Notice No. 151

February 12, 1987

Explosion of Accumulated Gas in the Engine Room
of a Supply Vessel Servicing an Offshore Facility

On September 25, 1982, the explosion of a natural gas accumulation in the engine room of a supply vessel servicing an offshore drilling and production platform in the Gulf of Mexico resulted in two fatalities, one injury, and $2 million in damages to the vessel.

The vessel began taking on water, and when its own pumping equipment failed, permission was obtained to borrow a pneumatically operated pump from the platform. A deckhand from the vessel and a roustabout from the platform proceeded to connect the pump to a pneumatic supply source at the platform via hose furnished by the vessel. Compressed air was available on a drilling rig located above the platform deck, but there were no lines leading down to the deck. The workers connected the hose to an unmarked supply outlet which later proved to be natural gas. Exhaust gas from the pump accumulated in the engine room where the pump was located and then ignited.

To prevent a recurrence of this type of accident, the Minerals Management Service recommends that OCS lessees and operators perform the following:

1. Carefully examine their operations and strengthen their lines of authority and discipline as appropriate.

2. Alert their work forces of the dangers in making assumptions regarding the nature of the contents inside any process vessel, pipe, or other container and the safe use of natural gas for power tools.