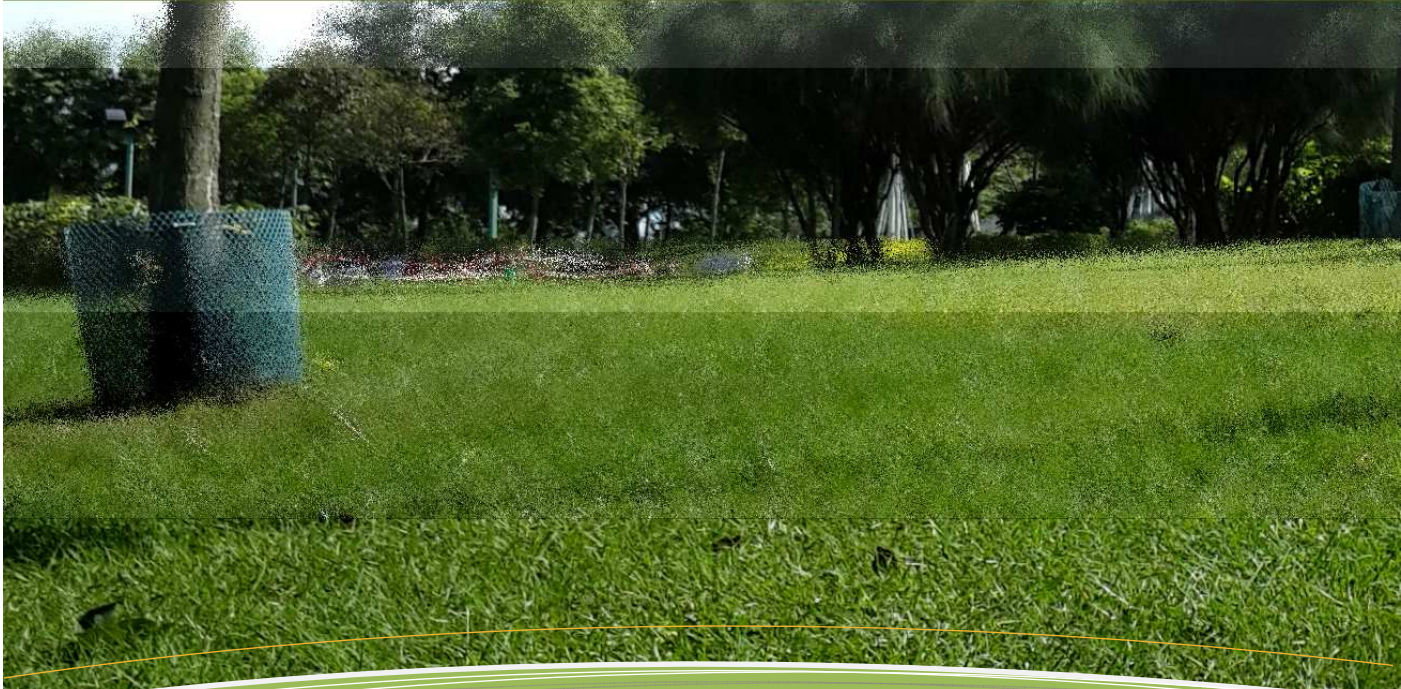


# Code of Practice for the Safe and Proper Use of Pesticides in Public Areas



Compiled by the Working Group  
for Safe and Proper Use of Pesticides  
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## **1. Introduction**

- 1.1 This Code of Practice, designed for workers who are required by their duties to apply pesticides in public areas, aims to provide them with practical guidance on the safe and proper use of pesticides.
- 1.2 The guidelines contained in this Code should not be regarded as exhaustive, covering all those matters covered in the relevant health and safety and other related environmental legislations, nor do they relieve the parties involved in the use of pesticides of any statutory responsibilities.
- 1.3 Taking into account safety concerns and environmental benefits, this Code should be periodically reviewed so as to provide up-to-date and effective guidance.
- 1.4 The formulation of this Code does not suggest that pesticides may be applied once safely and properly handled. Before a decision is made on the application of pesticides, consideration should be given first to the other control measures available.

## **2. Application**

- 2.1 This Code is applicable to workers who are required by their duties to apply pesticides in public areas, such as staff of government departments, government contract staff, workers employed by government contractors and their sub-contractors, etc.
- 2.2 In addition to the guidelines on the safe and proper use of pesticides provided in this Code, workers applying pesticides must also observe the operational guidelines or instructions set out by the respective or employing government departments concerned with respect to the conditions or restrictions of individual sites and the properties of the pesticides involved.

