

**SYNGENTA CROP PROTECTION, LLC (“Syngenta”) BULK PRODUCT CONSIGNMENT, STORAGE,
CONTRACT REPACKAGING AND PURCHASING AGREEMENT (“Agreement”) WITH COMPANY
EXHIBIT A - APPROVAL FORM AND LIST OF ACCEPTABLE CONTAINERS
As of March 8, 2016**

COMPANY NAME: _____

PHYSICAL ADDRESS OF COMPANY REPACKAGING SITE: _____

COMPANY REPACKAGING SITE EPA ESTABLISHMENT NUMBER: _____

Pursuant to the terms of the Agreement, **Syngenta authorizes Company at this location to repackage Syngenta Bulk Products (Products) into Syngenta Authorized Containers (Containers), solely to the extent** (i) such Products and Containers are listed below and (ii) such Products are supplied and delivered by Syngenta or its agent(s), as determined by Syngenta in its sole discretion.

This Exhibit A is effective as of March 8, 2016, 2016. A copy of the Agreement and this Exhibit A must be kept on file by Company at the physical location of each repackaging site utilized under the Agreement.

Please note: (i) Company must comply with the terms of the Agreement and this Exhibit A; (ii) Syngenta may at any time, upon written notice to Company, revise or replace the list of Products and/or Containers set forth in this Exhibit A; (iii) nothing in this Exhibit A obligates Syngenta to supply and deliver Products to Company, and the amount of Product to be shipped by Syngenta and stored by Company as consignment goods shall be determined by Syngenta in its sole discretion.

PRODUCT	Current EPA Registration #	Category* of Container Syngenta Authorizes for Repackaging of this Product**:	Authorized Container Special Stipulation/Restriction for use <i>(Please note – Syngenta always recommends refillable containers remain dedicated to a given product)</i>
AATREX® 4L	100-497	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
ACURON®	100-1466	1,2,3,4,5	
ACURON® FLEXI	100-1568	1,2,3,4,5	
AXIAL® XL	100-1256	1,2,3,4,5	
AXIAL® STAR	100-1389	1,2,3,4,5	
BICEP LITE II MAGNUM®	100-827	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
BICEP II MAGNUM®	100-817	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
BICEP II MAGNUM® FC	100-817	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
BOUNDARY® 6.5 EC	100-1162	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
BRAVO® ZN	50534-204-100	1,2,3,4,5	1.Exception to Category 2 : Excalibur tank with no bottom protective pallet is not allowed for repackaging of this product. 2. Container utilized for repacking is preferably dedicated to this product – but at a minimum, must be dedicated to Fungicide use only
BRAVO WEATHER STIK®	50534-188-100	1,2,3,4,5	1.Exception to Category 2 : Excalibur tank with no bottom protective pallet is not allowed for repackaging of this product. 2. Container utilized for repacking is preferably dedicated to this product – but at a minimum, must be dedicated to Fungicide use only
BROADAXE® XC BULK	279-3442-100	1,2,3,4,5	
CALLISTO® GT	100-1470	1,2,3,4,5	
CALLISTO® XTRA	100-1359	1,2,3,4,5	
CAPAROL® 4L BULK	100-620	2,3,4,5	1.Exception to Category 2 : Excalibur tank with no bottom protective pallet is not allowed for repackaging of this product. Cannot be stored in container having previously held a low rate herbicide
DISCOVER® NG	100-1173	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
DUAL II MAGNUM®	100-818	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
DUAL II MAGNUM® SI	100-829	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide

DUAL MAGNUM®	100-816	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
DUAL II G MAGNUM®	100-910	See Dual II G Magnum Acceptable Containers Document	New containers or containers previously containing Dual II G Magnum may be used.
EXPERT®	100-1161	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
FLEXSTAR®	100-1101	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
FLEXSTAR® GT 3.5	100-1385	1,2,3,4,5	
GRAMOXONE® SL 2.0	100-1431	2,3,4	Exception to Category 2 : Excalibur tank with no bottom protective pallet is not allowed for repackaging of this product.
HALEX® GT	100-1282	1,2,3,4,5	
LEXAR®	100-1201	1,2,3,4,5	
LEXAR® EZ	100-1414	1,2,3,4,5	
LUMAX®	100-1152	1,2,3,4,5	
LUMAX® EZ	100-1442	1,2,3,4,5	
PREFIX®	100-1268	1,2,3,4,5	
PRINCEP® 4L	100-526	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
QUADRIS®	100-1098	1,2,3,4,5	Container is preferably dedicated to this product – but at a minimum, must be dedicated to Fungicide use only
QUADRIS TOP® SB	100-1313	1,2,3,4,5	Container is preferably dedicated to this product – but at a minimum, must be dedicated to Fungicide use only
QUILT®	100-1178	1,2,3,4,5	Container is preferably dedicated to this product – but at a minimum, must be dedicated to Fungicide use only
QUILT XCEL®	100-1324	1,2,3,4,5	Container is preferably dedicated to this product – but at a minimum, must be dedicated to Fungicide use only
REGLONE®	100-1061	2,3,4	Exception to Category 2 : Excalibur tank with no bottom protective pallet is not allowed for repackaging of this product.
SEQUENCE®	100-1185	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
TOUCHDOWN® CT2	100-1169	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
TOUCHDOWN HITECH®	100-1182	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
TOUCHDOWN TOTAL®	100-1169	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
TRAXION®	100-1169	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
ZEMAX®	100-1410	1,2,3,4,5	
MEDAL® EC BULK	100-816	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
MEDAL II EC BULK	100-818	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
MEDAL II ATZ BULK	100-817	1,2,3,4,5	Cannot be stored in container having previously held a low rate herbicide
PLATINUM®	100-939	2,3,4,5	1.Exception to Category 2 : Excalibur tank with no bottom protective pallet is not allowed for repackaging of this product. 2. Container utilized for repacking is preferably dedicated to this product – but at a minimum, must be dedicated to Insecticide use only

*Categories of containers correlate directly with the "Portable Refillable Containers for Registered Liquid Pesticide Products" guide produced by Crop Life

America, and attached to this document or posted at: <http://www.croplifeamerica.org/PCC-Rule> .

