

## **Fatal Alert**

**October 31, 2006**

During a well re-completion operation, a workover rig employee became entangled in an unguarded protruding rotating shaft and pulley on a skid mounted mud pump. The morning of the accident, the temperature was + 9 degrees. When the workers arrived on location, they found the mud pump and hard lines to the wellhead were frozen. All the workers on location worked together to thaw the mud pump and hard lines. After the thawing process was completed, the mud pump motor was started and the clutch to the pump was engaged. Shortly thereafter, they had circulation. With the mud pump running, a workover rig employee continued to work on the mud pump oiler, which was still frozen. He either tripped and fell into the rotating shaft and pulley or he got too close and his clothing got caught on the rotating shaft and pulley. The shaft and pulley made several rotations with the rig employee entangled on them before the pump clutch could be disengaged. The rig employee expired at the scene.

### **Significant Factors:**

- Equipment safety guards missing, (Rotating shafts, pulleys, were unguarded)
- Hazard recognition and avoidance training was lacking
- Ambient environment (temperature was +9 degrees)
- Layers of loose clothing were worn for cold temperatures
- Explicit hazard warnings missing (Danger Rotating Parts, Keep Off, etc.)
- Communications between the workers on the task being performed was lacking

### **Recommendations:**

- Review the 1910 General Industry Standard Subpart O for machinery and machine guarding
- Brief all employees on the facts and circumstances of this fatal mishap
- All employees should constantly assess the operation for safety hazards. If an employee(s) is positioned in a potentially hazardous location, stop the operation and correct the potential hazard immediately
- Ensure only trained, experienced and authorized employees are allowed to work on equipment
- Guard all rotating parts. Assure that all shafts, pulleys and belts are completely guarded
- Conduct safety inspections of all equipment
- Train all employees on first aid
- Train all employees on the OSHA and company safety rules applicable to their work
- Ensure good communications between workers about the task being accomplished
- The company should develop programs/procedures requiring a Job Safety Analysis (JSA) to be accomplished before starting each separate task.