## **3. Terms and Interpretations**

- 3.1 In this Code, the terms and interpretations set out below follow the same definition as those stipulated under Section 2 of the Pesticides Ordinance (Cap. 133):
  - “active ingredient” means any substance, mixture of substances or biological agent in the pesticide which is the biologically active part of the pesticide;

- “licence” means a licence to import, manufacture, sell or supply registered pesticides issued under section 9;
- “permit” means —
  - (a) a permit to import, manufacture, sell, supply, be in possession of or use a scheduled pesticide or any other unregistered pesticide issued under section 9; or
  - (b) a permit to export a scheduled pesticide issued under section 9;
- “pesticide” means —
  - (a) any insecticide, fungicide, herbicide, acaricide or any substance (whether organic or inorganic) or mixture of substances used or intended to be used for preventing, destroying, repelling, attracting, inhibiting or controlling any insect, rodent, bird, nematode, bacterium, fungus, weed or other form of plant or animal life or any virus, which is a pest; or
  - (b) any substance or mixture of substances used or intended to be used as a plant growth regulator, defoliant or desiccant,

but does not include —

  - (i) any purely mechanical device for trapping or catching insects, rodents or other animals;
  - (ii) any purely electromagnetic or ultrasonic device for the control of mosquitoes, rodents or other pests;
  - (iii) any antiseptic, disinfecting solution or preparation in clinical or sanitary applications that is neither specified in Schedule 1 nor in Part 1 of Schedule 2;
  - (iv) any pharmaceutical product within the meaning of section 2 of the Pharmacy and Poisons Ordinance (Cap. 138); and
  - (v) any insecticide, fungicide, herbicide, acaricide or any substance (whether organic or inorganic) or mixture of substances described in paragraph (a) or (b), if —
    - (A) it is neither specified in Schedule 1 nor in Part 1 of Schedule 2;
    - (B) it is contained in an individual package or container and does not exceed 10 g or 10 ml; and
    - (C) it is used or intended to be used indoors —
      - (I) for laboratory research;
      - (II) for chemical analysis; or
      - (III) as a reference standard;

- “registered pesticide” means a pesticide which is registered in the register;
- “scheduled pesticide” means an unregistered pesticide specified in —
  - (a) Schedule 1 or Part 1 of Schedule 2; or
  - (b) both Schedule 1 and Part 1 of Schedule 2;
- “unregistered pesticide” means a pesticide which is not registered in the register.

3.2 In this Code, the term “responsible party” means any person or organisation in charge of the planning and management of any pesticide application activities conducted in public areas. A responsible party could be a government department or a private operator.

3.3 In this Code, the term “pesticide user” means any person who applies pesticides in public areas.

#### **4. Regulatory Control of Pesticides**

Under the Pesticides Ordinance (Cap. 133), the regulatory control of pesticides is effected through the following means:

- registration of pesticides;
- requirement of a licence for any person to import, manufacture, sell or supply any registered pesticide;
- requirement of a permit for any person to import, manufacture, sell, supply, be in possession of or use any unregistered pesticide which is not a scheduled pesticide;
- requirement of a permit for any person to import, export, transship, manufacture, sell, supply, be in possession of or use any scheduled pesticide; and
- minimum requirements for labelling and bottling of pesticides.

##### **4.1 Registration of Pesticides**

Only pesticides registered in Hong Kong are allowed to be distributed and used in Hong Kong under a Pesticide Licence. The Director of Agriculture, Fisheries and Conservation (DAFC) maintains a register of pesticides which includes a list of the active ingredient(s), maximum concentration limit and permitted formulations of all registered pesticides. The register of pesticides consists of two parts. Pesticides

listed in Part I are ready-for-use domestic pesticides and those in Part II are all other pesticides. The above registration details have been uploaded to the website of the Agriculture, Fisheries and Conservation Department (AFCD) for public information.

#### **4.2 Pesticides Licence**

No person shall import, manufacture, sell (including retail) or supply any registered pesticides except holding a valid Pesticides Licence. Pesticides Licences must be renewed annually. Pesticides Licences issued cover all registered pesticides contained in Part I or both Parts I and II of the register of pesticides.

