

TPSA Conference Feb. '09

C&C Rule –

“What Registrants Should Know and Do!”



Stewardship Committee

Marty Fitzpatrick
Product Stewardship

Helping Make
Products Better™

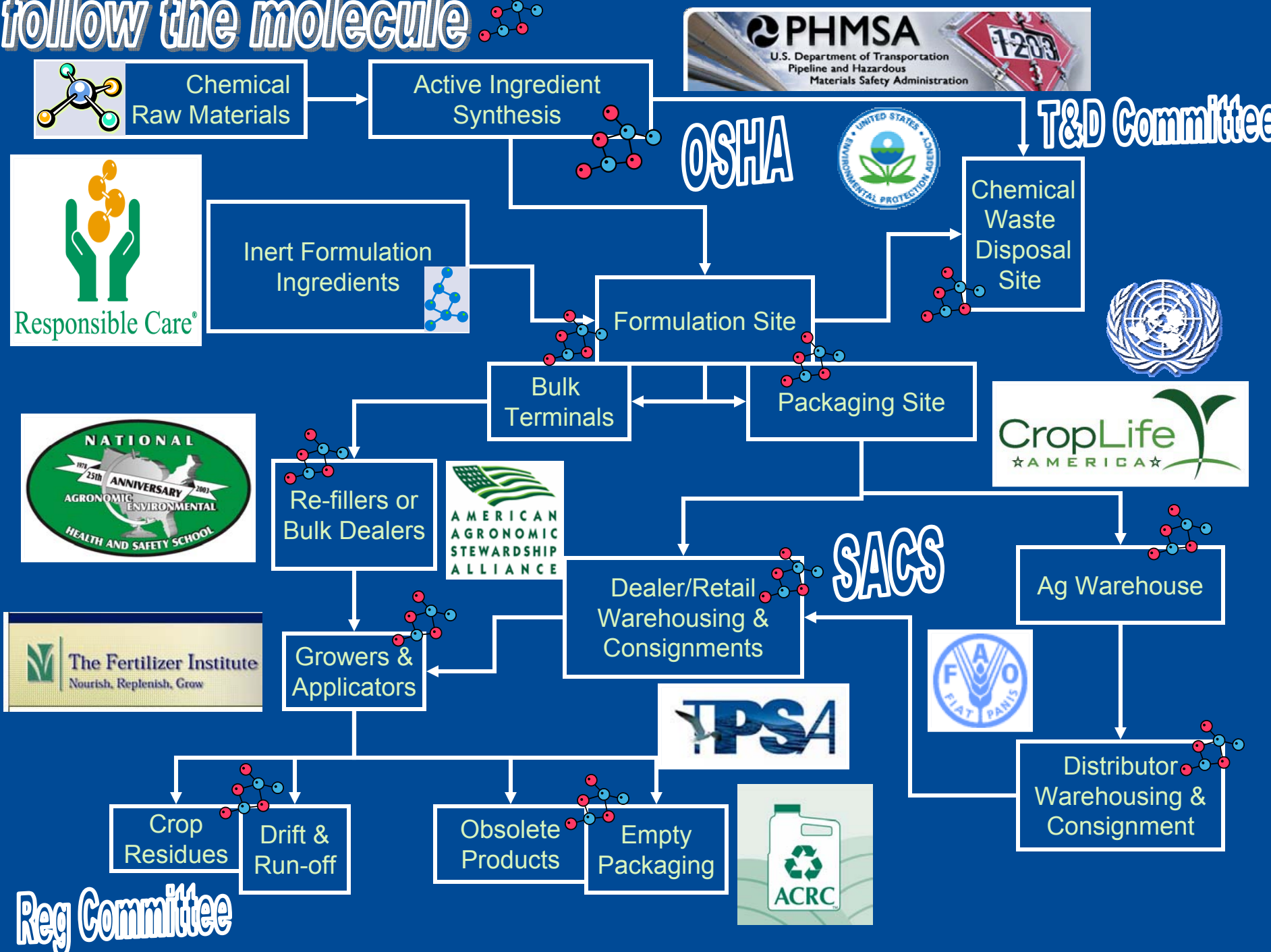
 **BASF**
The Chemical Company

Registrants & CLA Stewardship goals:

- ✓ prevent human injury & illness,**
- ✓ property damage & pollution,**
- ✓ and insure regulatory compliance.**

We do this by following the molecule.

follow the molecule



Registrants should consider:

- ✓ Common Law,
- ✓ Superfund Torts and
- ✓ FIFRA...

