AASA

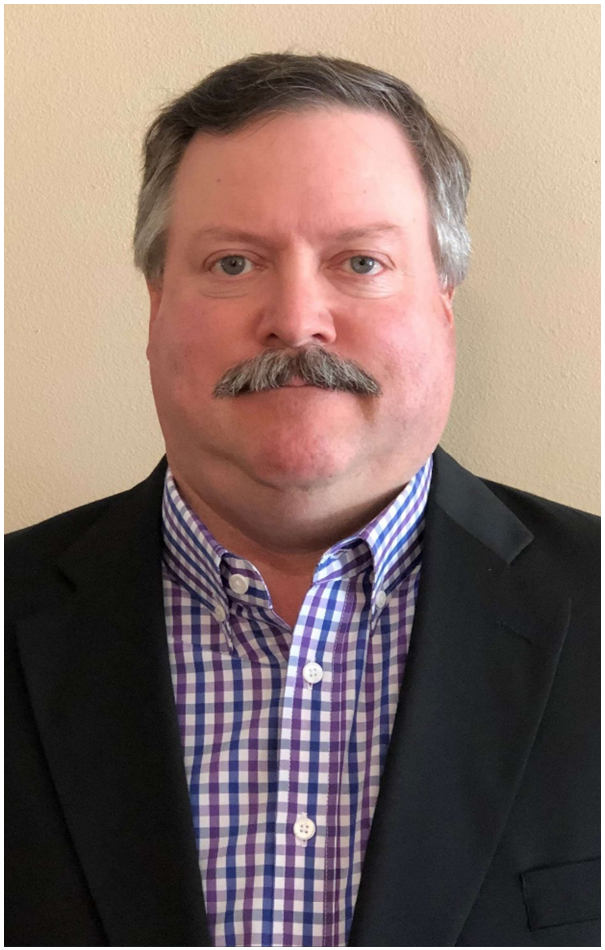
American Agronomic Stewardship Alliance

The AASA Inspection Program: Overview, Observations & Resources

Presenters:

Jean Payne, AASA Program Manager

Dave Powers, AASA Training & Technical Support Manager



Today's Topics

- Overview of the AASA Program and Site Inspections
- Observations & Trends
- Critical Requirements and Resources for Ag Retailers
- .5 CEU in IPM – scan code on final slide

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Website: aginspect.com

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Welcome

The American Agronomic Stewardship Alliance

The American Agronomic Stewardship Alliance (AASA) is a not-for-profit (501C (6)) organization that has taken the lead in developing a stewardship inspection program for agricultural retail facilities that store bulk, mini bulk, portable refillable containers (PRC's) and packaged crop protection products.

Our Mission

"Dedicated to leading the agricultural industry in educating, developing & promoting safe stewardship and best management practices for storing, handling and repackaging crop protection products throughout the distribution and retail supply chain."

Program Overview

Click **here** to view or download a 2-page, illustrative overview of the AASA program that also lists the top 10 items where facilities excel in compliance with federal regulations.

The AASA Inspection Program

The AASA Checklist

100 Questions Focused on FIFRA Bulk Pesticide Storage/Transfer/ Repack Requirements

We also include best management practice questions in the checklist

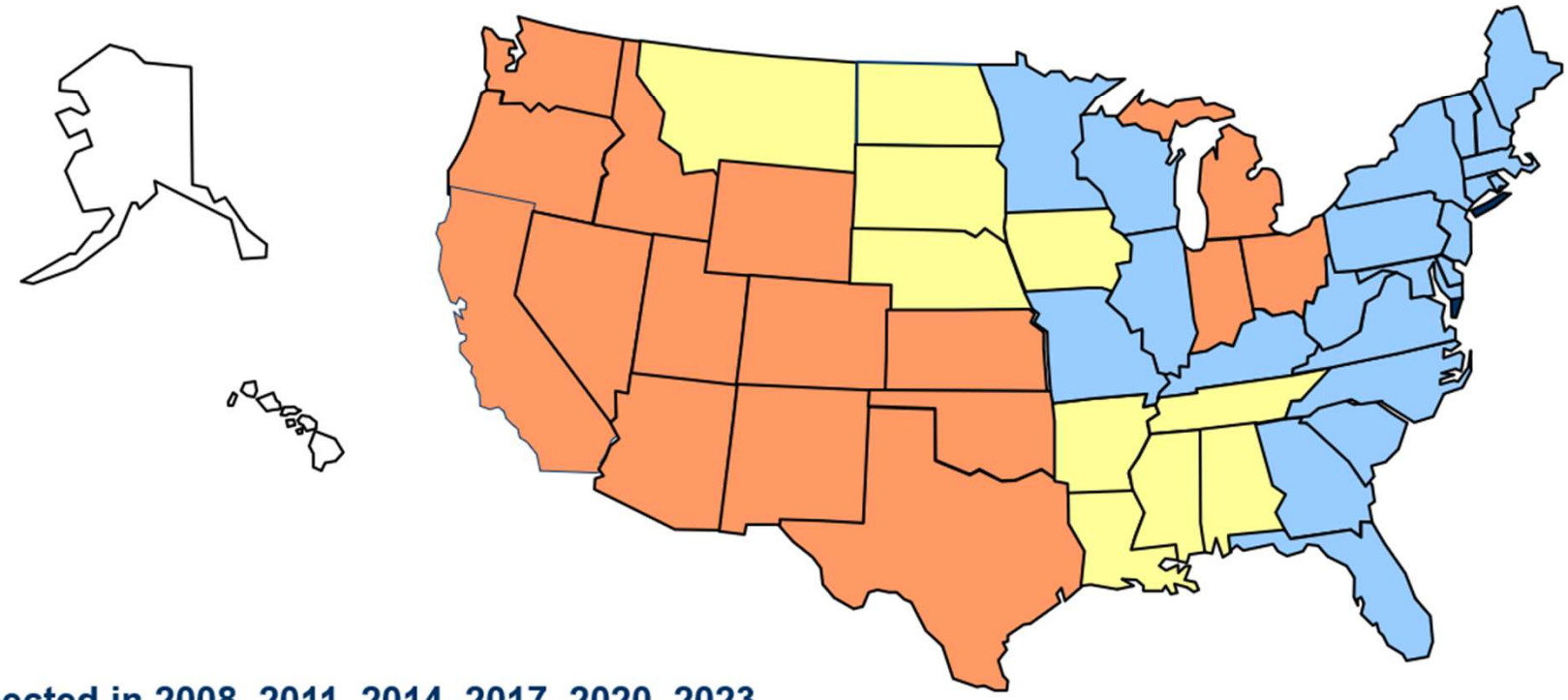
The registrants who ship to the facility and the facility personnel are only people who see the inspection reports. If major "misses" are noted the registrants and/or AASA may follow up with the facility to help address the issue.