#### **4.3 Pesticides Permit**

No person shall import, manufacture, sell (including retail), supply, be in possession of or use a scheduled pesticide or any other unregistered pesticides, or export or transship a scheduled pesticide, except holding a valid Pesticides Permit. Pesticides Permits, issued for specific pesticides, are valid for six months and may be renewed for further periods of six months subject to the approval of the DAFC. Scheduled pesticides not exceeding 10 g or 10 ml that are contained in an individual package or container and used indoors for laboratory research, chemical analysis or as a reference standard are excluded from the permit requirement.

#### **4.4 Import and Export of Pesticides**

Registered pesticides may only be imported by a holder of a Pesticide Licence. Scheduled pesticides or any other unregistered pesticides may only be imported or possessed by a holder of a Pesticides Permit issued in respect of the pesticide specified therein. In addition, each shipment of registered pesticides, scheduled pesticides or any other unregistered pesticides entering/leaving Hong Kong must also be covered by an import/export licence issued under the Import and Export Ordinance (Cap. 60). All import/export licences, with the exception of those covering methyl bromide, are issued by the AFCD under delegation from the Trade and Industry Department. Import/export licences for methyl bromide are issued directly by the Director-General of Trade and Industry.

#### **4.5 Labelling of Pesticides**

Minimum requirements for the labelling and bottling of pesticides are stipulated in the Pesticides Regulations (Cap. 133A). These requirements are set out to safeguard the pesticide users, the general public and the environment.

## Example of a (Part I) Pesticide Label

第一部份除害劑標籤樣本 EXAMPLE OF A (PART I) PESTICIDE LABEL

|                                       |   |
|---------------------------------------|---|
| 牌子 : XXXX                             | Brand Name : XXXX   |
| 除害劑類型 : XXXX<br>必須閱讀及依照標籤指示。<br>對人畜有害 | Type of Pesticide : XXXX<br>Always read and follow label instructions.<br>HAZARDS TO HUMANS AND ANIMALS |
| 主治害蟲 : _____                          | Target Pest : _____   |
| 使用方法 : _____                          | Directions for Use : _____  |
| 注意事項 : _____                          | Precautions : _____   |
| 存放 : _____                            | Storage : _____   |
| 棄置容器 : _____                          | Disposal of Container : _____   |
| 急救方法 : _____                          | First Aid : _____   |
| 解毒劑 : _____                           | Antidote : _____  |
| 有效成份 : _____                          | Active Ingredients : _____  |
| 劑型 : _____                            | Formulation : _____   |
| 註冊編號 : _____                          | Registration No. : _____  |
| 淨含量(容量/重量) : _____                    | Net Content (Volume/Weight) : _____   |
| 有效日期 : _____                          | Expiry Date : _____   |
| 供應商名稱及地址 : _____                      | Supplier's Name and Address : _____   |
| <b>毒藥</b><br>遠離孩童                     | <b>POISON</b><br>KEEP OUT OF REACH OF<br>CHILDREN   |

