



## Container Stewardship and Sustainability The New Ag Container Life Cycle

- Cropland Containers and Mauser Container
  - IBC Concerns
  - IBC Life Cycle
  - Agtainer Advantages
- Approved Agtainer Return Sites

•February 8<sup>th</sup> 2012

•Presented by;

- Brian J. Bilyeu – Cropland Containers
- Jeff DeLiberty-Mauser





## Extensive IBC Research Team



Jeff and Brian



Cheerleads





## Who is Cropland Containers

- Founded by owners of Stainlez Inc. headquartered in Minneapolis, MN
- We are the first supplier to focus the reconditioning, remanufacturing and recycling of all Agricultural containers.
- We service the Midwest with over 100,000 sq/ft in Webster City, IA
- We offer sales, service, and recertification of IBCs and drums
- We are fully integrated scanning and IBC tracking systems with AgTracs





## Who is Mauser Group

### COMPANY

- ▶ Based in Brühl, Germany
- ▶ Provider of packaging solutions for the chemical, petrochemical, pharmaceutical and food & beverage industries



### PRODUCTS

- ▶ Large variety of small and large plastic drums and jerricans
- ▶ Universal standard 55 gallon steel drum and other specialty drums
- ▶ Intermediate Bulk Containers (IBC) on composite, steel, wooden and plastic pallet
- ▶ Blow molding machinery, service and consultancy
- ▶ Largest plastic industrial container reconditioner in the US, expanding in Europe
- ▶ Fibre drums







- 1.Ensure the **integrity/strength** of refillable containers
- 2.Minimize the potential for **cross contamination**
- 3.Ensure that containers and repackaging **comply with federal pesticide law (FIFRA)**
- 4.**Encourage the use** of refillable containers

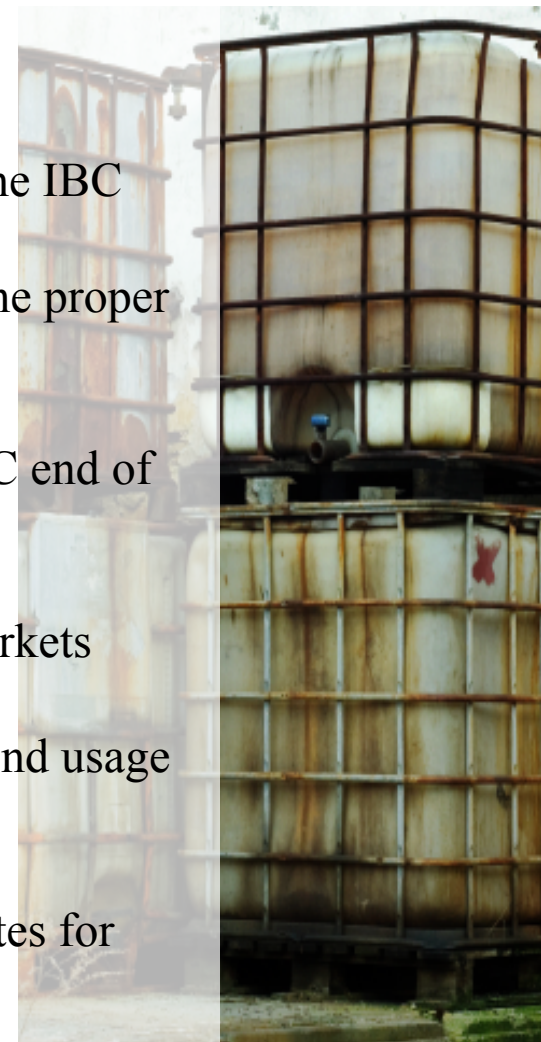
Container-Containment Rule Overview					
Category	Nonrefillable Containers	Refillable Containers	Repackaging Products	Container Labeling	Compliance
Who must comply?	Registrants	Registrants	Registrants Refillers	Registrants Users	Ag v Ag c appl Ag c bien
Major Requirements	<ul style="list-style-type: none"> <li>- DOT container design, construction &amp; marking standards</li> <li>- Dispensing capability</li> <li>- Standard closures</li> <li>- Residue removal (99.99% removal)</li> </ul>	<ul style="list-style-type: none"> <li>- DOT container design, construction &amp; marking standards</li> <li>- One-way valves or tamper-evident devices</li> <li>- Vent, gauge &amp; shut-off valve standards for large tanks</li> </ul>	<ul style="list-style-type: none"> <li>- Registrants &amp; refillers comply with specified conditions</li> <li>- Registrants develop &amp; provide certain information</li> <li>- Refillers obtain &amp; follow information, and clean, inspect &amp; label containers before refilling them</li> </ul>	<ul style="list-style-type: none"> <li>- Identify container as nonrefillable or refillable (all)</li> <li>- Statement to prohibit reuse and offer for recycling, batch code (all nonrefillables)</li> <li>- Cleaning instructions (some nonrefillables)</li> <li>- Cleaning instructions before disposal (all refillables)</li> </ul>	<ul style="list-style-type: none"> <li>- Se</li> <li>- cont</li> <li>- struc</li> <li>- arou</li> <li>- Co</li> <li>- pads</li> <li>- disp</li> <li>- Me</li> <li>- pro</li> <li>- ins</li> <li>- tank</li> </ul>
Compliance Date	Aug 17, 2009	Aug 17, 2011	Aug 17, 2011	Aug 17, 2011	Aug





