



Manitoba Agricultural Waste Webinar

March 10, 2011

3/31/2011

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Agenda

1. Welcome and Introductions – Barry Friesen
2. Manitoba Agricultural Waste Characterization – Barry Friesen
3. Ontario Farmer Survey – Sharon Barker
4. Collection/Processing Options – Don Tanner
5. Stewardship Options – Barry Friesen
6. Questions and feedback – Barry Friesen
7. Feedback Survey - Sharon



Special Thanks To:

- Manitoba Ministry of Agriculture, Food and Rural Initiatives
- Manitoba Conservation
- Canadian Animal Health Institute



MB Ag Waste Study Tasks

- 2010/11
- Agricultural Waste Characterization (non-organic)
 - Farmer Survey
 - Webinar
 - Collection and Processing Options
 - Stewardship Recommendations

CleanFARMS™ Who is CleanFARMS™?

- Industry Stewardship Organization
- Federally incorporated not-for-profit
- General Manager reports to private sector Board
- Members are manufacturers/distributors of crop protection products
- Operate voluntary (except where mandated)

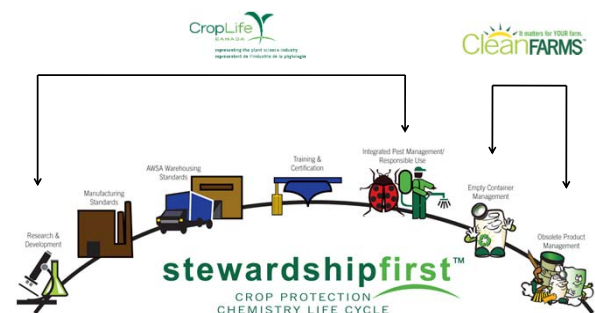
CleanFARMS™ Stewardship Arch for Crop Protection



3/31/2011

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CleanFARMS™ Responsibilities



3/31/2011

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CleanFARMS™ CleanFARMS™ Inc.

Two main programs:



Empty container management



Obsolete pesticide collection



Empty Pesticide Container Program

Containers recycled into farm drainage tile



-used back on the farm-



Empty Pesticide Container Program

Key Accomplishments:

- About 1,000 locations across country
- Over 83 million containers collected and recycled since 1989
- 2009 Return Rate – 63%
- Free to farmers and applicators



Obsolete Collection Campaign

Key Accomplishments:

- 2.5 million kilograms collected and safely disposed of since 1998 across Canada
- Other provinces looking at additional materials (i.e. pharmaceuticals, sharps)
- Free to farmers and applicators



Benefit of CleanFARMS' programs

Little regulatory burden

No consumer fees (Eco-fees)

Free to farmers and applicators



Excellent results:

A True industry stewardship program



Other Regulated Stewardship Programs for farm wastes

- Used Tires
- Oil containers and filters
- Paint and solvents



Huge plastic bags a worry on Prairies

[CBC News](#)

Posted: Mar 9, 2011 7:59 PM CST

Last Updated: Mar 9, 2011 8:26 PM CST



If you think a plastic shopping bag is bad for the environment, consider the impact of a single-use bag that's 150 metres long and three metres in diameter. In Saskatchewan and across the Prairies many farmers are using enormous plastic bags to store grain....

3/9/2011

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Key Messages

1. CleanFARMS is actively pursuing solutions for management of agricultural waste



March 10, 2010 — Presented by Don Tanner

WASTE CHARACTERIZATION STUDY RESULTS



Introduction

- A 'waste characterization study' estimates the type and amounts of waste generated
- This study is limited to:
 - Non-organic waste; and
 - Farm generated waste only
- Farms are as classified by Statistics Canada



Introduction

- Our purpose is to confirm and quantify:
 - Wastes generated in high quantities
 - Wastes with potential disposal issues
- The outcome of these studies can be used in the future to develop a new waste recycling and safer disposal program for Ag wastes in Manitoba



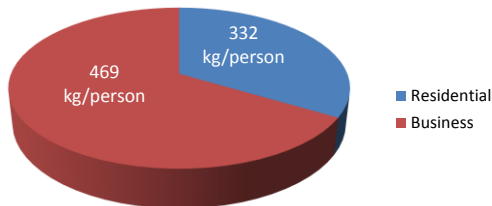
Waste in Manitoba – by the numbers (2008)

- Manitoba waste - 801 kg per person disposed
 - 41% residential
 - 59% non-residential (business)
- Manitoba overall diversion rate – 15%
 - High in Nova Scotia of 45%
 - Low in Saskatchewan of 14%

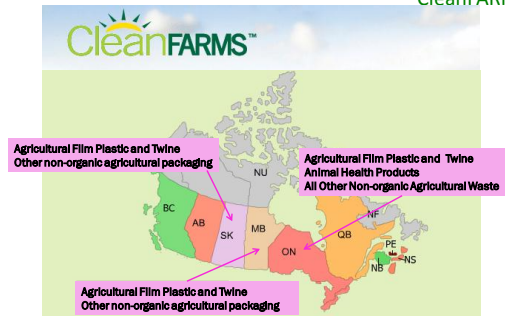


Manitoba Statistics (2008)

WASTE GENERATED



Manitoba diversion rate: 15.0%

Current Ag Waste
Characterization Studies by
CleanFARMSThree Waste
Characterization Categories

1. Agricultural film (bale/silage wrap, net wrap, mulch film, greenhouse film, grain storage bags) and baling twine
2. Other plastic and paper Ag wastes (seed/feed bags)
3. Corrugated cardboard, boxboard and laminated paper products

Agriculture Film and
Twine

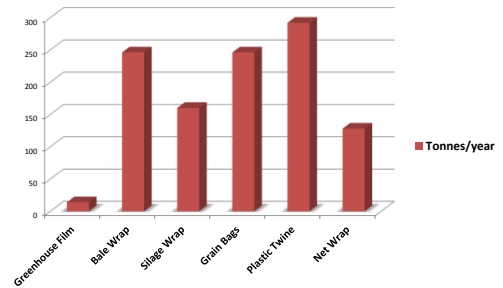
- Includes the following waste types:
 - Greenhouse Film
 - Bale/Silage Wrap
 - Grain Bags
 - Plastic Twine
 - Net Wrap



Agriculture Film and Twine



Approximately 1,100 tonnes of plastic film, twine and net wrap used annually



1/1/2011

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Other Plastic and Paper Ag Wastes

- Includes the following waste types:
 - Feed bags: paper and woven plastic
 - Seed bags: lined paper and woven plastic
 - Cardboard
 - Boxboard
 - Paper Laminates
 - Pesticide jugs



Other Plastic and Paper Ag Wastes

Feed and Seed Production

Woven Plastic, Paper Bags (lined and unlined)

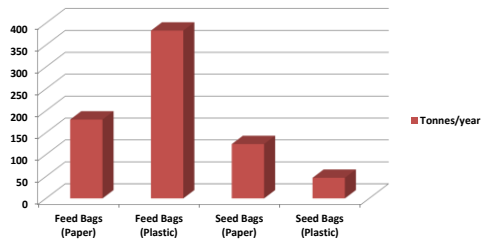


Adapted from: <http://www.agripak2m.com/agripaken/index.html>



Other Plastic and Paper Ag Wastes

Approximately 725 tonnes of bags used
annually

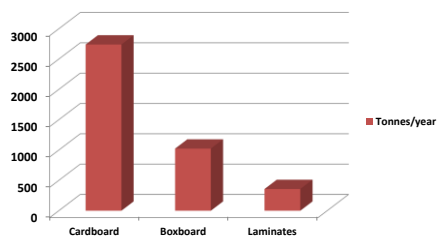


Corrugated cardboard, boxboard and laminates



Other Wastes – Results

Approximately 4,100 tonnes of cardboard,
boxboard and laminates used annually



Conclusions

- Approximately 5800 tonnes of wastes annually have been identified
- Primarily paper and plastic in nature
- These results will be included in our final report this month

Blacksheep Strategy Inc.

