



This form is to be used in conjunction with the Environment Health and Safety Manual Procedure 3.2 Hazard Identification, Assessment and Control - Application.

Information of Activity

Activity: Use of steambath Location: Chemistry

Identified by: G. Papadopoulos Date: 10/11/06

Identified Hazard / Aspect: Burns and chemicals released into environment

Risk Analysis matrix – level of risk

| Identified Hazards | Risk Assessment | | | Risk Score E x L x C | Risk Level |
|--|-----------------|-------------------|--------------------|-------------------------|------------|
| | Exposure (E) | Likelihood (L) | Consequence (C) | | |
| Steam burns | 6 | 0.3 | 2 | 4 | M |
| Exposure to vapours of heated solvents | 6 | 0.3 | 5 | 9 | M |

Definitions

| Exposure | E | Likelihood | L | Consequence | C | Risk Score | Hierarchy of Risk Controls |
|--------------|----|----------------|------|---------------|----|---|---|
| Continuously | 10 | Almost Certain | 1.0 | Catastrophic | 20 | E >20 H >10 M 3-10 | Elimination is a permanent solution and should be attempted in the first instance. Substitution involves replacing the hazard or environmental aspect by one of lower risk. Engineering controls involve physical barriers or structural changes to the environment or process. Administrative controls reduce hazard by altering procedures and providing instructions. Personal protective equipment last resort or temporary control. |
| Frequently | 6 | Likely | 0.6 | Major | 10 | | |
| Occasionally | 3 | Possible | 0.3 | Moderate | 5 | | |
| Infrequently | 2 | Unlikely | 0.1 | Minor | 2 | L < 3 | |
| Rarely | 1 | Rare | 0.05 | Insignificant | 1 | | |

LEGEND

E: extreme/significant risk; immediate action required; must be managed by senior management with a detailed plan, notify RMO immediately.

H: high risk, senior management attention needed, detailed research and management planning at senior levels

M: moderate risk, management responsibility must be specified; manage by specific monitoring or response procedures

L: low risk, manage by routine procedures; unlikely to need specific allocation of resources

Details of Risk Controls to be Taken

Risk Controls: (These should be determined by both the person(s) identifying the risk and the responsible manager and HSR or Environmental Representative). When determining risk controls refer to Hierarchy of Risk Control. Some examples are operating manuals, safe work procedures, licenses, permits to work, training and instruction etc

Supervision: Steambaths are in common use by undergrads in undergraduate pracs, providing significant familiarity with steambath use. Therefore supervision requirements are minimal.

Testing: All electrical equipment should be visually inspected regularly to ensure integrity of electrical cable. Any equipment that is sparking or has damaged cables should be tagged out. Testing of equipment to be done at least annually by a suitably qualified person.

Use: Use insulating gloves and/or tongs to handle objects on steam bath. Lab coat and glasses must be worn. Can only be used on the bench if using small quantities (>50ml) and the chemical has low flammability and toxicity, such as Ethanol. Must be used in a fume cupboard when used with low boiling point dangerous goods and toxic chemicals. Where there is limited fume hood space, local fume exhaust such as a venting arm should be used to extract the emitted fumes.



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RISK ASSESSMENT 3D Model EHS Manual

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Person assessing the risk: G. Papadopoulos Date: 10/11/06

Authorised by: G. Papadopoulos Planned completion date: _____

| |
|--|
| Risk Control Measures Completed |
|--|

Actions by: _____ Completed (Initials & date): _____