## Example of a (Part II) Pesticide Label

第二部份除害劑標籤樣本 EXAMPLE OF A (PART II) PESTICIDE LABEL

|   |  |   |                      |
|---|--|---|----------------------|
| (牌子 BRAND NAME)<br>(除害劑類型 TYPE OF PESTICIDE)<br>對人畜有害 必須閱讀及依照標籤指示<br>Hazards to Humans and Animals<br>Always read and follow label instructions.<br>Failure to follow the instructions on this label may result in<br>serious injury or may be fatal.<br>有效成份 Active Ingredient:<br>_____ %w/v or w/w<br>註冊編號 Registration No.: _____ | 使用方法 DIRECTIONS FOR USE:<br>只供_____用途, 不可作其他用途 For _____ use only, not for any other purposes!   |   |                      |
|   | 防治對象 TARGET PEST   | 稀釋比率 DILUTION RATE  | 使用量 APPLICATION RATE |
| <b>毒藥 POISON</b><br>遠離孩童<br>如誤服、吸入或滲入皮膚都會有危險<br>KEEP OUT OF REACH OF CHILDREN<br>Harmful if swallowed, inhaled or absorbed through skin   | 注意事項 PRECAUTIONS<br>應小心遵守產品注意事項及使用方法。<br>The Directions for Use and Precautions of this product must be followed carefully.  |   |                      |
|   | 中文(Chinese)  |   | 英文(English)          |
| <u>相容性 COMPATIBILITY</u>  | <u>物理及化學性危害 PHYSICAL AND CHEMICAL HAZARDS</u>  |   |                      |
| <u>環境污染 ENVIRONMENTAL HAZARDS</u>   | <u>存放 STORAGE</u><br>小心儲藏, 遠離食物、飲料、飼料、藥劑及動物, 須存放在緊閉的有標籤原裝容器內, 並置於陰涼乾燥處, 必須與除害劑分開存放。<br>Always keep the pesticide in the original-labeled container and store in a cool, dry and safe place under lock and key and away from food, drink, feedstuffs, children and animals. Store away from herbicides. | <u>棄置容器 DISPOSAL OF CONTAINER</u><br>除害劑用完后, 將容器沖洗三次後毀爛, 再作一般廢物處理, 不可將容器作其他用途。清洗容器後之殘餘除害劑不可污染水源, 應將其加入噴霧器內再作使用。<br>Triple rinse empty container, then break and dispose of as standard municipal waste. Do not re-use this container for any other purpose. Add the rinsing to the spray mixture for reuse, do not pour into the waterways. |                      |
| <u>急救方法 FIRST AID</u><br>如誤服: _____<br>如皮膚沾上: _____<br>如眼噴沾上: _____<br>如吸入: _____<br>If swallowed: _____<br>If on skin: _____<br>If in eyes: _____<br>If inhaled: _____   | 適當圖示 Appropriate Pictograms  |   |                      |
| <u>解毒劑 ANTIDOTE</u> : _____<br>送院診治時, 必須帶同此標籤。<br>Always bring along the label when seeking medical attention.  | 淨含量(容量/重量)<br>NET CONTENT (VOLUME/WEIGHT): _____<br>供應商 SUPPLIER: _____<br>電話 TEL: _____<br>包裝日期 Repackaging Date: _____<br>有效日期 Expiry Date: _____  |   |                      |

## **5. Responsibilities of Responsible Parties and Pesticide Users**

The responsible parties should ensure that all operations of pesticide application are safely conducted, with the risk imposed on the people working in or near the application area being minimised as far as practicable. All pesticide users involved in pesticide application operations are required to take reasonable care for not only the safety and health of themselves, but also of other persons who may be affected by the operations. The responsible parties should strictly observe the regulatory requirements under Cap. 133, and if necessary, apply to the AFCD for the relevant licences and permits and fully comply with the related terms and conditions.

### **5.1 Outsourcing of Pesticide Application Services**

If pesticide application operations are required to be outsourced to private operators, the responsible parties are advised to select appropriate service providers, which could provide quality service and well-trained staff for pesticide application operations. The responsible parties should clearly state their requirements in the service tendering documents, especially on safety management measures in each stage of the operation, and may include this Code or certain sections of this Code as tender conditions. The responsible parties must also establish an appropriate monitoring mechanism to ensure that the contractors comply with the tender requirements.

### **5.2 Training of Pesticide Users**

The responsible parties should provide their staff with adequate training, through either on-the-job training or safety training courses organised by appropriate educational institutes, to ensure that all pesticide users are equipped with relevant technical knowledge of pesticide application with a view to maintaining a quality standard of service.

The training standard should meet the need of different job nature, so that pesticide users are capable of understanding the information and instructions and acquire sufficient technical knowledge to discharge their duties in a safe and proper manner. The training of pesticide users should focus on the properties of pesticides in their routine use and the potential hazards that the pesticides may pose.



## **6. Proposal on Good Pesticide Management**

### **6.1 Preparation for Pesticide Applications**

#### 6.1.1 Purchase of Pesticides

- Pesticides should be registered in Hong Kong, with labels in both Chinese and English as required under the legislation.
- Prior to pesticide application, one should assess whether the pesticide treatment is necessary and consider the feasibility of adopting other measures, such as biological or environmental preventive measures. The pesticides and the application methods selected should have the least impact on humans, animals and the environment.