CleanFARMS Manitoba Farmer Survey

Webinar Presentation
March 10, 2011

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Blacksheep Strategy Inc.

Presentation outline

- Introduction
- Generation of agricultural waste
- Disposal of agricultural waste
- Container recycling
- Attitudes towards the responsible disposal of agricultural waste

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Methodology

Quantitative telephone survey

Random sample of 300 farmers across Manitoba

Overall level of accuracy of +/- 5.6% at the 95% confidence level

The survey was conducted in November 2010

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Regional distribution

N=300	Percent by region
Southwest (CAR 1, 2)	17%
Northwest (CAR 3 – 6)	26%
South Central (CAR 7, 8)	26%
Southeast (CAR 9, 10)	16%
Winnipeg north and Interlake (CAR 11, 12)	16%

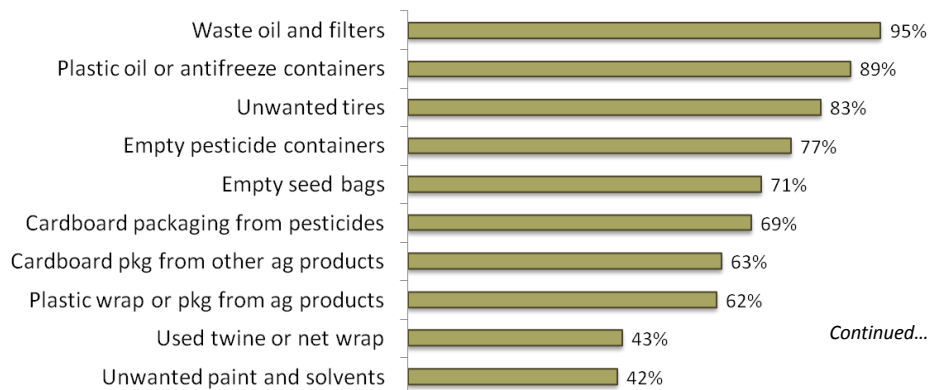
Blacksheep Strategy Inc.

Respondent Profile

Farm type	
Crops only	49%
Mixed crops and livestock	39%
Primarily livestock	12%
Farm size	
<1000 acres	51%
1000 – 2499	34%
2500 – 4999	12%
5000+	3%

Blacksheep Strategy Inc.

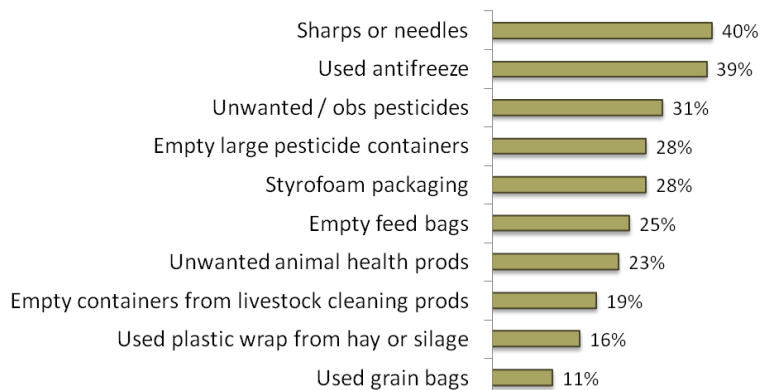
Types of farm waste generated



Continued...

N=300, entire sample

Types of farm waste generated (cont.)



For most common types of waste: Segments more likely to generate each type of waste

N=300	Who is more likely to generate or have on farm?
Waste oil and filters	5000+ acres
Plastic oil or antifreeze containers	No significant differences
Unwanted tires	5000+ acres
10 litre size range containers	1000+ acres and especially those with 2500+ acres
Empty seed bags	2500+ acres
Cardboard packaging from pesticides	South-Central MB, 2500+ acres, primarily crops

What is done with these agricultural waste materials?

For each type of material that they generate or have on farm, respondents were asked:

I would like to ask you what you do with each of these waste materials that you have on your farm.

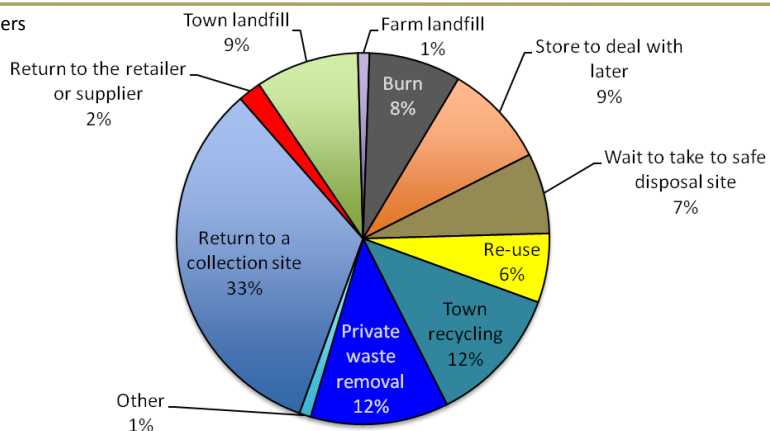
For example, this could include: (read in random order):

- Return to a collection site for recycling or safe disposal
- Return to the retailer or supplier
- Take to the municipal or town landfill
- Bury on farm
- Burn on farm
- Store or save to deal with later
- Wait to take to a safe disposal site when one comes into your region
- Re-use
- Put into municipal or town recycling
- (or other, specify)

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What is done with waste oil and filters?

