



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

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Notice No. 139

May 29, 1985

OCS Operations Safety Alert

Pollution from Production Operations Due to Rupture Disc Failure

A pollution event occurred on the Outer Continental Shelf in the Gulf of Mexico when the pressure safety element (PSE) on a chem-electric heater treater ruptured, causing a 2-barrel oil spill. When the turbine compressor on the C platform was restarted, a large volume of fluid was dumped from the LTX on the D platform. This surge of fluid caused the incoming low pressure oil pipeline from the C platform to the D platform to experience very high pressure. The lease operator on the D platform was not notified to remove the -inch orifice plate downstream of the chem-electric heater treater. This small orifice plate caused the fluid to back up and overpressure the chem-electric heater treater and rupture the PSE. The pressure safety high (PSH) sensor on the chem-electric heater treater was not set at 40 psi, and the working pressure of the vessel was 50 psi. The PSE ruptured before the PSH could activate a shut-in.

To prevent a recurrence of this type of pollution event, the operator sealed off the PSE outlet flange on the chem-electric heater treater, which rendered it completely out of service. This vessel is equipped with two pressure safety valves, and each was resized to handle the maximum liquid discharge rates that could be vented in an emergency situation. Because the PSV's will automatically reset themselves after an overpressure condition, they will minimize oil production being accidentally discharged into the Gulf of Mexico waters. This alternative to prevent discharge of hydrocarbons was chosen because there is no low pressure or high pressure relief discharge scrubber on the platform.

[signed] D.W. Solanas

Regional Supervisor

Rules and Production