SAFE WORK PROCEDURE

Faculty/School: Faculty of Pharmacy  
Initial Issue Date: Dec 2008
Next Review Date: Oct 2017

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Version: 5  
Version Issue Date: Oct 2016

SWP Title: Solvent Store Access and Maintenance  
Description: Procedures for users to access solvent store and to maintain the facility in good condition

Prepared by: Sarah Cui and Alpesh Patel

Responsible supervisor/s: Research supervisors/Technical officers/Laboratory managers

List the Hazards and risk controls as per risk assessment

<table>
<thead>
<tr>
<th>Associated risk assessment reference:</th>
<th>Hazards</th>
<th>Risk controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Facility misuse, physical injury (trip over on the floor)</td>
<td>1. Users should compulsorily complete training and on-site orientation before getting approval for access; be familiar with procedures e.g. decanting solvents, solvent container transfer and storage etc.</td>
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<td>2. Fire, health hazards due to exposure or spills from chemicals</td>
<td>2. PPE is essential to enter the area; no sources of ignition are to be taken into the store including mobile phones. Check the ventilation is operating properly prior to work. Be familiar with emergency procedures and usage of spill kit and first aid kit, emergency eye washes and safety shower, MSDS, and fire equipment (if trained).</td>
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<td>3. Cuts or related physical injuries, especially from glassware</td>
<td>3. Be familiar with procedures of transporting solvents, cleaning up broken glassware (preferably leather gloves dust pan and brush to clear glass and place in a glass bin). Preferably use 2.5L plastic or Winchester bottles for decanting solvents.</td>
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</table>

List resources required including personal protective clothing, chemicals and equipment needed

PPE must be worn to enter the room: laboratory coats, safety glasses, chemical resistant gloves, covered (enclosed) footwear, face shield (while decanting), 2.5 or 4L plastic or Winchester bottles only, Winchester carrier

List step by step instructions or order for undertaking the task

Solvent store is used to safety store large quantities of dangerous goods such as flammable or toxic solvents, please ensure to purchase and store minimal volume of chemicals, in order to minimise the associated potential risks.

1. Orientation & store access – floor plan is attached in Appendix 1.
   • Users are required to complete Faculty WHS essential procedures before submitting a request to pharmacy.labsupport@sydney.edu.au for on-site training and orientation.
   • After training and completion of quiz, competent users are granted as authorised users.
   • The key to the solvent store is located at the Faculty's main administration office. Authorised users will be required to sign the key out and sign the key back in immediately after they have finished using the store.
• To enter the solvent store, unlock & open the fire door by sliding it to the right into the door cavity, pushing it all the way until it is captured by the magnetic lock.
• The door is to remain open while users are inside working. When users have completed using the solvent store the door is to be closed by pressing the door release switch which is located on the outside wall to the right of the safety shower & wash basin.

2. Deliveries & labelling
• All deliveries are to be delivered to the Faculty mail room before users transfer them into solvent store.
• Two people are required for heavy drums; Faculty facility officer may be required to help.
• All delivered solvent containers are to store in the allocated shelf for each research group. Containers should contain labels for the following information: Date received, Supervisor/group solvent belongs to, Lab/ room No, Date opened, and opened by.

3. Storage
Flammable & toxic solvents
• Each research group has been allocated an area/shelf for chemical storage, the area and shelf are labelled with the name of the supervisor/group, non-toxic solvents are stored to the allocated area for each group.
• All toxic solvents are stored in the toxic solvent cabinet located in the vestibule outside of the flammable store. These solvents should be transferred to the cabinet as soon as possible after delivery and immediately placed in the toxic solvent cabinet.

Waste materials- to follow the SWP for Hazardous Waste Disposal
Waste materials generated by the Faculty’s teaching & research laboratories are to be stored and locked in the waste store located in the vestibule area of the bulk solvent store.
• Chemical waste: this facility can store the following segregated waste materials: mixed solvent, mixed acid, chlorinated, solid waste, bleached biological waste, disposable radioactive waste.
• Biological waste: including sterilised animal tissues, bleach contained waste (like waste generated in biohazard spill clean-up procedure) and sharps containers etc., and is collected in the Biological Hazardous Waste Bin (yellow).
• Cytotoxic waste: is collected in the Cytotoxic Waste Bin (purple).