Statutory Authority from FIFRA'88 sec.19 For the Container & Containment Rule –

- Final 2006 (effective Aug 17, 2009 & 2011)
- Labeling for container including batch codes (lot no.), rinsing & reuse
- Bulk Tanks & Mini-bulks
- Non-Refillable Packages
- Lays the ground work for package recycling (ACRC)

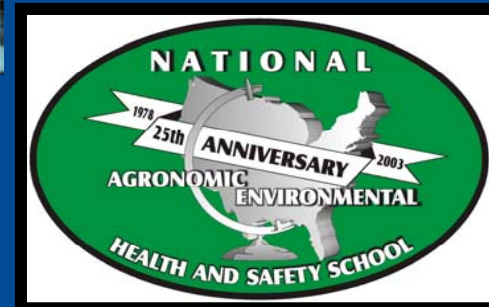
Registrant Perspective



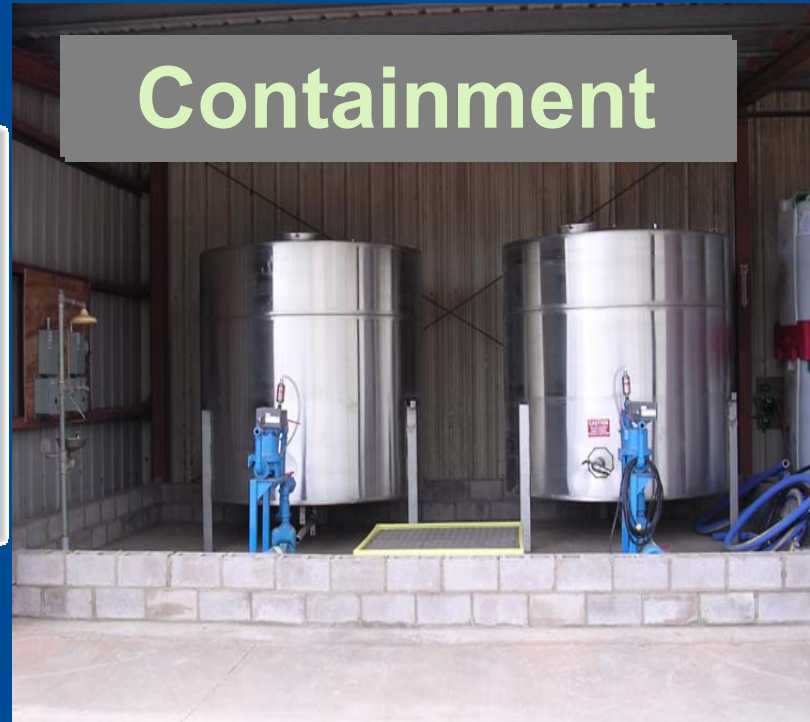
label



Containers



Containment



C&C Rule

Wendy'll cover part 156

I'll cover part 165

C&C Rule Subpart B
Non-refillable Container
Standards:
Container Design and
Residue Removal

C&C Rule Subpart B –
Non-refillable Container Standards:
Container Design and Residue Removal

§165.20 General provisions

- (a) ...regulates the design & construction of non-refillable pesticide containers.
- (b) ...**registrants who distribute or sell.**
- (c) ...must comply by August 17, 2009

§165.23 Scope of pesticide products included

(a) ...does not apply to Manufacturing Use Products (MUP)

(e) ...applicable to any product if...

(1) refers to 40CFR§156.62, .160-.175

(i) tox category I “DANGER”

(ii) tox category II “WARNING”

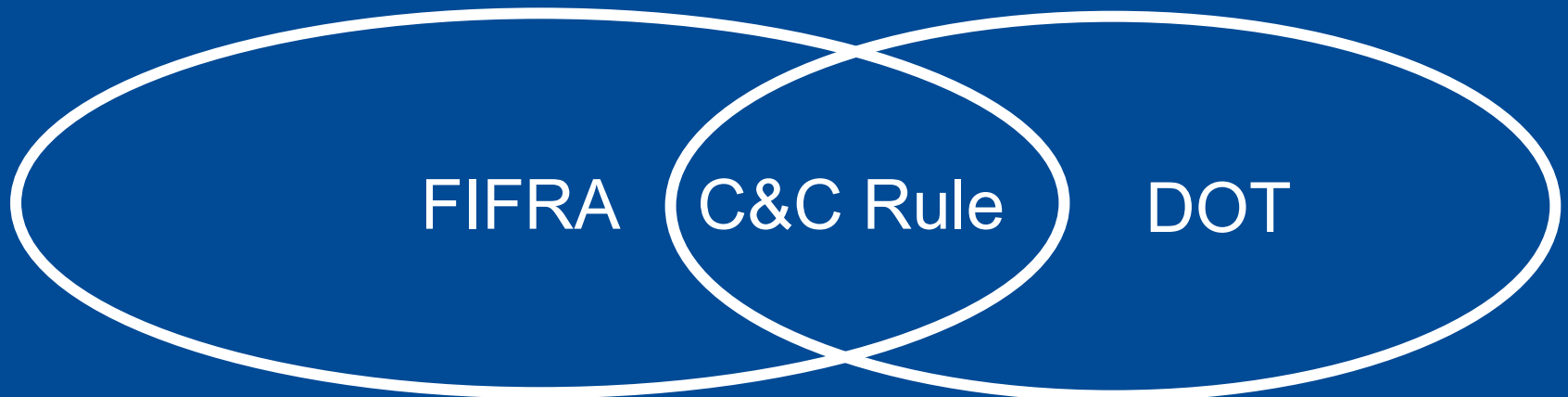
(iii) Restricted Use Product “R.U.P.”