Portion of farmers
who have: 95%
N=285

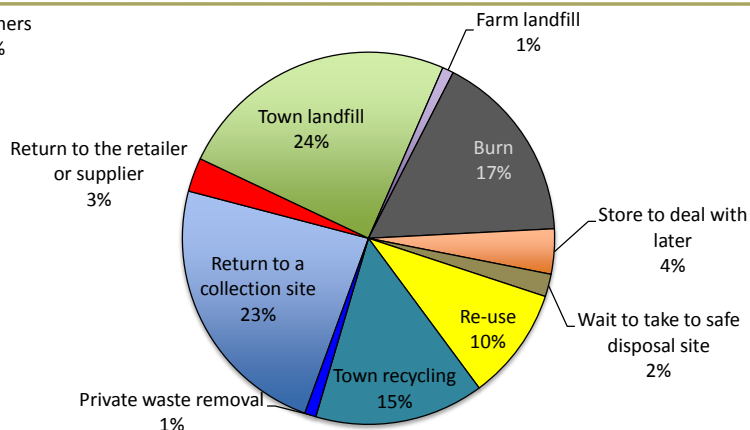


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What is done with plastic oil or antifreeze containers?

Portion of farmers
who have: 89%
N=267

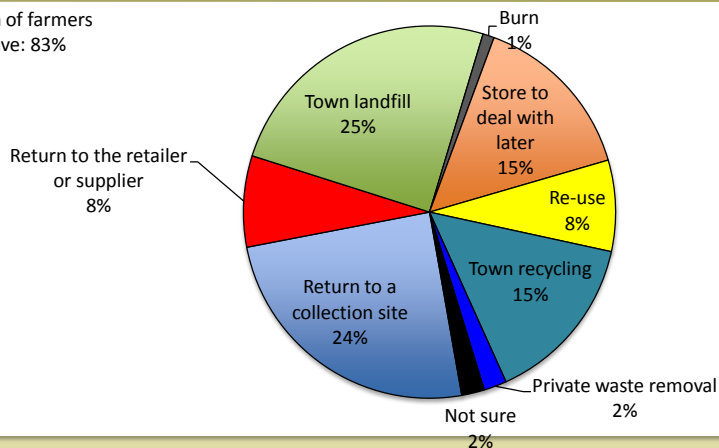


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What is done with unwanted tires?

Portion of farmers
who have: 83%
N=249

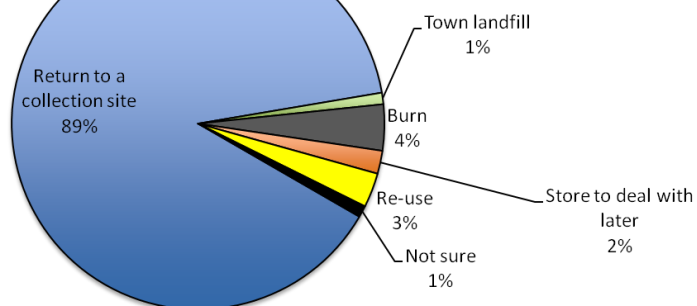


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What is done with empty 10L size-range containers?

Portion of farmers
who have: 77%
N=231

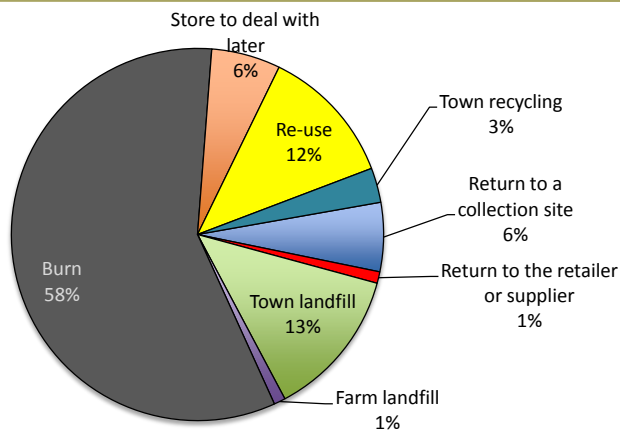


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What is done with empty seed bags?

Portion of farmers
who have: 71%
N=213

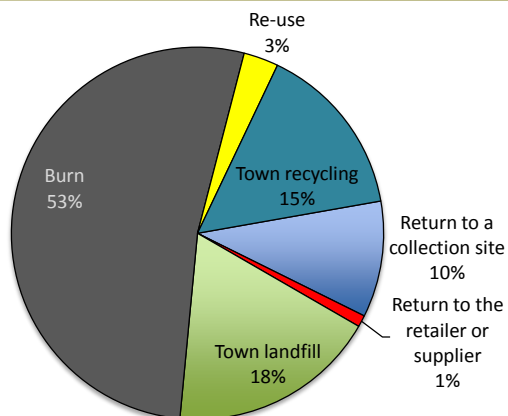


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What is done with cardboard packaging from pesticides?

Portion of farmers
who have: 69%
N=207

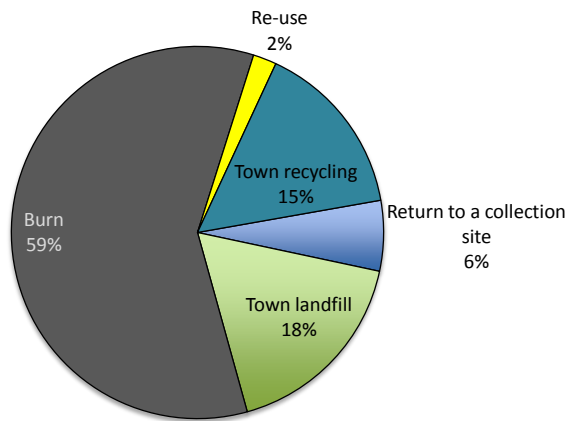


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What is done with cardboard packaging from other ag products (not pesticides)?

Portion of farmers
who have: 63%
N=189

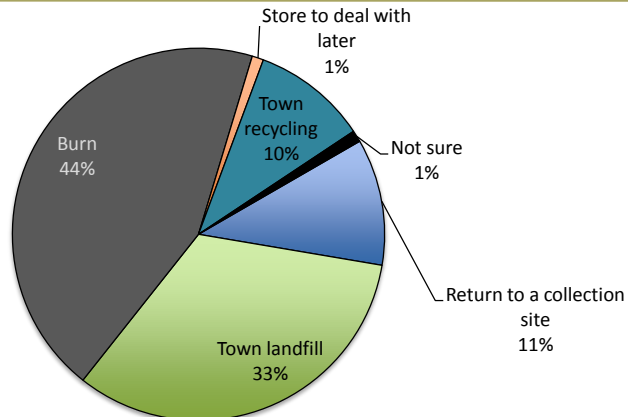


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What is done with plastic wrap or packaging from ag products?

Portion of farmers
who have: 62%
N=186

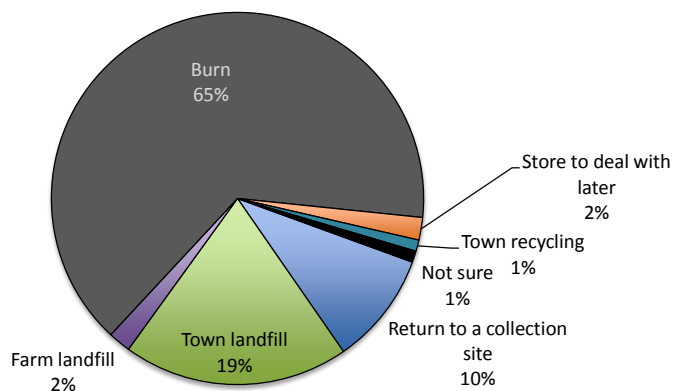


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What is done with used twine or net wrap?