**Syngenta recommends all refillable containers utilized for repackaging of our products be UN Authorized containers, however for refillable containers utilized for Syngenta products that are not UN authorized containers (category 3 specific requirements), refiller must inspect and conduct the leakproofness test prior to utilization of the container, and follow the same processes they would for all UN authorized containers under the EPA Container and Containment Regulations to ensure viability for continued use.

***DOT Regulated products must always be refilled into UN Authorized containers.

©2016 Syngenta Crop Protection, LLC., P.O. Box 18300, Greensboro, NC 27419.

Important: Always read and follow label instructions before buying or using Syngenta products. The instructions contain important conditions of sale, including limitations of warranty and remedy. Certain products listed above are not registered for sale or use in all States or local areas – please check to confirm before buying or using in your State or local area. AAtrex 4L, Acuron, Bicep Lite II Magnum, Bicep II Magnum, Bicep II Magnum FC, Callisto, Expert, GramoxoneSL 2.0, Lexar, Lexar EZ, Lumax, Lumax EZ, and Medal II ATZ, are Restricted Use Pesticides. AAtrex®, Acuron®, Axial®, Bicep Lite II Magnum®, Bicep II Magnum®, Boundary®, Bravo®, Bravo WeatherStik®, Callisto®, Caparol®, Discover®, Dual Magnum®, Dual II Magnum®, Dual II G Magnum®, Expert®, Flexstar®, Gramoxone®, Halex®, Lexar®, Lumax®, Medal®, Platinum®, Prefix®, Princep®, Quadris®, Quadris Top®, Quilt®, Quilt Xcel®, Reglone®, Sequence®, Touchdown®, Touchdown HiTech®, Touchdown Total®, Traxion®, Zemax®, and the Syngenta logo are registered trademarks of a Syngenta Group Company.

BroadAxe is a trademark of FMC Corporation.



Description of Refillable Containers for Liquid Pesticides

All portable refillable containers (PRCs) used for pesticide distribution are required to include safety and design standards.

These standards are:

1. All PRCs must meet the US Department of Transportation requirements for hazardous material packages at a minimum of PG III.
2. All vents in refillable containers must be designed to minimize the amount of material that could be introduced through the vent.
3. Each non-vent opening must include a one-way valve, a tamper evident device, or both.
4. Containers must be marked with a serial number, or some other unique identifying code.

PRCs used in the pesticide industry can be grouped into categories based on design.

Pesticide products can only be placed in containers that are identified as acceptable by the Product Registrant.

The following categories of pesticide PRCs may be used by registrants when describing the type of container that is acceptable for use for a specific product.

This guidance document does not exclude use of other options which meet the container requirements of the 2006 EPA Container and Containment rule and/or are authorized as acceptable by the product registrant.

Containers with the product name molded into the container should remain dedicated to that product.

	Category 1	Category 2	Category 3	Category 4	Category 5
Description:	Blow-molded inner container in cage or shell	Thick Wall container on a protective base-or legs	Thick wall, Proprietary Design	One Piece Container	One Piece Container
Bottom Discharge	with or without bottom discharge	with or without bottom discharge	with or without bottom discharge	No bottom discharge	with or without bottom discharge
Cylindrical/Square	Square	Square or Cylindrical	Square/Cylindrical or Custom	Cylindrical	Square or Cylindrical
Stackable	Yes	Yes	Yes or No	Yes & No	Yes
Options		May have top chime. May be equipped with a pump.	May have top chime. May be equipped with a pump.	May have top and bottom chimes	
Materials	HDPE bottle & Metal cage	HDPE and LLDPE Plastic	HDPE and LLDPE Plastic	HDPE and LLDPE Plastic	Stainless Steel
UN / DOT Authorization	UN 31HA2	UN31H1, UN31H2,	UN1H1, UN3H1, UN31H1, UN31H2, None	UN1H1, UN3H1, UN31H1, UN31H2,	UN1A1, UN31A1, DOT 57
Containers in each category include, but are not limited to, those pictured here.					