USEPA Requirements

- AASA checklist includes * questions that are USEPA requirements

	Tank - Required	
31.*	The tank is labeled which includes a product booklet	Y N
31a.*	The tank is labeled with the net contents from the last delivery.	Y N
31b.*	The correct EPA Establishment Number is affixed to the tank.	Y N
32. *	The tank is free of visible stress cracks, punctures, corrosion, or defects and there are no signs of leakage	Y N
33. *	The tank's profile is within the containment wall	Y N
33b.*	The bulk pesticide tank within the containment unit is anchored or elevated to prevent flotation	Y N
34. *	Type of vent used: P= Pressure Vacuum Relief Vent; E= Emergency Relief Vent; O= Open Vent; D= Vented to a desiccant; N= Not Vented **(Note: There could be more than one answer for each tank)**	P E O D N

History of AASA State Inspections



Inspected in 2008, 2011, 2014, 2017, 2020, 2023

Inspected in 2006, 2009, 2012, 2015, 2018, 2021

Inspected in 2007, 2010, 2013, 2016, 2019, 2022

Inspection Program

Download the 2022 Retail Facility Checklist

This document provides general information and covers inspection of:

- Bulk Tanks and Containment
- Portable Refillable Containers and Repackaging
- Security
- Packaged Storage

Edit content | Edit page

AASA Inspectors

2022 AASA INSPECTORS

Matthew Bouta - DEKRA

Jim Bushore - DEKRA

Joshua Flynn - DEKRA

Mike 'Buck' Gasner—DEKRA

Chuck Hilsenbeck - DEKRA

Jay Lais - DEKRA

Download the 2022 AASA Inspector Photo Index

Observations from AASA

OBSERVATIONS FROM AASA INSPECTORS 2020 – 2022

EMPLOYEE TURNOVER

The Covid era affected agriculture – many veteran retail managers and operations managers have retired.

LABOR & TRAINING

Difficult to find labor and experienced people to take over operations at retail facilities – loss of experience and historical knowledge of bulk pesticide operations and regulations.

CONTAINMENT - WHY?

AASA sees the need to ensure new operations personnel understand the reasons for the pesticide containment regulations and the importance of these systems to the facility and the entire industry.

AASA serves as a resource; pesticide manufacturer sales reps can serve as a resource too for assistance to retailers – many of them are also new!

Containment Systems for Stationary Bulk Pesticide Storage

Summary of the Rules

Title 40 - Protection of Environment
Chapter I - Environmental Protection Agency
Subchapter E - Pesticide Programs
Part 165 - Pesticide Management and Disposal
Subpart E - Standards for Pesticide Containment Structures

Authority: 7 U.S.C. 136 through 136y.
Source: 71 FR 47422, Aug. 16, 2006, unless otherwise noted.

§ 165.85 Design and capacity requirements for new structures.

(a) ***For all new containment structures, what construction materials must I use?*** These are the material specifications for a new containment structure:

(1) The containment structure must be constructed of steel, reinforced concrete or other rigid material capable of withstanding the full hydrostatic head, load and impact of any pesticides, precipitation, other substances, equipment and appurtenances placed within the structure. The structure must be liquid-tight with cracks, seams and joints appropriately sealed.

(2) The structure must not be constructed of natural earthen material, unfired clay, or asphalt.

(3) The containment structure must be made of materials compatible with the pesticides stored. In this case, compatible means able to withstand anticipated exposure to stored or transferred substances and still provide containment of those same or other substances within the containment area.

AASA Inspection Summary: Containment

QUESTIONS FROM THE AASA CHECKLIST ON BULK PESTICIDE CONTAINMENT	% COMPLIANCE
Bulk containment is rigid material (i.e. concrete, steel, reinforced sealed block) & is liquid-tight	**99%**
Containment drains, valves, & cracks are permanently sealed	**94%**
Bulk dispensing & transfers occur are on rigid, liquid-tight containment	**94%**

AASA Inspects and Measures Tanks and Containment Structures

- The program calculates containment compliance based on the measurements
- Dikes or the entire building floor (curbed and/or sloped) can achieve the requirement
- We also look for cracks, integrity issues and tank anchoring/elevating

Transfer Area Containment

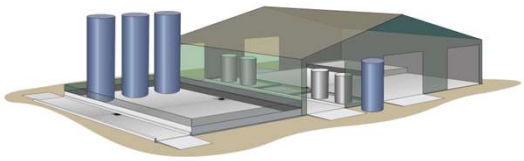
- Transfer of pesticides from the delivery truck into stationary bulk tanks or from bulk tanks to other containers or PRCs must occur over an impermeable surface which provides containment, whether it is indoors or outdoors.

AASA Resources Page – www.aginspect.com

Wisconsin Minimum Design and Construction Standards for Concrete Mixing and Loading Pads and Secondary Containment Structures

David W. Kammel
Professor, Biological Systems Engineering Department
University of Wisconsin Cooperative Extension

Published February, 2005



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Repackaging

Bulk Pesticide Facilities - Webinars on Compliance Topics (Containment, Labeling, Repackaging, PRCs)

Repackaging Compliance Guide

The Pesticide Stewardship Alliance (TPSA) Description of Pesticide Container and Uses

Procedures for PRC Inspection & Testing

USEPA - Obtaining Pesticide Producing Establishment & Annual Reporting

Fact Sheet on Bulk Repackaging

CropLife America Guidance for Safely Cleaning Refillable Pesticide Containers for Refilling or Rededication

Worker Protection Standard

USEPA WPS Website

WPS Resources for Training

Worker Protection Standard: FAQ

Containment & Mixing/Loading

USEPA Compliance Resources (tables) for Containment & Container Rules

Designing Facilities for Pesticide & Fertilizer Containment - Midwest Plan Service Booklet 1991

Wisconsin Design & Construction Standards for Concrete Mixing/Loading Pads & Secondary Containment - 2005

Guidance on Repairing Cracks in Containment

Changes in Minibulk Rules by Ag Professional Magazine

Container & Containment Rules Brochure

Dicamba Label & Paraquat Label Training Resources

Link to Paraquat Training Requirement for Certified Applicators

Bayer Dicamba Label Training

BASF Dicamba Label Training

Syngenta Dicamba Label Training

Each table summarizes the requirements and lists the sections to go to for more details

Pesticide Container and Containment Regulations At A Glance

The tables on this page provide an outline of many of the requirements of the regulations "Standards for Pesticide Containers and Containment." This information reflects the requirements established in August 2006 and amended in October 2008 and September 2010. Our goal is to facilitate the public's ability to determine who is subject to the rule and how to comply.