## Generic IBC Concerns

- ✓ Cross contamination of products.
- ✓ Non Traceable IBCs can be lost.
- ✓ Back Flow of other products into the IBC
- ✓ Usage of IBCs that may not have the proper DOT performance test.
- ✓ No way to measure or track the IBC end of life.
- ✓ Generic IBCs allow usage in of markets
- ✓ Non identifying marking risks second usage outside pesticides.
- ✓ No properly approved collection sites for IBCs.







## Why Should You Care As a Company?

- ✓ **Stewardship** is an ethic that embodies responsible planning and management of resources.
- ✓ **Sustainability** is the capacity to endure.
- ✓ **Awareness** is the state or ability to perceive, to feel, or to be conscious of events, objects or sensory patterns







## Measurable Results Reduces Risk and Lowers Cost

- ✓ **Compliance** is knowing that the container meets all the state, federal, and UN requirements for the product.
- ✓ **Security** is ensuring your product is safely being shipped and stored in the proper container.
- ✓ **Traceability** is Knowledge ! Having the means to analytically trace the container's life cycle from cradle to grave.





# AG TAINER

CROP SAFE; FARMER APPROVED  
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## AG TAINER

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COMPLIANCE - SECURITY - TRACEABILITY

### PLUGS

**AG BUNG**  
SOLID 2" BUTTRESS BALL POINT LID PLUG, DEVELOPED TO ALLOW THE PLUG TO STAY IN THE LID WITHOUT REMOVAL BUT ALLOW MANUAL VENTING.

### LIDS

**SINGLE BUNG LIDS**  
AVAILABLE WITH A GREEN SOLID OR VENTED PLUG, AND NPT OR BUTTRESS.

**DOUBLE BUNG LIDS**  
GIVING YOU THE ABILITY TO VENT IN ONE SIDE AND PUMP OUT OR INTO THE OTHER, THIS NEW LID HAS TWO NPT BUNG THREADS WITH A WHITE EPDM GASKET.

### BOTTLES AND MARKINGS

**UV BOTTLE**  
UV BOTTLES HELP DETER SUNLIGHT, SOME CHEMICALS CAN LOSE THEIR EFFECTIVENESS IF THEY SEE TOO MUCH SUNLIGHT. WITH THE NEW CROPLAND UV BOTTLE THAT IS ONE LESS PROBLEM TO WORRY ABOUT.

