

Department	Environmental, Health and Safety	Document no	EHS-110		
Title	Laboratory Spill Response				
Prepared by:		Date:		Supersedes:	
Checked by:		Date:		Date Issued:	
Approved by:		Date:		Review Date:	

1.0 AFFECTED PARTIES

All Environment, Health and Safety personnel

2.0 PURPOSE

This SOP provides guidance and instruction on the management of chemical spills in a laboratory environment.

3.0 SCOPE

This SOP applies only to the spills of liquid and solid chemical spills in a chemistry laboratory environment. Spills of [microbiological agents](#) are outside the scope of this SOP.

4.0 RESPONSIBILITY \ BUSINESS RULES

Laboratory Management shall ensure a minimum of 2 laboratory colleagues per shift are trained in the performance of spill response and clean up.

5.0 PROCEDURE

5.1 Spills of Solid Materials

5.1.1 Is the material hazardous?

If No, go to **5.3 General Clean Up Procedure**.

If Yes, or it is not possible to determine hazardous nature, continue to 5.1.2.

5.1.2 Assess the hazardous type and proceed to the appropriate paragraph 5.1.2.1 – 5.1.2.3 below.

5.1.2.1 Acid or Base Material (Phosphorous Pentoxide).

Examples of acids include P_2O_5

Examples of bases include NaOH (Sodium Hydroxide).

- Ensure water is not permitted to come into contact with the spilled material.
- Don the following PPE: Safety shoes Rubber gloves Laboratory coat Safety spectacles Face shield.
- Collect the spilled material into hazardous waste bags in the spill kit, using the scoops provided.
- When all the spilled material has been collected, carefully place the used scoops into the hazardous waste bag.
- Seal the bag with plastic ties and label as either “Acid waste material – solid” or “Basic waste material – solid” and include the name of the material on the label.

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- Select the appropriate absorbent from the Spill Kit store. Absorbents are available for acids, alkalis and solvents.
- Apply the absorbent as directed on the absorbent container.
- Use scoops provided to collect the absorbed material in hazardous waste bags.
- Place the used scoops and any used disposable PPE into the same hazardous waste bag.
- Seal the bag with plastic ties and label as either “Acid waste material – absorbed liquid” or “Basic waste material – absorbed liquid” or “Solvent waste material – absorbed liquid” and include the name of the material on the label.
- Complete the spill cleanup by following go to **5.3, General Clean Up Procedure**.

5.2.3.2 Spill Volume more than 7L

- IF SAFE TO DO SO, contain the spill using the spill kit items.
- Contact the EHS group for advice on clean up and disposal of the material. If the material is known, also consult the MSDS.

5.3 General Clean Up Procedure

5.3.1 Clean the area of the spill using an approved cleaning agent from “*Approved List for Lubricants, Cleaning Agents, Oils and Miscellaneous Materials*”. Seek advice from the cleaning contractor staff on choosing the correct cleaning agent.

5.3.2 Store all reusable equipment in the Spill Kit store.

5.3.3 Complete the reporting of the incident according to

[SOP EHS-070 “Hazard Identification and Incident / Accident Investigation Reports.”](#)

6.0 DEFINITIONS / ACRONYMS

MSDS Environmental Health and Safety

PPE Material Safety Data Sheet

overalls) Personal Protective Equipment (such as gloves, safety spectacles,

7.0 SUMMARY OF CHANGES

Version #	Revision History
EHS-110	New