(2) Otherwise, if not DOT hazmat, then
49CFR §173.24

DOT 49CFR§173.24 General requirements for packagings and packages.

The package will not leak or otherwise fail under conditions normally incident to transport (temperature, pressure, vibrating, dropping, wetting, etc.).

Thus, it may be easier to certify all packages to packing group III



§165.25 Non-refillable container standards

(a) & (b) pesticide packages subject to the rule...at least **DOT packing group III**

(d) ...if the rigid container has a capacity **greater than 3 liters (0.79 gallons)**

(3) screw cap, **63 mm**, at least one thread revolution at 6 threads/inch

(4) screw cap, **38 mm**, at least one thread revolution at 6 threads/inch. The cap may fit on a separate rigid spout or pull-out plastic spout.

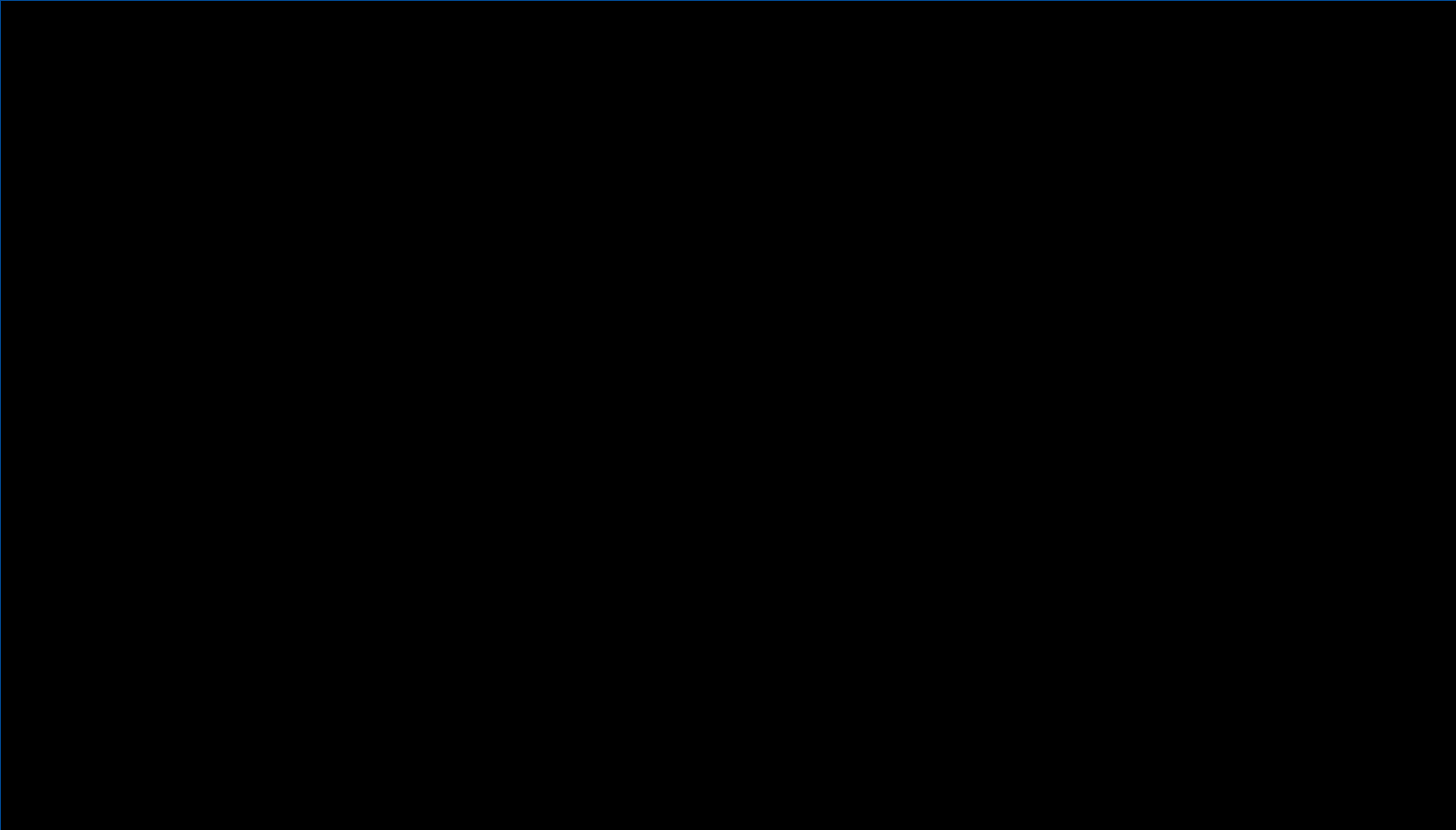
(e) ...**dispensing** for non-refillable containers with capacity **less than 5 gallons**

