DATE:

September 8, 2008

SOURCE OF MORE INFORMATION:

Edward Paden, Project Manager, Environmental Services - West Region

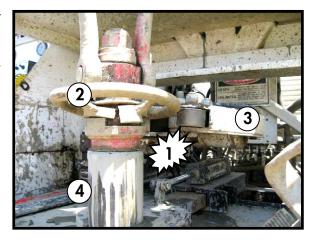
THE INCIDENT:

Contractor has been drilling mud-rotary holes on-site for the past 18 months, collecting water samples as they progressed. The driller and driller's helper elected to change designated positions during the job. At the time of the incident the driller's helper was operating the drill rig. The helper was neither trained nor authorized to perform drilling operations.

The acting helper was attaching the ring swivel to the drill string. The acting driller simultaneously noticed the rod spinner, which tightens or loosens drill pipe from the drill string, was not fully retracted. The acting driller attempted to retract the rod spinner but pushed the control lever in the incorrect direction. The rod spinner pressed forward crushing the acting helper's right middle finger between the rod spinner and the ring swivel. When the acting driller realized what had happened he again accidentally pushed the control lever in the incorrect direction applying additional force to the injured hand.

The acting helper then pushed the lever in the correct direction, retracting the rod spinner and freeing the acting helper's hand. The injured contractor was transported to a local hospital. A compound fracture, tendon, and artery were repaired in surgery.

- Pinch point acting helper's hand location when injury occurred
- 2. Ring swivel
- 3. Rod spinner
- 4. Drill string



LESSONS LEARNED:

- Drill crew must only perform activities for which they are specifically trained and authorized.
- Driller must not engage equipment or have hands near control levers when others are near the
 equipment.
- Driller must communicate intended actions to drill crew before engaging equipment.
- Possible pinch or crush points in and around equipment must be identified in advance and training should reinforce avoidance of these points.

SUGGESTIONS FOR PREVENTING SIMILAR ACCIDENTS:

- Prior to beginning work (i.e., during tailgate safety meeting), the consultant's field representative should verify with drill crew who is authorized to operate equipment.
- Safety meeting discussion items should include proper hand positioning to avoid pinch/crush points, communicating intention before action is taken, and hands off controls while anyone is working around powered equipment.
- Company policies need to be reinforced through job safety analyses and regular training.