PRODUCTION WORKSHOP

SOP No. CHEMICAL SPILL

1 INTRODUCTION

1.1 This Standard Operating Procedure (SOP) describes the safe working when a chemical spill occurs.
1.2 Intended application: Accident / emergency
1.3 Principle of operation: Chemical disposal and cleanup

Service contact: Production Workshop Staff
Phone: Ext 59340 / 59377

2 WARNINGS:

2.1 Safety Precautions:
· See Chemical risk assessments
· See Chemical risk register
· ALL RECORDS ARE KEPT IN THE PRODUCTION WORKSHOP COORDINATOR OFFICE

3 IMMEDIATE ACTIONS

· Clear the area
· Check for any persons involved
· Isolate the spill (if safe to do so)
· Contact the area supervisor or Safety Officer
The primary concern is to protect health and safety. No action should be taken during an emergency response that directly or indirectly violates this principle
Staff and students should put personal safety first - keep clear of a spill unless
trained in spill control and clean up.
· Ensure only trained and competent staff attempt to clean up a chemical substance spill
· Know where MSDSs are kept.
· Attend training provided on spill control.
· Follow written procedures provided for spill control
  · Use spill control equipment in the proper manner and store and maintain equipment as appropriate.

4 UNDERTAKING RISK ASSESSMENTS

Proper response procedures are dependent on correct assessment of the inherent risks. Persons without specific knowledge and/or training in chemical spill response should not make risk assessment judgements.

Who will clean up a chemical spill is determined by a risk assessment involving 3 factors:
• The nature of the spilled chemical (High / Low Hazard material)
• The quantity spilled (Large / Small amounts)
• The location of the spill (difficult access, public site / bunded area)

When evaluating risks associated with spills, 3 questions should be considered:
• Is special training required to handle the situation?
• Is special equipment required to clean up the spill? (ie PPE etc)
• Are special procedures required to clean up the spill (ie pumps, hoses etc)

Where the response is HIGH to any of the first three factors, or YES to any of the second 3 questions then the spill must be considered as HIGH RISK. Generally spills of less than 1 litre of most chemicals can be considered LOW RISK unless the material is highly toxic or reactive. All high risk spills should be handled by the Emergency Services response team. Low risk spills may be handled by area workers under direct supervision.

5 CLEANING THE SPILL

CONSIDERATIONS FOR EVACUATION
• Any situation which poses imminent threat to human health or safety

When the alarm sounds, all persons should immediately exit the building and report to their assigned assembly area.

HIGH RISK SPILLS
1. Contact the Emergency Services Team by calling 0-000 or Security on 59311 and explain the situation.
2. Determine who will take responsibility for the spill, ie Contractor, Fire Brigade, other Emergency Service.
3. Ensure appropriate University Personnel are advised of the situation.
4. Follow any advice or information provided by the Emergency Response Team.

LOW RISK SPILLS
Have at least 2 trained workers to 2. Use the proper protective equipment
3. Ensure fire protection is available for flammable spills
4. Control the source
5. Contain free liquids by damming, absorbing if appropriate
6. Place all spill residues in an appropriate manner
7. Decontaminate the affected area using an appropriate material
8. Decontaminate the salvage equipment
9. Analyse the area to ensure proper decontamination has taken place
10. Examine walkways, floors, stairs equipment etc for other hazards or damage

DEBRIEFING
• All emergency personnel involved in the spill response should be debriefed after the spill has been resolved.
• All spill control supplies should be restocked.
• All damaged or used equipment should be repaired or refilled.
• When the area is deemed clear, it can be re-opened for operations handle the spill

6 MAINTENANCE

PREPARING FOR SPILLS
Know the Material Safety Data Sheet special requirements for spill control such as the type of fire extinguisher required, incompatible substances, reactivity with substances such as water or air.
Where a substance is unknown, or an experimental substance with no MSDS, always treat as toxic.
Ensure that each I has:
• Sand, 'kitty litter' and absorbent spill pillows are available to prevent hazardous substances entering drains or storm water systems. (Contact Safety Officer)
• Appropriate PPE such as gloves, protective clothing, face shields, respirators or SCBA should be readily available, depending on the hazards associated with the types of substances used or stored in an area. (Available in the mobile spill stations)
• A chemical resistant container with a close fitting lid that will hold at least the volume of sand and other contaminated material should be on hand for waste disposal of the spilled material. (Available in the mobile spill stations)
Wherever practicable, the storage and use of the chemical should be in an area which can contain or restrict the flow from a spill site. On benches, this can be assisted by a raised lip at the front of the bench, or by the use of spill trays.
In storage cabinets, trays should be provided that are compatible with the contents, and which will contain the contents of the two largest glass containers, or the largest metal or plastic container.
For storage areas where liquids are involved, bunding should be considered. This is mandatory for certain areas.