(1) ...continuous, coherent stream **(no glugging)**

(2) ...**minimal dripping** outside container

- **A test has been requested** to establish that a nonrefillable container for a liquid pesticide meets EPA's **design/construction standard for glugging** (i.e., that the liquid contents pour from the container in a continuous, coherent stream).
 - ✓ Per the preamble for the 1994 proposed regulation, “EPA is not proposing specific numerical standards or test methods to verify ... [the glugging standard]. The Report to Congress contains a method to demonstrate glugging based on a variation in internal pressure of the container and this method could be adapted for use by registrants. The registrant could use the data from this method or use photographic evidence to demonstrate dispensing capability...”
 - ✓ Interested registrants & EPA should cooperate on this issue (could build on the preliminary test procedure for glugging and/or use the suggestion of maximum time to empty a jug in a continuous pour or **develop photographic evidence**).
 - ✓ Report to Congress also concluded that “certain container design features can result in ... glugging during normal use activities”. Thus, EPA expects registrants to examine container design criteria that minimize glugging.
 - ✓ **User education to minimize glugging should also be promoted.**
 - ✓ If necessary, registrants can request a waiver or modification to this standard per 40 CFR 165.25(f).

No-Glug Video



Preventing Glugging.avi

§165.25 Non-refillable container standards (cont.)

(f) ...each container and pesticide combination must meet **residue removal requirements**

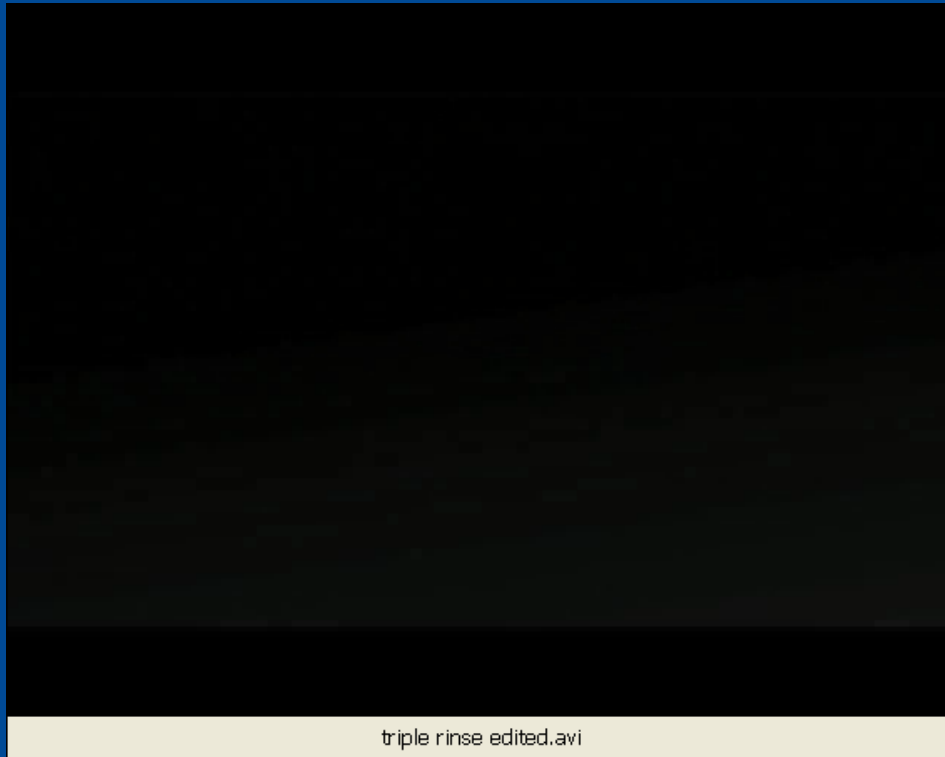
(1)...residue removal requirements for pesticides mixed with liquid diluents if the container is less than 5 gallons for liquid or 50 pounds for solid...then each pesticide/container combination must meet **99.99% removal** using EPA test procedure “Rinsing Procedures for Dilutable Pesticide Products in Rigid Containers.”