Because this is a summary, many details are not included. Refer to the Code of Federal Regulations (40 CFR parts 156 and 165) for the full version:

- Part 156, Labeling Requirements for Pesticides and Devices
- Part 165 Pesticide Management and Disposal

- Table 1: Overview of the Pesticide Container and Containment Structure Regulations (pdf) (52.89 KB)
- Table 2: Products Subject to the Nonrefillable Container, Refillable Container and Repackaging Regulations (pdf) (32.34 KB)
- Table 3: Nonrefillable Container Requirements (40 CFR Part 165 Subpart B) (pdf) (37.91 KB)
- Table 4: Refillable Container Requirements (40 CFR Part 165 Subpart C) (pdf) (38.7 KB)
- Table 5: Requirements for Repackaging Pesticide Products into Refillable Containers (40 CFR Part 165 Subpart D) (pdf) (49.16 KB)
- Table 6: Container Labeling (40 CFR Part 156 Subpart H) (pdf) (109.7 KB)
- Table 7: Standards for Containment Structures (40 CFR Part 165 Subpart E) (pdf) (112.88 KB)

DEPARTMENT OF AGRICULTURE
625 ROBERT STREET NORTH, SAINT PAUL, MN 55155-2538
WWW.MDA.STATE.MN.US

Pesticide & Fertilizer Management Division 651-201-6121 Fax: 651-201-6112 Factsheet

Concrete Containment – Crack Repair and Maintenance

This factsheet was prepared by the Minnesota Department of Agriculture to provide information for facilities who have constructed and have permitted concrete containment systems in Minnesota. This guidance is intended to supplement— not replace—Federal and State Laws and Rules.

Containment Evaluation

When conducting inspections of the safeguard (dike or load pad) areas, pay special attention to the following:

- Joint movement (floor, wall and wall/floor joints)
- Cracks: If cracks are present, try and determine whether they are active/moving (additional movement can be expected) or dormant/non-moving (little or virtually no movement in the future can be expected)
- Concrete defects, damage or corrosion.

Containment Repair Techniques

If joint movement and cracking is evident in the concrete floor or wall and dike integrity has been jeopardized, repairs must be made immediately.

Below are examples of repair techniques for a variety of concrete repair problems. Some manufacturers may have similar techniques and procedures specific to their products.

Dormant/Non-Moving Cracks

For very small non-moving hairline cracks, the required repair could be done by applying a pesticide/fertilizer compatible coating over the area creating a thin film or seal to prevent liquid movement through the area in question. The procedure of coating the entire secondary containment structure has also been recommended to help preserve concrete safeguards from deterioration from the substances they are intended to capture.

For small non-moving cracks that are larger than hairline cracks (1/4-inch or less), one possible solution is to apply a compatible coating on both sides of the crack and, while coating is still wet, work in a fiberglass-mesh cloth strip over the crack with a roller until the coating has soaked its way through the cloth. After the first coat is dry, apply a second

For moving cracks/joints greater than 1/4 inch wide, insert a backer rod prior to sealing. In some cases, the crack or joint may need to be routed (widened and/or deepened) slightly to accommodate proper placement of the backer rod. After the backer rod is in place, apply a flexible joint or crack sealant on top of the backer rod and into the sides of the joint or crack. Flexible sealant should be capable of expanding or contracting without pulling away from the concrete. If the sealant is not flexible, a moving crack or joint will reopen, lessening the effectiveness of the repair. The flexible sealant must also be coated with a compatible material if the compatibility of the sealant is questionable or unknown.

Wall/Floor Joints

There are several repair techniques adequate for wall and floor joints that are suspect. Examples:

- Caulk and cove corner joint;
- Caulk the corner joint, then cover with two layers of compatible coating material working fiberglass-mesh cloth into the first coat while wet (see small moving crack repair above).

Voids and Bugholes

All voids and bugholes should also be filled and patched when present to ensure dike integrity. Though they may not be cause for immediate concern, they can become problems in the future. A patching material recommended by the coating manufacturer should be used if the area is to be coated following patchwork.

Selecting a Coating or Sealant

It is important to note that there are many repair methods and techniques available for dealing with a variety of concrete damage or deterioration. When selecting a coating or sealant, the following must be considered:

Containment & Mixing/Loading

USEPA Compliance Resources (tables) for Containment & Container Rules

Designing Facilities for Pesticide & Fertilizer Containment - Midwest Plan Service Booklet 1991

Wisconsin Design & Construction Standards for Concrete Mixing/Loading Pads & Secondary Containment - 2005

Guidance on Repairing Cracks in Containment

Bulk Transfer and PRC Fill Containment

- USEPA requires transfer pads to have 750-gallon containment capacity
- This can be accomplished with permanent or portable containment systems
- AASA inspectors measure and inspect transfer areas to ensure adequate containment capacity and integrity

Repackaging from Bulk to PRCs

All facilities that repackage from bulk to portable refillable containers must have a current

REPACK AGREEMENT from the Pesticide Manufacturer

Ideally, this agreement is readily available in the facility's office.

If you can't locate your agreement, contact your product sales representative immediately.

REPACKAGING AGREEMENT for BAYER PESTICIDES

This Repackaging Agreement for Bayer Pesticides and its Exhibits (collectively, this "Agreement") is entered into on January 1, 2021 ("Effective Date") between Bayer CropScience LP, a Delaware corporation with offices at 800 North Lindbergh Boulevard, St. Louis, Missouri 63167 ("Bayer"), and _____, with offices at _____ ("Customer"). Bayer and Customer may be referred to individually as a "Party" and collectively as the "Parties".

Customer has received certain Bayer registered pesticide products in package or bulk form ("Products") and desires to repackage the bulk Products for resale. Bayer and Customer agree as follows:

