Life-saving rules - Safety campaign

HAZARDOUS RELEASE

Working with systems and equipment that contain hazardous energy sources when in operation is a daily task for many colleagues at Stork and Client sites. Failure to control hazardous energy can result in a fatality or multi-fatalties.

In most circumstances, we work with systems that should be clean and de-energised, however, time and time again systems are handed over to Stork containing hazardous energy, which results in injury or narrowly avoiding life-altering incidents.

Working with live systems is sometimes unavoidable and this poses a number of risks to mitigate against.

Please read on for advice and tips on how to prevent injuries related to the hazardous release of energy.

HAZARDOUS ENERGY SOURCES INCLUDE:
- Chemical
- Thermal
- Hydraulic
- Pneumatic
- Electrical
- Mechanical
- Asbestos
- Radiation (isotope)
FOR LIVE SYSTEMS

- Consider if working on clean/de-energised system is possible.
- If you’re working on live equipment, do a detailed task risk assessment focusing on possible hazardous release.
- Use the relevant PPE to protect yourself against the contents of the system.
- Ensure emergency processes and equipment are in place, as required.
- Asbestos should only be worked on or removed by licensed suppliers - if you don’t think the proper control measures are in place, then don’t start the job!
- When performing work with radioactive isotopes, ensure that the radiation dose at the restricted-area boundary is maintained under the permissible rate and that you are monitoring the received dose rate.

TAKE PERSONAL RESPONSIBILITY

FOR SYSTEMS THOUGHT TO BE CLEAN/DE-ENERGISED

- Conduct a last minute risk assessment with the system owner to make sure the system is safe to work on.
- Convince yourself that hazardous energy and chemicals have been drained off or allowed to dissipate – it’s your life on the line if there’s something in the line!
- Keep your body out of the line of fire - if hazardous release occurs you don’t want to be in the way of it!
- Where relevant, use the lock-out and tag-out (LOTO) procedure to make sure systems remain out of operation during work activities.
- If you experience exposure to asbestos, or material you think might be asbestos, then stop the work immediately and notify the supervisor.
- If a radioactive source becomes lost or fails to retract from the X-ray equipment - walk away, close the area and alert the emergency response team immediately.

RECENT HAZARDOUS RELEASE INCIDENTS @ STORK!

- During the hydrotest of a spool at 136 bar, a pressure gauge shot loose during the test at a pressure of +/- 120bar.
- Caustic soda was released during the switch-out of a pump and made contact with a colleague’s wrist.
- An uncontrolled release of thermal oil scaled a colleague, causing second degree burns.
- A radioactive isotope (iridium 192) failed to retract back into its housing following a routine radiography worksopne.
- Pressure inside a diaphragm pump blew off a hose and discharged sludge onto two employees.
- A colleague performed weld work on a low pressure steam line without placing his personal lock onto the system.