

Hazard and Operability (HAZOP) Study Horror Stories

Presented by Louise Wilson, 21st January 2026

Summary of Presentation

This webinar focused on Hazard and Operability (HAZOP) studies, using real-world “horror stories” to illustrate how inadequate hazard identification can lead to major accidents. The speaker explained that HAZOP is a structured technique intended to identify credible deviations, assess consequences, and ensure suitable safeguards are in place before systems enter operation.

Several high-profile incidents were discussed, including Piper Alpha, Three Mile Island, and Williams–Geismar, highlighting how failures in maintenance, change management, isolation, alarm handling, and escalation control led to loss of life, environmental damage, and major economic impact. Offshore and marine-operating environments were referenced through examples such as offshore oil and gas installations, where poor isolation and escalation management significantly worsened outcomes.

The speaker emphasised that many incidents could have been prevented through effective HAZOPs, or were identified but not properly actioned. Common weaknesses included poorly defined scope, overestimation of safeguards, inadequate documentation, insufficiently experienced teams, rushed schedules, and ineffective closure of HAZOP actions.

The webinar concluded that improving HAZOP quality requires education at all stages — before, during, and after the study — ensuring competent teams, realistic scheduling, disciplined application of the methodology, and robust assurance of action closure to prevent future safety-critical incidents.

If you are a SaRS Member and would like to watch the recording of the webinar please [click here](#).