

ICMS Chemical Spill Drill Guidelines for Simulated

Laboratory Spills – For Instructor

A. Introduction

Date: TBC (once a year)

Time: TBC

Venue: TBC

Participants: ICMS laboratory users

Purpose: In this drill, the instructor (it is recommended to demonstrate the spill response drill at least two persons) will demonstrate the participants how to handle a minor spill. A minor chemical spill is one that the lab-user is capable of handling safely without assistance of safety or emergency personnel. All other chemical spills are considered major. Please read all sections A-E in the document, “Emergency Procedures” and “Chemical Spill Response Guidelines” before the drill.

B. Before the Drill:

- 1) Familiar with the location and method of use of the spill response kits, neutralization reagents, absorbents and emergency facilities. Ensure the quantities of the first 3 items are sufficient for the drill.
- 2) Familiar with the MSDS search method
- 3) Prepare a container with water and a chemical label
- 4) Select a chemical to be the subject of the drill.

C. During the drill:

- 1) Notify everyone in the laboratory that a drill is taking place.
- 2) Simulate a spill with a small amount (5-10 ml) of water on the floor (DO NOT intentionally spill a hazardous chemical). Label the container with water by using the chemical label (refer to section B, point 3) as the selected chemical (refer to Section B, point 4) and place it next to the simulated spill.
- 3) Discuss with the participants how to identify the simulated spill chemical, e.g.

check the label on the container, appearance, obvious odor, etc.

- 4) Consult the MSDS of the chemical
- 5) Indicate the location of the spill response kits and demonstrate the method of use for each item, including mask, gloves, broom and dustpan, and absorbent barrier.
- 6) It is recommended to demonstrate the spill response drill at least two persons.
- 7) Each participant, including the demonstrators and the audiences, should wear appropriate PPE and clean up the simulated spill according to MSDS.
- 8) The method of use of the spill response kits, can be referred to “Chemical Spill Response Guidelines”.

D. After the drill:








- 1) Since the spill is simulated, the materials can be discarded in the trash.
- 2) Discuss how to dispose the chemical absorbent for an actual spill – the hazardous absorbent should be placed in an approved container, and clearly label the contents as “Hazardous Waste”, the “Date”, the “Chemical, Concentrations and Volumes (if known)”, and the “Name of the Handler”.
- 3) Indicate the location of neutralization reagents and discuss with the participants how to apply during an actual spill.
- 4) Remind the participants that the drill is only applied to minor spill (refer to Section A, purpose) and they should report to the laboratory technicians of ICMS laboratory for an actual spill.
- 5) Indicate the location of emergency facilities and lists of safety phone numbers to the participants.

E. Complete the drill report

The instructors should prepare the drill report and submit it to ICMS laboratory technician office and thus ICMS safety committee within five days after the completion of the drill. The instructor should:


- 1) Arrange personnel for photos taking during the drill
 - 2) Take the attendance before starting the drill
 - 3) Discuss and review the effectiveness of the whole process of the chemical spill drill and the emergency response procedures, and provide suggestions in the report
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Chemical Spill Kit Check List 化學安全泄漏工具盒清單:

No.	Item / 物品		Picture/ 圖示	Qty / 數量
1	Visitor spectacle	保護眼鏡		1-2 pcs/副
2	Gloves, Ansell	手套		1-2 pair/對
3	R95 Face Mask	R95 口罩		1-2 pcs/個
4	Hazardous Waste Bag	危害物垃圾袋		2 pcs/個
5	Sweeping set	掃帚工具		1 set/套
6	Safety sorbent, 1.75lb,WYK, model 500/UP40	吸附劑		2 boxes / 盒
7	3M Chemical Sorbent sheet	化學品吸附棉		5-6 sheets /片
8	Labels	標籤紙		1 pc/份

化學洩漏處理包使用方法 Spill Cleanup Procedures




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(Chemical Spill Kit) 化學品洩漏處理箱

			
Spill kit 化學品洩漏處理箱	Nitrile Gloves 防護手套	Safety goggles 防護眼鏡	Mask 口罩
			
Absorbent pillow/sheet 吸液條/片		Hazardous bag 廢料處理袋	Sweep 小掃把/簸箕