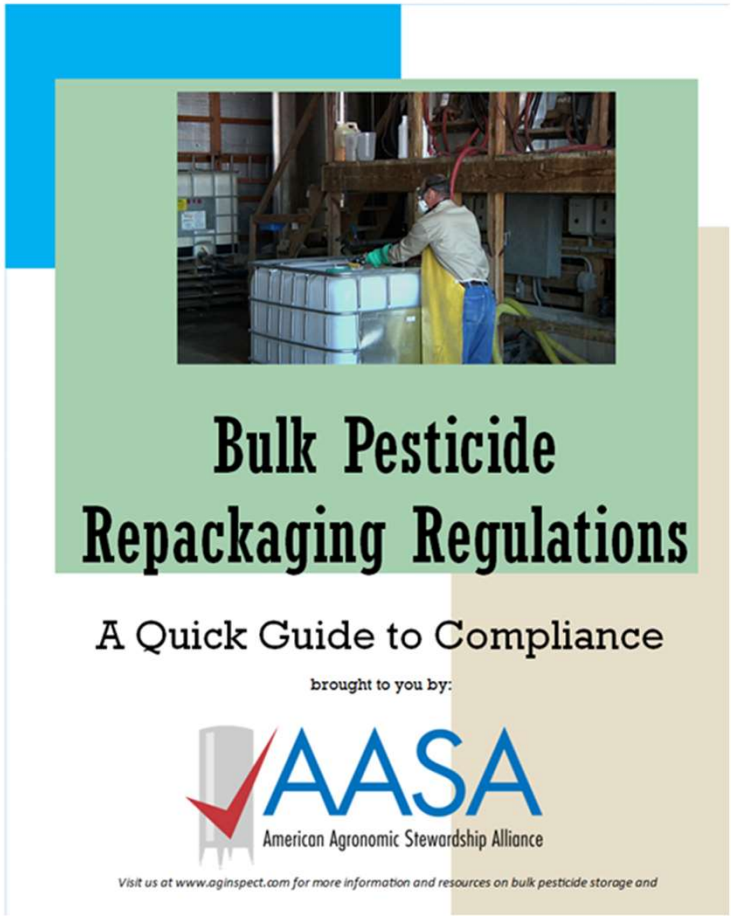
1. AUTHORIZATION FOR THE REPACKAGING OF BULK PRODUCTS. Subject to Customer's compliance with the terms of this Agreement, Bayer grants Customer a non-exclusive authorization to repackage bulk Products into portable refillable containers that meet the standards set forth in 40 CFR Part 165 Subpart C ("Containers"). Customer must repackage bulk Products in compliance with the guidelines set forth in this Agreement, including any guidelines set forth in the Exhibits (collectively, the "Guidelines") and any other instructions that Bayer may communicate from time to time. Bayer may, in its sole discretion, modify the Guidelines at any time and will provide Customer with written notification of any modifications.

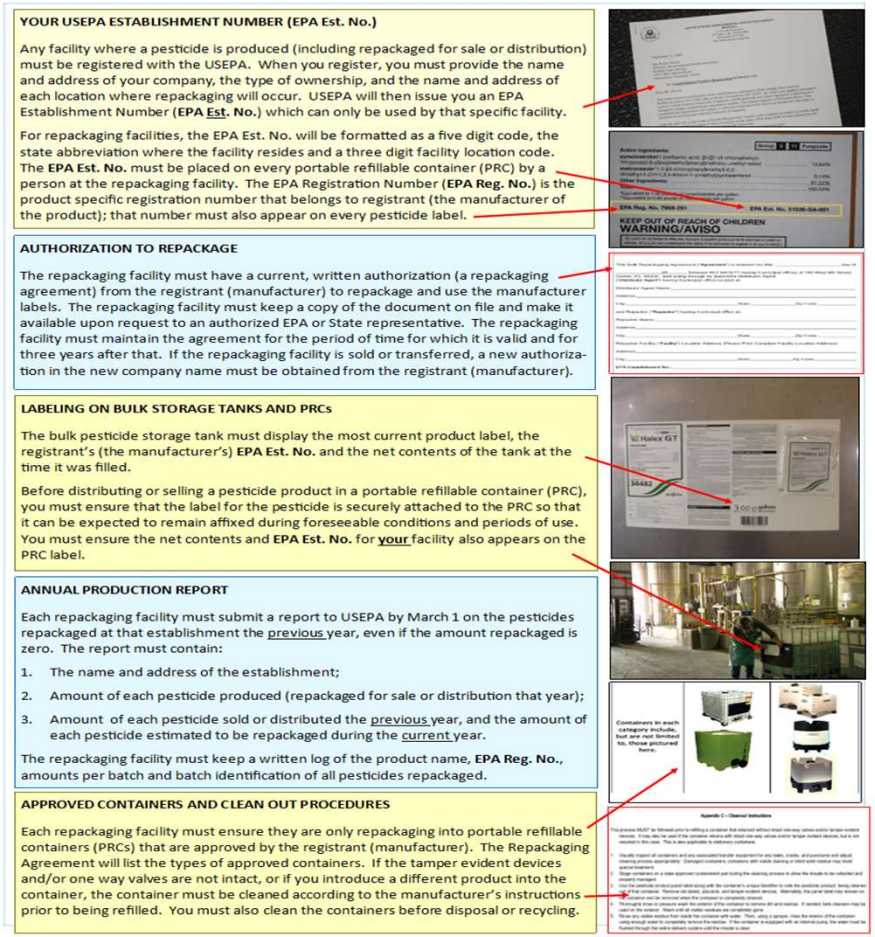
Repack Agreements Contain Important Items:

- Bulk Delivery Guidelines
- Type of refillable containers that can be used
- Container inspection and clean-out procedures
- Authorization for Label Use

Repackaging Compliance Guide

(on AASA Resources page)





YOUR USEPA ESTABLISHMENT NUMBER (EPA Est. No.)

Any facility where a pesticide is produced (including repackaged for sale or distribution) must be registered with the USEPA. When you register, you must provide the name and address of your company, the type of ownership, and the name and address of each location where repackaging will occur. USEPA will then issue you an EPA Establishment Number (**EPA Est. No.**) which can only be used by that specific facility.

For repackaging facilities, the EPA Est. No. will be formatted as a five digit code, the state abbreviation where the facility resides and a three digit facility location code. The **EPA Est. No.** must be placed on every portable refillable container (PRC) by a person at the repackaging facility. The EPA Registration Number (**EPA Reg. No.**) is the product specific registration number that belongs to registrant (the manufacturer of the product); that number must also appear on every pesticide label.

AUTHORIZATION TO REPACKAGE

The repackaging facility must have a current, written authorization (a repackaging agreement) from the registrant (manufacturer) to repackage and use the manufacturer labels. The repackaging facility must keep a copy of the document on file and make it available upon request to an authorized EPA or State representative. The repackaging facility must maintain the agreement for the period of time for which it is valid and for three years after that. If the repackaging facility is sold or transferred, a new authorization in the new company name must be obtained from the registrant (manufacturer).

LABELING ON BULK STORAGE TANKS AND PRCs

The bulk pesticide storage tank must display the most current product label, the registrant's (the manufacturer's) **EPA Est. No.** and the net contents of the tank at the time it was filled.

Before distributing or selling a pesticide product in a portable refillable container (PRC), you must ensure that the label for the pesticide is securely attached to the PRC so that it can be expected to remain affixed during foreseeable conditions and periods of use. You must ensure the net contents and **EPA Est. No.** for **your** facility also appears on the PRC label.

