

#### **4. WHO Laboratory Biosafety Manual (Third Edition)**

For more than 20 years, since it was first published in 1983, the *Laboratory Biosafety Manual* has provided practical guidance on biosafety techniques for use in laboratories at all levels. For this new edition, the manual has been extensively revised and expanded. The manual now covers risk assessment and safe use of recombinant DNA technology, and provides guidelines for the commissioning and certification of laboratories. Laboratory biosecurity concepts are introduced, and the latest regulations for the transport of infectious substances are reflected. Material on safety in health-care laboratories, previously published elsewhere by WHO, has also been incorporated

#### **5. Malaysia Guidelines for Contained Use Activity of Living Modified Organism (LMOs)**

This guideline gives details on the Biosafety Levels (BSL) for containment as well as the safe practices for working with different types of LMO. Types of LMO outlined in the guideline are genetically modified microorganism, plant, animal, arthropod and aquatic. Other information found in this guideline are biological safety cabinet, disposal of LMO and related waste, movement, transport and storage of LMO. This guideline should be used in addition to the relevant legislations, guidelines and references that involve containment facilities

### **2.1.1 Other Relevant Regulations**

#### **1. Malaysia Factories and Machinery Act with Regulations 1967**

Factories and Machinery Act (FMA) 1967 or Act 139, is to provide for the control of factories on matters relating to the safety, health and welfare of persons, and the registration and inspection of machinery. Some high risk machinery such as boilers, unfired pressure vessels, passenger lifts and other lifting equipment such as mobile cranes, tower cranes, passenger hoists, overhead traveling cranes and gondolas, must be certified and inspected by DOSH. All factories and general machinery must be registered with DOSH before they can be installed and operated in Malaysia

#### **2. Malaysia Occupational Safety and Health Act and Regulations 1994**

The Occupational Safety and Health Act (**OSHA**) 1994 - Act 415 provides the legislative framework to promote, stimulate and encourage high standards of safety and health at work. The aim is to promote safety and health awareness, and establish effective safety organisation and performance through self-regulation schemes designed to suit the particular industry or organisation. The long-term goal of the Act is to create a healthy and safe working culture among all Malaysian employees and employers

In addition to the above regulations, the practices done in this facility should also comply with the following general laboratory regulations:

1. Access to the plant facility is limited to authorised personnel only
2. All work done should obtain permission from the facility manager and the IBC
3. All doors to the plant facility should be locked during the experimentation except for the periods in which the personnel are working inside
4. Personnel are required to read and understand the biosafety manual of the greenhouse prior to entering the facility