

WHERE INNOVATION TAKES ROOT

Global Container Management CropLife International

Presentation to TPSA Asheville, N.C. February 26, 2008

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working responsibly to protect people and the environment



Presentation Outline

- CropLife International global CM program
- 2. Canada C M Branding
- 3. Canada stewardship update







CropLife International

CropLife International Brussels, Belgium

The industry trade association funded by major technology developers in chemistry and biotech







Stewardship Vision

To be recognized as a responsible industry promoting effective stewardship programs

Stewardship is a key pillar in CLI's activities







CropLife International

Four key stewardship areas:

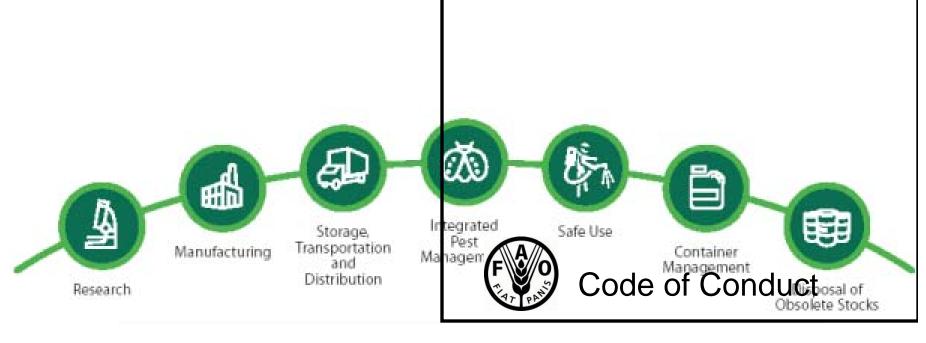
- 1. Container Management
- 2. IPM/Responsible Care
- 3. Obsolete Stocks
- 4. FAO Code of Conduct







The four pillars of our CropLife Stewardship strategy









Industry Associations

ECPA

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- CropLife Africa
- CropLife Asia
- CropLife Lat.
 America
- CropLife Int'l
- CropLife Canada

Team

CropLife Members

- BASF
- Bayer
- Monsanto
- Syngenta
- Dow
- DuPont





Country Managers 29 Countries

....plus country managers, for example:

- ACRC U.S.A.
- RIGK Germany
 - Inpev Brazil
- Agsafe Australia
-plus 25 others







Container Management Goals - 2010

people and the environment

- 1. Develop CM programs in key countries
- 2. Provide guidance & support for programs
- 3. Establish information flow for all countries
- 4. Seek & implement cost reduction opportunities
- 5. Base all decisions, program components, & end use applications on solid technical science
- 6. Work with governments & other country stakeholders to achieve these goals (eg. consider promotion of mandatory regulations as applies working responsibly to protect working responsibly to protect



Nine Key Objectives for 2008

- Cost reduction identify & analyze regional cost differences (eg USA, AU, Canada)
- Position paper/guidance on process & criteria for establishing program in new countries







Objectives for 2008

- 3. Information sharing three dbases on the CLI website:
 - A Country programs:
 - Costs (financial template)
 - Return rate
 - B Technical information, incl analytical data
 - C Position papers





Objectives for 2008



- 4. Effective (triple/pressure) rinsing communications program
- 5. Classification (rinsed granulated plastic) as non-hazardous
- 6. Recycling (more!)vs. incineration (less!)
- 7. Global communications & branding





Objectives for 2008 CropLife Pilot Programs – New Countries

- Asia:
 - China (Sichuan province)
 - Malaysia
- Africa:
 - Mauritius
 - Madagascar
 - Ethopia
 - South Africa
 - Namibia
 - Uganda
 - Malawi
 - Kenya
 - Tanzania & Zambia discussions









9. Technical underpinnings for all components of the Container Management program

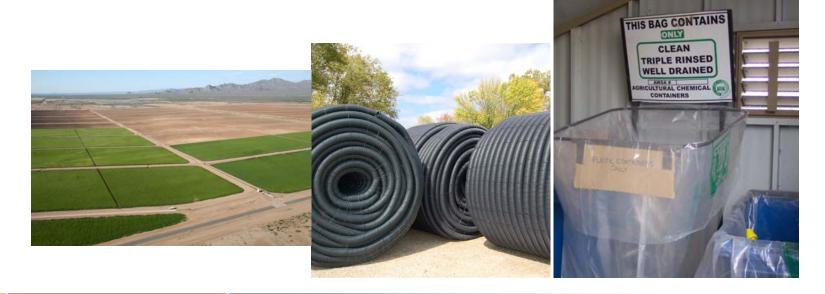






Operational Review of the CropLife Canada Container Management Program

Summary of Findings and Recommendations January 9, 2008





e Team. Infinite Solutions.