#### 6.1.2 Proper Maintenance and Regular Checking of Equipment

- Personal protective equipment (PPE) generally includes overalls, PVC aprons, helmets or caps, goggles, gloves and protective respirators, etc. The proper protective equipment could effectively protect the working staff. Reference should be made to the information provided by the manufacturers and suppliers when making a choice. Working staff should also know the correct way of using and maintaining the PPE. Cracked or damaged PPE should be replaced.
- The PPE should be stored separately from the pesticides and other items to avoid contamination.
- The PPE should be washed at once after use. Overalls should be washed with soap or washing powder on a daily basis.
- Check all the equipment to ensure that it is in good condition. Should there be any crack or damage, the equipment should be stopped from use and arranged for replacement or maintenance.
- Use separate sprayers identifiable with a clear marker for application of insecticides and herbicides.
- Provide regular maintenance, repair and calibration for the sprayers, and carry out problem shooting on the sprayers, such as leakage from joints, pipes and worn-out parts, corroded or blocked nozzles (resulting in uneven spraying), etc.
- After use, action should be taken to -

- empty the residue left in the nozzles. Do not blow out clogged nozzles with the mouth;
  - rinse the spraying tank with clean water, flushing some through nozzles;
  - repeat the rinse, and drain away the water inside the tank and nozzles completely; and
  - store the sprayers in a dry place with the lid of the tank open.
- If a motorised sprayer is not to be used within 48 hours, drain the fuel tank and carburetor and leave them empty.

### 6.1.3      Precautionary Measures Prior to Application of Pesticides


- Prior to application, the responsible parties should check the application area and its periphery to assess the potential hazards, which may affect humans and the environment, in particular the leisure facilities which are open to the public such as recreational areas, parks, gardens and children's playground, etc.
- Ensure that the application operations are well-planned and arranged at times of low pedestrian flow, or if necessary, the application area may be temporarily closed for treatment purpose.
- If it is necessary to carry out treatments when the application area is with a high pedestrian flow (e.g. during weekends or public holidays), the affected parties or on-site working staff should be informed in advance and provided with details of the operations for arrangement of appropriate precautionary measures.
- Prepare conspicuous notices or warning signs to inform affected parties, or the public of the relevant date, time, place and duration of treatment. The application area should also be clearly defined and isolated prior to operations to prevent public access.
- Make available the relevant Material Safety Data Sheets of the pesticides concerned for emergency use.

## **6.2      Recommendations for safe use of Pesticides**

### 6.2.1      Display of Warning Notices

The responsible parties should ensure that Chinese-English bilingual warning notices are posted in prominent positions in the application site and in the

periphery of reasonable distance before and after the operation. The warning notices should include at least the following information:

- a. name of the government department;
- b. common name of the active ingredients in the pesticides;
- c. registration number of the pesticides;
- d. date and time for application of pesticides;
- e. appropriate pictograms  suitable only for application of rodenticide; it is not required for application of other pesticides);
- f. the wordings “WARNING” and “ATTENTION” should be used in the warning signs for rodenticides and other pesticides respectively;
- g. contact information of the responsible department;
- h. warning signs should be displayed in a Chinese-English bilingual version;
- i. warning signs should be printed in A4 size; and
- j. the size of the characters should be big enough to be seen with the naked eye.

#### 6.2.2 Restriction on Entry to the pesticide treated Area

- Only the working personnel with appropriate protective clothing are allowed to enter the application area.
- The pesticide treated area should be isolated with distinguishable barriers, which can be easily identified by the public and non-working staff to prevent accidental entry to the application site until the no-entry period expires.
- If no re-entry period is specified on the pesticide label, the responsible parties may still consider prohibiting the public from entering the site, until the pesticide treated area is completely dry or deemed appropriate to re-open for public access.

#### 6.2.3 Preparation and Mixing of Pesticides

- Read carefully the label on the pesticide containers and the prevailing user guide of the department.
- Wear waterproof rubber gloves, overalls with PVC aprons, masks and goggles as recommended.
- Containers for mixing pesticides should be placed upwind.
- Prepare or mix the pesticides in a designated well-ventilated location,

where should be separated from other rest areas or working places.

- Choose sprayers of appropriate size, adjust the spraying pressure and the distance of the spraying target, for minimizing the generation of mist and rebound of pesticide droplets or excessive spraying.
- Do not prepare pesticides at places frequented by non-authorized persons (such as general offices).
- When opening the container or pouring the liquid into the sprayer, avoid dust contamination and the spilling of liquid.
- Do not use or mix pesticides in strong wind.
- Measure the required pesticides with appropriate apparatus. Applying an excessive amount of pesticides is wasteful and harmful, and not able to control pests more efficiently.
- Do not mix pesticides at places where pesticides may be leaked into the water source due to spillage or overflow.
- In case of spillage, handle it with chemical absorbent agents such as fine sand, clay, commercial absorbent agent for spillage or sand for pets. If such absorbent materials are not readily available, other use other absorbent materials such as mud and newspapers to stop the diffusion of spillage within a short period of time.
- If the skin comes into contact with the pesticides, rinse off with large quantity of soap and water. If the clothes are sprayed with pesticides, they should be changed immediately.
- Clean all the tools after used. Do not use any abraded glassware or plastic containers for preparing pesticides.