ANNUAL PRODUCTION REPORT

Each repackaging facility must submit a report to USEPA by March 1 on the pesticides repackaged at that establishment the previous year, even if the amount repackaged is zero. The report must contain:

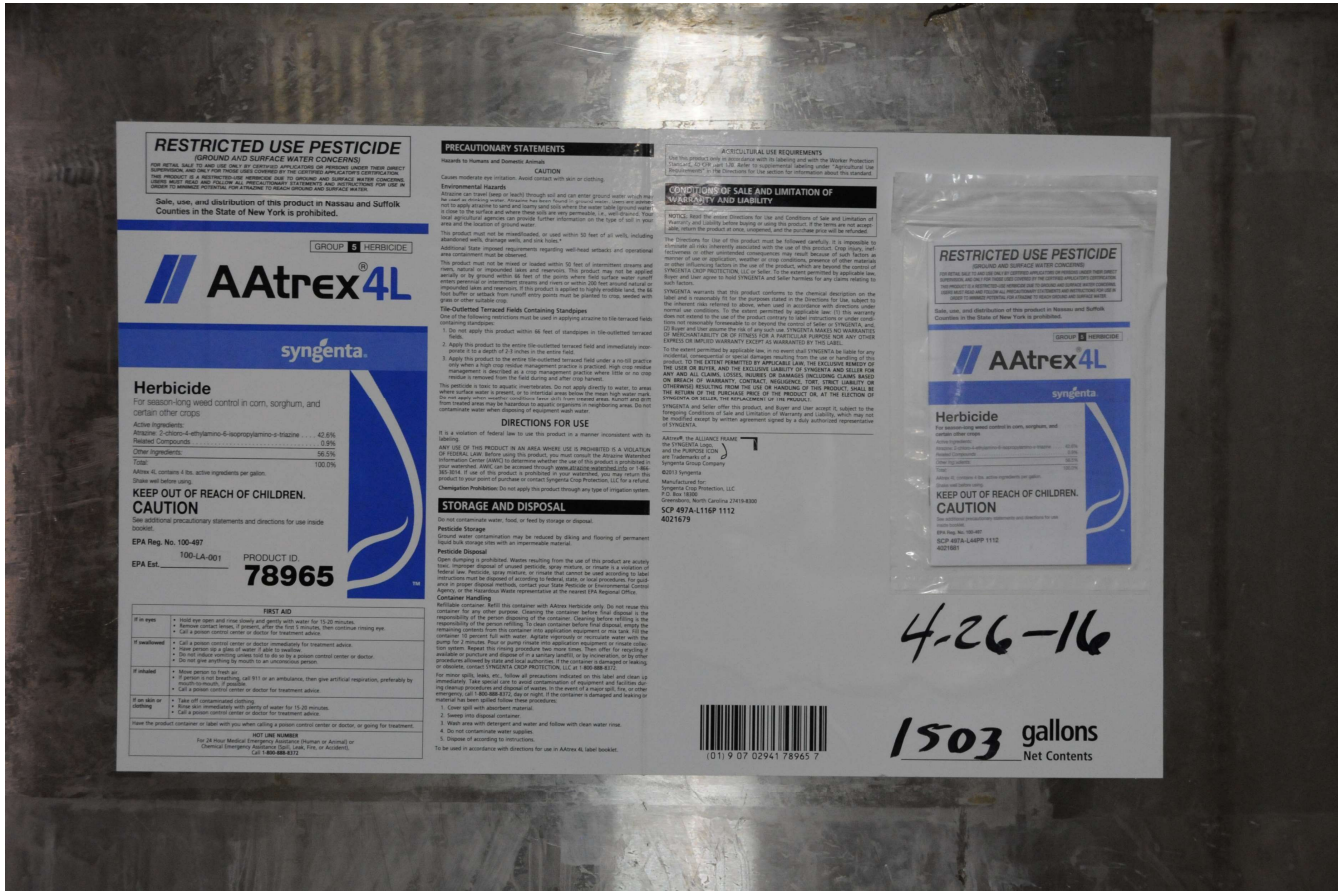
1. The name and address of the establishment;
2. Amount of each pesticide produced (repackaged for sale or distribution that year);
3. Amount of each pesticide sold or distributed the previous year, and the amount of each pesticide estimated to be repackaged during the current year.

The repackaging facility must keep a written log of the product name, **EPA Reg. No.**, amounts per batch and batch identification of all pesticides repackaged.

APPROVED CONTAINERS AND CLEAN OUT PROCEDURES

Each repackaging facility must ensure they are only repackaging into portable refillable containers (PRCs) that are approved by the registrant (manufacturer). The Repackaging Agreement will list the types of approved containers. If the tamper evident devices and/or one way valves are not intact, or if you introduce a different product into the container, the container must be cleaned according to the manufacturer's instructions prior to being refilled. You must also clean the containers before disposal or recycling.