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Recommendations

1. Continue to influence improved rinse rate (goal of 80% in 2008)

- Encourage proper signage at collection sites
- Continue to provide instructions to growers and dealers

2. Influence reduction of risk of HSE exposure at collection sites

- Encourage conversion of unsupervised sites to supervised or dealer sites
- Develop national standards that include storage of containers in bags (or provide shelter), signage, restricted access
- Encourage key stakeholders (such as regulatory bodies and rural municipalities to adopt national standards)
- Audit sites to identify ones that pose unacceptable risk





- 3. Influence reduction in risk of contractor exposure during collection, shredding, and washing operations:
 - Provide safe work practice guide and possibly training program material for handling CMP material, appropriate PPE, and personal hygiene
 - Require contractors to adopt guide and training program or provide own with equivalent or greater level of safety or proof that risk has been assessed for site/operation and shown to be low
 - Require medical monitoring for all workers who come into contact with CMP material
 - Conduct scheduled audits of contractual terms







Recommendations

- 4. Require assessment of risk of release to environment prior to use of new processing (cleaning) facilities
 - For operations that produce process water, require evidence that receiving environment can assimilate CMP process water or require appropriate disposal
 - For operations where stormwater can come into contact with containers, shreds, or product, require evidence that receiving environment can assimilate CMP run-off or require stormwater management /pollution prevention plan
 - Ensure proper characterization and appropriate disposal of all waste streams







Recommendations

- 5. Require monitoring and control of releases to environment for existing processing (cleaning) facilities
 - For operations where water is discharged into surface water body, require scheduled pesticide and toxicity testing
 - Require scheduled monitoring of quality of waste streams produced from processing of CMP material
 - Require 3rd party environmental compliance audits of processing facilities on a set basis
- 6. Ensure CM Plastic is only used to produce "approved" end products
 - Conduct scheduled audits of contractual terms

7. Require assessment of HSE risk for all new end products







Key Performance Indicators

(KPI's)

External:

- 1. Number of countries with a program
- 2. Average % return rate for countries with a program







Canada

Program Branding







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Empty Pesticide Container Recycling Program







YOUR CONTAINERS



Returning your empty pesticide containers is good for your health and for the environment. Just triple rinse your pesticide containers, remove the paper booklet, and return them to your local collection site.



Contact your local collection site or visit www.croplife.ca



FOR YOUR FARM, YOUR FAMILY, YOUR HEALTH AND YOUR ENVIRONMENT

return - Don't Burn

It's easy, and EVERY return makes a difference.

Burning plastic is bad for your health and bad for the environment. But there is a clean alternative.

Just triple rinse your pesticide containers, completely remove the paper booklet,
and return them to your local collection site for recycling.





For more information, contact your local collection site or visit www.croplife.ca





CropLife Strategic Review

- Commencing to look at options for the Container management business:
 - "as is"

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- Stand-alone "not-for-profit"
- Stand-alone "for profit" (incl other plastic?)
- Significant trend to drums/totes
- Good models in U.S.A., Europe and Brazil
- Philosophy of one program for all registrants (& containers) in Canada





Behind-the-farm-Gate

The next wave of Stewardship







Future of Stewardship



 CropLife envisions an enhanced focus on lifecycle stewardship at the farm level in the future.







Future of Stewardship

The next wave of stewardship...

- Producers being required to satisfy a wide range of "voluntary" standards to gain access to markets.
- Schemes incorporating food safety, environmental compliance, health attributes and social/ethical responsibilities.
- Move to on-farm auditing in compliance with assurance standards (HACCP, ISO, etc).
- Long term emergence of "certified farms"

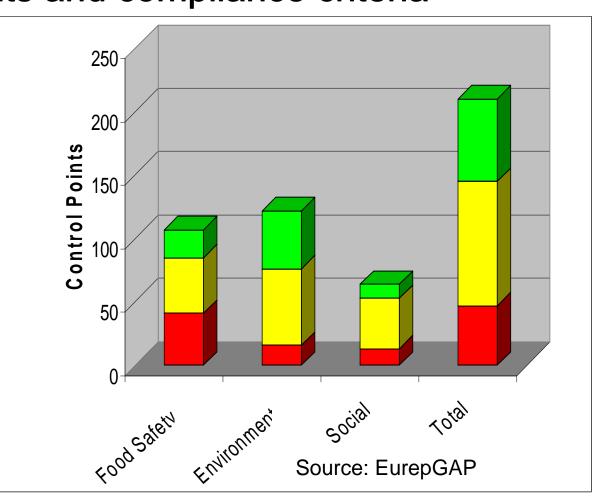




Scope of EurepGAP Standards

Control points and compliance criteria

- 200 specific control points
- Encompass food safety, environmental & social components
- Major (100% compliance)
- Minor (95% compliance)
- Recommended