SYNGENTA CROP PROTECTION, LLC BULK FORMULATION PRODUCT CATEGORY

Product Name	Active Ingredient(s)	Product Category
ACURON®	Benoxacor / Atrazine / S-Metolachlor / Mesotrione / Bicyclopyrone	Low Rate Herbicide
ACURON® FLEXI	Benoxacor / S-Metolachlor / Mesotrione / Bicyclopyrone	Low Rate Herbicide
AXIAL® STAR	Pinoxaden / Fluroxypyr	Low Rate Herbicide
AXIAL® XL	Cloquintocet-Mexyl / Pinoxaden	Low Rate Herbicide
BROADAXE® XC	S-Metolachlor/ Sulfentrazone	Low Rate Herbicide
CALLISTO® XTRA	Atrazine / Mesotrione	Low Rate Herbicide
CALLISTO® GT	Glyphosate / Mesotrione	Low Rate Herbicide
DISCOVER® NG	Clodinafop-Propargyl	Low Rate Herbicide
FLEXSTAR®	Fomesafen	Low Rate Herbicide
FLEXSTAR® GT 3.5	Fomesafen / Glyphosate Acid	Low Rate Herbicide
GRAMOXONE® SL 2.0	Paraquat Dichloride	Low Rate Herbicide
HALEX® GT	Mesotrione / Glyphosate Isopropylamine / S-Metolachlor	Low Rate Herbicide
LEXAR®	Benoxacor / Mesotrione / Atrazine / S-Metolachlor	Low Rate Herbicide
LEXAR® EZ	Benoxacor / Mesotrione / Atrazine / S-Metolachlor	Low Rate Herbicide
LUMAX®	Benoxacor / Mesotrione / Atrazine / S-Metolachlor	Low Rate Herbicide
LUMAX® EZ	Benoxacor / Mesotrione / Atrazine / S-Metolachlor	Low Rate Herbicide
PREFIX®	Fomesafen / S-Metolachlor	Low Rate Herbicide
REGLONE®	Diquat Dibromide	Low Rate Herbicide
ZEMAX®	Benoxacor / Mesotrione / S-Metolachlor	Low Rate Herbicide
AATREX® 4L	Atrazine	Normal Rate Herbicide
BICEP II MAGNUM®	Benoxacor / Atrazine / S-Metolachlor	Normal Rate Herbicide
BICEP II MAGNUM® FC	Benoxacor / Atrazine / S-Metolachlor	Normal Rate Herbicide
BICEP LITE II MAGNUM®	Benoxacor / Atrazine / S-Metolachlor	Normal Rate Herbicide
BOUNDARY® 6.5 EC	Metribuzin / S-Metolachlor	Normal Rate Herbicide
DUAL II MAGNUM®	Benoxacor / S-Metolachlor	Normal Rate Herbicide
DUAL II G MAGNUM®	Benoxacor / S-Metolachlor	Normal Rate Herbicide
CAPAROL® 4L	Prometryn	Normal Rate Herbicide
DUAL II MAGNUM® SI	Benoxacor / S-Metolachlor	Normal Rate Herbicide

SYNGENTA CROP PROTECTION, LLC BULK FORMULATION PRODUCT CATEGORY

PRODUCT NAME	Active Ingredient	Product Category
DUAL MAGNUM®	S-Metolachlor	Normal Rate Herbicide
EXPERT®	Atrazine / Glyphosate Isopropylamine / S-Metolachlor	Normal Rate Herbicide
MEDAL® EC	S-Metolachlor	Normal Rate Herbicide
MEDAL II® ATZ	Benoxacor / Atrazine / S-Metolachlor	Normal Rate Herbicide
MEDAL II® EC	Benoxacor / S-Metolachlor	Normal Rate Herbicide
PRINCEP® 4L	Simazine	Normal Rate Herbicide
SEQUENCE®	Glyphosate Acid / S-Metolachlor	Normal Rate Herbicide
TOUCHDOWN HITECH®	Glyphosate Acid	Normal Rate Herbicide
TOUCHDOWN TOTAL®	Glyphosate Acid	Normal Rate Herbicide
TOUCHDOWN® CT2	Glyphosate Acid	Normal Rate Herbicide
TRAXION®	Glyphosate Acid	Normal Rate Herbicide
BRAVO WEATHER STIK®	Chlorothalonil	Standard Fungicide
BRAVO® ZN	Chlorothalonil	Standard Fungicide
QUADRIS®	Azoxystrobin	Standard Fungicide
QUADRIS TOP® SB	Azoxystrobin / Difenconazole	Standard Fungicide
QUILT XCEL®	Azoxystrobin / Propiconazole	Standard Fungicide
QUILT®	Azoxystrobin / Propiconazole	Standard Fungicide
PLATINUM®	Thiamethoxam	Standard Insecticide

- Note: 1) Containers that last held Low application Rate Herbicides cannot be refilled with Normal application Rate Herbicides, Standard Fungicides, or Standard Insecticides.
- 2) Containers that last held Low application Rate or Normal application Rate Herbicides cannot be refilled with Standard Fungicides, or Standard Insecticides.
- 3) To determine the product category for other products, please call the Syngenta Customer Center in Greensboro at **1-800-632-6000**.



Guidance for Safely Cleaning Refillable Pesticide Containers for Refilling or Rededication



Registrant must authorize use of this guidance for their product.

Is the pesticide container refillable?

To verify the pesticide container is refillable, read the marks & labels found on the containers. A non-refillable pesticide container must not be refilled.

EPA rules found in 40 CFR Section 156.140(a) require the labels for most pesticide products distributed in non-refillable containers include: (i) "Nonrefillable container" and (ii) a statement about reuse. Additionally, 40 CFR Section 156.140(b) requires the labels for pesticide products distributed in refillable containers to include: (i) "Refillable container."(ii) "Refill this container with pesticide only." or "Refill this container with [common chemical name] only."

