



Safety Alert

From the International Association of Drilling Contractors

ALERT 00-23

GUARDRAIL FAILURES

WHAT HAPPENED:

Recent offshore accidents, including one fatality, occurred as a result of guardrail failures. In one case, a guardrail failed during its use as a support for a lifting device. In another case, a guardrail failure occurred as a result of an operator leaning on the guardrail.

WHAT CAUSED IT:

Investigations after these failures indicated severe corrosion and improper welding at guardrail post base welds. In one case, the guardrail was used as an anchor point for a lifting device.

CORRECTIVE ACTIONS:

In view of the above, it is recommended that operators and contractors review the design specifications and criteria under which guardrails on their existing facilities were installed and determine if existing guardrails meet those criteria.

Additional information is contained in OSHA regulation 29 CFR 1926.500 subpart M (Fall Protection) and 1978 publication "Guide to Safe Stairways, Walkways, and Railings," published by the Petroleum Extension Service, The University of Texas at Austin in cooperation with the International Association of Drilling Contractors. Guardrails, as described in the above-referenced documents, are intended solely for the purpose of preventing personnel from falling to lower levels.

It is recommended that operators and contractors develop procedures to periodically inspect the structural integrity of guardrails as well as formulate a policy on the proper use and maintenance of guardrails. The policy should include but not be limited to the following:

- Never use the guardrail as an anchor point for lifting/supporting a load or as an anchor point for fall protection gear. (Light lifesaving devices such as buoys and floats as well as ESD stations may be mounted to guardrails),
- Never lean equipment against a guardrail or utilize a guardrail as a securing point for hanging stored equipment.
- Always use personal fall protection equipment when installing, removing or replacing guardrails, and
- When removing guardrails, always securely rope or chain off the unguarded area in accordance with the provisions of the aforementioned regulation.
- Need to reinforce the JSA review process emphasizing that all critical job steps must be identified and that a change in job scope requires a subsequent JSA review;
- Establish as part of the units preventative maintenance program a frequent inspection and repair procedure for guardrails. Include in this procedure inspection for corrosion or damage.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

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