC OCS REGION  
EXECUTIVE SUMMARY  
September 17, 2004**

**By the Offshore Facility Decommissioning Costs Team:**

**David Gebauer  
Catherine Hoffman  
Eddie Lee Lim  
Michael Mitchell  
Glenn Shackell  
John Smith  
Frederick L. White  
Rishi Tyagi (sponsor)**

**Pacific OCS Region  
Minerals Management Service  
770 Paseo Camarillo  
Camarillo, CA 93010**

The full report is available for download at <http://www.mms.gov/omm/pacific/lease>

Disclaimer:

This report has been reviewed by the Pacific OCS Region, Minerals Management Service (MMS) and approved for publication. The information contained in this report was gathered from contractual, in-house, and trade publications and personal communications. Mention of trade names or commercial products does not constitute endorsement or recommendation for use. This report has not been edited for conformity with MMS editorial standards.

## **Executive Summary**

The Pacific OCS Region (POCSR) Offshore Facility Decommissioning Cost Team (OFDC) was formed to develop cost estimates for decommissioning offshore oil and gas facilities in the POCSR. This OFDC cost report covers operator compliance with OCS oil and gas regulations (30 CFR 250 and 256) for permanent plugging of wells; removal of well conductors and platform jackets to 15 feet below the mudline; decommissioning and removal of platform decks; decommissioning and removal of pipelines and powercables as appropriate; site clearance; and other lease and permit requirements. The report is one of the inputs used by the POCSR to determine if a Supplemental Bond is required from a lessee.

This report assumes that POCSR platforms will be completely removed and transported to shore for disposal. The decommissioning cost estimates for individual platforms are based on a decommissioning scenario that was developed by the OFDC for the 23 Pacific OCS oil and gas platforms. The scenario assumes six decommissioning projects will be conducted during the 2010-2025 period, and that 2-6 platforms will be removed during each project to minimize the high cost of mobilizing/demobilizing a heavy lift vessel from the Gulf of Mexico, North Sea, or Asia. The decommissioning scenario and methodology assumptions are described in detail in Section 2 of this report.

The decommissioning costs were developed by the OFDC based on information obtained from MMS files, oil and gas operators, consultants, and technical decommissioning studies funded by the Minerals Management Service (MMS). The decommissioning scenario developed by the OFDC for this cost study represents MMS's best professional judgment regarding the sequence and timing of future platform decommissioning activities in the POCSR. The MMS is planning to conduct a detailed update of this report every five years to incorporate new information that results from advances in technology or changes in market conditions, and Federal, State and local regulatory requirements. More frequent updates may be required if unanticipated advances in technology occur or if there is a significant change in regulatory requirements.

The cost report estimates costs for each phase of the decommissioning process: Engineering and Planning, Permitting and Regulatory Compliance, Platform Preparation, Well Plugging and Abandonment, Conductor Removal, Mobilization and Demobilization of Heavy Lift Vessels, Platform Structure Removal, Pipeline and Powercable Decommissioning, Platform Transportation and Disposal, and Site Clearance.

Platform decommissioning costs can vary widely due to factors such as location and type (complexity) of the facility, number of structures to be removed, water depth and weight associated with the structure, the number and depth of wells and conductors, removal method, and transportation and disposal options. Although water depth and weight (size) are key variables in determining the decommissioning costs for any particular activity, other factors may have significant impact on the decommissioning cost. For example, the costs of plugging and abandoning a well with deviation greater than 60 degrees will be much greater than the cost of plugging and abandoning a well with no deviation. Similarly, the cost of decommissioning a pipeline that must be removed will be much greater than the cost of decommissioning a pipeline that is approved to be abandoned in-place.