(2) The **test must be conducted for all flowable concentrates/packages**

(3) ...percent removal is mass of pesticide active

(g) & (h) ...getting a waiver from EPA

Triple Rinse Video



§165.27 Reporting and Recordkeeping

- (a) ...submissions to EPA are not required
- (b) ... for each pesticide/package...have these records on August 17, 2009 and keep for three after selling the product (must be available for EPA & State audits):
 - (1) Product Name, Registration Number
 - (2) Description of package (picture, specifications)
 - (3) Closure description & compliance documents
 - (4) Dispensing (such as the plug video) documents
 - (5) Residue removal documents

internal audit

**C&C Rule Subpart C –
Refillable Container
Standards:
Container Design**

C&C Rule Subpart C – Refillable Container Standards: Container Design

§165.40 General provisions

- (a) ...regulates the design & construction of refillable pesticide containers.
- (b) must comply if...
 - (1)...registrants who distribute or sell.
 - (2) re-fillers (a.k.a. bulk dealers)
- (c) ...must comply by August 17, 2011

§165.43 Scope of pesticide products included

- (a) ...does not apply to Manufacturing Use Products (MUP)
- (f) ...**applicable to all pesticide products**
- (h) does not apply to transport vehicles

§165.45 Refillable container standards

(a) & (b) all refillable pesticide packages (**mini-bulks**)...**at least DOT packing group III** e.g., design, construction, marking, etc. but not 173.28(b)(2) i.e. leak testing unless required elsewhere (49CFR).

(d) “...marked in a durable and clearly visible manner with a **serial number or other identifying code** that will distinguish the individual container from all other containers.”

(e) each opening other than the vent must have a one **way valve, tamper evident device**, or both. Minimize vent.

CLA Bulk Dealer Poster

#1 Awareness

#2 Details

#3 To Do

2011 REQUIREMENTS!

...FOR AG CHEM MINI-BULKS, SHUTTLES,
OR ANY OTHER PORTABLE REFILLABLE
PESTICIDE CONTAINER

ENVIRONMENTAL PROTECTION AGENCY
Pesticides:
Regulating
Pesticides

Address: <http://www.epa.gov/pesticides/regulating/containers.htm>

WWW.EPA.GOV/PESTICIDES/
REGULATING/
CONTAINERS.HTM

Pesticide Container
and Containment Rule

BEFORE FILLING!
INSPECT
CLEAN
LABEL
RECORDKEEPING

ONE WAY
VALVES OR...

...TAMPER
EVIDENT
SEALS

DON'T
REFILL IF IT
FAILS
INSPECTION!

FROM THE REGISTRANT:
CLEANING INSTRUCTIONS
ACCEPTABLE CONTAINERS
FIFRA LABELS

FIFRA LABEL

SERIAL NO.

31HZ/T/12/06/USA
SNYDER IND. INC.
LINCOLN, NE. 68602/2072
CAPACITY-1041 LITERS
TARE MASS- 00 KG
GAUGE TEST PRESSURE-100 KPA
LAST LEAK/PROOFNESS TEST 12/06
LAST INSPECTION- 12/06

DOT MARKINGS
AND TESTING

INSPECT OLD CONTAINERS!

WILL THESE
CONTAINERS
BE SUITABLE
FOR
REFILLING IN
2011?

MUST NOT
SHOW ANY SIGN
OF FAILURE

AS NEEDED, ARRANGE FOR DOT TESTING AND
REPAIR, OR DISPOSAL AND REPLACEMENT.

CropLife
AMERICA

FROM CLA'S STEWARDSHIP COMMITTEE CALL (202) 872-3840 FOR COPIES

§165.45 Refillable container standards (cont.)

(f) **(Bulk Tanks)** Stationary pesticide containers designed to hold more 500gal or 4K lbs...

(1) except for unanticipated emergency or disaster **must not fail**:

(i) resistant to corrosion, puncture, and cracking.

(ii) capable of withstanding atmospheric heat, pump & compressor pressure, and atmospheric mechanical stress.

(2) liquid containers:

(i) vent or relief device that prevents evaporation and excludes precipitation.

(ii) external site inspection device.

(iii) all connections must have automatic shut of valves, in the event of a leak.

(g) waivers...



**C&C Rule Subpart D –
Standards for
Repackaging Products
into Refillable
Containers**

C&C Rule Subpart D – Standards for Repackaging Products into Refillable Containers

§165.60 General provisions

(a) ...regulates pesticide refilling for distribution or sale.

(b) must comply **if registrant or re-filler** (bulk dealers) who distributes or sells

(c) ...must comply by August 17, 2011

§165.63 Scope of pesticide products included

(a) ...does not apply to Manufacturing Use Products (MUP)

(f) ...applicable to **all** pesticide products

(h) **does not apply** to

- (1) **transport vehicles**
- (2) custom blending

§165.65 Registrants who distribute or sell pesticide products in refillable containers.

(a) registrant must comply

(b) registrant is responsible for product integrity, as required in FIFRA section 3 (must meet the CSF).

(c) **registrant must develop these written documents** for each pesticide/package:

(1) **residue removal procedures**

(i) CSF compliance

(ii) diluent use, rinsate management

(2) **describe acceptable containers**

(i) compatible with formulation

(ii) in compliance (sturdy, cleanable, etc.)

§165.65 Registrants who distribute or sell pesticide products in refillable containers. – cont...

