#### SAFE USE AND MANAGEMENT OF CROP PROTECTION AGENTS (CPAs)

#### What do CPAs contain?

### <u>CPAs = active ingredient + filling material + other substances</u>

Active ingredient The poisonous element, the ingredient which actively kills the pest

in question.

Filling material Material carrying the active substance or ingredient and

determining the composition of the CPA (solid, liquid, granule,

powder, etc.).

Other substances Substances which increase the effect of CPA, facilitate its holding

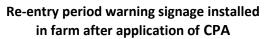
on to the leaf, increase shelf-life and prevent foaming, colors.

**Application dosage** The quantity effective on the target disease or pest.

## ! Using CPAs more than recommended does not increase their effect.

**Re-entry period:** Refers to the period of time immediately following the application of a pesticide during which unprotected workers should not enter a field.







Re-entry period warning signage

**Pre-harvest interval:** The recommended period between the final application of CPA and the harvesting time. The value is indicated on the CPA's label.

**Residue:** Any quantity of CPAs remaining on agricultural crops following CPA application. CPA residue levels decline over time after an application. When CPAs are used carelessly and more than the required, residues on tobacco will be higher. There are residue limits set for each CPA. For this reason, tobacco sample should be taken regularly from tobacco farmers for residue analysis.

### In order to prevent unacceptable residues:

- Registered CPAs should be used only for specific target pests of tobacco, i.e., Flubendiamide should only be used to control budworms and cutworms.
- Compliance with application dosage indicated on the label is required.
- Compliance with the number and time of application of the CPA is required.
- CPAs should not be misused.
- Compliance with the pre-harvesting interval is required.

! Tobacco with CPA residues above the acceptable limits has no commercial value. Application dosage and pre-harvest interval must be in line with the label instructions.

**Toxicity classification:** The toxicity of CPAs to humans and the environment must be well understood. The degree of toxicity of CPAs is divided into 4 categories. When choosing CPAs, choose those that cause minimum harm to human health and the environment.



#### Selection and Preparation and Application of CPAs

- Observations should be made regularly in the seedbed and field, and disease and pest levels should be determined precisely.
- CPA applications should be carried out only when required and the appropriate CPAs should be used for pests and disease.
- It is recommended to wait for the level of pests to reach the economic threshold level to necessitate pest control, otherwise applications may be made unnecessarily and at an overall cost to farmers.
- The label of the CPAs should be read carefully and compliance with the instructions is required.
- Before applying CPAs, children and pets should be taken away from the site.
- When preparing the CPA, kitchen utensils, laundry materials and food should not be used.
- The CPAs should be well stirred.
- The materials to be used for the CPA application should be carefully selected and checked.

During preparation and application of CPAs, appropriate personal protective equipment (PPE) or clothing should be used as follows: rubber gloves, masks, goggles,

rubber boots or shoes, long-sleeved shirts and long pants.

- Should any of the CPA come in contact with the body during application, wash with soap and water.
- Applications should not be made on windy or rainy days.
- Obstructed nozzles and hoses should never be unclogged by blowing.
- The CPAs should be applied so as to cover all parts of the plant.
- The CPA particles and vapor should not be breathed in.
- Persons suffering from colds, bronchitis and stomach disorders, or those having cracks and lesions on their hands are more sensitive to toxic substances. Such persons should not be used for CPA applications.
- Nursing mothers, pregnant women, children under 18, sick or disabled persons should not be involved in applying CPAs.
- Any spilled CPAs should be carefully cleaned up.
- After each application, the hands, face and personal protective equipment should be washed with plenty of water.
- Any remaining CPA mixture should be applied to the crop. It should never be poured out in the environment.



Farmer wearing complete set of PPEs

#### **After CPA Applications**

 Empty CPA container should never be used for other purposes and should not be left around the seedbed or field.



**Empty CPA sachets left in the field** 



Empty CPA containers stored inside the CPA lock-up storage



**Empty CPA bottles left in the field** 



Proper segregation of of empty CPA containers for disposal

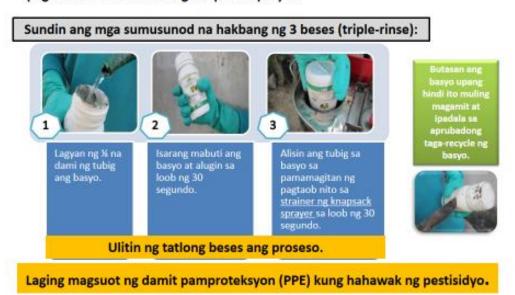
#### **Disposal of Empty CPA Containers**

Empty CPA containers should be rinsed out with clean water at least three times and this rinsing water should be poured into the prepared CPA solution.

#### **Triple rinsing:**

# HUGASAN NG TATLONG (3) BESES ANG <u>BASYO</u> NG INYONG PESTISIDYO!

Tandaan: Ubusin muna ang laman ng basyo ng pestisidyo sa pamamagitan ng pagtaob nito sa strainer ng knapsack sprayer.



! Empty CPA containers should be crushed and punctured, then stored in closed bags off the ground and out of reach of children. Empty CPA containers may be returned to CPA suppliers for proper disposal.



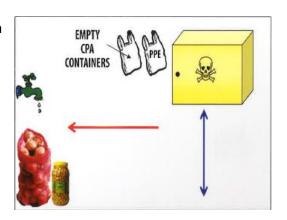


## **Storage of CPAs**

- CPAs should be stored in their original containers, tightly closed, away from children, locked in a cool, dry place.
- CPAs should always be kept in their original packages and not be transferred to other containers.
- CPAs should not be stored or prepared in living quarters such as kitchens, bedrooms, stables, etc.

#### Safekeeping of CPA containers inside the CPA lock-up storage

 There should be no foodstuff and drinks in places where CPAs are stored.



• Warning signs should be placed where CPAs are kept.



