

## **Guidelines on Handling Bird Droppings and Bird Carcasses**

### **(1) Hypochlorite Disinfectant (Bleach)**

- a. Hypochlorite solution, commonly known as 'bleaching solution', is a very powerful disinfectant and with precautionary measures, should be safe to use.
- b. Bleach is available from supermarkets. Regular bleach may contain up to 5.25% hypochlorite and concentrated bleach has 6% of the active chemical.
- c. As an alternate source, University Safety Office has concentrated hypochlorite solution available to users for disinfection (phone no. 3943-7958).
- d. For wetting of bird droppings before removal, a working solution of 0.1% strength of hypochlorite solution (1 part of household bleach in 49 parts of water) should be used.

### **(2) Procedures and Safety Precautions in Diluting Bleach**

- a. Remember:
  - Do not mix bleach with acids or alkaline.
  - Do not add hot water to dilute the chemical.
  - Do not use bleach in undiluted form.
  - Store concentrated bleach in secure places and away from sunshine or source of heat.
  - Always ensure that proper label is adhered to container of solution.
  - For effective disinfection, use diluted bleach within 24 hours after preparation as decomposition increases with time if left unused.
  - Call University Safety Office (phone no. 3943-7958) for advice if in doubt.
- b. For personal protection:
  - Prepare diluted bleach in places with good ventilation.
  - Put on gloves, masks and eye protector/chemical face shield before handling bleach.
  - Prepare the quantity of diluted solution you are going to use for your work. Excessive chemicals mean additional risks and wastage.
  - Wash with copious amount of water if your body has been in contact with hypochlorite solution.

### **(3) Procedures for Using Diluted Bleach**

- a. Dilute and use bleach in a well-ventilated area.
- b. Put on appropriate Personal Protective Equipment (e.g. mask, gloves, safety goggles and plastic apron) when diluting or using bleach.
- c. Mix bleach with cold water as hot water decomposes the active ingredient of bleach and renders it ineffective.
- d. Clean and disinfect frequently touched surfaces, furniture, floor, toilets and bathrooms regularly, for example daily clean and disinfect with 1 in 99 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 99 parts of water), leave for 15-30 minutes, and then rinse with water and wipe dry.
- e. For places soiled by vomitus, excreta or secretions, clean up the visible matter with strong absorbent disposable material, then disinfect with 1 in 49 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 49 parts of water), leave for 15-30 minutes, and then rinse with water and wipe dry.
- f. For spillage of blood, clean the visible matter with strong absorbent disposable material, then disinfect with 1 in 4 diluted household bleach (mixing 1 part of household bleach containing

5.25% sodium hypochlorite with 4 parts of water), leave for 10 minutes and then rinse with water and keep dry.

- g. Use a tablespoon or measuring cup for accurate measurement of the amount of bleach added.
- h. Wash hands thoroughly after the procedure.

#### **(4) Procedures for Removing Bird Droppings in Public Areas**

- a. Cleaning staff must put on suitable gloves and masks when removing bird droppings.
- b. Wet the bird droppings with 1 in 49 diluted household bleach solution first and wait for one minute before removing them.
- c. When applying the hypochlorite solution, care must be taken to avoid affecting other people passing through the area.
- d. Bird droppings after mixing with disinfectant may be dumped into garbage bags or washed off with copious amount of water.
- e. Apply additional disinfectant onto the surface if there are still stains of bird droppings remaining. Allow a few minutes for the disinfectant to soften the stain before removing it by scrubbing.
- f. After finishing the work, staff must use brush to scrub the sole of the footwear with 1 in 49 diluted household bleach solution to remove stains of bird dropping adhered, and wash their gloves and hands thoroughly afterwards with liquid soap and water.

#### **(5) Procedures for Removing Bird Droppings from Vehicles**

- a. Personnel must put on gloves and masks when removing bird droppings.
- b. Wet the bird droppings with 1 in 49 diluted household bleach solution and wait for one minute before removing them.
- c. Use pieces of cloth or waste to scrub the bird droppings off the surface of the vehicle and dump the fabrics into garbage bag.
- d. Use another piece of cloth or waste dampened with water to rinse off residual bleach.
- e. After finishing the work, the person must use brush to scrub the sole of the footwear with 1 in 49 diluted household bleach solution to remove stains of bird dropping adhered, and wash their gloves and hands thoroughly afterwards with liquid soap and water.

#### **(6) Discovering Bird Carcass on Campus**

- a. Notify the Security Office (phone no. 3943-7999) when a bird carcass is discovered.
- b. The Security Office will cordon off the area and inform the Agriculture, Fisheries and Conservation Department (AFCD) by calling 24-hour hotline 1823 to pick up the bird carcass.

#### **(7) Procedures for Removing Bird Carcass by University Staff**

In special situations where the AFCD service is not available and the bird carcass has to be handled by University staff:

- a. The Security Office will cordon off the area and inform EMO for collection of the bird carcass.
- b. Staff of EMO should put on appropriate personal protective equipment such as waterproof rubber gloves, surgical mask and disposable apron before picking up the bird carcass.
- c. Cover the bird carcass with disposable absorbent towels soaked with 1 in 4 diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 4 parts of water). An alternative way is to cover the bird carcass with bleaching powder. Wait for at least 15 minutes and use tongs to pick up the carcass and put it into black garbage bag. Care must be taken not to generate excessive dust from the carcass.
- d. After putting the carcass into the black garbage bag, add in a few cups of bleaching powder and then tightly tied up the bag using goose-neck technique.

- e. Put the bag with dead bird (inner bag) into a special biohazard bag (outer bag). Then remove the rubber gloves (inside out) and wash hands thoroughly with soap.
- f. Dispose of all used items including the rubber gloves and surgical mask by putting them in the outer bag. Then wash hands again thoroughly with soap.
- g. Disinfect those reusable items and mop the surfaces that are likely to be contaminated, e.g. floor, platform, stairs etc., with 1 in 49 diluted household bleach solution.
- h. Send the biohazard bag to the bio-waste collection site at Science Centre or Laboratory Animal Services Centre for temporary storage before processing by the bio-waste contractor.
- i. After finishing the work, wash the hands again.