### PROTECTION

**BOTTLE CORNERS**  
FIND YOUR AG IBC CONTAINER FASTER WITH OUR GREEN CORNERS.

**COLORS PALLET**  
ANOTHER NEW PRODUCT IS THE GREEN PALLET. UNLIKE REGULAR WOOD OR BLACK PLASTIC PALLETS, CROPLAND'S NEW AG PALLET WILL HELP IDENTIFY YOUR AG IBCS.



### 6 LABELS AND PLATES



**CUSTOM COMPANY COLLECTION LABELS**  
TRACKING AND COLLECTION LABELS WITH BARCODE OR RFID SERIAL NUMBERS.



**IBC COMPLIANT LABELS**  
EPA AUGUST 16TH 2018 APPROVED COMPLIANCE LABELS ARE REQUIRED FOR ALL YOUR TOTES.



**UN LABELS**  
REQUIRED FOR AGRICULTURAL PESTICIDES, PACKAGING GROUP III.



**VIP INSPECTION LABELS**  
HELP KEEP YOUR IBCS INSPECTED WITH VIP LABELS.



**GREEN LABEL PLATE**  
COLOR COAT YOUR AG CONTAINERS.

### LOCKING SEALS



**LOCKING CROSSBAR**  
KEEPS THE BOTTLE LOCKED IN THE CAGE AND SECURE.



**TAMPER EVIDENT EQUILOIK SECURITY SEAL**  
10" GREEN, 8" BLUE, OR 6" RED EQUILOIK SECURITY SEAL.



**TAMPER EVIDENT VALVE CLIP**  
THIS SIMPLE VALVE LOCKING CLIP ENSURES THAT THE VALVE SEAL HAS NOT BEEN COMPROMISED.

### 11 VALVES



**FLUID LOCK - ZERO BACKFLOW BALL VALVE**  
THE NEWEST FLUID LOCK HAS A ZERO BACK FLOW BUILT INTO THE VALVE BODY. THIS WILL ENSURE THAT NO FOREIGN PRODUCTS CAN ENTER THE IBC THROUGH THE VALVE, ELIMINATING THE CONCERN FOR CONTAMINATION.



**BUTTERFLY VALVE**  
THE NEWEST FLUID LOCK HAS A ZERO BACK FLOW BUILT INTO THE VALVE BODY. THIS WILL ENSURE THAT NO FOREIGN PRODUCTS CAN ENTER THE IBC THROUGH THE VALVE, ELIMINATING THE CONCERN FOR CONTAMINATION.



**CYLINDER VALVE**  
THE NEWEST FLUID LOCK HAS A ZERO BACK FLOW BUILT INTO THE VALVE BODY. THIS WILL ENSURE THAT NO FOREIGN PRODUCTS CAN ENTER THE IBC THROUGH THE VALVE, ELIMINATING THE CONCERN FOR CONTAMINATION.



**TOP UNLOADING VALVE**  
USED FOR CLOSED SYSTEMS, ALLOWS FOR PUMPING THROUGH THE LID OF YOUR IBC.



**cropland**  
CONTAINERS INC

**MAUSER**

TOLL FREE: 888-422-2767 (888-IBC-CROP) | FAX: 763-971-7869  
2001 MARVEL STREET WEBSTER CITY, IA 50595 | WWW.CROPLANDCONTAINERS.COM



**cropla**

CONTAINERS INC

•Developed in partnership by **Cropland Contai** and **Mauser**

•Designed to meet new EPA PCC rule

•Color Identification to ensure usage for Agriculture usage

•Smart tracking to have knowledge of last contained, DC test, LKL, and end of life.

