8348 August 1994 Source : ICHEME Location:

Dead: 0 Injured: 0

Abstract

Fire at crude unit pump on a refinery. During flushing of the coil in a cooler box, a coupling associated with a temporary pump installation, failed, and resulted in release of LGO. A fire started before any action could be taken to stop the release. There was damage to equipment and product loss. It was found that previous attempts to use the pump had resulted in failure, these were repaired but not reported. The cause was the pump being run beyond its design capabilities. In addition the maintenance leader had no intimate knowledge of the equipment to be used consequently inadequate instruction was provided, suppliers were aware that this equipment had not been used on this duty before on a "live" process unit; but they did not discuss this aspect. [coupling failure, design or procedure error, fire - consequence, refining, temporary equipment]

Lessons

Use of temporary equipment (such as pumps) needs careful consideration and approval as to its design, suitability, and any risk it could present as a potential ignition source.

1054802 September 1986

Abstract

Whilst dismantling some old temporary buildings in a construction yard, one man was injured when the building frame collapsed onto him. The men were on-site without the knowledge of the site supervisor, and were not experienced in dismantling buildings. The structural design of the frame was deficient, in that there were no bracing angles, and also the wooden frame had become rotten and incapable of maintaining integrity.

[demolition, temporary equipment, training inadequate, design inadequate, injury]

Lessons

The lessons relating to the accident recorded in the report were:

- 1. Unauthorised access to site refresh Gateman's instructions.
- 2. No safety awareness instruction.
- 3. Revised Engineering Dept procedure to ensure the earlier removal of "sheds" before rotting starts.
- 4. Lack of experience was the main cause, with the structural problems contributing.