

SHUTDOWN OBSERVATIONS & LEARNINGS

Positive observations

- During emergency work was stopped and people evacuated the plant
- QA/QC completed during box-up
- CFO files before were managed very well
- Mercury management at the ammonia system was executed according to procedure
- Flare tip replacement was done as planned, high risk task
- MOCs were discuss in shutdown meetings
- Marked up MFDs were attached to blank lists
- Emergency exercises were conducted at early stages of the shutdown and deviations / gaps were addressed and rectified
- Daily assurance of the critical and battery limit blanks
- Manholes barricaded against man entry when no work in progress
- Production and electrical lock-out procedure were followed
- PTC was signed by all relevant parties before product transfer.

Areas of improvement

- Blank lists
 - Different blank list formats used
 - Incomplete blank lists attached to permit to work
 - Blank lists were not scope specific; blanks deleted
- Decommissioning checklist
 - Not all steps signed off and checklist not completed correctly
 - Unapproved checklists used
 - Checklist past the required revision date and was used
 - Steps not in chronological order on the decommissioning checklist
- Facility siting
 - Site establishment not as per approved plan
 - Not all containers have a COC

Areas of improvement

- MOCs
 - Left for last minute and is rushed off
 - List of MOCs to be implemented during the shutdown not available in the permit office.
 - Permit issuers does not put the MOC number on the permit.
 - Shutdown MOCs were not part of shutdown meeting agenda
 - Correct person not identified on MOC to complete step
- PSSR & CFO
 - Exceptional items not signed off on the PPSR/CFO file
- Box up & blanking
 - Deviate from the QCP during box-up
 - Welding defects on equipment in cycling services in future
 - Old or re-used gaskets used in interconnection blanking

Questions