(d) requirements for establishments repackaging into refillables (**bulk dealers**)

- (1) EPA establishment number (§167.20)
- (2) No formulation changes without registration
- (3) Refill into acceptable container for product
- (4) No limits on size of containers or refill amounts
- (5) Refiller has **registrants written documents:**
 - (i) product's label**
 - (ii) residue removal procedures**
 - (iii) description acceptable containers**

§165.65 Registrants who distribute or sell pesticide products in refillable containers. ...*re-filler requirements*

(d) requirements for establishments repackaging into refillables (bulk dealers) – cont...

(6) Identify product previously contained in the container to be re-filled

(7) Inspect according to paragraph (e)

(8) Clean according to paragraph (f) or (g)

(9) Label according to paragraph (h)

(10) Recordkeeping according to paragraph (i)

(11) *Establishment* records required in part 169

(12) *Establishment* report in part 167

§165.65 Registrants who distribute or sell pesticide products in refillable containers. – *cont...re-filler requirements*

(e) requirements for inspecting refillable containers before refilling – **cont...**

(1) Integrity is compromised (container fails) if:

(i) shows any damage that reduces structural integrity

(ii) pitting, thickness loss, metal fatigue, closure damage, or other such defects

(iii) cracks, warpage, corrosion or any damage preventing safe transport

(2) must bear clear legible all required markings

(3) must have intact and functioning one-way valve on each opening and/or tamper-evident device, as required, other than vent.

CLA Poster

§165.65 Registrants who distribute or sell pesticide products in refillable containers. – *cont...re-filler requirements*

(f) requirements for cleaning refillable containers before refilling – **using registrants residue removal procedure** unless:

- (1) tamper-evident device and one-way valve intact
- (2) ...and refilling with **same product** or...
- (3) both:
 - (i) same active ingredient
 - (ii) no change to **composition (CSF)**

§165.65 Registrants who distribute or sell pesticide products in refillable containers. – *cont...re-filler requirements*

(g) requirements for cleaning if tamper-evident device and/or one-way valve are not intact...

...use registrants written residue removal procedures...

...and other procedures as needed to insure product integrity.

(h) insure label is securely attached...

...net contents noted...

...and EPA establishment number appear on the label.

§165.65 Registrants who distribute or sell pesticide products in refillable containers. – *cont...re-filler requirements*

(i) Maintain all these records for three years and furnish to inspectors:

(1) **for each pesticide product –**

(i) written residue removal procedures

(ii) written description of acceptable

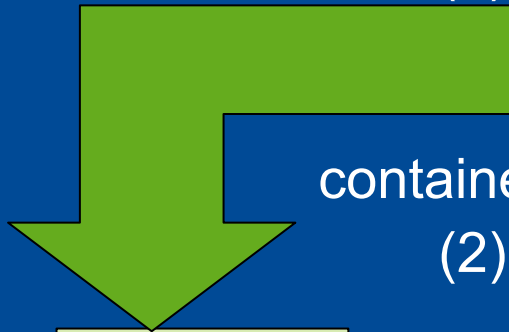
containers

(2) for each refill –

(i) Product EPA reg. no.

(ii) repackaging date

(iii) serial number of refillable container



post @ web. site

§165.67 Registrants who distribute or sell pesticide products to re-fillers for repackaging

- (a) registrants must comply
- (b) refilling conditions:
 - (1) no change in formulation
 - (2) refiller is -
 - (i) EPA est.
 - (ii) user
 - (3) **written contract (bulk agreement)**
 - (4) refilled containers meet subpart C
 - (5) label, net contents & EPA est. no.
- (c) must have a registration for the product
- (d) **written contract before refilling**
- (e) **registrant responsible for product integrity - CSF**

§165.67 Registrants who distribute or sell pesticide products to re-fillers for repackaging- *cont...*

(f) for each product, **registrant must develop** written

(1) **residue removal procedure** which...

(i) insures compliance with **CSF**

(ii) **if solvent** other than label diluent then
rinse **disposal instructions**

(2) description of **acceptable returnable containers**

(i) complies with subpart C

(ii) **specifications, materials of construction**

§165.67 **Registrants** who distribute or sell pesticide products to re-fillers for repackaging- *cont...*

(g) provide **before refilling**:

- (1) **written residue removal**
- (2) written description of **acceptable containers**
- (3) product's **label**

(h) **recordkeeping** (for 3 years):

- (1) written **contract**
- (2) written **residue removal procedure**
- (3) written description of **acceptable containers**

§165.70 Re-fillers who are not registrants

- (a) re-fillers must comply
- (b) refilling conditions:
 - (1) **no change in formulation**
 - (2) refiller is -
 - (i) EPA est.
 - (ii) user
 - (3) **written contract with registrant**
 - (4) refilled containers meet subpart C
 - (5) label, net contents & EPA est. no.
- (c) must have a registration for the product
- (d) re-filler responsible for product integrity - CSF

§165.70 Re-fillers who are not registrants. *cont...*

(e) compliance requirements **(for bulk dealers)**

- (1) EPA establishment number (§167.20)
- (2) No formulation changes without registration
- (3) Refill into acceptable container for product
- (4) No limits on size of containers or refill amounts
- (5) Re-filler has registrants written documents:
 - (i) written contract**
 - (i) product's label**
 - (ii) residue removal procedures**
 - (iii) description of acceptable containers**

§165.70 Re-fillers who are not registrants. *cont...*

(e) compliance requirements (for bulk dealers) – cont...