When transporting waste from laboratories to the waste store users are to ensure they are wearing appropriate PPE; correct procedure for waste disposal is required to follow and the disposal form is required to send to pharmacy.labsupport@sydney.edu.au.

4. Decanting solvents– to follow the SWP for Decanting Solvents

5. Store ventilation service and maintenance
• The bulk solvent store ventilation is to remain on 24 hours 7 days a week. In the event that the ventilation system fails, an alarm will sound and the ventilation control panel lights will change from green to yellow.
• If this occurs, immediately contact pharmacy.facilities@sydney.edu.au and pharmacy.whs@sydney.edu.au to submit a CIS request, the CIS contractors are responsible for repairs and maintenance.
• DO NOT use the solvent store if the ventilation is faulty.
• The alarm can be muted on the ventilation system control panel by pressing the black mute button.

List emergency shutdown procedures

If the evacuation alarm sounds throughout the Faculty, anyone using the bulk solvent store are to immediately stop what they are doing and exit the store ensuring all containers, doors and gates are closed and locked behind them.
Press EMERGENCY shutdown button to cut off the electricity and evacuate the room.
A copy of the university evacuation procedure is located on the wall near the fire extinguishers inside the main store.
Follow local emergency procedure and approach emergency contacts.

List Emergency procedures for how to deal with fires, spills or exposure to hazardous substances

1. Spills-follow the SWP for Chemical Spills Clean-up
2. Fire
• There are three fire extinguishers located in the bulk solvent store. A powder extinguisher on the wall outside of the waste store in the vestibule area; and one powder and one foam extinguisher inside the main store.
• These are only to be used if faculty staff and students are physically able to use them and are trained to use extinguishers, and the fire is small enough to be extinguished through the use of a fire extinguisher.
3. Exposure to hazardous substances

• Provide appropriate first aid treatment in response to chemical exposures. Refer to the MSDS for guidance.
• Respond to chemical spills and other dangerous events including fire.

List Clean up and waste disposal requirements

Follow SWP for Chemical Spills Clean-up and Hazardous Waste Disposal

List references used in the development of this SWP, e.g. codes of practice

• Work Health and Safety Act 2011
• NSW Poisons and Therapeutic Goods Regulation 2002
• WorkCover NSW Code of Practice – Control of Workplace Hazardous Substances 2006
• WorkCover NSW Code of Practice – Storage and Handling of Dangerous Goods 2005
• University's WHS Policy

List competency required – qualifications, certificates, licensing, training - e.g. course or instruction:

• Before users are permitted to access the faculty solvent store they must attend training and an orientation session in order to familiarise themselves with the facility (Appendix 1).
• Training will be comprised of the following steps: review of operational procedure, successful completion of the associated quiz (Appendix 2), and orientation of the store.
• After successful completion of the training, users will be granted access to the store.
• Names of the authorised users to access to the solvent store are listed at faculty front desk.

Staff approved to assess competence for this SWP

Technical officers and Dr. Sarah Cui
In signing this section the assessor agrees that the following persons are competent in following this SWP.

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date Competent</th>
<th>Name of Assessor/Authoriser</th>
<th>Assessor/Authoriser signature</th>
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</table>
Appendix 2

Quiz to complete for granting access to Pharmacy Solvent Store N208 and N207

**Question 1:** What is the primary use of the Faculty of Pharmacy’s bulk solvent store?

**Question 2:** In which area of the bulk solvent store should chloroform be stored?

**Question 3:** What should be used to safely transport Winchesters from labs to solvent store and back again?

**Question 4:** List the Personal Protection Equipment that must be worn when decanting solvents.

**Question 5:** Explain the steps required when decanting from a solvent drum into a Winchester?

**Question 6:** What should be placed on solvent drums once they have been delivered into the store?

**Question 7:** What is the dangerous good class that flammable liquids are classified under?

Date:
Name:
SID/Staff ID
Supervisor name