#### 6.2.4 Application of Pesticides

- Wear appropriate protective clothing and equipment such as helmets and masks, goggles, ear muffs and gloves as recommended.
- Ensure the apparatus for pesticide application is accurately calibrated.
- Ensure the equipment for pesticide application is in good condition.
- The amount of pesticides should be applied as instructed.
- Do not apply pesticides in liquid or powder form in strong wind.
- Should be cautious to avoid contamination of the fodder, food or water source by pesticides.
- Should soft tubes or nozzles are blocked, do not blow it with mouths.
- Should there be any leakage in the equipment, stop using it and pending repair or disposal.

- Inform all occupants near the application area (if any) in advance, to ensure that they will not be affected by the pesticide application.
- No one is allowed to stay within the application area, apart from operational staff and their supervisors.
- Turn off central air-conditioning system in the treatment areas before and during the application until the places allow for re-entry.
- Provide advice to occupants of the places concerned not to enter the application area until the places allow for re-entry.
- Remove dead insects with tools.
- Provide advice to occupants of the places concerned not to remove any dead insects bare-handed.
- Clean all the tools used in the course of pesticide application.
- Wash the protective equipment and hands thoroughly with soap.

#### 6.2.5 Post-treatment Measures

- Warning notices should be posted in prominent positions in the application area.
- Decide the enclosure time with reference to the label instructions when enclosing the affected application area (such as flower beds or grassland) with ropes or fences. If no relevant information is stated on the label, the pesticide treated area may be closed at least for 12 hours. Ample time should be allowed before the pesticide treated flower beds or grassland is re-opened for public enjoyment, to avoid the public from exposure to pesticide residues.
- Rinse off skin and clothes with water thoroughly immediately after use.
- Clean thoroughly all the tools, equipment, clothing, the concrete hard-paved ground within the pesticide application area and other facilities

### **6.3 Storage, Transport and Disposal of Pesticides**

#### 6.3.1 Storage of Pesticides

- The cabinet and room for storing pesticides should be locked and appropriate staff should be designated for stock-keeping. Check if there is excessive storage of pesticides on a regular basis.
- The keys of the cabinet and room for storing pesticides should be kept

by designated persons and should not be placed in the office in which anyone can get hold of them.

- Pesticides should be stored in the appropriate dangerous goods store.
- Without a dangerous goods licence, the pesticides stored should not exceed the exempted quantity.
- The store for pesticides should not be used for storage of non-pesticide items or materials.
- The pesticides should not be stored together with the fodder, food, drinks or water.
- Pesticides should be stored in a dry and well-ventilated place under room temperature and installed with exhaust fans. Avoid exposure to the sun.
- The storage should have sufficient lighting.
- The storage should be made with fire-proof materials, with the floor surfaced with smooth (no gap or crack) concrete and a durable protective layer so that leaking or spilling of pesticides can easily be cleaned.
- Appropriate warning signs with wordings such as “PESTICIDES STORED – NO ENTRY WITHOUT PERMISSION”, “NO SMOKING”, “NO EATING OR DRINKING”, etc should be clearly exhibited at places where pesticides are stored.
- Pesticides can only be stored in their original containers.
- Different types of pesticides should be placed separately and the types of pesticides (for example, pesticides, herbicides, plant growth regulators) should be clearly marked in their storage racks or storage cabinets.
- Pesticides in granule form should be stored on racks to avoid moulding due to the humidity on the ground.
- The pesticide container should be kept tight after use.
- The label on the container should be kept intact with clear wordings. The label can be covered with a transparent polythene sheet to avoid any damage.
- Examine regularly whether there is any leakage or crack in the pesticide containers.
- Dispose of the container with leakage and crack and cleanse the spilled or leaked pesticides at once.
- If some pesticides inside a cardboard container have been used, the cardboard container should be sealed with adhesive tape or staples.

- If the pesticide is kept in a new cardboard container, do not tear off its upper part when opening it. Use sharp scissors instead.
- Record the date from which a pesticide began to be placed in the storage area.
- Discard all outdated materials.
- Record exact amounts of pesticides retrieved and update the current inventory on a regular basis.
- Make available the Material Safety Data Sheet for every pesticide stored for staff reference.
- Avoid overstocking pesticides.