(6) Identify **product previously contained** in the container to be re-filled

(7) Inspect according to paragraph (e)

(8) Clean according to paragraph (f) or (g)

(9) Label according to paragraph (h)

(10) Recordkeeping according to paragraph (j)

(11) *Establishment* records required in part 169

(12) *Establishment* report in part 167

(13) Stationary container (bulk tank) compliance

(14) Containment requirement compliance

dedicated containers?

§165.70 Re-fillers who are not registrants. *cont...*

(f) requirements for inspecting refillable containers before refilling - visually inspect integrity, markings, & openings:

(1) Integrity is compromised (**container fails**) if...

(i) shows **any damage that reduces structural integrity**

(ii) pitting, thickness loss, metal fatigue, closure damage, or **other such defects**

(iii) cracks, warpage, corrosion or **any damage preventing safe transport**

(iv) damage to fittings, valves, seals

(2) must bear clear legible all required markings

(3) must have intact and functioning one-way valve on each opening and/or tamper-evident device, as required, other than vent.

§165.70 Re-fillers who are not registrants. *cont...*

(g) Re-fillers are required to **clean each refillable** containers before refilling, using registrants residue removal procedure, **unless:**

(1) tamper-evident device and one-way valve is intact

(2) ...and refilling **with same product or...**

(3) **both:**

(i) **same active ingredient**

(ii) **no change to composition (CSF)**

§165.70 Re-fillers who are not registrants. *cont...*

(h) requirements for cleaning if tamper-evident device and/or one-way valve are not intact...

...**use registrants written residue removal procedures...**

...and other procedures as needed to insure product integrity.

(i) insure **label** is securely attached...

...**net contents** noted...

...and **EPA establishment** number appear on the label.

§165.70 Re-fillers who are not registrants - *cont...*

(j) Maintain all these records for three years and furnish to inspectors:

(1) for each pesticide product –

- (i) written contract
- (ii) written residue removal procedures
- (iii) written description of acceptable containers

(2) **for each refill –**

- (i) Product EPA reg. no.
- (ii) repackaging date
- (iii) serial number of refillable container

**C&C Rule Subpart E –
Standards for Pesticide
Containment Structures**

Verify before you ship!

C&C Rule Subpart E – Standards for Pesticide Containment Structures

§165.80 General provisions

(a) protect people & environment through construction of **secondary containment**, and reduce waste generation with:

- (1) storage & handling
- (2) dispensing & refilling

(b) must comply if you owner/operate **stationary pesticide containers (bulk tanks)**:

- (1) re-filling retail (bulk dealers)
- (2) custom blenders
- (3) applicators

(c) by **August 17, 2009**

§165.81 Scope of Stationary Pesticide Containers Included:

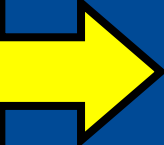
(a) ...refillable, at a fixed facility for at least 30 days, and holds pesticides

(b) ...can hold pesticides as undivided liquids (500 g trigger) and solids (4000 lb trigger) must have secondary containment unless:

- (1) empty
- (2) contains rinsate, wash water (labeled)
- (3) contains a gas
- (4) contains non-pesticide (labeled)

§165.82 Scope of Pesticide Dispensing Areas Included:

For 2009,
“the issue”
for many
dealers



(a) **pesticide dispensing area must have containment pad if:**

- (1) refillables are emptied, cleaned or rinsed
- (2) **pesticides are dispensed from stationary containers for any purpose** including refilling, emptying, or cleaning into any vessel:
 - (i) refillable container
 - (ii) service container
 - (iii) transport vehicles
 - (iv) application equipment

§165.82 Scope of Pesticide Dispensing Areas Included: ...cont...

Many
registrants
do not allow

(a) pesticide dispensing area **must have containment pad if:**

(3) **from transport vehicle to refillable**

(4) **from any container to a refillable** if the intent is sales or distribution...not applicable if dispensed for application.

(b) areas exempt:

(1) pesticide is a gas

(2) already protected by secondary containment

(3) from rail car (less than 30 days applies).