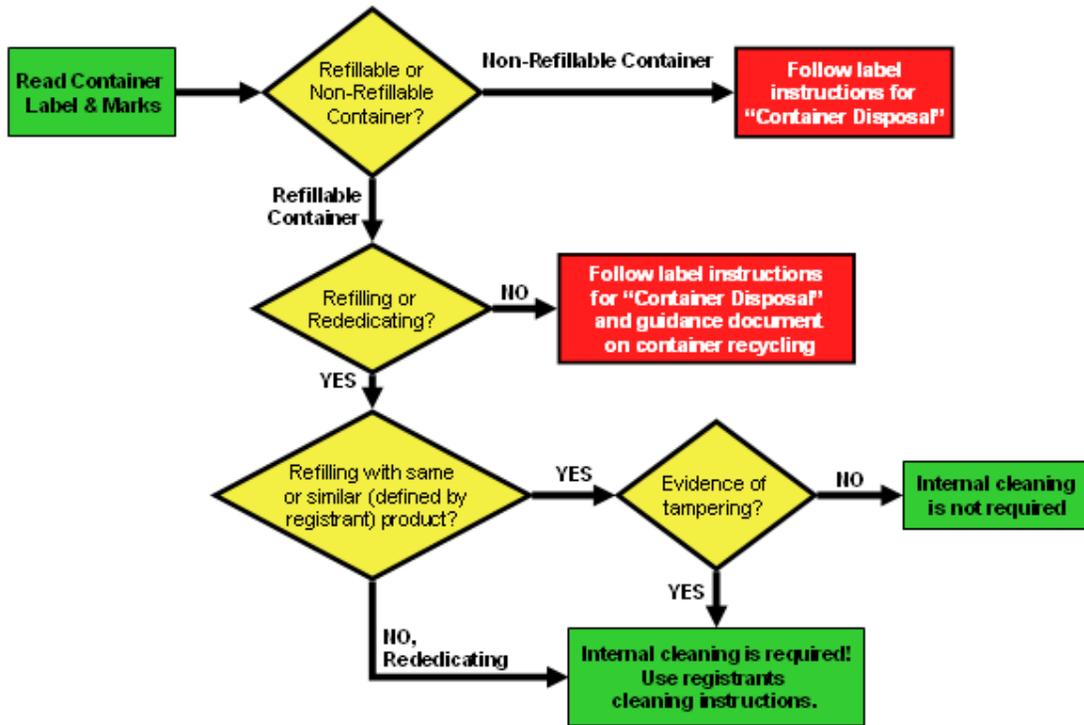
Will the container be refilled, rededicated or recycled?

If the container is to be removed from service (disposed or recycled) do not use this guidance. Use the cleaning instructions on the label and the guidance document titled "Safely Cleaning Refillable Pesticide Containers for Recycling" <http://www.croplifeamerica.org/what-we-do/crop-protection-goals/safety-regulations>.

If the container is to be refilled with the same product or similar product (as defined by the registrant) it may not need to be cleaned if the one-way valves and tamper evident devices are in place. The goal is to educate the users to leave tamper-evident devices intact to avoid unnecessary cleaning of containers.

If the container shows evidence of tampering or if it will be rededicated to another pesticide product, then it must be cleaned using the written residue removal procedure (cleaning instructions) provided by the registrant of the pesticide product being put into the container (see 40 CFR §165.70(g)). If the registrant references this document, these cleaning instructions may be used.

After cleaning, the refillable container must be clean, drained and free from contaminants. Even so, registrants may not allow some pesticide products in containers that were previously used for other products. For instance, they may prohibit introduction of fungicides into containers that previously contained herbicides. Also, registrants may not allow refilling of some products into containers with visible staining.



Option to have the end user rinse the container before refill or rededication

If a refillable container needs to be cleaned, the EPA regulations require the refiller to clean the container. The refiller could contract with someone, including the end user, to rinse the container according to the registrant’s written residue removal procedure provided the registrant allows such a contractual arrangement. This practice would have to be consistent with the repackaging contract with the registrant (i.e., not prohibited); the contractor would have to clean the containers using the registrant’s residue removal procedure for the product; and the refiller would have to ensure compliance with this and all other applicable regulatory requirements. However, entering into such a contract would not relieve the refiller of his responsibility for complying with the requirement to clean the container if necessary (§165.70(e)(8)).





Conduct an Environmental Health & Safety (EHS) Review

Review the label and Material Safety Data Sheet (MSDS) for each pesticide product, noting safety information. Check with your pesticide state lead agency for requirements on certification of applicators and/or handlers. Workers cleaning containers may need to be certified applicators, trained as handlers under the Worker Protection Standard (40 CFR 170), and/or require training or certification to wear PPE, manage waste, operate equipment, and/or transport containers.

Workers cleaning containers must wear the equipment (PPE) required on the label for application. If many different containers are to protective PPE.



personal protective mixing, loading and be cleaned, use the most



Review the site/facility safety procedures and environmental policies. If industrial equipment (pressure washers, forklifts, etc.) are used then review the manuals and safe operating procedures. Verify that workers are trained and/or certified to operate equipment and handle pesticide products and wastes. Use equipment manual or safe work practice.

A rinsate collection system and residue management plan must be available before beginning the cleaning process. Cleaning should be done on a mix load pad or other containment structure that allows collection of rinse water. Review state and local environmental rules and use these (together with the label and MSDS) to identify any product that may be regulated under waste rules. Some residues may be moved to containers that are dedicated to pesticide rinsate management. If containers with residue will be transported, obtain shipping information (needed to transport containers with residue or rinsate).

If additional guidance is necessary, be prepared to contact the –

- ✓ Pesticide Registrant
- ✓ Container Manufacturer
- ✓ Local Container Recycler
- ✓ State Pesticide Official
- ✓ State or Local Waste Regulator
- ✓ Waste Disposal Contractor
- ✓ Local/State/Regional Trade Associations



Initial Inspection of Containers to be Cleaned

Look at each container and if any are visibly damaged (structural integrity of the container has been compromised or otherwise not suitable for filling) consider cleaning the container for recycling. At this time, it may also be possible to see if the valve fittings, seals, pumps, meters, hoses and other appurtenances are in good operating condition and suitable for continued service. Another, more thorough inspection of each container will be required before refilling. At that time, you may use the checklist (web link below) to determine whether or not the container meets the standards in the regulations:

<http://aginspect.org/sites/aginspect.com/FINAL%20PCC-Refillable-Container-Rules.pdf>

Soaps & Cleaners

If possible, avoid using soaps & cleaners. If soaps & cleaners are needed review the label and MSDS, use the smallest amount needed, and use only water in the final rinse. Many distributors and others sell commercial tank cleaners suitable for use; however, before using consult with the product's registrant. Also, verify the soap or cleaner can be used in your rinsate management program.

