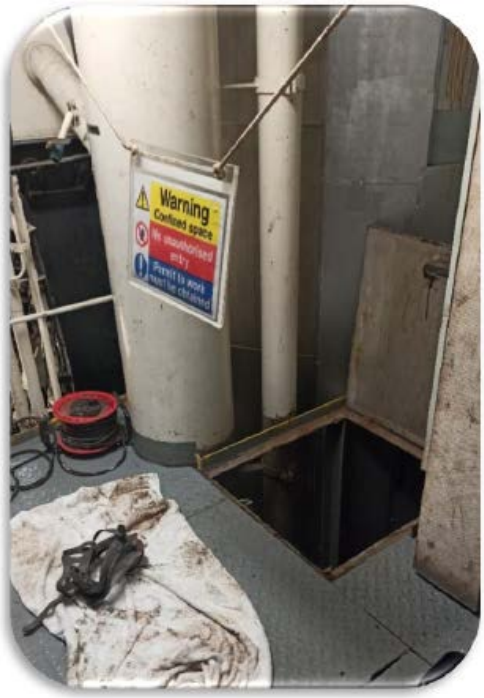
Steam Burn Fatality (Lessons Learnt / Case Study)

What Happened:

- On a parent company vessel two crew members were performing maintenance and cleaning inside an enclosed space (feed water tank)

- At that time the boiler and diesel generator were started and they filled the enclosed space with hotwater and steam

- ***The crew members got severely burnt and one of them died later from his injuries***



Contributing Factors / Causes:

- Inadequate processes on:
  - Permitting to Work
  - Isolating confined space from pipelines/valves/energy
  - Locking out/tagging out

- Inadequate onboard operatonal communication between involved departments

CORRECTIVE & PREVENTIVE ACTIONS REQUIRED:

Vessels:

1) Hold a dedicated safety meeting with Deck and Engine crewmembers engaged in relevant activities to:

   a) Review this Bulletin with Lessons Learnt / Case Study

   b) Review the VMS procedures on:
   - Fleet Ops > 9.0 Safety Management > 9.6 Safe Working Practices > 9.6.2 Permit to Work System > Enclosed Space Entry and Rescue Procedures
     - form SAF06 “Permit to Work and Entry into Enclosed Spaces”
   - Fleet Ops > 9.0 Safety Management > 9.6 Safe Working Practices > 9.6.18 Tool Box Talks

   c) Reiterate the critical importance from the above procedures on:
   - performing the following process for jobs requiring permits to works and/or non-routine tasks:
     - pre-job Tool Box Talks (TBT)
     - identification of Hazards
     - performing /revewing Risk Assessments
   - adequately isolating confined from connecting pipelines, valves and energy:
     - locking / tagging these out
     - communicating the above to all involved departments

2) Review best practices for:

   a) Crew in Engine spaces and procedures taken by the ECR watch for all engine room visitors with regard to accounting and logging for them - in/out, awareness of their visit/work performed/location etc

   b) Implement a Standing order by the Ch. Eng. on the above

3) Revert to your VOTech/Fleet Cell and DPA with positive reports on the above

The Company:

1) Circulate a Lesson Learnt case study fleet wide

2) Review the effectiveness of the related procedures (above), their associated Generic Risk Assessments and checklists / permits to work and enhance them as feasible

3) Implement a fleet wide procedure on crew in engine spaces / engine room visitors

[redacted] Completed [redacted]