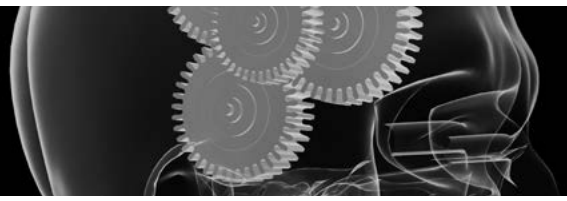

CASE STUDY 5 - Assumptions aren't always right...

What happened?

The work-team were using a high pressure water jet cutting system to cut redundant steelwork and pipework. The job was additional work that had been added to the scope after the team had arrived at the platform. The work-pack made only a general reference to removing equipment in the area. The team were instructed to "cut all material in the area" and the toolbox talk did not indicate which items should be cut or left. Various pieces of steelwork and pipe were marked with red-and-white tape.

The team began cutting steelwork and pipes away from the deck-plate. Shortly after cutting a pipe an oily smell was noticed and the team stopped work. The area authority confirmed that they had cut through a live drain line.

In the absence of any other indication, the team had assumed that the red-and-white tape marked the lines and steel which needed to be cut. In fact it marked trip hazards on the worksite.

What human factors were involved?

What did people do intentionally?

The team were asked to do work which was not in the original scope
The work was not in the original scope so had not been properly planned. Items of equipment to be cut were not clearly identified. There was no management of change.

The supervision did not communicate the scope and hazards properly
The toolbox talk didn't discuss the items to be cut, or point out the hazards from the live lines in the area.

What did people do without meaning to?

The team thought the red-and-white tape marked the items to be cut
Having been given the instruction to cut everything in the area, the team presumed that red-and-white tape marked the items to be cut.

Barriers

- Safety Critical Communication
- Procedures
- Risk Assessment

- Managing Human Failure

What can we learn from this incident?

- The operations team assumed people would understand that red-and-white tape marked trip hazards. This wasn't confirmed with the workparty.
- When we make decisions we interpret the information available to us. Our interpretation is influenced by what has happened before, and what we expect to happen this time. This sometimes leads to incorrect conclusions.
- A clear work-pack is a good start, and an effective tool-box talk helps to get everybody clear on what needs to be done. Talk about the job at the worksite. Walk, point and mark the plant to be worked on. Those doing a job should be able to explain the job and their role in it.
- Late changes and additions often lead to incidents - that's why management of change processes are important. Those raising the change need to think carefully about the possible consequences, and work-teams should challenge work that comes in without good quality work-packs.