Three possible cleaning solutions are listed below:

(1) One part household ammonia to 100 parts warm water. If ammonia based fertilizers are used, then a greater dilution should be calculated.

(2) Ordinary dish soaps (used to clean food serving utensils) diluted in water.

(3) Commercial tank cleaners diluted according to label directions.

Quality Standards

To meet the minimum quality standards required for any pesticide product (described in the product's registration formula statement) products can only be filled into clean, dry containers free from residue, or containers that held the same or similar products. Additionally, EPA must be notified if other pesticides have adulterated products above levels of concern (see http://www.epa.gov/opppmsd1/PR_Notices/pr96-8.html). To prevent cross contamination, products with dissimilar uses or formulations should not be used in the same container. Here are some general recommendations.

Recommendations:

Whenever possible, dedicate containers to a single product or similar product as defined by the product's registrant. Do not put corn herbicides in containers used for soybean herbicides and vice versa. Do not put fungicides or insecticides into herbicide containers. Be certain containers are completely dry (no water) before filling with Emulsifiable Concentrates (ECs) i.e., products having non-water solvents.

Do not put microencapsulated formulations into containers that contained ECs or that may have solvent residue.

Use the pesticide panel label and container's unique identifier to keep track of the product previously in a container.

Instructions for Cleaning Refillable Containers before Refilling Them

If authorized by the pesticide's registrant, follow these instructions to clean a refillable container before refilling or rededicating it.

1. Visually inspect all containers and any associated transfer equipment and plan the cleaning process appropriately. For example, containers thoroughly rinsed clean through special arrangements with the end user or that are dedicated to a single product or similar products (and have intact tamper-evident devices and one-way valves), may not require additional cleaning. Damaged containers, containers with visible staining or dried solid residue may need special treatment.
2. Stage containers on a containment pad during the cleaning process, so the rinsate can be collected and managed.
3. Use the pesticide product panel label along with the container's unique identifier to note the pesticide product being cleaned out of that container. Remove old labels, placards, and tamper evident devices. Alternatively, the panel label can remain on the container and be removed when it is completely cleaned.
4. Thoroughly rinse or pressure-wash the exterior of the container to remove dirt and residue. If needed, tank cleaners may be used on the exterior. Wash until all visible residues are completely gone.

5. If the container has not been field rinsed through special arrangements with the end user, rinse any visible residue from inside the container with water. Using a sprayer, rinse the interior of the container using only enough water to completely remove the residue. If the container is equipped with an internal pump, the water must be flushed through the entire delivery system until the rinsate is clear.
6. Drain and collect the rinsate from the container. Repeat high pressure rinsing until container is clean & rinsate is clear. Inspect the inside of the container to determine if additional cleaning is needed.
7. For stubborn residues, hot water with a cleaning solution, such as a commercial tank-cleaning compound suitable for use with pesticides (exempt from a tolerance) may be used. Using a high-pressure sprayer and rinse nozzle thoroughly flush the interior of the container again. If the container is equipped with an internal pump, the tank cleaning solution followed by water must be flushed through the entire delivery system until the rinsate is clear.
8. Inspect the inside of the container. If needed, use a light or mirror to thoroughly inspect and insure visible pesticide residue has been removed. If a tank cleaner was used, insure the last rinse is water only and that the water is flushed through the delivery system.
9. Drain the container. A pump or dedicated wet-dry shop vacuum may be used to remove any remaining rinsate. **Caution:** *If product is a DOT combustible or flammable class 3 (a.k.a. "red label"), use pump or wet-dry shop vacuum only if combustible vapors are not present (verify with a Combustible Gas Indicator).*
10. After cleaning, the container should remain sealed to prevent introduction of foreign material.

NOTE: If in practice, you develop a better, easier cleaning method, please let us know at CLA.

This guidance is recommended for compliance with refillable container and repackaging requirements under EPA container and containment rules, [§165.67(d), (f) & (g)] IN NO EVENT SHALL CropLife America, its members, directors, officers, employees or agents BE LIABLE FOR ANY DIRECT, INDIRECT, PUNITIVE, INCIDENTAL, SPECIAL, CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER FOR THE USE OF THIS GUIDANCE. CropLife America shall not be liable for users' failure to comply with either this guidance or any applicable law, regulation, rules and order of any federal, state or local government body, official or agency or any negligence or wrongful and willful misconduct on the part of the user."

Syngenta Crop Protection, LLC Addendum to CLA Cleaning Instructions

Precaution: Rededication of plastic mini-bulk refillable tanks previously utilized for storage of the following classes of materials is prohibited:

- Products that permanently stain plastic, such as dinitroaniline herbicides,
- Products that contain phenoxy (e.g. 2,4 D), bromoxynil, and dicamba herbicides.

Mini-bulk tanks used for storage of these products are very difficult to clean properly for refilling with different chemicals.