Portion of farmers
who have: 43%
N=129

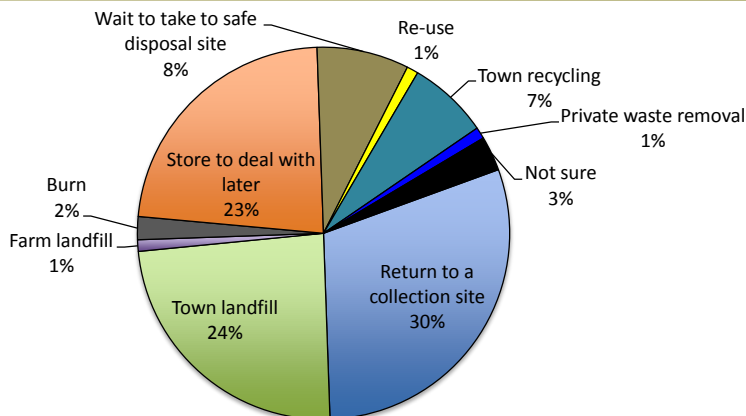


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What is done with unwanted paint and solvents?

Portion of farmers
who have: 42%
N=126

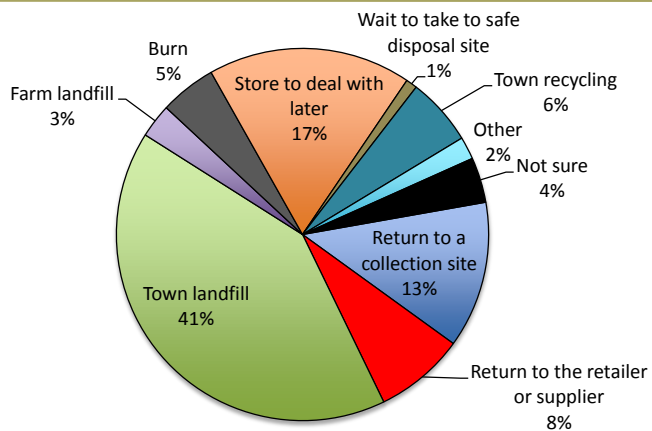


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What is done with sharps or needles from livestock?

Portion of farmers
who have: 40%
N=120

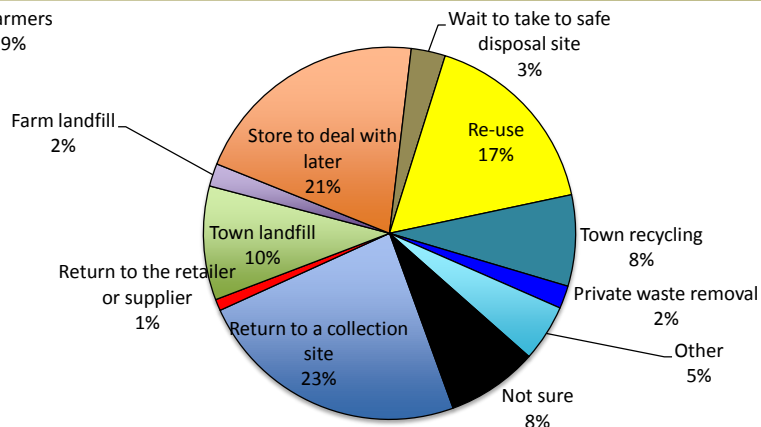


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What is done with used antifreeze?

Portion of farmers
who have: 39%
N=117

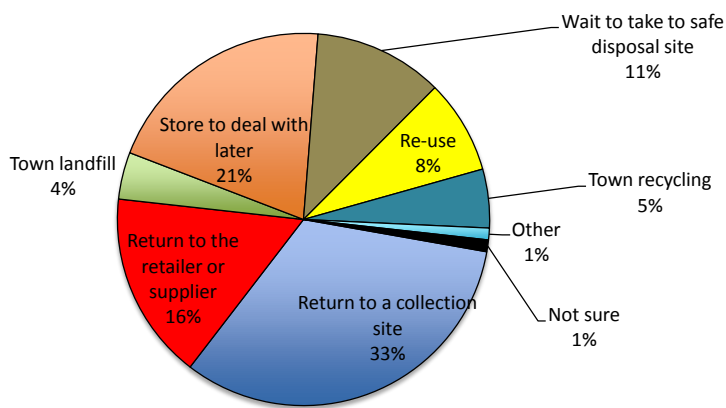


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What is done with unwanted, old or obsolete pesticides?

Portion of farmers
who have: 31%
N=93

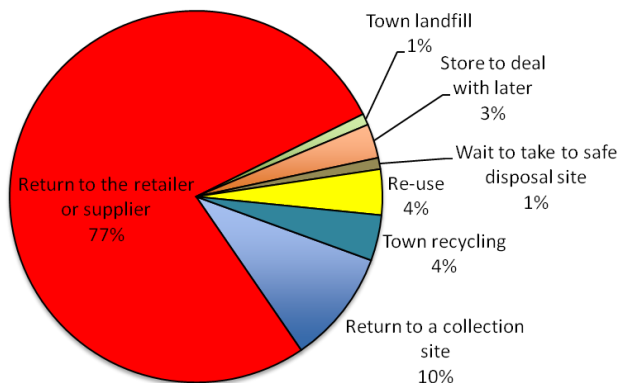


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What is done with empty large containers (totes, drums)?

Portion of farmers
who have: 28%
N=84

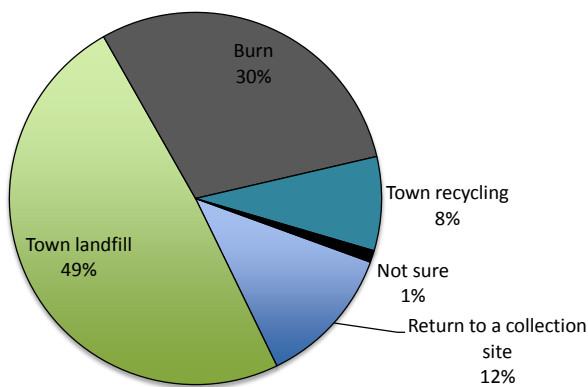


23

Blacksheep Strategy Inc.

What is done with Styrofoam packaging from ag products?

Portion of farmers
who have: 28%
N=84

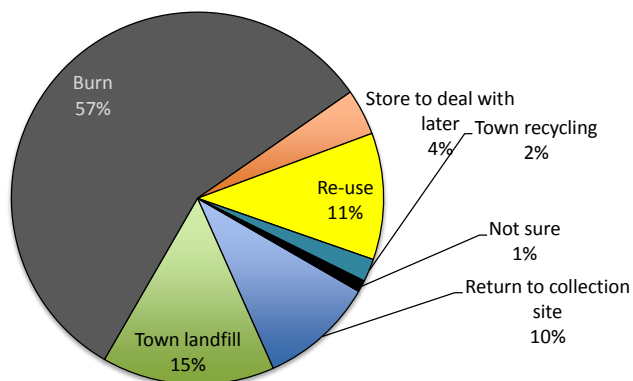


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What is done with empty feed bags?

