

# Monsanto Bulk Pesticide Repackaging Program 2011

## The Pesticide Stewardship Alliance

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# History

- Monsanto established its own set of minimum containment standards
- Monsanto developed its own proprietary fleet of intermediate bulk containers (mini-bulks) that had one-way valves and/or tamper-evident seals in the mid-90's
- Monsanto had a Team of people in the field to implement the containment standards and conduct training in the proper methods of bulk pesticide repackaging

# Contract

- For years we operated with a written “Bulk Repackaging Agreement” under the old Bulk Repackaging Guidelines
- Today under the new Part 1 Subpart D regulations we have to have “a Written Contract”



# Refillable Containers



- Monsanto has made a sizable investment in its own fleet of dedicated refillable containers since the mid-90's
  - All have one-way valves for taking product out
  - All have one-way valves for putting product in OR tamper-evident seal capability
  - All meet or exceed DOT Packing Group III Specifications

# Refillable Containers



15-Gallon Shuttle Jr.

30-Gallon Shuttle Jr.



# Refillable Containers

120-Gallon Shuttle



150-Gallon Shuttle

# Refillable Containers























# Refillable Containers



The 275-Gallon CUBE






Type	Color Options <i>as of Dec 2010</i>	Summary Details
<p><b>Shuttle Jr. 15</b></p> 	<p><b>Rings</b></p>  Green  Blue	<ul style="list-style-type: none"> <li>• 15 gallon capacity.</li> <li>• Monsanto tamper evident 3" one-way valve &amp; tamper evident vent.</li> <li>• Gravity flow extraction only.</li> <li>• Meets 2011 compliance: <b>YES</b></li> </ul>
<p><b>Shuttle Jr. 30</b></p> 	<p><b>Rings</b></p>  Green  Blue  Gray  Red	<ul style="list-style-type: none"> <li>• 30 gallon capacity.</li> <li>• Monsanto tamper evident 3" one-way dip-tube valve, 2" tamper evident one-way gravity flow valve, and tamper evident vent.</li> <li>• Meets 2011 compliance: <b>YES</b></li> </ul>
<p><b>Shuttle 120</b></p> 	<p><b>Frame</b></p>  Green  Red  Gray	<ul style="list-style-type: none"> <li>• 120 gallon capacity.</li> <li>• Monsanto tamper evident 3" one-way dip-tube valve, either a 5" tamper evident closure or 3" tamper evident fill valve, and tamper evident vent.</li> <li>• Meets 2011 compliance: <b>YES</b></li> </ul>
<p><b>Shuttle 150</b></p> 	<p><b>Frame</b></p>  Green  Red  Gray  Black	<ul style="list-style-type: none"> <li>• 150 gallon capacity.</li> <li>• Monsanto tamper evident 3" one-way dip-tube valve, either a 5" tamper evident closure or 3" tamper evident fill valve, and tamper evident vent .</li> <li>• Meets 2011 compliance: <b>YES</b></li> </ul>
<p><b>Shuttle 250</b></p> 	<p><b>Pallet Base</b></p>  Green  Blue	<ul style="list-style-type: none"> <li>• 250 gallon capacity</li> <li>• Monsanto tamper evident 3" one-way dip-tube valve, either a 5" tamper evident closure or 3" tamper evident fill valve, and tamper evident vent .</li> <li>• Meets 2011 compliance: <b>YES</b></li> </ul>

# Monsanto Authorized Refillable Containers

## Aug 2011 Compliant Quick Reference Guide



Type	Color Options <i>a/o Dec 2010</i>	Summary Details
<p><b>CUBE</b></p> 	<p><b>Bottle</b></p>  Gray	<ul style="list-style-type: none"> <li>• 275 gallon capacity.</li> <li>• Tubular frame with protective galvanized steel shell.</li> <li>• Lockable one-way valve &amp; tamper evident vent; auto-vent cap.</li> <li>• Gravity flow or bottom pump capable.</li> <li>• Meets 2011 compliance: <b>YES</b></li> </ul>
	<p><b>Frame</b></p>  Galvanized Steel	

### \*\*\*\*\*OTHER MONSANTO-APPROVED CONTAINERS\*\*\*\*\*

Other IBC (Intermediate Bulk Containers) or portable tank designs manufactured with FIFRA-compliant components and tested by the original manufacturer at an approved testing facility may be used by refillers provided the following criteria are met:

- Constructed of LDPE, HDPE, or stainless steel.
- DOT Packing Group III identification/UN markings and tested by the original manufacturer.
- Durably marked with a serial number or other identifying code.
- Each opening must have a one-way valve, a tamper-evident device, or both.
- Container is inspected by refiller, is free of defects, and cleaned in accordance with Monsanto guidelines.

### Monsanto Outdated Shuttles

**Not Authorized after August 2011**

Type	Color Options	Summary Details
<p><b>Shuttle 105, 200 Gallon</b></p> 	<p><b>Rings</b></p>  White	<ul style="list-style-type: none"> <li>• 1990-1995 Vintage</li> <li>• DD6 Internal Pump</li> <li>• Not UN tested</li> <li>• No one-way valve</li> <li>• Meets 2011 compliance: <b>NO</b></li> </ul>
	 Gray Base	
<p><b>200 Gallon Dome Style</b></p> 	<p><b>Tank &amp; Base</b></p>  White	<ul style="list-style-type: none"> <li>• 1980's vintage</li> <li>• Dome with DD6 Internal Pump</li> <li>• Not UN tested</li> <li>• No one-way valve</li> <li>• Meets 2011 compliance: <b>NO</b></li> </ul>

# Refillable Containers

## \*\*\*\*\*OTHER MONSANTO-APPROVED CONTAINERS\*\*\*\*\*

Other IBC (Intermediate Bulk Containers) or portable tank designs manufactured with FIFRA-compliant components and tested by the original manufacturer at an approved testing facility may be used by ref fillers provided the following criteria are met:

- Constructed of LDPE, HDPE, or stainless steel.
- DOT Packing Group III identification/UN markings and tested by the original manufacturer.
- Durably marked with a serial number or other identifying code.
- Each opening must have a one-way valve, a tamper-evident device, or both.
- Container is inspected by ref filler, is free of defects, and cleaned in accordance with Monsanto guidelines.



# Refillable Containers



# Refillable Containers



# Refillable Containers



# Residue Removal Procedures

- Exhibit 4 of the Bulk Repackaging Contract:
  - Wear appropriate PPE and conduct all cleaning over a contained area
  - Visually inspect the container
  - Remove old labels
  - Pressure rinse outside and inside with clean water and a tank cleaner/neutralizer until visible residues are gone
  - Continue rinsing with clean water
  - Completely remove all rinsate from the container using a vacuum, if necessary

# Questions or Comments?