Mini-bulk containers previously utilized for refill of herbicides cannot be utilized for refill and/or storage of fungicides or insecticides. Syngenta requires that any containers utilized for refill and/or storage of fungicides or insecticides be new or previously utilized only for like fungicide / insecticide.



syngenta®

Understanding Refillable
Containers and
the New Regulations



SYNGENTA REFILLABLE CONTAINER BASICS

Container/ Equipment Style	Container Visual	Refillable Container Details	Compliance Position
15 - 55 Gallon Drum		UN1H1; Example of drums pictured. 2-2" openings - 1-2" buttress thread; 1-2" NPT thread with 3/4" knockout;-	Refiller must introduce a check valve to-ensure compliance with one-way valve regulation and avoid clean-out prior to same product refill.
FarmPak 120 and 220		UN31H2; Asset tank; Rotational molded 2 piece container; embossed w/serial number. 3 openings - 1-gem cap, 1-standard 2" buttress bung w/manual vent, 1-standard 2" buttress bung w/solid plug; No bottom outlet discharge. 120 or 220 gallon capacity.	Tank meets 2011 requirements for refilling
Square Stackable		UN31H2; Asset tank; embossed with a serial number. Bottom outlet one-way valve required to avoid cleaning prior to refill. Tank approved for use in following tank sizes: 120, 220, 275, 330 gallon.	Depending on style of tank - the bottom outlet may require retrofit to one-way valve.

**Container/
Equipment Style**

Container Visual

**Refillable
Container Details**

**Compliance
Position**

Cage Style IBC



31HA2; Composite IBC; steel frame/metal pallet; 2" breather and pressure vent in top opening; ball valve with check valve in bottom outlet, 2" male camlock; minimal wall thickness .06".

Syngenta filled cage style tanks produced prior to October 2010 did not have check valve bottom outlet – thus are considered limited use IBC's. Syngenta cage style tanks produced October 2010 and moving forward are compliant as refill containers assuming other requirements for continued use met. Cage tanks with check valve have manufacturer sticker to indicate this.

**Flowserve Gem cap
Style Pump**



Flowserve gem cap style PH6 pump must be retrofitted to meet requirements as one-way valve. Pump must be secured to mini-bulk tank with tamper evident device. Please see attached document. Flowserve pumps produced October 2010 forward are compliant with no retrofit.



**Sotera Gem cap
Style Pump**



Sotera 445 series gem cap style pump includes an internal one-way check valve. No retrofit required, simply ensure pump is secured to tank with tamper evident device.

August 2011 CCR refillable container regulations met assumes all seals/one-way valves are intact, container is being refilled with exact same product, and the container meets all other inspection requirements.

Understanding the EPA Container and Containment, Refillable Container Regulations

Q & A

Q: When does the “Refillable Container” portion of the CCR (Container and Containment Regulations) go into effect?

A: August 17, 2011

Q: Who is responsible for compliance with this portion of the regulations?

A: The rule is federal regulation that affects all states, regardless of existing state regulations. Parts of the Rule affect retailers, commercial applicators, custom blenders, refillers (both retailers and distributors), and registrants. With the exception of coordinating refillable containers with refillers, growers/end-users are not affected by these new rules.

Q: Who will be enforcing the regulations?

A: Enforcement will be led by the U. S. EPA regions via state pesticide control officials. (These groups include the State Department of Ag and the State Environmental Protection Agency). The DOT (Department of Transportation) will also be enforcing a portion of these regulations. All of these agencies have the authority, ability, and funding to levy financial and criminal penalties.

Q: What was the rationale behind the refillable container portion of the regulation?

A: The rule seeks to provide sound stewardship practices and national consistency for pesticide labeling, container integrity, repackaging, and storage. The rule also seeks to reduce the risk of cross contamination during the refill/repack process.

Q: What are the key high level changes in mini-bulk regulations that will be going into effect?

A: There are many changes that are going into effect; however several that will require more thought and attention from all affected parties. In a snap shot:

- One-way valves and/or tamper evident devices on all openings other than the vent are required and must be intact for exact product refill with no tank clean-out
- One-way valves and/or tamper evident devices broken, damaged, or altered will require refiller to clean and re-dedicate the container prior to refill even if refilling with the exact same product
- Containers must meet DOT design, construction, and marking (this is not new for Syngenta mini-bulk containers)
- Refiller may only use containers approved by the registrant
- Refiller must have registrant’s cleaning instructions, list of approved containers, and repack agreement readily available on site
- Pressure testing and other inspection process requirements
- Every refillable container must have a unique identifier
- Refillers must maintain records for all refill activities

Q: Will all of a dealer's older refillable mini-bulks have to be replaced?

A: No; many of the mini-bulks that Syngenta has placed in the field do meet the requirements of the new regulation. Mini-bulk refillable containers that have been in the field for longer than 2.5 years, (see manufactured/inspected by date on the container) will need to be pressure tested to remain compliant. It will be necessary for dealers to provide tamper evident seals for mini-bulks. Some mini-bulk tanks will also need to be retrofitted with one-way check valves to eliminate the need for cleaning between refills when filling with same product. Each tank will have to be evaluated independently to determine viability.

Q: Is it true that with the new regulations my customer's mini-bulk tanks must have one-way valve bottom discharge?

A: If your customer is refilling mini-bulk tanks with a bottom discharge, it is more efficient for them to ensure that the bottom outlet is a one-way valve. The regulation states that one-way valves or tamper evident devices must be on all openings (other than the vent). If the container comes back to the refill site with any of these seals broken and/or missing, the refiller will have to clean the container even if they are going to refill with the exact same product. Mini-bulk tanks that have a one-way, check valve allow for the product to be extracted without opening the container and breaking the tamper evident devices. This eliminates the need for the refiller to clean the mini-bulk between each use; (assuming the other openings are sealed and/or have pumps that qualify as one-way valves). Any required mini-bulk cleaning will take time away from normal operations and will require the refiller to generate additional rinsate and tracking documentation.