COMPLIANCE SECURITY TRACEABILITY



# AGTAINER

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Check - In  
and  
inspection

### CROPLAND CHECK IN AND RECERTIFICATION

Cropland, scans in the Agtainer to show arrival, then the Agtainer is REMANUFACTURED or RECYCLED (end of life). During the remanufacturing process all Agtainers are re-certified with STAINLEZ<sup>®</sup> parts and MAUSER bottles. The Smart IBC is then stored or sent back to the Refiller facilities to be put back into production.



Register  
into  
Database

### AGTAINER MANUFACTURING

Agtainers are constructed and tracking labels are applied to each individual Smart IBC for DOT and EPA compliance at our Cropland and Mauser Facilities

Check -  
Assign  
custom



### AGTAINER WAREHOUSING

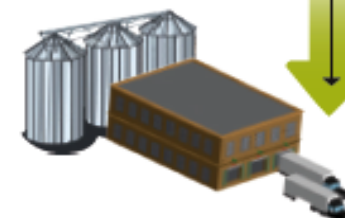
Agtainers are then stacked and stored in our warehouses around the country until Smart IBC's are shipped to refiller facilities or manufacturer

Check out  
and assign  
to Cropland  
and BOL



### AGTAINER TRANSFER

Agtainers then go on to be refilled and sent back to the farmer, or are sent back to Cropland to be recertified before put back into production.



Re  
pro  
and

### AGTAINER MANUFACTURE OR REFILLER FACILITY

Agtainer arrives at facilities and is filled with assigned agriculture product

Inspect for  
compliance  
and product  
compatibility



### AGTAINER REFILLER FACILITY

Agtainers arrive at refiller facility. Smart IBC's are evaluated for condition and what previous product was stored in the Agtainer.

If agtainer passes  
inspection and  
compliance it is able  
to be refilled and is  
returned to circulation.

STAINLEZ<sup>®</sup>



cropland  
CONTAINERS INC  
MAUSER

\*\*Agtainer utilizes the cloud to trace the Agtainer throughout its life cycle.\*\*

\*Software compatible with  
Macintosh or PC Operating systems\*

Secure  
TRACS

GreenLease

Check  
and to cu  
and



### TRANSFER TO CUSTOMER

Agtainers are loaded onto a truck shipped. Smart IBC's are scanned to show E.T.A. and shipped to customer



### AGTAINER TRANSFERS BACK TO REFILLER

User returns the smart IBC's to the refiller facility.



### FARMER

Receiver of the product obtains their smart IBC and uses product on agricultural needs.