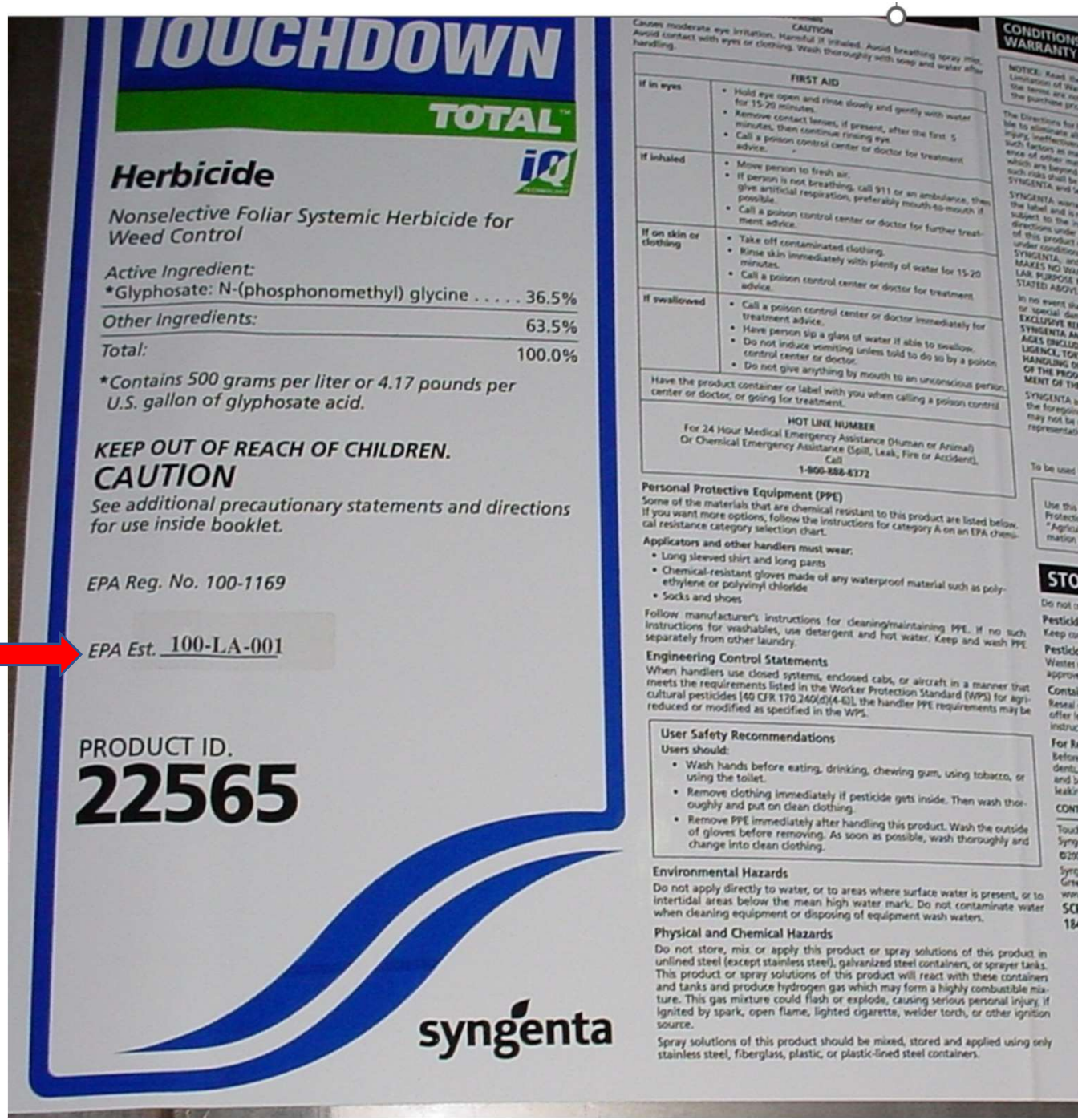
Tank Labeling

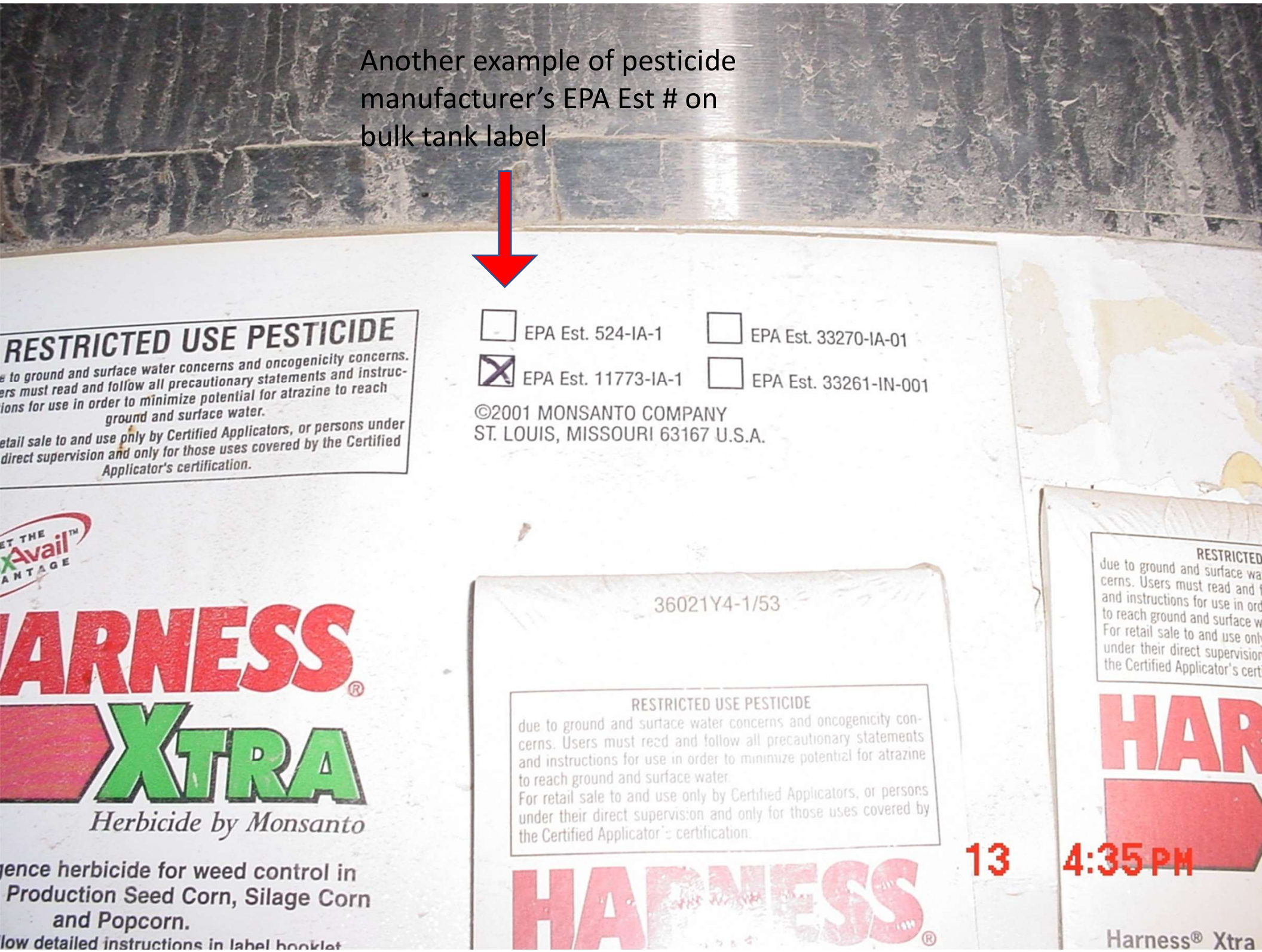


AASA Inspection Summary: Bulk Tank Labeling

	% Compliance	
The tank is labeled with the net contents	**79%**	
The correct EPA Est. No. is affixed to the tank	**81%**	
The tank is labeled which includes a product booklet	**89%**	

