



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

Notice No. 109

March 24, 1983

Fire

A fire occurred when a relief valve on a chem-electric treater relieved oil and gas near the end of a generator engine exhaust. Damage was estimated at \$110,000 and involved the chem-electric treater, peco filter, generator enclosure, heliport and platform deck.

After inspection of the damage, the following contributing causes were found:

1. A wire mesh screen in the scrubber dome, in front of the vane section on top of the chem-electric treater, was plugged with paraffin.
2. A downcomer, that would have allowed liquids on the outlet side to fall into the liquid section below, was missing.
3. With the vane section screen plugged and with a downcomer missing, both oil and gas flowed to the gas outlet. The pressure regulator on the gas outlet was designed for gas service only.
4. The upstream piping to the chem-electric treater caused the relief valve to "chatter" and may have caused the seat to fail.
5. The generator engine exhaust, although properly insulated, was too close to the relief valve on the treater.

To correct this hazardous situation, the operator did the following:

1. The wire mesh screen in front of the vane section was removed.
2. A downcomer was installed to allow liquids on the outlet side to fall into the liquid section.
3. The pressure regulator on the gas outlet was replaced with one designed for oil and/or gas service.
4. The equalizing line from the treater to the scrubber dome was repiped to reduce the number of right angle bends in order to reduce the "chattering" of the relief valve.
5. The generator engine exhausts were reinsulated and moved away from the treater relief valve.

[signed] D.W. Solanas

Regional Supervisor

Offshore Operations Support