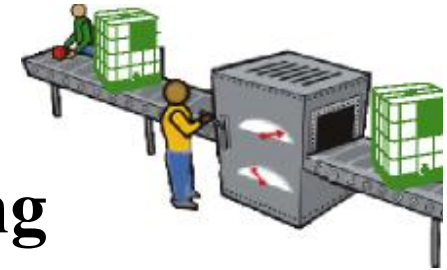
# AGTAINER

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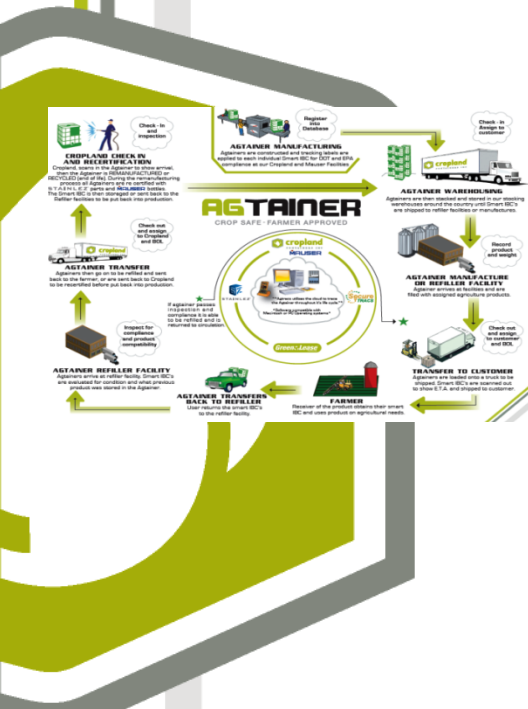
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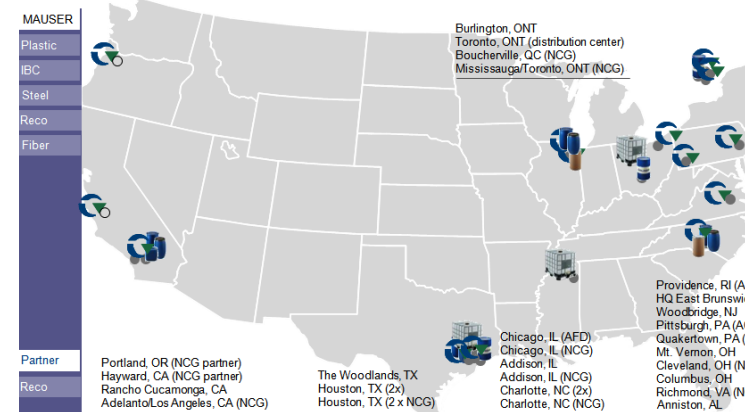


## AgTainer Manufacturing

- ✓ Made at AL, OH, TX in the US by Mauser
- ✓ Design Tested in Mauser Packaging Lab
- ✓ Performance Tested to DOT and UN standards
- ✓ Individually recorded and tracked into the AgTracs System



## Geographical presence: North America





# AGTAINER

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## AgTainer Warehousing and Distribution



- ✓ Shipped directly from Mauser or Cropland Containers stocking.
- ✓ Stored in warehouses around the country to reduce lead times.
- ✓ Individually recorded and scanned out and assigned to customer.
- ✓ AgTracs Container Tracking System sends report to customer.

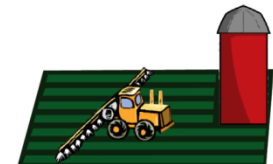
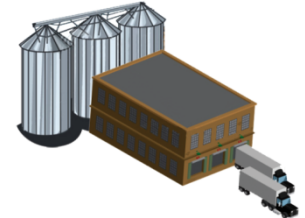






## Chemical Distribution Channel

- ✓ AgTainer arrives at the manufacture or Refiller location.
- ✓ AgTainer is filled with product scanned and recorded with product and weight.
- ✓ Scanned and Shipped to the Farmer.
- ✓ Farmer uses product.

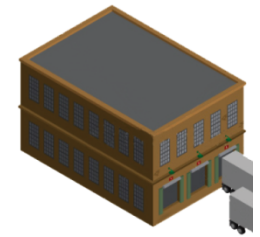






## AgTainer Collection for Reuse or Remanufacturing

- ✓Farmer returns the AgTainer to the refiller.
- ✓Refiller scans in AgTainer and inspects condition, tamper quality, and certification dates.
- ✓If refiller decides anyone of the three inspections are breeched then Cropland Containers “Saves the Day” ☺
- ✓Cropland collects the Agtainer quickly and returns to be remanufactured.







## AgTainer Remanufacturing or Recycling

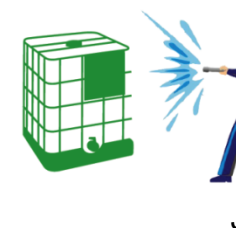


✓ Agtainer is return and scanned back into the AgTracs system.