§165.83 Definition of New and **Existing Structure:**

(a) it's a new structure if installation began after November 16, 2006 if:

- permits received and
- begun physically or signed a contract

(b) an existing structure was constructed (or construction began) **before November 16, 2006**

§165.85 Design and Capacity **Requirements** for New (after November 16, 2006) Structure:

(a) new structure material specifications:

- (1) rigid, capable of withstanding full load of any pesticide or precipitation, sealed and liquid tight
- (2) can not be earth, clay or asphalt
- (3) pesticide compatible - withstand exposure

(b) general design requirements:

- (1) protect against damage – supports, rails, cages, barriers, etc.
- (2) must seal everything through wall, except if into another containment area.
- (3) sufficient freeboard for precipitation and other
- (4) may have more than one tank in a dike

The logo for AASA Inspection features the text "AASA Inspection" in a large, bold, sans-serif font. Each letter is a different color: 'A' is pink, 'A' is red, 'S' is orange, 'A' is yellow, 'I' is green, 'n' is blue, 's' is purple, 'p' is blue, 'e' is green, 'c' is yellow, 't' is orange, 'i' is pink, 'o' is red, 'n' is orange, and 's' is yellow. The letters have a slight 3D effect with a shadow underneath. The background is a solid blue.

§165.85 Design and Capacity Requirements for **New** **(after November 16, 2006) Structure:...**cont...

(c) **capacity of containment...**

(1) if protected from rain, 100% of largest tank plus total displacement

(2) if exposed to rain, 110% of largest tank plus total displacement

(c) **...and containment pads:**

(3) at least 750 gallons if dispensing 750 gallons or more

(4) volume of largest container if dispensing less than 750 gallons

§165.85 Design and Capacity Requirements for **New (after November 16, 2006) Structure:...cont...**

- (d) anchor or elevate to **protect against flotation**
- (e) **containment pads** in dispensing area:
 - (1) designed to intercept leaks or spills
 - (2) extend completely beneath any container **and the delivery device from a transport vehicle**
 - (3) sump to manually remove and recover material
 - (4) slope surface for collection and removal
- (f) stationary dry pesticide containments
 - (1) protected from wind and rain
 - (2) raised to prevent water accumulation in or under
 - (3) minimum 6 inch curb at least 2 feet beyond the perimeter

§165.87 Design and Capacity Requirements for **Existing (before November 16, 2006) Structure:**

(a) **existing structure material specifications:**

- (1) rigid, capable of withstanding full load of any pesticide or precipitation, sealed and liquid tight
- (2) can not be earth, clay or asphalt
- (3) pesticide compatible - withstand exposure

(b) **general design requirements:**

- (1) protect against damage – supports, rails, cages, barriers, etc.
- (2) nothing through wall except into more containment. Spills or leaks easy to see.
- (3) sufficient freeboard for precipitation and other
- (4) may have more than one tank in a dike

§165.87 Design and **Capacity Requirements for Existing** (before November 16, 2006) Structure:...cont...

(c) capacity of containment...

(1) 100% of largest tank plus total displacement

(c) ...and containment pads:

(2) at least 750 gallons if dispensing 750 gallons or more

(3) volume of largest container if dispensing less than 750 gallons

§165.87 Design and Capacity Requirements for Existing (before November 16, 2006) Structure:...cont...

(d) anchor or elevate to protect against flotation

(e) containment pads in dispensing area:

- (1) designed to intercept leaks or spills
- (2) extend completely beneath any container and the delivery device from a transport vehicle
- (3) sump to manually remove and recover material

(f) stationary dry pesticide containments

- (1) protected from wind and rain
- (2) raised to prevent water accumulation in or under
- (3) minimum 6 inch curb at least 2 feet beyond the perimeter

§165.90 operational, inspection and maintenance requirements for all new and existing containment structures.

- (a) Owners and operators of structures must:
- (1) prevent pesticides from escaping
 - (2) collect and recover spills and leaks – **cleanup must occur by end of each day of occurrence**
 - (3) manage spilled and leaked materials according to label and law
 - (4) insure **transfers are attended at all times**
 - (5) lockable **valves locked closed when facility is unattended**

§165.90 operational, inspection and maintenance requirements for all new and existing containment structures...cont...

(b) Owners and operators of structures must:

- (1) inspect monthly – check list
- (2) immediately repair damage
- (3) not store in failed structures – prompt removal acceptable

§165.92 Containment pads and secondary containment units may be combined...

...if they satisfy both requirements.

§165.95 Recordkeeping requirements...

Owners and operators must have these records:

(a) inspection and maintenance records (kept for 3 years) including:

- (1) person conducting inspection or maintenance
- (2) date conducted
- (3) conditions noted
- (4) specific maintenance performed

(b) Record of any non-stationary pesticide container (500 gals or 400 lbs) – must include dates container was used

(c) Construction records for containment structure kept for life of structure plus three years.

§165.97 States with existing containment programs

- (a) States with primacy and regulations in effect prior to August 16, 2006 have the option
- (b) States may request authority

Farming is tough



mashmellow .avi