Portion of farmers
who have: 25%
N=75

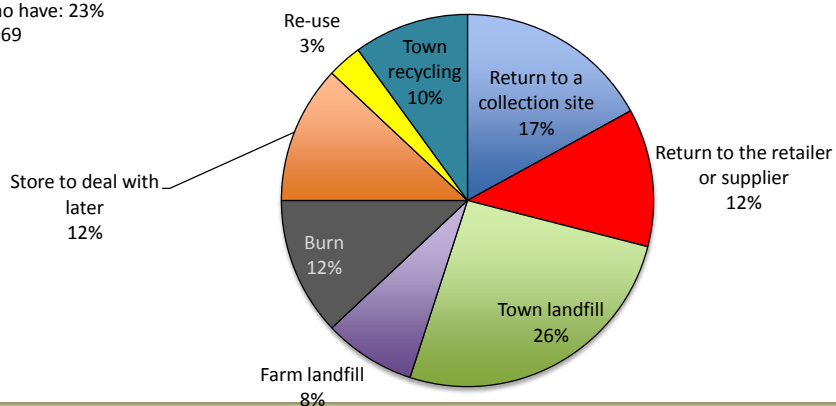


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What is done with unwanted animal health products or pharmaceuticals?

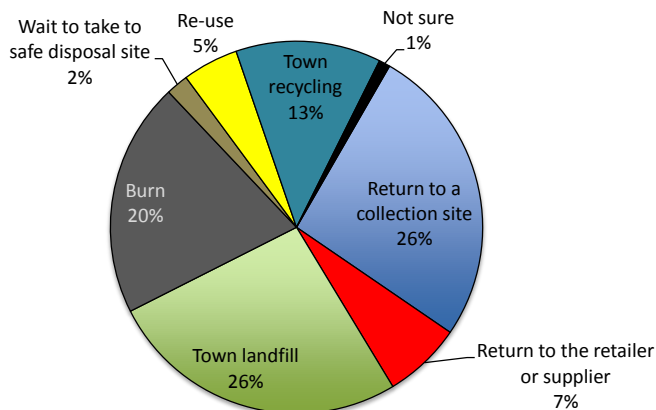
Portion of farmers
who have: 23%
N=69



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What is done with empty plastic livestock disinfectant product containers?

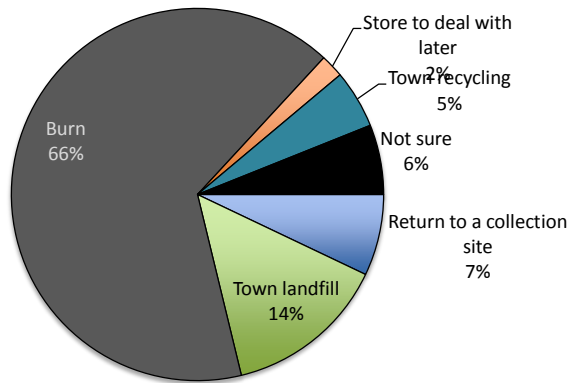
Portion of farmers
who have: 19%
N=57



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What is done with plastic wrap from silage or hay bales?

Portion of farmers
who have: 16%
N=48

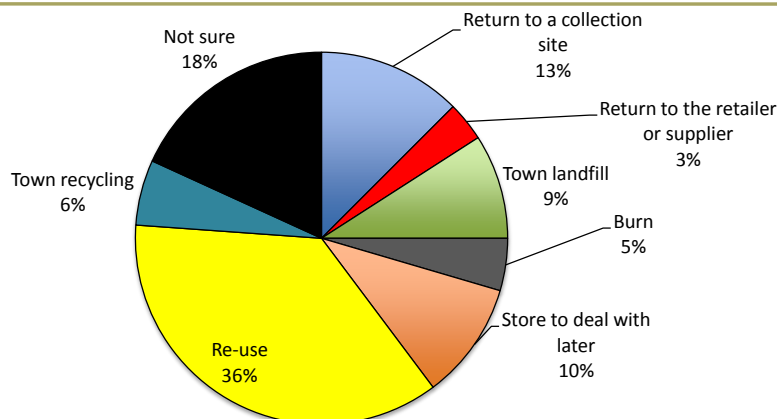


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What is done with used grain bags?

Portion of farmers
who have: 11%
N=33



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Summary of more prevalent materials and / or those that are being burned or put in landfill

- Plastic oil, antifreeze containers - a high portion has them, and over 40% get burned or put in landfill
- Empty seed bags - a high portion has, and over 70% gets burned or put in landfill
- Cardboard packaging - a high portion has, and a high portion gets burned
- Plastic wrap or packaging - a high portion has, and most gets put in landfill or burned
- Twine or net wrap – two-thirds is burned, and another 20% goes into landfill
- Sharps or needles – a lower portion has, but over 40% gets put in the landfill
- Styrofoam packaging – almost a third have, and 80% ends up in landfill or being burned
- Empty feedbags – a quarter have, and a high portion gets burned or put in the landfill
- Animal health products – a quarter have, and much of it gets burned, put in landfill or is being stored
- Empty plastic livestock disinfectant containers and unwanted animal pharmaceuticals – almost half is burned or put in landfill
- Plastic wrap from hay or silage bags – a lower portion has, and most of it is burned or put in landfill

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Blacksheep Strategy Inc.

Do farmers have materials they don't know how to dispose of?

Do you have any material on your farm that you are concerned about recycling or safely disposing of, or that you are unsure of how to dispose of? (N=300) *

Plastic wrap and film, silage wrap, bale wrap	4%
Twine	4%
Canola seed, fertilizer, treated seed	4%
Chemicals, pesticides	3%
Antifreeze	3%
Paint and solvents	3%
Oil	2%
Tires	2%
Containers	2%
Animal health items	1%
Oil filters	1%
Other	2%
Nothing, no concerns, don't know	76%

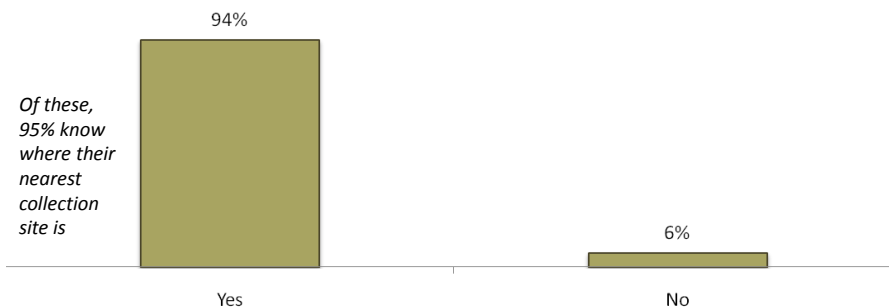
* Percentages add to more than 100, as respondents could give more than one response