Q: What if my customer has mini-bulk containers with bottom outlets – however they are NOT one-way valve bottom outlets? Do they have to decommission and recycle those containers or is there a way to retrofit them to continue use?

A: Depending on the age, inspection results (including pressure testing if age requires), style of tank, and viability of the refill container, a retrofit may be a possibility. Each tank would have to be evaluated individually. We do have approved retrofit valves in Ag Biz for certain tanks. There are some retrofits on the market however, that do not meet the new regulations for qualification. If the retrofit valve extends outside of the profile of the tank, it will nullify the UN (United Nations/DOT) authorization of the tank, thus rendering it non-compliant with the new regulations. Examples of portable refillable containers that can be effectively retrofitted include the Snyder square stackable series and the Excalibur 330 gallon tank. Cage style tanks cannot be retrofitted. Current Farm-Pak style tanks meet the regulations without any retrofit.

Q: Is a retrofit available for the cage style tanks that do not have a one-way valve bottom outlet?

A: The cage style IBC's (intermediate bulk containers) are generally considered one-way, one use tanks. They were not designed for repetitive use and the majority of these tanks in the field currently do NOT have a one-way valve bottom outlet. There is not currently a retrofit approved for use with these tanks.

Q: Would Syngenta consider moving to a cage style tank that has a one-way valve bottom outlet?

A: Fourth quarter of 2010, Syngenta began utilizing a cage style IBC that does have a one-way valve bottom outlet for products traditionally prefilled into this style container. This does allow a refiller to refill the container with the same product if all tamper evident seals are intact. Syngenta will allow this practice with many of our brands (non-regulated products). The anticipated service life of these containers is limited, so this tank is not viewed as the best alternative as a repetitive use IBC for long periods of usage.

Q: Do gem cap style pumps qualify as one-way valves?

A: Gem cap style pumps can qualify as one-way valves. Syngenta currently recommends two gem-cap style pumps. The Sotera (Tuthill) gem cap style pump has passed the EPA review and is considered a one-way valve as manufactured. The refiller would simply need to ensure the pump is secured to the mini-bulk container with a tamper evident device. The Flowserve gem cap pumps produced prior to October, 2010 did not pass the EPA review to be considered a one-way valve; however there is a relatively inexpensive retrofit option (available in Ag Biz) that will bring this pump into compliance to serve as a one-way valve. The refiller would need to ensure the pump is secured to the container with a tamper evident device prior to leaving their location. Flowserve pumps produced October, 2010 forward do qualify to serve as a one-way valve under these new regulations. Only pumps produced prior to October, 2010 will require retrofit.

Q: Is it a requirement under the new regulations that every refillable mini-bulk container be clearly marked with a serial number or unique identifier?

A: It is a requirement that each refillable portable container have a unique identifier marked on it. The refiller has the ability to create their own system of identification or they can use the serial numbers embossed/stamped on the refill container. Some refillers may use a combination of the two. Whatever system chosen – the unique identifier must remain with the tank for the life of the tank – and it must be clearly visible on the container at all times.

Q: What will the refiller use this unique identifier system for?

A: The refiller will be required to maintain manual or electronic records of each container by these unique identifiers, including the dates of fills, product and product registration numbers of what was filled into the container, all inspections (including internal, external, and pressure testing) and the results of such inspections, as well as decommissioning of the tank.

Q: My retailer was concerned about the inspection process for refillable containers. What is required under the new regulations?

A: Per the regulations, refillers are required to conduct a visual inspection (look for gouges, cracks, signs of failure) prior to refilling a mini-bulk. Pressure testing is required on all portable refillable containers with a capacity of over 119 gallons every 2.5 years from the date of the manufactured date/subsequent pressure testing date. The pressure testing requires that the tank be pressurized to 2.9 psi and held in that state for 5 minutes. During that period, no leaks, etc. can be detected if the container is to be deemed acceptable for use. Inspection dates must be clearly marked on the container, and results must be kept in the tracking log by the unique container identifier. Additionally, the regulations require a refiller to conduct an internal inspection minimally every 5 years. It is always a good idea to do a quick external inspection with every fill and an internal inspection at year end in preparation to winterize their equipment for season end.

Inspect and Test Container: Capacity greater than 119 Gallons

Equipment Inspection/Replacement (every time tank is re-used): Test and/or inspect pumps, suction tubes, gaskets, hoses, valves, and fittings to ensure that they are not leaking and are in working order.

External Inspection (every time tank is re-used) - Check the container for any visible sign of cracks, warpage, corrosion, dents or other structural damage. Containers with any visible signs of damage or stress cracking (plastic containers) should be taken out of service. Please note the location of these imperfections; this will aid in the pressure testing.

- Any coverings that may impair a proper inspection must be removed.
- Any markings that are difficult to read must be replaced or repaired.
- Any service equipment that is damaged or missing must be replaced or repaired.

Pressure Test (every 2.5 years): - Visually inspect each container as identified above (External Inspection). If any damage is detected, the IBC must be removed from service.

- Inspect the container for broken equipment that may affect the container's integrity and fix and/or replace broken equipment. Replace or repair if necessary. Close all service equipment.
- Replace the vent with a pressure tester fitting.
- Connect testing apparatus.
- Open the air supply until container is holding 2.9-psi minimum.
- A soap solution can be applied to all seams and joints to assist in identifying leaks.
- Disconnect air supply.
- If soap solution was not used as described above, Container must hold 3-psi air pressure while disconnected from the air supply for five minutes. If the container holds the pressure, then it is qualified for reuse.
- Remove the pressure tester fitting.

Internal Inspection (required every 5 years) - Check the container for any visible sign of cracks, warpage, corrosion, dents or other structural damage. Containers with any visible signs of damage or stress cracking (plastic containers) should be taken out of service.