### 6.3.2 Transport of Pesticides

Pesticide users are often required to carry pesticides to a treatment site for application. The site may be far from the office, in which case the use of a means of transport may be required to ensure due completion of work. However, bringing pesticides on board public transport should be avoided as they are toxic and noxious substances. Pesticide users must in that case use a government or hired vehicle as a means of transport, take due care when carrying pesticides on board and note the following in the course of transportation:

- Only the amount of pesticides and the application equipment needed to perform a task should be brought on board.
- Pesticide containers must be securely capped, and the labels on them must be intact with words legibly printed. Make sure that no container is contaminated by pesticides on the outside. Containers must be handled with care to prevent them from being crushed or punctured.
- Before transporting pesticides, pesticide users should be well informed about how to deal with a pesticide spillage. If there is pesticide spilt inside or from a vehicle, the spilt pesticide must be dealt with immediately and properly.
- Pesticides must not be transported with materials which are for human or animal consumption or with which humans or animals will come into physical contact (e.g. foodstuff and garments), to prevent contamination of such materials.
- Pesticides must not be placed inside the passenger compartment of a vehicle. Since there are storage cabinets fitted to most government

vehicles available to pesticide users, pesticides (as well as application equipment) must be kept in such cabinets as far as possible. If no separate compartment or storage cabinet is available on a vehicle for such purpose, pesticides must be put in a securely capped plastic/metal container.

- All pesticides and application equipment must be appropriately placed inside a vehicle, with all containers securely fitted to prevent them from moving from side to side or sliding down.
- In the course of transportation, all application equipment inside a vehicle must be empty of pesticides and must not be in a pressurised state.
- The relevant staff should mix the amount of pesticides needed and load the application equipment on site just before applying the pesticides.
- Before proceeding to another treatment site, the relevant staff should remove any leftover pesticide from the application equipment, and then depressurise the equipment and clean it with water.
- If necessary, keep the vehicle's windows open for good ventilation in the course of transportation.
- Do not leave a vehicle loaded with pesticides unattended before locking its doors and windows.

### 6.3.3 Disposal of Pesticides

- As required by the Environmental Protection Department, pesticide containers should be rinsed with water three times, and then punctured or crushed (so that they cannot be reused) before being disposed of.
- Rinse water from cleaning pesticide containers can be used to dilute pesticides.
- Do not use any paper from empty containers for manufacturing recycled paper.
- Do not reuse empty containers for other purposes.
- Do not store any empty container that has not been cleaned for more than 90 days.
- Store pesticides that are no longer needed in their original containers pending disposal, and deal with such pesticides in accordance with the instructions set out on the label.
- Supervisors should be responsible for disposing of or dealing with empty containers or pesticides that are no longer needed.



## **7. Emergency and First Aid**

### **7.1 Dealing with Pesticide Leakage**

- Protective gear such as overalls, aprons, rubber gloves, safety boots, goggles, mouth masks with canisters and industrial cleansers for human use should be readily available.
- Tools such as empty open head drums, large heavy-duty plastic bags, brooms, shovels, rubber wipers and adequate absorbent materials should be available for handling leakages or spillages.
- In case of a spillage or leakage of pesticides, contain and cover the spill or leak with double the volume of inert absorbent such as sand, sawdust or soil.
- After the spilt pesticides have been absorbed, sweep or shovel up the absorbent thoroughly.
- Put all contaminated debris in sealed and marked containers or large heavy-duty plastic bags.
- Clean the contaminated area with detergents.

### **7.2 First Aid Measures**

Far from being a substitute for medical treatment, first aid is given to a poisoned person to relieve the symptoms while he/she is awaiting medical treatment. Seek medical assistance as soon as possible in case of bodily contamination with pesticides or suspected pesticide poisoning. Do not spend too much time giving first aid on your own.

#### **7.2.1 General First Aid Measures**

- Prevent further exposure to a pesticide. In case of skin contact, wash thoroughly the skin, hair and nails with clean water. If a person who has swallowed a pesticide remains conscious and the airway is kept unobstructed, vomiting must be induced subject to relevant instructions (please refer to those set out below).
- Keep the pesticide containers and any leftover inside; give to the doctor any labels that are legible as well as names of relevant chemicals.

