IMPROPER RIGGING RESULTS IN A FATALITY

WHAT HAPPENED:

A drilling crewmember died when a twin clevis link used in a rig floor winch hoisting assembly failed, dropping a joint of drill pipe onto him. At the time of the accident, the drilling crew was laying drill pipe down the V-door ramp. This involved using a winch line to pick up pipe from the mouse hole and workers stand behind the pipe and push it over the edge of the rig floor onto the V-door ramp. The pipe is then lowered with the winch line — via the rig’s V-door ramp — to the catwalk below. The rig crewmember was under the pipe being pushed when the twin clevis link broke.

WHAT CAUSED IT:

The winch line was connected to a tail chain with the use of the twin clevis link. The winch line and tail chain were attached to the twin clevis link by a metal pin inserted through the lugs of the twin clevis link. Only a cotter key kept that pin in place. In addition, the tail chain was too small to work properly with the twin clevis link. The twin clevis link was not designed for overhead lifting since it was not manufactured from Grade 80 alloy-based steel. Only Grade 80 or better alloy-based steel rigging and rigging components should be used in overhead lifting applications.

CORRECTIVE ACTIONS: The regulatory agency involved required the following:

1. Ensure that the rigging is safe. The American Society of Mechanical Engineers (ASME) and American National Standards Institute (ANSI) set acceptable standards for safe use of rigging.
2. Ensure that workers are trained to use it correctly.
   - Rigging is assembled, used, maintained and dismantled under the supervision of a competent worker and in accordance with the manufacturer’s specifications and instructions.
   - Workers who are required or permitted to assemble, use, maintain or dismantle rigging should be trained in safe rigging practices.
3. Ensure that rigging is regularly inspected at intervals recommended by the manufacturer.
4. Provide the necessary information, instruction, training and supervision to protect workers.
5. Ensure that the workplace is competently supervised.
6. Workers have been trained to recognize hazards and work and act safely. Before starting work, an employer shall ensure that no worker is permitted to perform work unless the worker has been trained, and has sufficient experience.

Note: Thanks to the Canadian Petroleum Safety Council (www.psc.ca) for use of this alert.