ALERT 01 – 40

PRESSURE TESTING FUEL HOSE RESULTS IN A SERIOUS INJURY

WHAT HAPPENED:

While pressure testing a fuel transfer hose in preparation to transfer fuel, the trapped air pressure was suddenly released. This release resulted in the hose striking the crane operator, causing serious trauma to the head. The sudden release of the trapped air pressure occurred when the lock type connector was unlatched to bleed off the pressure (no vent valve was utilized to bleed off the pressure).

WHAT CAUSED IT:

The investigation revealed that there was no JSA or PTW reviewed or issued prior to conducting this operation. In addition, no Pre-Job meeting was conducted prior to applying pressure to the hose. The normal pressure-testing manifold was not used during the test. This manifold includes valves for isolation, bleeding/venting of the trapped pressure, and a pressure gauge. Normal pressure testing procedures were not followed for this operation. Although Personnel were verbally cautioned that pressure was still on the hose, when the connector was released there was a failure to STOP and examine the situation.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

- Required all rigs to prepare appropriate JSAs or update hose testing JSAs prior to any pressure test of the fuel transfer hose.
- Required that Permit To Work be issued any time the fuel hose is to be pressure tested.
- Required Pre-Job safety meetings which include instruction that procedures are to be reviewed and corrected once the hose is connected, and prior to applying pressure to the hoses.
- Established a procedure to utilize a pressure-testing manifold that incorporates an isolation valve and a bleed-off/vent valve and pressure gauge, with a means of collecting any liquid returns.
- Instructed personnel to be sure that all hoses used in pressure testing the fuel hose are secured to a fixed structure to ensure that if the pressure is suddenly released none of the hoses will whip uncontrollably. Also, ensure that all “crows-foot” connections are safety pinned and whipping checks are utilized.
- Instructed personnel that in ANY operation, if it is anyone’s opinion that the operation is not being performed properly, ALL personnel will STOP what they are doing and assess the situation and develop an agreed upon procedure on how to overcome the problem at hand.

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.