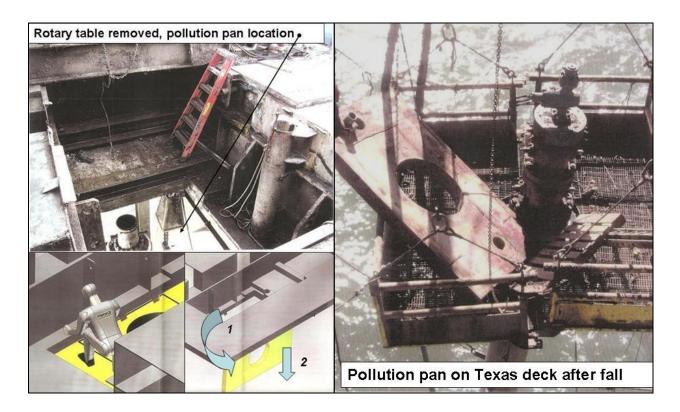
MMS

Safety Alert No. 278 7 April 2009 Contact: Jack Williams (504) 736-1757

One Killed when Oil Pollution Pan Falls

In a recent incident on a drilling rig a casing crew was rigging up to run 60-inch over-drive pipe. Two welders were cutting a hole in the pollution pan beneath the rotary when the pan suddenly dropped out from beneath them and fell 50-ft to the Texas deck. One of the welders fell with the pan and was killed.



An investigation discovered that the oil pollution pan was only attached to the rig by 3-inch metal straps, not hard-welded or bolted to the rig sub-structure. These straps were cut by the welders in the course of their work, which allowed the pan to fall out from beneath them.

Immediately prior to the accident, one of the welders attempted to initiate a "stop-work" but was unable to make himself understood. Previously, rig floor personnel had unsuccessfully told the casing crew to

cease cutting the pan. However they did not talk to the casing crew supervisor (they were unable to identify him) and they did not explain the danger. A full account is available at the following web site:

http://www.gomr.mms.gov/homepg/offshore/safety/acc_repo/accindex.html

An MMS investigation found the following as the cause of the accident:

- 1. The casing crew did not know how the oil pan was attached. They assumed (but did not check) that the pollution pan was directly welded or bolted. As a result, no fall protection was used.
- 2. Planning was inadequate. No comprehensive JSA meeting that included all parties was held as required by company policy, to discuss the job.
- **3.** Partly as a result of the failure to hold a comprehensive JSA meeting, the assignment of responsibilities unclear. The rig's floor personnel thought they, not the casing crew, were supposed to remove the pollution pan at a later time.
- **4.** No easy method of initiating "*stop-work*," such as a hand signal, was a part of the standard operating procedure of any of the companies involved.
- **5.** Supervision was inadequate at all levels. Communication between OIM, rig floor supervisors, casing crew was confusing, contradictory, and incomplete. As a result of this confusion:
 - The rig floor personnel did not know who the casing supervisor was. When they wanted the casing crew to cease cutting the pan, they approached the wrong person.
 - The rig personnel failed to communicate the danger to the casing crew. Their use of only directive instruction did not convey the imperative to stop cutting the pan.
 - o The rig's OIM failed to define job responsibilities and chain of command on the rig floor.
 - The casing supervisor did not coordinate his plan with the rig floor personnel. He did not comprehend or act when one of his welders wanted to "stop-work."

The MMS recommends to the operators that they consider the following actions:

- **1.** Rig OIMs and supervisors should review <u>how oil pollution pans are attached to their rig</u>. Contract supervisors should conduct a thorough review of the parameters of their tasks prior to starting work.
- **2.** The supervisors should always hold a <u>fully attended, comprehensive JSA meeting</u> prior to major operations. These meetings should address all the steps in the upcoming operation, not just the major elements. All supervisors have the responsibility of communicating and understanding the <u>unambiguous chain of command</u> during upcoming operations.
- **3.** Companies should develop a <u>clear method of initiating "stop-work"</u> that is effective under emergency work conditions. Preferably this will include an easily understood visual signal.
- .4. The Operators, rig companies, service companies, and contractors should consider emphasizing in their training that <u>inadequate</u>, <u>incomplete communications</u> remain one of the most common causes of major accidents.