- When handling a pesticide poisoning arising from skin contact, first-aiders must put on protective gloves and clothing if there is a risk of exposure to pesticides.

## 7.2.2 First Aid Measures for Specific Type of circumstances

### Skin Poisoning

- Drench affected skin and clothing with clean water (from a shower, hose or faucet).
- Remove contaminated clothing.
- Wash off skin and hair thoroughly with soap and clean water; it is most important to wash quickly to alleviate the injury.
- Dry the patient and cover him/her with a blanket.

### Eye Poisoning

- Hold the eyelids open and gently rinse the eyes with plenty of clean tap water.
- Continue washing for 15 minutes or more.
- Do not add chemicals or drugs in the wash water.

### Inhalation Exposure to Poisonous Matters

- Leave all windows and doors (if any) open
- Take the patient to open area with fresh air as quickly as possible.
- Loosen any tight clothing.
- Prevent chilling (cover the person with a blanket but do not overheat).
- Keep the patient calm and steady
- If the person goes into convulsions, check for breathing difficulties to prevent him/her from falling or hitting his/her head against the floor or wall. Lift the chin to keep the airway clear to facilitate breathing.
- Do not allow the patient to consume any alcoholic beverage.

### Swallowing of Poisonous Substances

- Do not induce vomiting if the person:
  - becomes unconscious;
  - suffers convulsions;
  - has swallowed a petroleum product (i.e. kerosene or mosquito larvicidal oil); or
  - has swallowed a corrosive poison (a strong acidic or alkaline product) and displays symptoms of sharp pains and a burning sensation in the mouth and throat.
- If a person who has swallowed a corrosive poison (e.g. an alkali, acid, disinfectant solution) is still able to swallow, feed him/her up to 8 oz (about 240 ml) of milk or water.
- If a person has swallowed a non-corrosive substance, try as far as possible to induce vomiting unless he/she is unconscious, suffers convulsions or has swallowed a petroleum product.
- Do not spend too much time inducing vomiting. Most importantly, deliver the patient to the hospital without delay for appropriate treatment.

#### Chemical Burns on Skin

- Wash the burned areas with plenty of tap water.
- Remove contaminated clothing.
- Cover the burned areas with a loosely-applied clean cloth of any kind.
- Avoid applying any medicated ointments, greases, powders or other drugs.
- If the patient is in shock, keep him/her lying flat and warm and calm him/her until professional medical assistance arrives.

## **8. Relevant Legislation**

This Code of Practice does not remove or alter any obligations or statutory requirements under the law of Hong Kong. Apart from the Pesticides Ordinance (Cap. 133), other legislation relating to pesticides and relevant matters includes:

| Legislation                 | Chapter number | Relevant pesticide-related matters                           |
|-----------------------------|----------------|--|
| Import and Export Ordinance | 60             | Regulation of import, export and transshipment of pesticides |
| Public Health and Municipal | 132            | Regulation of pesticide residues in                          |

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|  |     |   |
|--|-----|---|
| Services Ordinance                       |     | food  |
| Dangerous Goods Ordinance                | 295 | Storage of highly inflammable pesticides containing liquefied petroleum gas |
| Air Pollution Control Ordinance          | 311 | Control of pesticides containing volatile organic compounds                 |
| Waste Disposal Ordinance                 | 354 | Disposal of pesticides  |
| Ozone Layer Protection Ordinance         | 403 | Import and export of methyl bromide as a fumigant                           |
| Occupational Safety and Health Ordinance | 509 | Occupational safety of pesticide users                                      |
| Hazardous Chemicals Control Ordinance    | 595 | Regulation of hazardous chemicals (excluding pesticides)                    |

The relevant matters listed above are for reference only. References to regulatory measures in details should be made on the basis of the provisions of the above-mentioned Ordinances.

## 9. Compiling Departments

This Code was compiled by the Working Group for Safe and Proper Use of Pesticides set up jointly by the AFCD, the Food and Environmental Hygiene Department and the Leisure and Cultural Services Department.

## 10. Enquiry

For further information on this Code and information on the regulatory control of pesticides, please visit the AFCD website at <http://www.afcd.gov.hk> or contact the Working Group for Safe and Proper Use of Pesticides at:

Address: 5/F, Cheung Sha Wan Government Offices, 303 Cheung Sha Wan Road,  
Kowloon

Tel.: 2150 7007

Fax: 2314 2622

Email: [mailbox@afcd.gov.hk](mailto:mailbox@afcd.gov.hk)