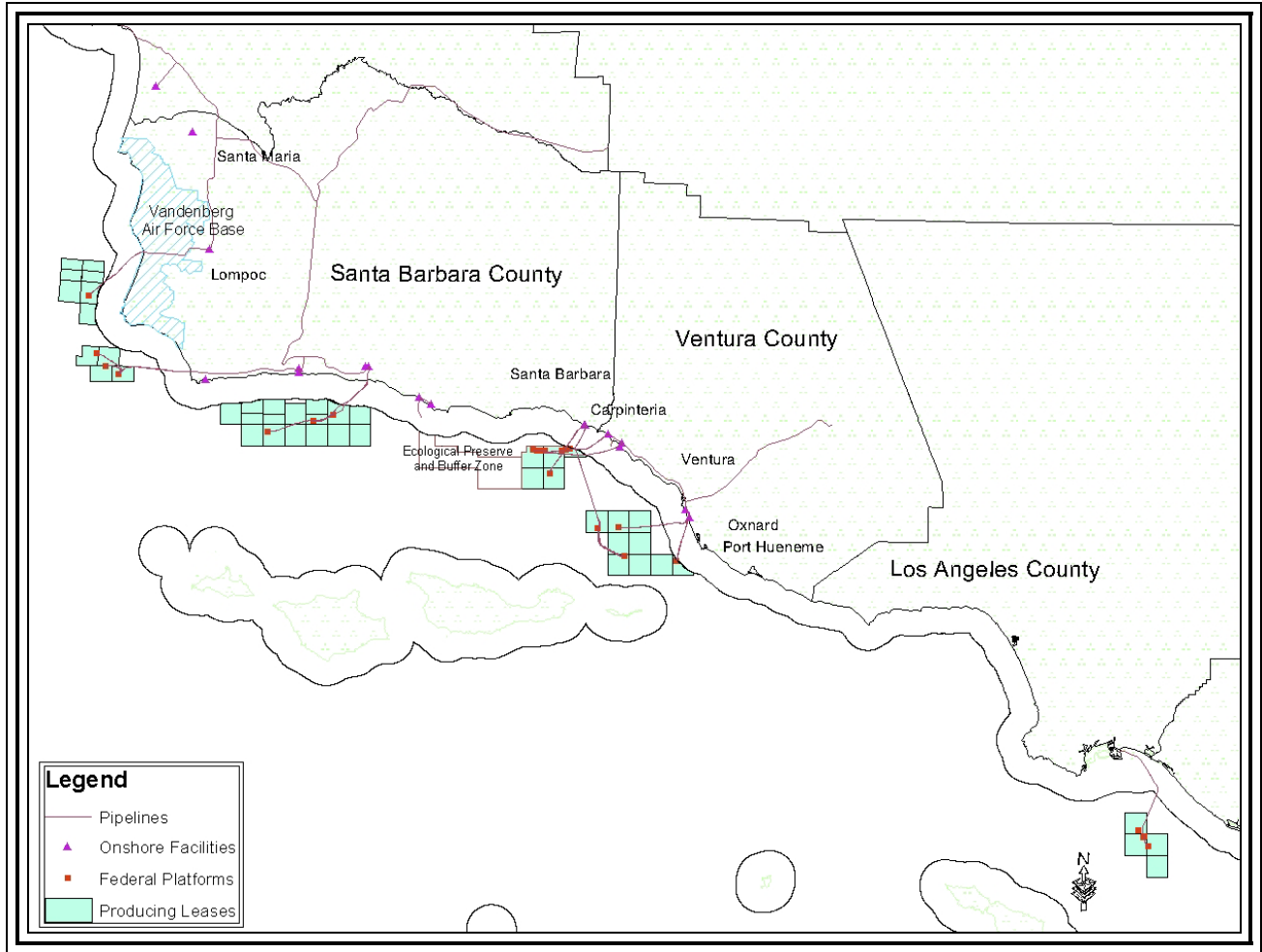
The costs of mobilizing and demobilizing a heavy lift vessel can also vary widely depending on the origin of the derrick barge and the number of platforms that are being decommissioned as a group. This cost of mobilizing and demobilizing a heavy lift vessel will be very high in POCSR due to fact that such vessels are currently stationed in the North Sea, Gulf of Mexico, or Asia. It is very unlikely that heavy lift vessels would be stationed in the POCSR unless there was a strong and prolonged market demand for such vessels. This situation is not considered likely to change in the foreseeable future.

Table 1 shows the estimated decommissioning cost for each platform in the POCSR. Appendix B shows the total cost for decommissioning for each platform by cost category.

**Table 1 Platform Decommissioning Costs (2004 Dollars)**

<b>Platform</b>	<b>Decommissioning Cost</b>
Platform A	\$21,533,000
Platform B	\$22,579,000
Platform C	\$19,401,000
Edith	\$22,265,000
Ellen	\$33,176,000
Elly	\$19,946,000
Eureka	\$73,569,000
Gail	\$70,191,000
Gilda	\$33,906,000
Gina	\$10,291,000
Grace	\$27,405,000
Habitat	\$23,550,000
Harmony	\$129,842,000
Harvest	\$71,274,000
Henry	\$15,755,000
Heritage	\$128,654,000
Hermosa	\$64,827,000
Hidalgo	\$52,859,000
Hillhouse	\$20,743,000
Hogan	\$21,849,000
Hondo	\$77,051,000
Houchin	\$21,318,000
Irene	\$25,715,000
Total POCSR	\$1,007,699,000

Figure 1 is a map showing the location of the POCSR platforms and pipelines. Maps showing platforms included in each decommissioning project are included in Appendix A.



**Figure 1 Federal Platforms and Pipelines in the Pacific OCS Region**



### The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



### The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.



**MMS** *Securing Ocean Energy &  
Economic Value for America*