Inspection documentation and marking

The inspections and tests that are required every 2.5 and 5 years (internal – minimally every 5 years, external – with every fill, and pressure tests- every 2.5 years) must be documented. The test dates must be marked on the IBC. Keep an inspection/test log at the refill location including package design type and specification, refill site name, address, product name, serial number of container, date of test and or Inspection, inspector name, pass or fail & reason. Keep this log on file for a minimum of 2.5 years. This log must be available for random inspection by Syngenta and/or regulatory authorities.

The month and last two digits of the year that an IBC passes a periodic inspection must be marked near the UN marking. All test and inspection marking has to be durable and at least 12 mm in height.

Q: I have seen a reference to an approved list of acceptable containers that Syngenta must provide to customers in order for them to be able to refill our products into repack containers. What is that document and where do I get that?

A: Under this regulation registrants are required to provide refillers with a description of containers or container types they deem acceptable for repacking each of their products into. This description can include or exclude certain containers from use with their products. Syngenta is actively working through this process now and anticipates this list of acceptable containers becoming a part of the Repackaging Agreement which is also required to be in the refiller's files. Though this document is not yet complete, you can anticipate its' availability second quarter 2011.

Q: Where can I find our cleaning instructions and repackaging agreements?

A: Our cleaning instructions are part of our Bulk Handling Guide. Crop Life America, with participation from all of the basic manufacturers and several distributors is creating an industry-wide cleaning instruction guideline. Our updated bulk handling guide will incorporate this document as well. The repackaging agreement as stated earlier is being rewritten – however your customers should have the current version of that agreement and the Exhibit A in their files already. For blank versions of these two documents, please go into Ag Biz and look under “Blank PDFs”.

Q: Is it true that a refiller can be fined if they don't have their EPA establishment number on the product label on their refilled containers?

A: That is a fact. If the refiller labels a container with an incorrect label, multiple product labels, leaves off their EPA establishment numbers, and/or the net contents – the EPA considers this “misbranding” and they can be fined. (This is also true of the stationary bulk tanks – however the EPA number on those labels would be Syngenta’s production site number versus that of the refill site).

Q: What styles of containers does Syngenta utilize for “pre-fills” and what is their status with regard to these new regulations?

A: Syngenta has several types of containers that are utilized for our pre-fill portable container markets. The first style is the 120 gallon and 220 gallon Syngenta proprietary design FarmPak tank. This is a high quality “asset” portable refillable container that we recommend for refilling. This tank does not have a bottom discharge and is already compliant with the new regulations as of today. Depending upon the gem cap pump your customer is utilizing with this tank – the pump MAY require retrofit. Another container we utilize in the pre-fill market is the cage style IBC. Production prior to fourth quarter 2010 did not incorporate a one-way valve bottom discharge and is not a candidate for retrofit. Production fourth quarter 2010 and moving forward is in a cage style IBC that has a one-way valve bottom discharge. A sticker will be on the container by the valve to denote the style. Syngenta also -provides pre-fill containers in the form of 15 and 30 gallon drums. These are compliant with the new regulations. However, these non-bulk drums will require clean out every refill or must be retrofitted if the customer would like to continue to refill the container without cleanout with every fill. If the refiller incorporates a micromatic valve style tamper evident device, the drum does meet the new regulations for refill without clean out. If the refiller chooses to use a spigot configuration, they will need to introduce a check valve under the spigot to be in compliance with the one-way valve component of the new regulations. Testing is currently being conducted by the drum manufacturer to ensure UN authorization is maintained with introduction of this part. Currently – the UN authorization is nullified with the introduction of this part. We anticipate resolution of this by year-end.

Q: If the refillable container is owned by the grower (end-user) and not by the retailer, will that tank still be subject to the same guidelines?

A: Though a grower is exempt from these specific Container and Containment Regulations – the refiller is not. Therefore in order to refill a container – the refiller must ensure all containers comply and are cleaned, tested, tracked, etc. as if they were owned by the refiller themselves. Shifting ownership of the container in no way changes the refiller’s obligations to uphold and meet the new regulations when refilling the container.

Q: Who do I contact if I have additional questions about the new Container and Containment Regulations?

A: You can contact the following individuals for additional information:

- Stephanie Neese – National Bulk Manager (336) 632-3969 or (336) 317-9702
- Scott Birchfield - Emergency Response/Environmental Stewardship Manager (336) 632-6128
- Syngenta Customer Center – (866) 796-4368

©2011 Syngenta Crop Protection, LLC. Greensboro, NC 27409. Important: Always read and follow label directions before buying and using these products.

Syngenta Crop Protection LLC warrants that its products conform to the chemical description set forth on the products' labels. NO OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO SYNGENTA PRODUCTS. Syngenta Crop Protection LLC neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than such as is expressly set forth herein. UNDER NO CIRCUMSTANCES SHALL SYNGENTA CROP PROTECTION LLC BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF ITS PRODUCTS. No statements or recommendations contained herein are to be construed as inducements to infringe any relevant patent now or hereafter in existence. The Syngenta logo is a trademark of Syngenta, LLC.

NOTICE: All information and recommendations herein are provided in good faith and are believed to be accurate. But no representation, guarantee or warranty is made as to the accuracy, reliability or completeness of such information and recommendations. Nor is any representation, guarantee or warranty made that application, or use of any of the same, will avoid hazards, accidents, losses, damages or injuries of any kind to persons or property, or give desired results. Users must satisfy themselves as to the suitability of such information and recommendations prior to use. The EPA summary and Rule is available at: www.epa.gov/pesticides/regulating/containers.htm