Appendix 4 Example Risk Assessment for Small Scale Laboratory Use of Solvents

| Title: | | Assessed By: | Date of Assessment: | | | |
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| Step 1 What are the hazards? | Step 2 Who might be harmed and how? | What are you already doing? | Step 3: What further action is necessary? | Step 4: How will you action? | u put the Asso | essment into |
| Hazard/Task or Situation | | | | Action by whom | By when | Done |
| Fire and explosion hazard from small scale laboratory use of solvents (typically less than 1 litre) | Staff and other persons accessing the laboratory may suffer burns However, formation of a flammable atmosphere in the laboratory is very unlikely (only those solvents classed as highly flammable present a significant risk). Given the limited quantity of fuel it is not credible to cause intoxication (CO) or asphyxiation. No over pressure event | No highly flammable solvents in use substituted by lower flammability alternatives. Minimise inventory of solvents in laboratory. Liquids handled in small containers typically < 1 litre. Following information is provided: Working Safely with Solvents http://www.hse.gov.uk/pubns/indg273.pdf http://www.hse.gov.uk/fireande xplosion/storageflammliquids.htm Safe Working with Flammable Substances http://www.hse.gov.uk/pubns/indg227.pdf | None Control measures are sufficient to reduce risks to tolerable levels The Basis for Safety is Explosion Prevention | | | |

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| | Use solvents in registered and maintained fume cupboards wherever possible otherwise ensure that there is good general ventilation. | | |
| | Good laboratory practice - Replace lid of solvent container when not in use. Clean up spills immediately. | | |
| | Store solvents in lockable metal solvents cupboard. MSDS available. | | |
| | No smoking allowed Other portable ignition sources controlled by good laboratory practice. Any hot work carried out under a Hot Work Permit | | |
| | Fire alarm system available Fire procedures displayed indicating location of nearest suitable fire extinguisher Staff given fire training | | |
| Step 5 Review Date: | Review your assessment to make sure you are still improving, or at least not sliding back. If there is a significant change in your workplace, remember to check your risk assessment and where necessary, amend it. | | |

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