

U.S. Department of the Interior Minerals Management Service Gulf of Mexico OCS Region

Notice No. 120

October 3, 1983

OCS Operations Safety Alert

Fire During Turbine Compressor Start-Up

While personnel were attempting to start a turbine compressor, an ignition and fire occurred at the compressor engine exhaust. The emergency shutdown valve was activated, but due to internal corrosion, the fuel gas supply valve did not close in response. The fire continued to be fed by (1) excess fuel gas flowing through the engine exhaust, (2) gas from the gas starter exhaust vent outlet, (3) hydrocarbon vapors from the auxiliary motor's lube oil and seal oil vent outlet, and (4) hydrocarbon vapors from the lube oil storage tank vent outlet. The fire was extinguished within 10 minutes, using the platform light water system. The fuel gas supply valve had to be manually closed. There were no injuries; and damage to surrounding paint and muffler insulation was estimated at \$1,000.

To prevent a recurrence, the operator will repipe the vent lines below deck, away from the compressor engine.

Emphasis should be placed on preventive maintenance to assure proper operation of the fuel gas supply valve.

[signed] D.W. Solanas

Regional Supervisor

Offshore Operations Support