



The Pesticide Stewardship Alliance

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Agricultural Retailer Association

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WHO IS ARA?



- The Agricultural Retailers Association (ARA) is a nonprofit trade association that serves as the political voice of agricultural retailers and distributors.
- ARA's leadership includes a 44-person board representing retailers, distributors and suppliers of crop protection products, fertilizer, equipment, technology and other services.
- ARA members represent the majority of agribusiness dealers in the United States ~ 6,500 agronomy retail and distribution outlets.



Pesticide Disposal & Plastics Recycling (General Overview)

- ▶ **Rinsing**
- ▶ **Rinsate**
- ▶ **Disposal**
- ▶ **IBCs**

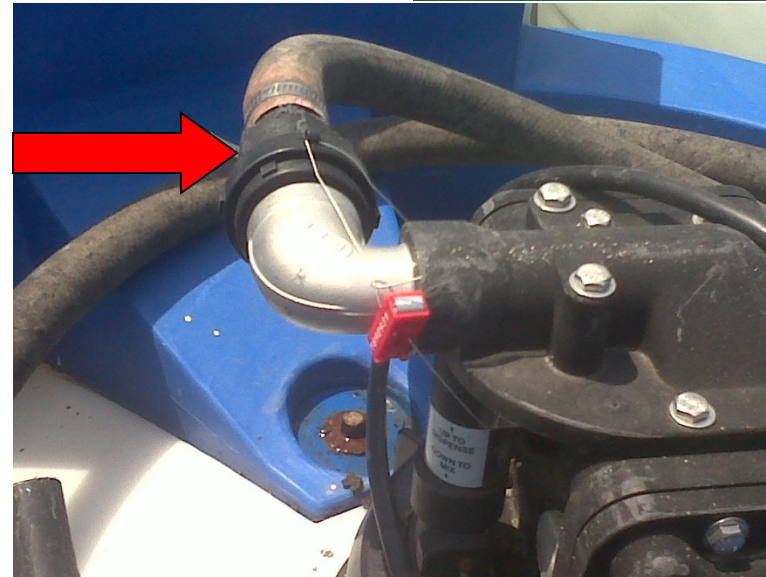
Rinsing

- ▶ Recyclable Containers are Triple Rinsed
- ▶ Retailers / Custom Applicators Triple Rinse as They Load
- ▶ Farmers / Growers Have Learned to Triple Rinse
 - ▶ Retailers and Recyclers Have Rejected Dirty Containers
- ▶ Bulk and Mini-bulk Has Reduced Need for Rinsing
- ▶ Dedicated Stainless Steel Kegs and Tanks
- ▶ Use Micromatic Values To Protect Dedicated Containers



One way valves or tamper evident devices are employed on PFC openings other than vents.

- For portable refillable containers holding liquid pesticides, each opening other than a vent must have a **one-way valve, a tamper-evident device, or both.**
- A vent must be designed to **minimize the amount of material** that could be introduced into the container through it.



Rinsate

- ▶ Goal Is to Add Rinsate Back to the Load ASAP
- ▶ Retailers Have Dedicated Rinsate Tank Based On Crop
- ▶ Rinsate Of Mini Bulk (off season) Stored By Crop

- ▶ Rinsate From Cleaning Equipment Most Difficult
- ▶ Contains Soil and Pebbles
- ▶ Even Micro Size Particles Can Clog Modern Nozzles

Rinsate - Direct Inject

- ▶ Applicators Using Direct Inject To Reduce Rinsate



Sidekick Console



Rinsate - Chemical Injection Option

- ▶ Two tank two pump
- ▶ High volume injection system
 - ▶ (5 to 200 oz/acre)



Rinsate

Multiple Spray Booms to Reduce Rinsate



Disposal

- ▶ Goal To Minimize Need For Disposal
- ▶ Waste Water is Applied Back to Appropriate Field Based On Crop
- ▶ Some Manufactures Still Have Retail Locations For This Purpose

Container Disposal

- ▶ Goal is to Recycle 100%
- ▶ Some Retailers have Installed Chippers
- ▶ Other Work With Plastic Container Manufacture To Recycle Plastic
- ▶ Work With State Recycle Projects as well as

IBCs

- ▶ DOT qualified vessel which requires initial testing and requalification after 2.5 years of use.
- ▶ Chemical Manufactures Require Test Inspection
- ▶ The industry is not consistent with IBC operations.
- ▶ Some Retailers Inspect and Pressure Test On Rigorous Schedule
- ▶ Other Retailers and Distributors Have Decided Not To Fill again after 2.5 years and to Take Out of Service.
- ▶ RCRA guidance on recycling of these totes.
- ▶ Triple rinse these Container if Seals are broken
- ▶ Rinsate used as makeup water on next application.
- ▶ If using IBC to repackaging retailer should follow manufacturer requirement of washout and labeling

IBSs Disposal

- ▶ Retailers / Distributors Dispose of their IBCs and PRCs
 - ▶ 1) Recycling through a State / Nation program. Requires cutting the tanks up and ensuring they are clean.
 - ▶ 2) Sale the Tank to the Farmer Along with the Pesticide .
 - ▶ 3) Working through their Manufacturer's Representative to Return the Tanks.
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- ▶ 25-30% is disposed of in each category above and the balance are damaged, taken out of service, burnt or used for other products such as used oil, etc.

Questions?

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