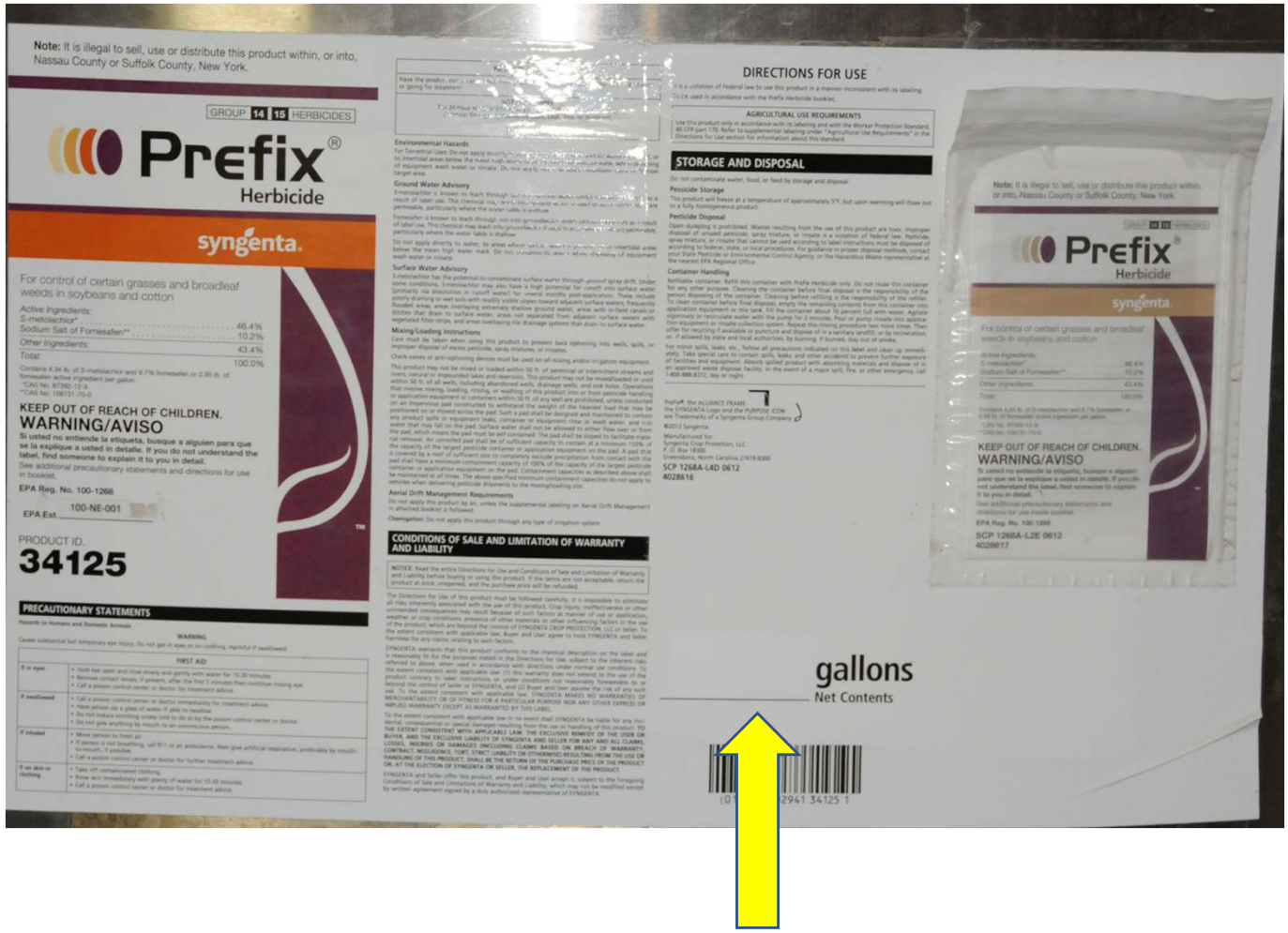
Establishment Number must be on the bulk tank label; the est # in this case is the manufacturer's establishment #.




Another example of pesticide manufacturer's EPA Est # on bulk tank label
RESTRICTED USE PESTICIDE
to ground and surface water concerns and oncogenicity concerns.
ers must read and follow all precautionary statements and instruc-
ions for use in order to minimize potential for atrazine to reach
ground and surface water.
etail sale to and use only by Certified Applicators, or persons under
direct supervision and only for those uses covered by the Certified
Applicator's certification.
EPA Est. 524-IA-1
EPA Est. 33270-IA-01
EPA Est. 11773-IA-1
EPA Est. 33261-IN-001
©2001 MONSANTO COMPANY
ST. LOUIS, MISSOURI 63167 U.S.A.
ARNESS
XTRA
Herbicide by Monsanto
gence herbicide for weed control in
Production Seed Corn, Silage Corn
and Popcorn.
low detailed instructions in label booklet
36021Y4-1/53
RESTRICTED USE PESTICIDE
due to ground and surface water concerns and oncogenicity con-
cerns. Users must read and follow all precautionary statements
and instructions for use in order to minimize potential for atrazine
to reach ground and surface water.
For retail sale to and use only by Certified Applicators, or persons
under their direct supervision and only for those uses covered by
the Certified Applicator's certification.
HARNESS
13
4:35 PM
Harness® Xtra

Net Contents

Must be written on the tank label



Portable Refillable Container Labels

For PRCs, the retailer's EPA establishment number must be on the product label

Bulkpesticiderules.org

Repackaging

Bulk Pesticide Facilities - Webinars on Compliance Topics (Containment, Labeling, Repackaging, PRCs)

Repackaging Compliance Guide

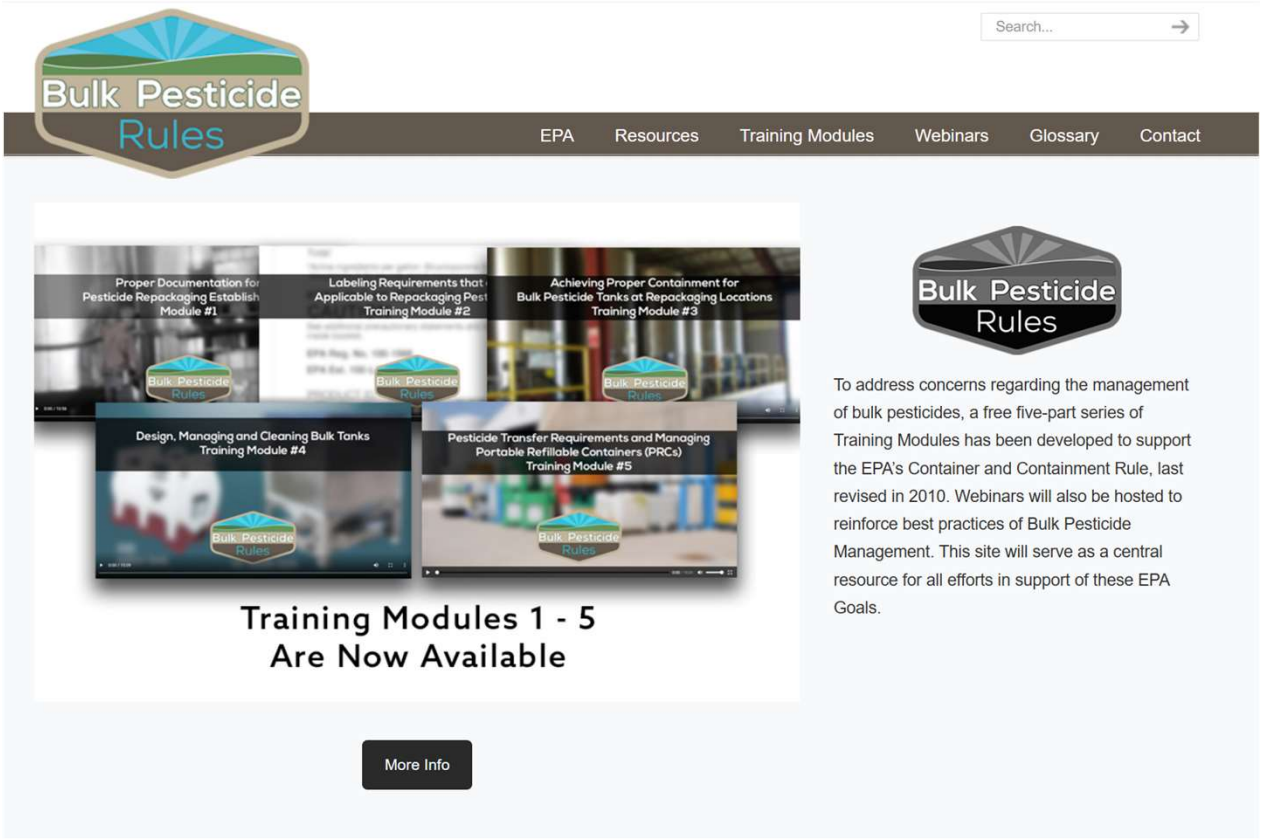
The Pesticide Stewardship Alliance (TPSA) Description of Pesticide Container and Uses