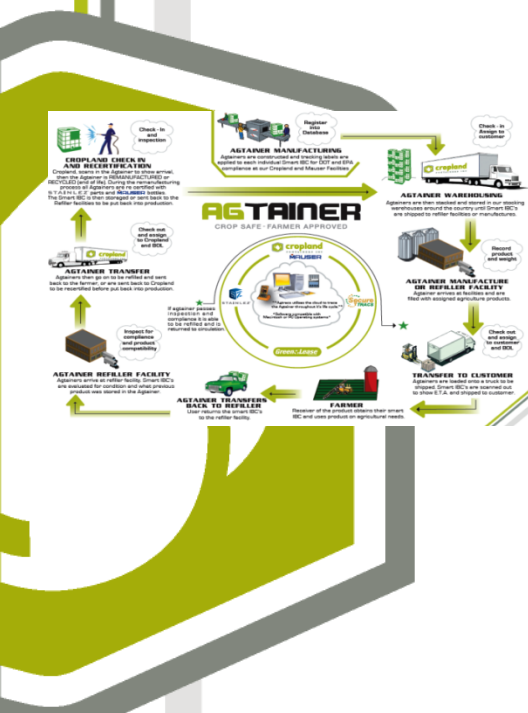
✓ The AgTainer gets a new bottle and a new certification date

✓ The old bottle is shredded and is turned in drainage tile.

✓ The customer receives a report notifying them of the AgTainer End of Life and receives credit through our **Buy Back Program**.



J

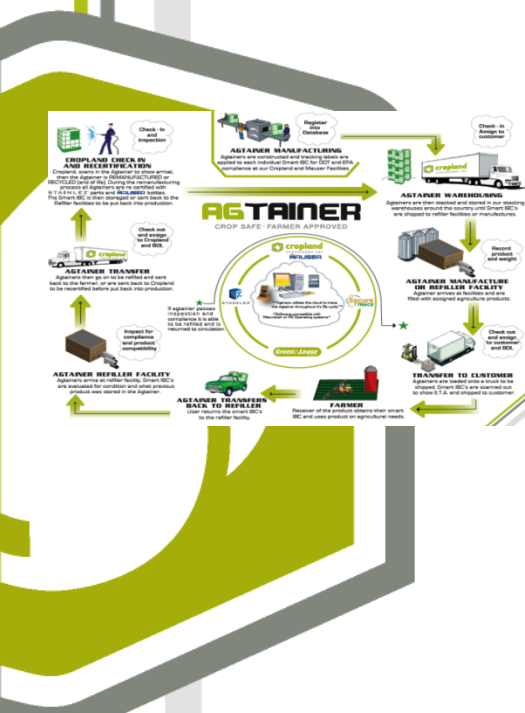






## AgTainer Traceability

- ✓ Secure Trac's container and product tracking system allows full visibility of the container life cycle.
- ✓ It monitors the container's certification dates, product last contained, and the condition.
- ✓ It is a free service with the Agtainer purchase.
- ✓ Allows you to measure your containers' metrics daily and yearly so you can improve on knowing where your container are.



### AgTracs

Manage Your Account

- Logout
- Account Home
- Change password
- Update email address

Warehouse Transactions

- Checkin
- Checkout
- Fill
- Inspect
- Lookup
- Register
- Relabel

### Tank Summary

Barcode: 1234

Tank Type: Monsanto 120

Location: Rake, IA

Registration Date: 2012-01-12

Checkedout?: No

Refilled?: No

EPA Deadline: 2012-01-12

Days Until Deadline: 0

Passed Last Inspection?: Failed

History: All Fills

No data

History: All Inspections

No data

History: All Transaction

barcode	tanktype	transactiondate	transactiontime	location	username	transactiondescription
1234	Monsanto 120	2012-01-12	2012-01-12 21:15:42	Rake, IA	warehouse	[1234] Added a tank to inventory.