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Awareness of container recycling program

Before now, were you aware that there is a collection and recycling program for these containers? (N=230, those who generate containers)

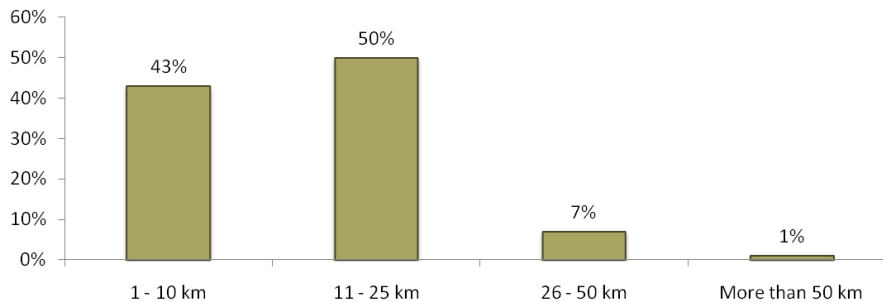


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Distance to drive to return containers

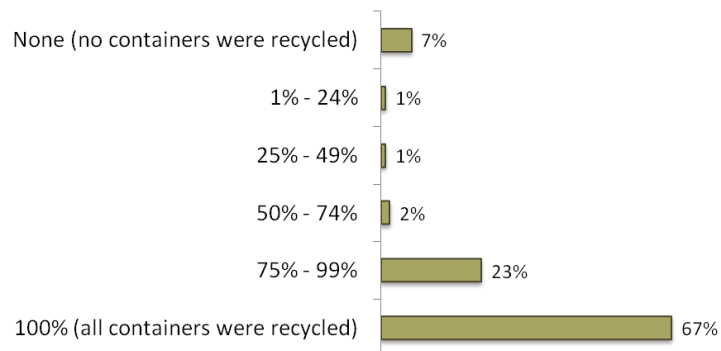
About how far would you have to drive to return containers? (N=202, those who have containers and know where their collection site is)



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Portion of containers recycled

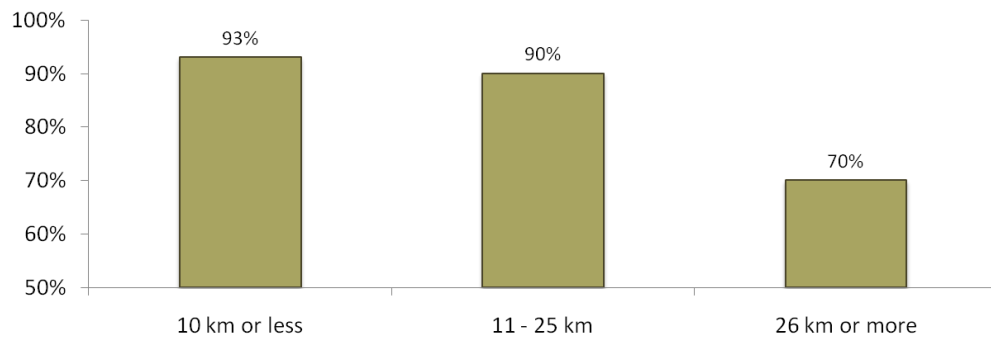


N=228, those who generate 10L size-range containers

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Portion of containers returned by distance to collection point



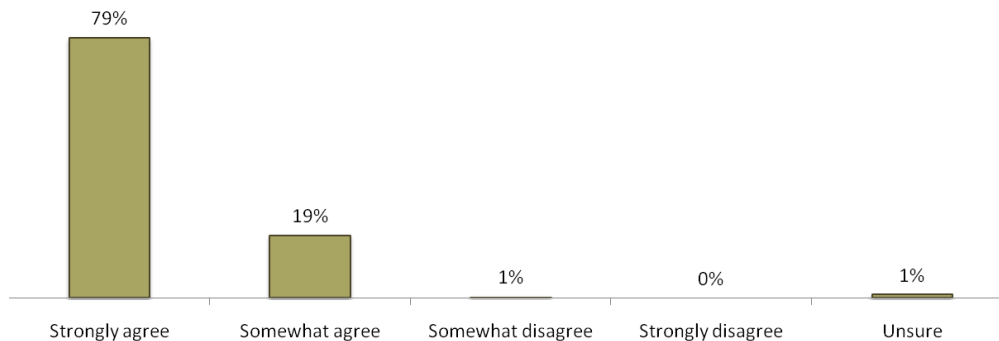
N=202, those farmers who are aware of program and know where their recycling point is

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Attitudes towards responsible disposal of agricultural waste

Responsible disposal of agricultural waste is very important to me (N=300)

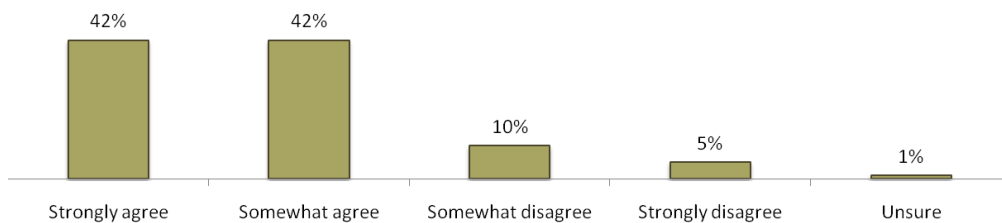


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Do farmers think industry is doing enough?

The agricultural industry is doing enough to ensure there are responsible ways to dispose of the waste from their products (N=300)

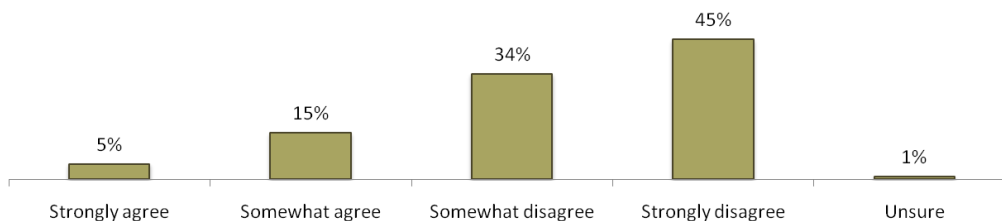


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Do farmers have waste that they don't know how to dispose of safely?

I have a lot of waste materials around my farm that I am unsure of how or where to safely dispose of (N=300)

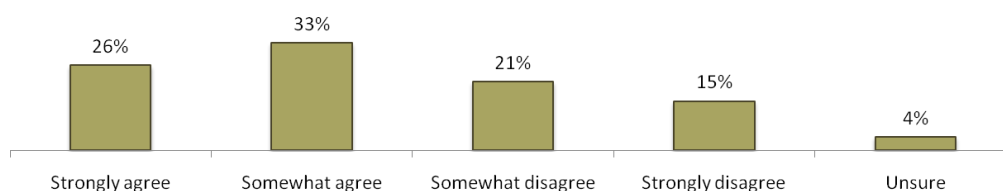


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Do farmers see alternatives to landfill or burning?

