IMPROPER CONFINED SPACE ENTRY RESULTS IN MULTIPLE FATALITIES

WHAT HAPPENED:

Before the product was unloaded, an employee entered a water tank that contained a water / nitrogen mixture from the displacement of a rigless coil tubing operation and became incapacitated. A co-worker, in an attempt to rescue the first employee, entered the same tank and, for the same reason, was followed by two other co-workers. Realizing that four of his employees were inside the tank, the supervisor ordered the tank drained. He then asked two more of his employees to enter the tank to rescue the four personnel trapped inside by using a rope (safety line). Three of the rescued personnel were unconscious and one was semi-conscious. All four personnel were immediately evacuated to a local clinic. After performing first aid, the semi-unconscious employee was evacuated to a nearby hospital for further treatment. The three others were pronounced deceased by a local medical doctor.

WHAT CAUSED IT:

- Employees did not recognize the water tank as a confined space and therefore:
  - Employees did not follow the confined space entry or rescue procedures.
  - Employees did not conduct multi-gas testing (LEL, O₂, CO₂ & H₂S) before entering the confined space.
  - Employees did not wear the proper PPE for the task (appropriate masks for acceptable range limits, and breathing apparatus for over range limits).
  - Poor and impulsive rescue attempts.

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

- The company reminded all employees to identify and mark/label confined spaces and the risks in their working area.
- The company retrained all employees on confined space entry and rescue.
- The company reminded all employees to always follow procedures before performing their tasks. This included ensuring a Confined Space Work Permit has been prepared and the requirements have been fulfilled (Gas Test, Ventilation, Buddy System, Equipment & PPE, etc).
- The company reminded all employees to always implement the 3 Golden Safety Rules:
  o Think first.
  o Stop immediately
  o Report immediately