| NUS Safety & Health Guidelines | Procedure No:                | OSHE/SOP/CS/04   |
|--------------------------------|------------------------------|------------------|
| Chemical Spill Response        | Revision No:<br>Issue Date : | 000<br>21-Oct-04 |
|                                | Page:                        | 1 of 4           |

| Prepared By       | Approved By        | Review Date |
|-------------------|--------------------|-------------|
| Subbiah Annamalai | Dr Peck Thian Guan | 21-Oct-04   |

#### 1.0 OBJECTIVE

This document provides guidelines on how spills and accidental releases arising from handling, transportation and storage of chemicals are to be handled.

#### 2.0 SCOPE

This guideline applies to laboratories and facilities under the purview of NUS that are engaged in the use, storage, transportation and delivery of chemical materials and supplies.

### 3.0 RESPONSIBILITIES

## 3.1 Principal Investigator

The PI is responsible for:

- a. Assessing the incident and the course of action required to control the incident effectively.
- b. Ensuring that an incident report is submitted to the relevant parties such as Head of Department, Deanry or OSHE.
- c. Implementing any corrective measures as stipulated by the Head of Department, Deanry or OSHE.

### 3.2 Deanery

The Deanery is responsible for establishing procedures for:

- a. Reporting incidents of chemical spillage to the OSHE.
- b. Inform other faculty staff if the incident is not confined within the laboratory.
- c. Assess the incident report to determine the effectiveness of response and remedial measures by the PI.
- d. Communicate lessons learnt to other departmental staff.

#### 4.0 DEFINITIONS

**Chemical incident**: Any spillage or incidents occurring due to chemicals.

SCDF/ HazMat: Singapore Civil Defense Force's HazMat wing

MOM: Ministry of Manpower

**NEA**: National Environmental Agency

| NUS Safety & Health Guidelines | Procedure No:                | OSHE/SOP/CS/04   |
|--------------------------------|------------------------------|------------------|
| Chemical Spill Response        | Revision No:<br>Issue Date : | 000<br>21-Oct-04 |
|                                | Page:                        | 2 of 4           |

### 5.0 PROCEDURES

## 5.1 Response Plan

Every faculty / department must develop a response and mitigation plan to respond to chemical spills/releases. The emergency plans should contain the following elements:

- a. How to contain the chemical spill/ release, including using the appropriate absorbent material for liquids and ventilation methods for vapours.
- b. The type of response in relation to the spill (please refer to the flowchart)
- c. Activation of emergency response team, if available.
- d. Wearing of appropriate PPE
- e. How to give first aid for injuries resulting from exposure to chemicals.
- f. Signage to warn others of the hazards.
- g. Notification to other departmental staff, faculty safety & health officer, OSHE and external agencies, if necessary.
- h. Evacuation procedures.
- i. Reporting and investigation procedures
- j. Storage and disposal of absorbents and other materials used in the spill.

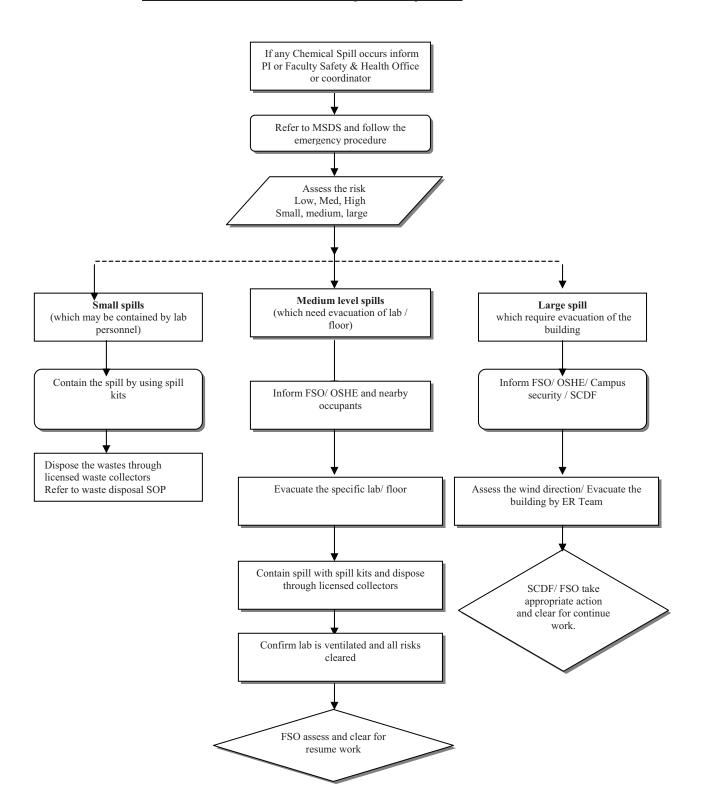
## 5.2 Spill Response Kit

To effectively contain any spilled chemicals, each laboratory should purchase and maintain suitable spill kits. The contents of the spill kit should, contain, at minimal the following:

- a. Appropriate absorbent to soak up the chemical
- b. Appropriate Personal Protective Equipment such as gloves, boots, face shield, etc.
- c. Waste disposal bags
- d. Signage and labels
- e. Thongs to put up sharps such as glass pieces

| NUS Safety & Health Guidelines | Procedure No:                | OSHE/SOP/CS/04   |
|--------------------------------|------------------------------|------------------|
| Chemical Spill Response        | Revision No:<br>Issue Date : | 000<br>21-Oct-04 |
|                                | Page:                        | 3 of 4           |

# 5.3 Flow chart for Chemical Spill Response



| NUS Safety & Health Guidelines | Procedure No:                | OSHE/SOP/CS/04   |
|--------------------------------|------------------------------|------------------|
| Chemical Spill Response        | Revision No:<br>Issue Date : | 000<br>21-Oct-04 |
|                                | Page:                        | 4 of 4           |

#### 5.4 Notification Procedures

- a. The PI is responsible for notifying the relevant personnel in NUS about the spill. Please refer to SOP on incident reporting (OSHE/SOP/GL/02) for the appropriate reporting procedures.
- b. The PI or his designate is responsible for compiling an incident report.
- c. Medium and large spills are defined as those requiring evacuation of the laboratory as the laboratory's spill control resources are insufficient to effectively contain the spill.

### 6.0 RECORDS

- a. Incident reporting forms
- b. Investigation reports

### 7.0 REFERENCES

- a. SOP for Chemical Waste Disposal (OSHE/SOP/CS/01)
- b. SOP for Accidents/Incidents Reporting and Investigation (OSHE/SOP/GL/02)

## 8.0 APPENDICES

Nil