I am uncomfortable burning or putting certain products in my own or other landfills, but don't see any alternative (N=300)



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Key Messages

1. CleanFARMS is actively pursuing solutions for management of agricultural waste
2. In Manitoba, many agricultural waste materials are being buried or burned
3. Farmers believe that proper management and stewardship of agricultural waste is important

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**Thank you.
Any questions?**





March 10, 2010 — Presented by Don Tanner

COLLECTION OPTIONS AND THE MARKETS FOR AG WASTES



Collection Options

Primary Considerations:

- **What** – tonnage, size/volume of materials, handling issues
- **Where** – what type of locations (or combination of locations) are potentials logistically
- **When** – on-going, seasonal, combination of both



Collection Options

1. Municipal site collection
2. Return to Retail
3. Mixed model – municipal and retail
4. Single stream collection blitz
5. Combined stream collection blitz
6. Mobile farm pickup
7. Mobile farm pickup – reverse distribution
8. Private collection and disposal



Challenges common to all Options

- Level playing field – fairness for stewards that participate
- Voluntary or Mandatory – how do you ensure all 'Stewards' are playing their part
- Who pays – Is it a fee at retail on top of the cost of the product or are the costs of the program incorporated in the selling price?
- Recycling markets - some materials are hard to find



Option 1 - Municipal Site Collection

Benefits

- Used for pesticide containers for over 20 years – farmers very familiar
- Very good geographic coverage
- Often plenty of space available

Challenges

- Less convenient for farmers than return to retail, but not new to them
- Site management is paid through municipal taxes
- Some of these sites may no longer exist in the future



Collection Options



● Municipal Sites



Option 2 – Return to Retail

Benefits

- Hundreds of agricultural retailers in the province – very good coverage
- Used for pesticide containers in Saskatchewan for many years
- Farmers already going to these sites regularly
- Good geographic coverage

Challenges

- Space could be problematic for some materials
- Bio-security could be an issue for some materials
- Retailers could object to collecting materials they didn't sell
- Collection incentive may be required



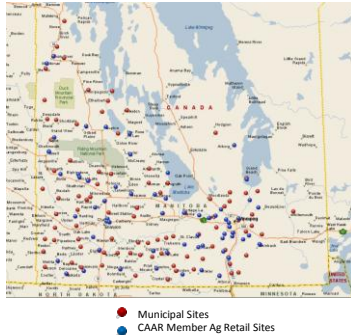
Collection Options



● CAAR Member Ag Retailer Sites



Collection Options



Option 3 – Mixed Model (Municipal/Retail)

Benefits

- Flexibility to fit products into appropriate location
- Improved access for some farmers
- Allows for reduction in municipal sites over time...or vice versa for retailers

Challenges

- Similar to options 1 and 2
- Retailers who don't participate may have unfair advantage over those that do
- Overall collection/transportation cost may increase



Option 4 – Single Stream Collection Blitz

Benefits

- Similar to CleanFARMS' obsolete pesticide collection program
- Used successfully in Moose Jaw for grain bags
- Good for products that are:
 - Bulky; or
 - Generated only at certain times of the year (i.e. grain bags); and
 - Can be stored on the farm until the collection blitz

Challenges

- Need collection site with appropriate space
- Blitzes can result in more material collected than can be managed



Option 5 – Combined Stream Collection Blitz

Benefits

- Economy of scale – can share administration costs

Challenges

- If retail sites are used – may object to collecting materials that weren't sold at that location



Option 6 – Mobile Farm Pickup

Benefits

- Scheduled pickups and 'on-demand' service
- UK and New Zealand use model for bale/silage wrap, twine, pesticide containers, etc.
- Convenient to farmers

Challenges

- Approx. 19,000 farms in the province - this would be very expensive



Option 7 – Mobile Farm Pickup via Reverse Distribution

Benefits

- Similar to Option 1, but uses companies already delivering products to the farm (i.e. feed and seed delivery)
- Convenient to farmers

Challenges

- Wastes may not be available at the same time as the new product delivery
- It is unlikely that all the Ag wastes could be picked up in this manner
- Companies would need some type of incentive to participate



Option 8 – Private Collection and Disposal

This is the current 'status-quo'

Benefits

- No changes required by anyone

Challenges

- Landfills are filling up and some may close soon
- Many waste products already unsafely burned or buried
- Poor environmental management practices by farmers
- Poor stewardship by industry
- End of life costs borne by farmers and unfairly distributed (i.e. tipping fees at landfills vary substantially)



Key Messages

1. CleanFARMS is actively pursuing solutions for management of agricultural waste
2. In Manitoba, many agricultural waste materials are being buried or burned;
3. Farmers believe that proper management and stewardship of agricultural waste is important;
4. A combination of different types of sites could be the most efficient collection network for the products



Markets for Ag Wastes

W11020004

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Corrugated Cardboard Boxboard Paper Laminates



W11020004

W11020004

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Old Corrugated Cardboard

Location

- Mills located in Minnesota, Ontario and Quebec

Strength

- Very mature market
- Capacity of mills to take recycled material is high
- OCC prices vary from \$100 to 135/tonne (net of freight cost)

Challenges

- Distance to markets means higher costs than those provinces with mills nearby

W11020004

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Boxboard

Location

- Mills located in Minnesota, Ontario and Quebec

Strength

- Very mature market
- Capacity of mills to take recycled material is high
- Boxboard prices vary from \$10 to 70 (net of freight cost)

Challenges

- Distance to markets means higher costs than provinces with mills

W11020004

W11020004

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Laminates

Location

- Mills recycling OCC (Minnesota, Ontario and Quebec) accept a small amount of laminates in the overall stream

Strength

- Very poor market
- Can be blended in with OCC, but to a maximum of 1% by weight only

Challenges

- Generates lots of 'residue' during recycling, requiring disposal



Agricultural Films



17/03/2011

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Markets

Ag Films (Bale/Silage Wrap, Greenhouse Film, Mulch Film)

- There are at least three processors who currently accept these materials for recycling:
 - (1) Merlin Plastics (BC and Alberta)
 - Aggressively pursuing all available waste Ag plastics
 - Alberta plant has the capacity to process 2500 tonnes per year (Vancouver facility has a capacity of 5000 tonnes)
 - The waste films need to be baled and dirt/organics contamination is not to exceed 5% by weight
 - Price paid is \$100/tonne + a \$50/tonne freight allowance --- this implies net revenue of approximately \$80 to \$100 per tonne



Markets

• Ag Films (cont'd)

