

**CNSOPB Safety Notice**  
**Offshore Well Testing Operations**

**June 2001**  
**Safety Notice #2001-04**

This Safety Notice highlights some safety issues associated with gas well testing operations and identifies specific actions for Operators to include in their management system.

**BACKGROUND**

On November 25, 2000, an incident in the Nova Scotia offshore area involved H<sub>2</sub>S gas, which had the potential for serious consequences. The steam generator on a jack-up rig was being used to supply heat to the well test heat exchanger during gas well testing operations. An odour was identified in the steam generator room at the end of the test. Safety personnel with respirators and portable detectors confirmed H<sub>2</sub>S concentrations of 13 ppm. The room was fully vented until the H<sub>2</sub>S was eliminated. No one was injured, however, there was potential for serious consequences as a result of this incident. The source of the H<sub>2</sub>S was found to be a leak in the inner coil of the heat exchanger, which allowed produced gas to be in communication with the steam system. The leak in the heat exchanger was not detected and a check valve on the steam inlet failed. The Board's investigation has identified a number of issues, which should be addressed by all Operators.

**ACTION REQUIRED**

All Operators shall ensure that the following issues have been thoroughly examined and addressed for well testing operations:

- Well testing equipment for the offshore area must be thoroughly examined prior to each well testing assignment. Reliance on annual inspections as a preventative maintenance standard is not considered acceptable.
- Gas sensors are to be appropriately located during testing operations to ensure all sources of gas can be detected including venting from or connecting to the heat exchanger.
- The certifying agency for the installation is required to review and accept all well testing equipment.

**LEGAL REQUIREMENTS**

The actions identified in this Safety Notice are legal requirements under the following regulations/requirements:

Canada-Nova Scotia Offshore Petroleum Board - Occupational Health & Safety Requirements

Section 33 - Nova Scotia Offshore Area Petroleum Drilling Regulations

Section 34 - Nova Scotia Offshore Area Petroleum Drilling Regulations

Section 67 - Nova Scotia Offshore Area Petroleum Installation Regulations

Questions regarding this Safety notice should be directed to the CNSOPB, attention:

*C. Andrew Parker*  
*Chief Safety Officer*