Hazard Alert: Scald by Pressure Release

Intended audience: laboratory principal investigators and personnel

Incident summary
A high pressure release of a 121°C liquid caused a facial scald. An ampoule within a thermal analyzer over-pressurized unexpectedly, detaching from its loading mechanism and rupturing upon removal.

Investigation findings
• Routine experiment with unexpected outcome
• Unplanned change in routine practice introduced a new hazard (pressurized ampoule)
• New hazard was not realized

Key Takeaways
• PPE works! Lab coat, gloves and safety glasses prevented serious injury.
• When there is a change to routine practice – press pause and reassess for a change in hazard.
• Manufacturer user guides may be a useful source of safety-related information.

Actions Taken
• Manufacturer user guides reviewed
• Procedure written to standardize process and call attention to potential hazard

Additional Resources:
Environment, Health and Safety webpage:
• Lab Safety Program
  • Standard Operating Procedures Standard
  • Standard Operating Procedures Template
• Personal Protective Equipment Program

Spray pattern