- (2) Poly-America (USA)
 - One of the largest manufacturers of heavy duty plastic bags for residential and commercial use
 - All four of their US plants accept waste Ag film for recycling --- closest plant is in St. Paul, Minnesota
 - The waste films are used in the production of construction film
 - Demand fluctuates with the demand for this end product
 - Price paid is approx. \$50/tonne --- net revenue would be neutral to slightly positive
- (3) NextLife (USA)
 - Two facilities in the US that currently accept waste Ag films --- closest is in Frankfort, Kentucky
 - Due to freight cost, net revenue would be negative



Grain Bags



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Markets

• Grain Bags

- There are now two Canadian processors who are taking these bags back for recycling:
 - Merlin Plastics
 - Participated in a Saskatchewan collection pilot in the spring of 2010 that collected 50,000 pounds of bags over a single weekend
 - Have used this as a 'springboard' to develop markets for the recycled material
 - Pricing and material spec is the same as for the other Ag Films
 - Crown Shred & Recycling
 - Established recycler in Saskatchewan
 - Just recently began accepting used grain bags from farmers
 - Considering a new plant dedicated to grain bags and, potentially, other Ag films

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Ag Twine



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Markets

• Ag Twine

- Bridon Cordage / Gopher Plastics
 - Large manufacturer of Ag twine located just outside St. Paul, Minnesota
 - Began recycling waste twine into new twine approximately three years ago
 - Annual capacity of approximately 2700 tonnes per year --- currently running at 50 to 60% of capacity
 - Dirt/organics contamination spec --- they prefer a maximum of 5%, but 7-8% is tolerable
 - Moisture is the real issue
 - Price paid is \$175/tonne (net of freight costs)

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Net Wrap



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Markets

• Net Wrap

- Normally made from polypropylene, but can contain small amounts of other plastics like nylon
- Merlin Plastics is looking for this waste material as well
- Max. dirt/organics contamination spec of 5% may be more difficult to meet
- Same pricing and expected net revenue as Ag films and grain bags

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Seed & Feed Bags



W1100001

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Markets

• Seed Bags

- Paper:
 - Largest percentage of these are used for canola and corn seeds
 - Residual contamination with herbicide and, in some cases, insecticide as well
 - Recycling is not an option
 - Incineration is most likely to be the preferred method of disposal (expensive @\$2.00 per kilogram!)
- Polyethylene
 - Generally used for cereal crop seed (pesticide contamination not an issue)
 - Can be recycled at Merlin's facility in Alberta:
 - Same contamination spec
 - Same pricing

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Markets

• Feed Bags

- Paper:
 - Split between plastic lined and unlined
 - Those with a plastic lining are difficult to recycle (same issues as paper laminates)
 - The unlined bags might be acceptable blended in with the boxboard
- Polyethylene
 - Can be recycled at Merlin's facility in Alberta:
 - Same contamination spec
 - Same pricing



Markets - Summary

Material	Recyclable ?	Revenue (\$/tonne)	% Recyclable
OCC	Y	100-135	
Boxboard	Y	10-70	91
Laminates	N	0	
Aq Films	Y	0-100	100
Grain Bags	Y	80-100	100
Net Wrap	Y	80-100	100
Seed Bags			
- Paper	N	(2000)	0
- Poly	Y	80-100	100
Feed Bags			
- Paper	?	?	?
- Poly	Y	80-100	100



Key Messages

1. CleanFARMS is actively pursuing solutions for management of agricultural waste
2. In Manitoba, many agricultural waste materials are being buried or burned;
3. Farmers believe that proper management and stewardship of agricultural waste is important;
4. A combination of different types of sites could be the most efficient collection network for the products
5. Processors are available to take almost all of the materials



Stewardship Options

March 10, 2011

3/31/2011



National Ag Waste Stewardship

- Ag Waste - Regulated through a number of federal depts
 - Health Can, Env Can, Transport Can, etc
 - Usually apply to health products and transportation and storage of dangerous goods.
 - Apply to products and packaging
 - Some legislation requires labels to state 'disposal' in waste – not recycling
- National voluntary stewardship programs
 - i.e. bulk containers (asset tanks), all pesticide containers, etc.
 - Responsible use programs
 - Product specific (fertilizer – right rate, right time, right product) etc.



Provincial Ag Waste Stewardship

- All other ag waste is usually exempt from regulation – waste is mainly burned or buried



Provincial Ag Waste Stewardship

PROVINCE	STATUS
BC	New EPR regulation. No plans yet for 'commercial' waste.
SK	Proposing legislation aimed at domestic packaging. Environment Ministry expects roll-out in 2011.
MB	Packaging regulation 'agnostic' on source. CleanFARMS submitted ISP in 2010 in response to regulation. Approval pending.
ON	Announced in 2009 it will regulate all packaging. Since 'Eco-fee' problem, missing all targets for further legislation.
QC	Packaging regulation 'agnostic' on source (similar to MB). Current organization, EEQ, does not include 'business to business' packaging but expects to consider later. New EPR regulation – similar to BC.



Key Elements for any EPR Stewardship Scheme

- Clear definition of products
- Targets
 - Accessibility for users
 - Recovery rates
- Financing options
- Promotion and education program
- Reporting results



OPTIONS

- OPTION 1 – Free Market Approach (or ‘do nothing’ approach)
- OPTION 2 – Steward Voluntary Approach (still a ‘do nothing’ approach)
- OPTION 3 – Steward legislative approach (similar to packaging legislation)
- OPTION 4 – Ban only approach



Option 1

Free Market Approach – no gov’t involvement

- Premise is that price of recycled resin sales drives market
- Businesses actively seek used product to remanufacture into new resin/products

Likelihood of success:

- Very unlikely unless recyclers pay much higher prices for wastes and landfilling remains cheap



Option 2

Free Market Approach – with ‘Steward’ involvement

- Similar to pesticide container program
- ‘Stewards’ manage and pay for cost of program

Likelihood of success:

- Very unlikely until all or most ‘Stewards’ participate



Option 3

Backstop legislation requiring 'Steward' involvement

- Similar to 'packaging' regulations, 'Stewards' must submit plan to gov't for program
- Accessibility, recovery, E&A, financing, reporting to be addressed

Likelihood of success:

- Success very likely...but may require some cooperation with SK to avoid cross-subsidization – huge issue for manufacturers/sellers



Option 4

Ban products from burning or burying

- Similar to Germany for bale wrap and greenhouse film – landfilling is banned and only incineration is allowed...but incineration is very expensive (~200€/tonne)
- Lack of 'cheap' disposal options drives a 'free market' approach to collecting and recycling product

Likelihood of success:

- Success very likely...but may suffer in areas close to borders that have no program and cheap landfill (i.e. SK)



Key Messages

1. CleanFARMS is actively pursuing solutions for management of agricultural waste
2. In Manitoba, many agricultural waste materials are being buried or burned;
3. Farmers believe that proper management and stewardship of agricultural waste is important;
4. A combination of different types of sites could be the most efficient collection network for the products
5. Processors are available to take almost all of the materials
6. Some type of regulated program is required to achieve further stewardship on agricultural waste



QUESTIONS AND ANSWERS



Feedback

- https://www.surveymk.com/s/Manitoba_Webinar_Feedback_Survey



THANK YOU

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