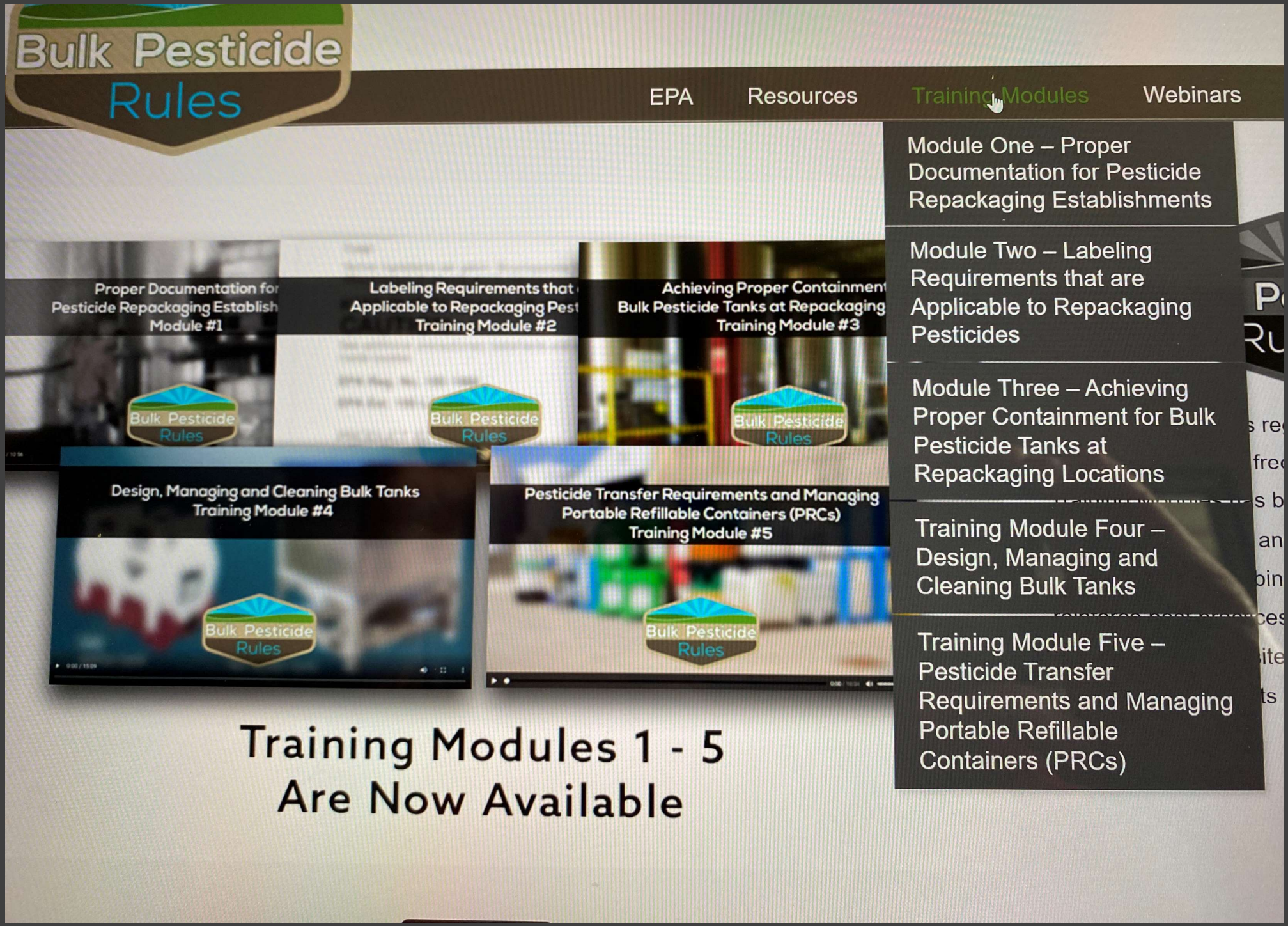
Procedures for PRC Inspection & Testing

USEPA - Obtaining Pesticide Producing Establishment & Annual Reporting

Fact Sheet on Bulk Repackaging

CropLife America Guidance for Safely Cleaning Refillable Pesticide Containers for Refilling or Rededication




Bulk Pesticide Rules
EPA
Resources
Training Modules
Webinars
Module One – Proper Documentation for Pesticide Repackaging Establishments
Module Two – Labeling Requirements that are Applicable to Repackaging Pesticides
Module Three – Achieving Proper Containment for Bulk Pesticide Tanks at Repackaging Locations
Training Module Four – Design, Managing and Cleaning Bulk Tanks
Training Module Five – Pesticide Transfer Requirements and Managing Portable Refillable Containers (PRCs)
Proper Documentation for Pesticide Repackaging Establish Module #1
Labeling Requirements that Applicable to Repackaging Pest Training Module #2
Achieving Proper Containment Bulk Pesticide Tanks at Repackaging Training Module #3
Design, Managing and Cleaning Bulk Tanks Training Module #4
Pesticide Transfer Requirements and Managing Portable Refillable Containers (PRCs) Training Module #5
Training Modules 1 - 5 Are Now Available

AASA leaves yellow stickers on tanks with date of inspection

For Help – Contact AASA Staff and/or your Product Sales Representative

www.aginspect.com – Board & Staff page

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