Barcode:

Lookup Tank Information



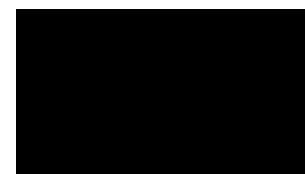


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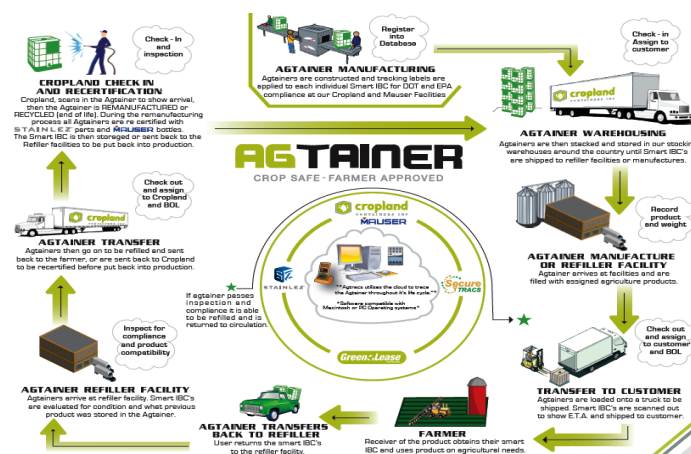
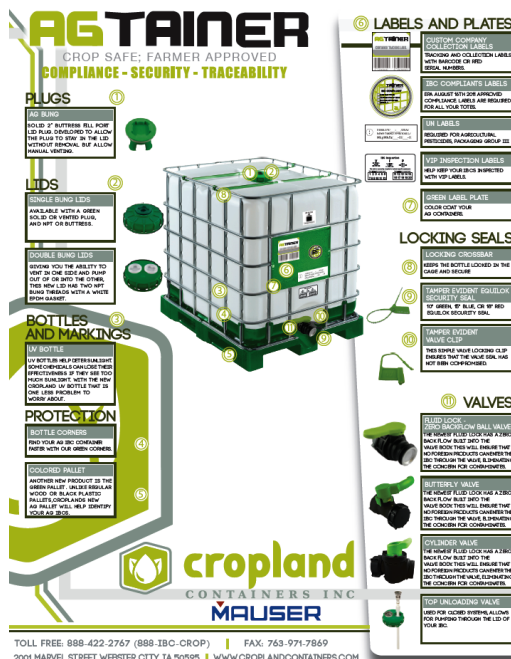
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STAINLEZ™



AgTracs 





# AGTAINER


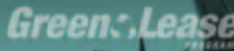

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## Container Buy Back Program



GREEN LEASE PROGRAM

turns out, green isn't just a color anymore.

### IBC Buy-Back Program


Cropland Containers offers a One-Way Composite (Bottle in a Cage) IBC Buy-Back program which offers payment of up to \$20 per Reconditionable IBC.

### IBC Buy-Back Program Guidelines

#### CUSTOMER RESPONSIBILITIES

- 1) Do you have 60 IBCs? In order to pay the most amount per IBC we need to maximize the collection of IBCs per truck, if we can get 60 IBCs per pickup this will provide the highest payback to you.
- 2) Are Containers RCRA Empty? Containers need to be certified RCRA empty and if previous contents included a pesticide or any ACUTE hazardous substance, they must be Triple Rinsed.
- 3) Are Containers Sealed? All original plugs, covers and rings must be secure.
- 4) Are Containers Labeled with Original Labels showing Prior Contents? Original labels showing prior contents and also any information regarding prior contents' hazards.
- 5) Use only the Bill of Lading provided by Cropland for shipment of used Containers. This B.O.L. will be provided at the time of pick up request. No other Bill of Lading is allowed.
- 6) MSDS and a Empty Container Certification (ECC) must be faxed to Cropland Containers Inc. prior to Collection. Fax to 763.971.7869


**NEED MORE INFORMATION?**  
Visit [www.croplandcontainers.com](http://www.croplandcontainers.com) for more information.



CONTAINERS THAT  
WORK JUST AS  
HARD AS YOU DO.

[CROPLANDCONTAINERS.COM](http://CROPLANDCONTAINERS.COM)

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2001 Marvel Street Webster City, IA 50595 | [www.croplandcontainers.com](http://www.croplandcontainers.com)









## Two Minds with One Thought



Thank You from Jeff and Brian

