

Container Management

Appropriate packaging plays an essential role in ensuring that crop protection products are safely delivered to the end user. The plant science industry is taking the lead to ensure the development, use and appropriate disposal or recycling of crop protection containers is managed sustainably to protect both farmer health and the environment.

CONTAINER MANAGEMENT GOALS

Container management programmes represent the plant science industry's commitment to safety and ensure the industry is taking responsibility for its waste. Goals include:

- protecting both the environment and the operator from exposure
- appropriate treatment and safe disposal of used packaging
- reducing waste and maximising recycling
- ensuring compliance with local packaging requirements and legislation

The plant science industry is actively working to promote the expansion of container management programmes to new regions and countries, with the ultimate aim of recovering 100% of crop protection containers worldwide.

STEWARDSHIP VISION 2020

The crop protection industry is taking the lead to ensure safe and responsible management of empty, properly rinsed pesticide containers worldwide. Through collaboration with governments and country stakeholders, our industry has a goal of recovering 100% of all crop protection containers by the year 2020.

PROGRAMME AREAS

The plant science industry is committed to managing crop protection containers from their development through to their end use and eventual disposal as part of the stewardship life-cycle approach. Container management programmes and policies are therefore supported across three main areas:

- 1. Research and Design of Containers** – The crop protection industry is working to continually produce better, easier to handle and more environmentally sensitive packaging. This is a crucial phase of container management, as manufacturers can focus on preventing packaging waste at its source. Such innovations include:
 - small, ready-to-use packs (suitable size for backpack sprayers)
 - multi-trip, returnable containers
 - one-way, single-trip containers made of recyclable materials
- 2. Training of Distributors and Growers** – The global CropLife network invests considerably in the training of distributors, retailers and growers. From 2005-2011, almost 2 million individuals were trained to ensure responsible use of crop protection products and safe, appropriate disposal of empty containers. Training that relates to container management includes:
 - purchasing appropriate-sized containers
 - never decanting crop protection products into other containers
 - never using empty containers for other uses
 - properly cleaning and preparing empty containers for collection and recycling using the triple-rinse method
- 3. Support of Recycling Options** – The crop protection industry supports a range of different programmes that enable the collection and recycling of properly rinsed containers in specific countries. These programmes are supported or delivered by regional and national CropLife associations. Plastic recovered through these programmes can be converted into a variety of useful products such as fence-posts, parking cones or drainage pipes. In areas where recycling is not yet an option, the industry promotes appropriate disposal of containers.

WHAT ARE THE BENEFITS?

Container management programmes deliver a variety of benefits to operators and the environment, including:

- protecting the environment and operator from unnecessary exposure
- safe disposal of used packaging
- reducing waste and maximising recycling
- resource conservation impacts:
 - energy savings (reducing need to burn gasoline or extract oil)
 - saving landfill space
 - reducing carbon emissions

DID YOU KNOW?

Every ton of High Density Polyethylene (HDPE) plastic recycled into new products, as compared to using virgin HDPE plastic results in an energy savings of 51,400,000 BTUs – the equivalent of over 1,700 litres of gasoline.

PROGRAMME EXAMPLES

Container management programmes are now established in over 30 countries around the world, with several more pilot programmes in the works. The most successful programmes are typically industry led in partnership with various stakeholders such as local authorities and government. Here are some examples of various container management programmes around the world:

AG CONTAINER RECYCLING COUNCIL

The Ag Container Recycling Council (ACRC) is a U.S. based non-profit organisation that collects and recycles plastic crop protection containers. As a result of the ACRC, thousands of farmers and applicators in the U.S. participate in its free recycling programmes. So far, these programmes have collected 100 million pounds (45,000 metric tonnes) of containers, resulting in:

- savings of more than 380,000 cubic metres of landfill space
- reduction of 19,500 metric tonnes of carbon equivalent
- energy savings equal to over 83 million litres of gasoline

This is equivalent to removing 15,475 cars from the highway each year.

CROPLIFE CANADA'S CLEANFARMS

CropLife Canada's CleanFARMS programme is a non-profit industry stewardship organisation that manages crop protection waste from farms across Canada. Since its inception in 1989, the programme has:

- collected and recycled more than 91 million empty pesticide containers, equivalent to saving over 345,000 barrels of oil
- recycled containers into products such as drainage tile for use on the farm
- safely collected and disposed of over 1.5 million kilograms of obsolete pesticides

BRAZIL'S INPEV

Initiated in 2002, Brazil's container management programme coordinated by the National Institute for Processing Empty Containers (inpEV) has grown to become a benchmark for other sectors and countries. The programme has removed more than 108,000 tonnes of empty containers from the environment since 2002, and recycled 92.4% of the containers collected in 2008. An eco-efficiency study commissioned by inpEV demonstrates its social and environmental responsibility. In six years (between 2002 and 2007), the proper disposal of containers brought an environmental gain equivalent to:

- 302,000 barrels of oil that did not need to be extracted

OR

- 131,000 tonnes of CO₂ equivalent that was not emitted into the atmosphere

GERMANY'S PAMIRA PROGRAMME

Germany's PAMIRA programme has been collecting and recycling empty pesticide containers since 1995. Founded by IVA, the German crop protection association, PAMIRA has succeeded in achieving strong collection rates in Germany, with 2,458 tonnes of empty containers collected in 2011. Farmers deposit used containers at one of the 250 collection points once per year.

Contact CropLife International at croplife@croplife.org or visit www.croplife.org for more information.