Retail and Foodservice Members



















Laurus



















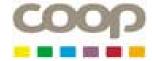




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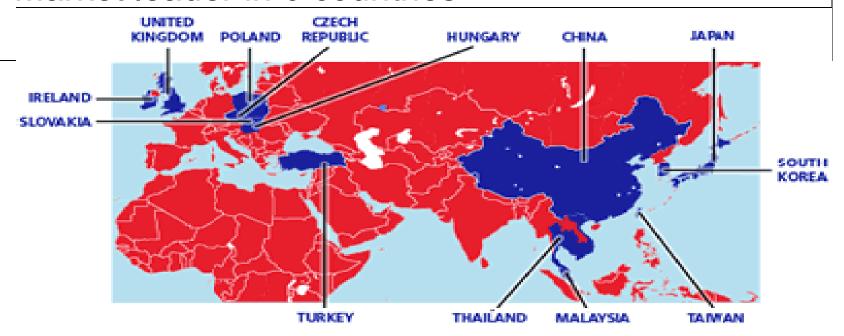






Tesco

- 2nd largest retailer in Europe, 4th largest worldwide
- \$71bn sales (2005)
- Over 2,500 stores in 13 countries
- Market leader in 6 countries



Supplier Members

















































NECTAR FRUITS

































CSO

CENTRO SERVIZI ORTOFRUTTICOLI

COPEFRUTS,A

CAPESPAN









































































Nature's Choice - scope

stewardshipfirst[™]

working responsibly to protect people and the environment

7 key areas:

- Rational use of crop protection products controlled list of pesticides*
- Rational use of fertilisers and manures
- Protection of human health
- Pollution prevention
- Efficient use of energy, water and other natural resources
- Recycling and re-use of material
- Wildlife and landscape conservation and enhancement



Certified farms

- What will be involved?
 - IPM practices (right product, right rate, right time, etc.)
 - Sprayer calibration
 - Good environmental practices (eg. training, onfarm storage, containers, obsolete stocks, etc.)
 - Record keeping
 - On farm audits/certification granted
 - Canada work with the "Environmental Farm Plans" & other stakeholders
 - Will drive container recycling/obstosks wall'ashipfirst™ working responsibly to protect people and the environment



Thank You

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Container Program Controls

CROPLIFE CANADA Support the Container Return Program Objective: Ensure Container Return (smail and one-way bulk) remains safe, efficient & revenue neutral		FARM → Users of Product Objective: 80 % Return 90 % Containers meet criteria		COLLECTION DEPOT Dealer / Region Objective: Zero HSE Impacts		FIELD CONTRACTOR Collect, Shred, Bag Objective: Zero HSE Impacts		TRANSPORTATION Transport CropLife Material Objective: Legal compliance		PROCESSOR → Prepare for sale Objective: Zero Environmental Impacts		RECYCLER END-USE PRODUCT Produce Products Objective: Zero HSE Impacts on Users or environment													
													CONTROL	Execute Target	CONTROL	Execute Target	CONTROL	Execute Target	CONTROL	Execute Target	CONTROL	Execute Target		Execute Target	Tested & Approved – formalizing process
													☑ Program Control Document	Draft Mar 20	☑ Farm communication		☑ Annual Outreach		☐ Pre-Approval Process	Mar 20	☐ Best Practices Guide	Include TDGA Mar 20	Pre- Approval Process	Mar 20	
		☑ Dealer communication		☑ Container condition checks		☑ Contract	Revise Mar 20			☑ Contract – under revision	Revise Mar 20														
		☑ GROU communication		☐ Site Inspection Checklist	Draft Mar 20	☑ Insurance				☑ Insurance															
				☐ HSE Standard	Draft Mar 20	☐ HSE Standard	Draft Mar 20			Environmental Standard	Contract Mar 20														
			The state of the s	☑ AWSA ??		☐ Annual Contract Review Audit	Mar 20			☐ Annual Contract Review Audit	Mar 20														
						☐ Best Practices Guide	WIP Mar 20		-	☐ Best Practices Guide	WIP Mar 20														
										☐ Traceability – Confirmation of final disposition of CropLife material	Contract Mar 20														







Nature's Choice Code of Practice

- Launched in 1992 and further strengthened in 2004
- Aim: To ensure high environmental standards of production
- Governed by committee of suppliers, independent academic, an auditor and Tesco Managers
- Applies to all fruit, vegetables and salad suppliers to UK market
 - Aim for 100% suppliers to comply by 2007
 - Over 7,600 farms in 41 countries are currently registered
 - International operations require EurepGAP certification
- Recently moved to independent certification
 - 3,400 independent audits so far undertaken in 60 countries





Synopsis

- Far reaching changes are taking place throughout the agricultural value chain, from production farther up/down.
- The food industry is facing new consumer/societal preferences:
 - Food that is Safe and Healthy (assurances),
 - Production methods that are environmentally sustainable,
 - Social fairness, equity and responsibility.

