

## **LABORATORY SAFETY**

### **INTRODUCTION**

Employees conducting laboratory activities encounter a wide variety of potential health and safety hazards. Exposure to hazards will vary depending on the type and duration of the activity. Planning and preparation for laboratory activities is an important part of ensuring a safe and healthful laboratory work environment.

The planning and preparation process includes techniques and procedures for:

- Researching and identifying the potential for occupational hazards and risks
- Evaluating risks/hazards and minimizing the potential for exposure
- Selecting and maintaining appropriate protective equipment, clothing, and other hazard control measures.

### **OBJECTIVES**

At the end of the training course, participants should be able to:

- Identify key elements that must be considered when planning and preparing for laboratory activities.
- Reviewing the laboratory's Chemical Hygiene Plan (CHP)
- Conducting hazard assessments
- Selecting appropriate control measures (administrative, engineering control measures, personal protective equipment (PPE), etc.)
- Identifying emergency procedures.

### **DURATION**

The duration of this program is 3 days, 8.30am – 5.30pm

### **WHO SHOULD ATTEND**

Lab managers, supervisors, chemists, technicians, health and safety professionals

### **TRAINING SYLLABUS**

Module 1: Introduction

- Brief Introduction to OSHA
- Chemical Hazards
- Health Effects
- Exposure Limits
- General recommended lab procedures

Module 2: Laboratory Operations

- Standards Operating Procedures
- Storage
- Handling Chemicals

### Module3: Legislation Dealing with Hazardous Materials

- Transportation of Dangerous Good Regulations
- Compliance/ Training
- Chemical hygiene Plan
- Waste

### Module 4: Safety Equipment & Procedures

- Safety Procedures
- Personal Protection Equipment
- Lab Safety equipment

### Module 5: Miscellaneous aspects of Safety

- Compressed Gases
- Biological Hazards
- Radiation
- Electrical Safety
- Confined Space
- Ergonomics

### Module 6: Emergencies

- Standards Operating Procedures
- Fire-Fighting equipment
- First Aid
- Accident/ Incident reporting

### **LANGUAGE MEDIUM**

English and/or Bahasa Malaysia. The training can be executed in a dual language option.